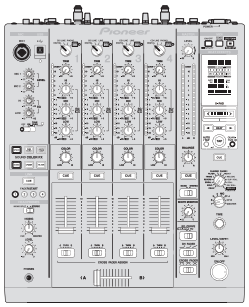
Pioneer

Service Manual



DJM-900NXS

ORDER NO.
RRV4170

DJ MIXER

DJM-900NXS

NOTE: The model name of this product is DJM-900nexus.

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
DJM-900NXS	SYXJ8	AC 220 V to 240 V	
DJM-900NXS	UXJCB	AC 120 V	
DJM-900NXS	LXJ	AC 110 V to 120 V or 220 V to 240 V	
DJM-900NXS	KXJ5	AC 220 V	
DJM-900NXS	XJCN5	AC 220 V to 240 V	

For details, refer to "Important Check Points for good servicing".

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SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

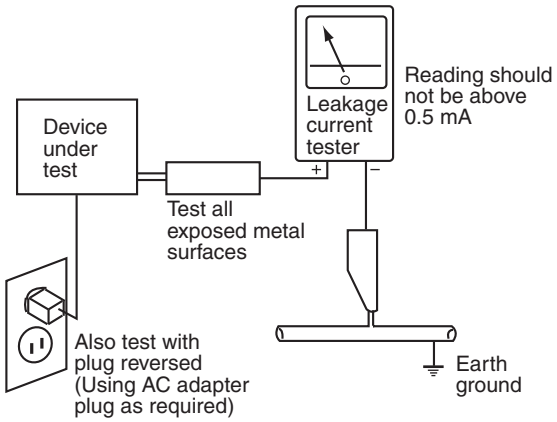
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120 V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

1. SERVICE PRECAUTIONS

1.1 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 ºC.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 ºC in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Do NOT use a soldering iron whose tip temperature cannot be controlled.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

1.2 NOTES ON REPLACING

The part listed below is difficult to replace as a discrete component part.
When the part listed in the table is defective, replace whole Assy.

Assy Name	PCB Assy Part No.	Parts that is Diffcult to Replace			
		Ref No.	Function	Part No.	Remarks
MAIN Assy	DWX3190	IC1406	12V → 1.2V DC/DC converter	BD9326EFJ	IC with heat-pad
		IC1407	12V → 3.3V DC/DC converter	BD9326EFJ	IC with heat-pad
		IC501	ETHER UCOM	R5S76700B200BG	BGA
		IC1801	USB UCOM	ADSP-BF524BBCZ-3A	BGA
		IC2214	FPGA	XC3S50A-4FTG256C	BGA
		IC701	DSP	D810K013BZKB400	BGA
		Q3405	Transistor	2SD1760F5 (R)	Transistor with heat-pad
		Q3406	Transistor	2SB1184F5 (R)	Transistor with heat-pad
		Q3407	Transistor	2SD1760F5 (R)	Transistor with heat-pad
		Q3408	Transistor	2SB1184F5 (R)	Transistor with heat-pad
CDCB Assy	DWX3191	IC3601	CDC SENSOR	AD7147ACPZ500RL7	IC with heat-pad

1.3 SERVICE NOTICE

VOLTAGE MONITORING

This unit always monitors for power failure and will shut itself off immediately after an error is detected.
A power failure is indicated with flashing of the LFO FORM LED (Intervals: 250 ms [Lit 125 ms/Unlit 125 ms]).
All the LEDs other than LFO FORM will be unlit, and all the switches and VRs will be disabled.
Repair the unit according to the diagnostic procedures described in “5.4 Information on Power Diagnostics.”

CONFIRMATION OF USER-SETTING

This product has user- and club-setting data. Be sure to confirm those data before starting repair, although changing them may not have a large effect. Use the Check Sheet in “8.5,” to which you can transcribe the settings, as required.
The settings are stored in Flash ROM (IC502) on the Main Assy.
To display the [USER SETUP] screen, hold [ON/OFF (UTILITY)] pressed for at least 1 sec.
To display the [CLUB SETUP] screen, press [POWER] (ON) while holding [ON/OFF (UTILITY)] pressed.

FLASH ROM ON THE MAIN Assy

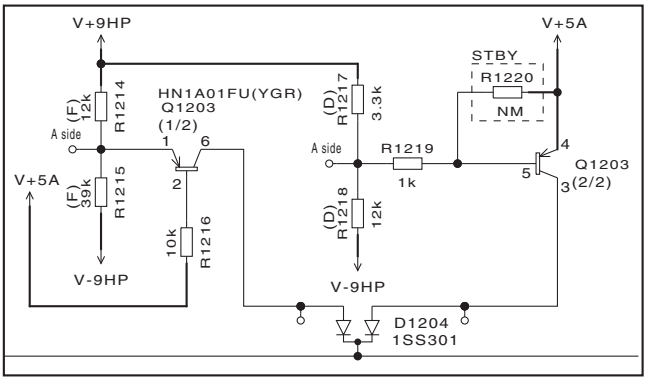
Never replace the Flash ROM (IC502) on the MAIN Assy during servicing.
If the FLASH ROM is assumed to be defective, replace the whole MAIN Assy.
This FLASH ROM contains data that can only be written in at the factory.
An IEEE 802.3-based MAC address specific to this unit has been written.

1.4 ON MODIFICATION OF THE VOLTAGE-MONITORING CIRCUITS

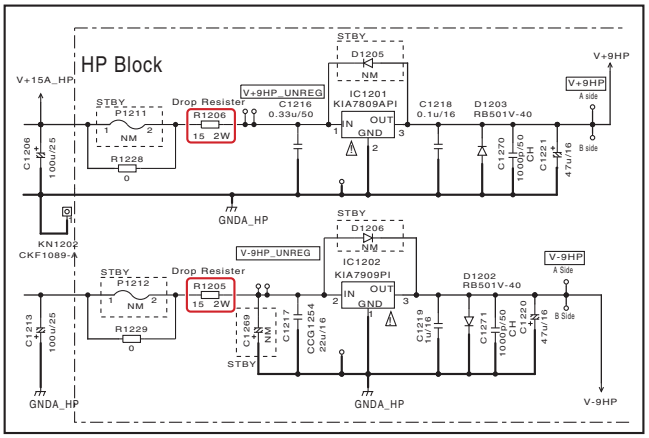
The voltage-monitoring circuits have been modified because of a malfunction found during mass-production of the products. Note that the measures taken for the products may differ by the timing of the production.

- Malfunction: A shutdown may occur when certain headphones are used with this product.
- Cause: Malfunction of the voltage-monitoring circuits
- Modifications: ① Removal of the ±9-V monitoring circuit
  ② Removal (short-circuiting) of the power-drop resistors (R1205, R1206)

① ±9-V monitoring circuit



② Power-drop resistors (R1205, R1206)



Timing of the production:

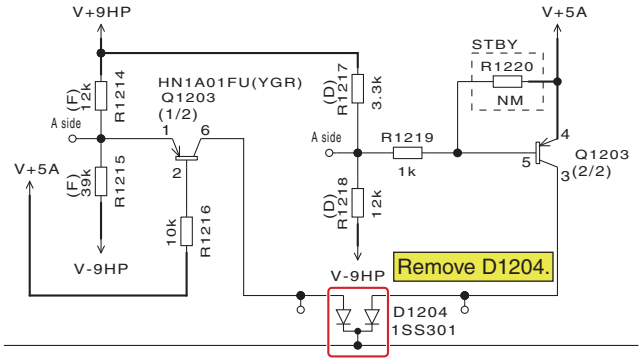
(1) All units with serial numbers beginning with KA or KB, and some units with serial numbers beginning with KC or KD

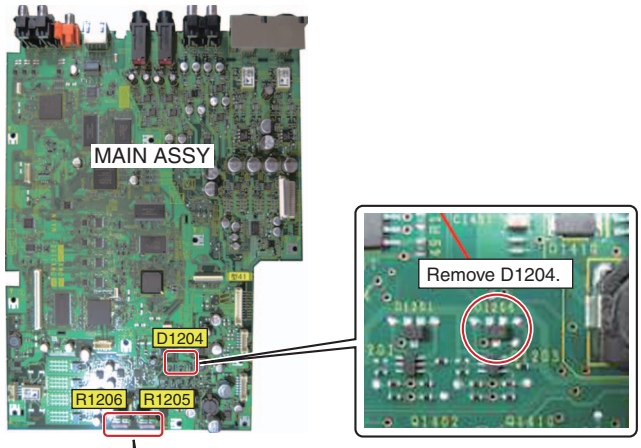
(2) Some units with serial numbers beginning with KC, KD, or KF (planned), and all units with serial numbers beginning with KE

(3) Some units with serial numbers beginning with KF, and all units with serial numbers beginning with on and after KG (planned)

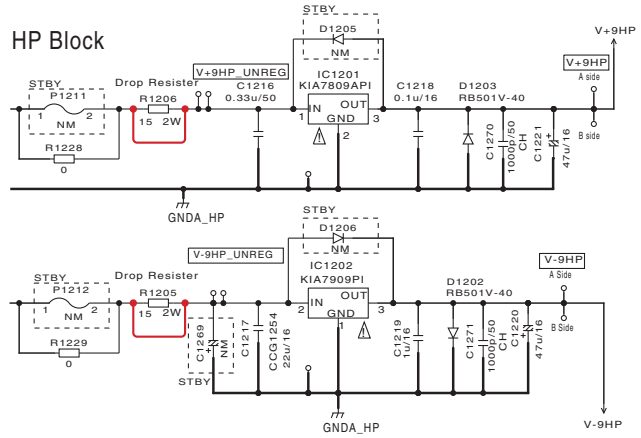
(1) All units with serial numbers beginning with KA or KB, and some units with serial numbers beginning with KC or KD

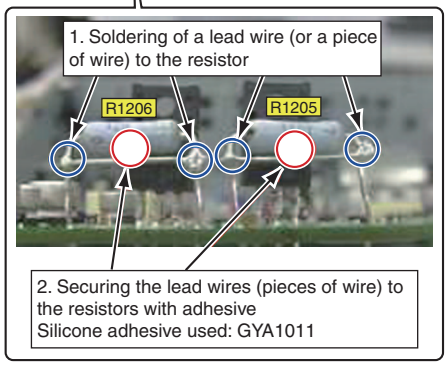
① Removal of the chip diode [D1204].





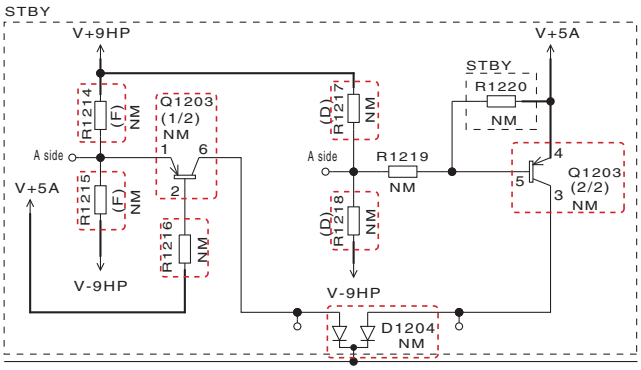
② Soldering of a lead wire or a piece of wire to R1205 and R1206.





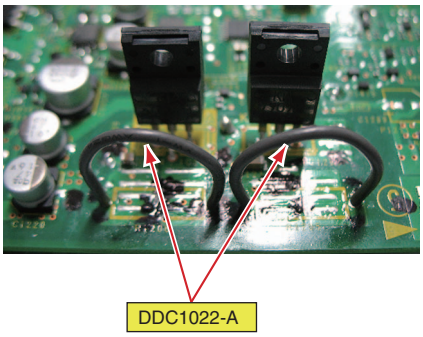
(2) Some units with serial numbers beginning with KC, KD, or KF (planned), and all units with serial numbers beginning with KE

① Not mounting the ±9-V monitoring-circuit block.



The following parts are not mounted:
D1204
Q1203
R1214
R1215
R1216
R1217
R1218
R1219

② Mounting pieces of wire [DDC1022] instead of the resistors [R1205, R1206].



These parts are described as JP1205 and JP1206 in the circuit diagrams. However, JP1205 and JP1206 are not printed on the board.

(3) Some units with serial numbers beginning with KF, and all units with serial numbers beginning with on and after KG (planned)

① Not mounting the ±9-V monitoring-circuit block. (This measure is the same as (2).)

② Patterns on the board are to be modified so that R1205 and R1206 are short-circuited.

2. SPECIFICATIONS
2.1 SPECIFICATIONS

General

Power requirements.....AC 220 V to 240 V, 50 Hz/ 60 Hz (SYXJ8, XJCN5)
AC 120 V, 60 Hz (UXJCB)
AC 110 V to 120 V or 220 V to 240 V, 50 Hz/ 60 Hz (LXJ)
AC 220 V, 60 Hz (KXJ5)
Power consumption.....41 W (SYXJ8, LXJ, KXJ5, XJCN5)
42 W (UXJJCB)
Power consumption (standby).....0.4 W

Main unit weight.....7.1 kg (15.7 lb)
Max. dimensions.....331 mm (W) × 107.9 mm (H) × 409 mm (D)
(13 in. (W) × 4.2 in. (H) × 16.1 in. (D))
Tolerable operating temperature.....+5 °C to +35 °C
(+41 °F to +95 °F)
Tolerable operating humidity.....5 % to 85 % (no condensation)

Audio Section

Sampling rate ..... 96 kHz
A/ D, D/ A converter..... .24 bits
Frequency characteristic
CD/ LINE.....20 Hz to 20 kHz
S/ N ratio (rated output)
PHONO.....88 dB
CD/ LINE.....105 dB
MIC1, MIC2.....84 dB
Total harmonic distortion (CD/ LINE — MASTER1)..... 0.005 %
Standard input level / Input impedance
PHONO.....–52 dBu/ 47 kΩ
CD/ LINE.....–12 dBu/ 47 kΩ
MIC1.....–52 dBu/ 8 kΩ
MIC2.....–52 dBu/ 12 kΩ
RETURN.....–12 dBu/ 47 kΩ
Standard output level / Load impedance / Output impedance
MASTER1.....+8 dBu/ 10 kΩ/ 5 Ω or lower
MASTER2.....+2 dBu/ 10 kΩ/ 22 Ω or lower
REC OUT.....–8 dBu/ 10 kΩ/ 22 Ω or lower
BOOTH.....+8 dBu/ 10 kΩ/ 1 kΩ or lower
SEND.....–12 dBu/ 10 kΩ/ 1 kΩ or lower
PHONES.....+8.5 dBu/ 32 Ω/ 1 Ω or lower
Rated output level / Load impedance
MASTER1.....+26 dBu/ 10 kΩ
MASTER2.....+22 dBu/ 10 kΩ
Crosstalk (LINE).....82 dB
Channel equalizer characteristic
HI.....–26 dB to +6 dB (13 kHz)
MID.....–26 dB to +6 dB (1 kHz)
LOW.....–26 dB to +6 dB (70 Hz)
Microphone equalizer characteristic
HI.....–12 dB to +12 dB (10 kHz)
LOW.....–12 dB to +12 dB (100 Hz)

Input / Output terminals

PHONO input terminal
RCA pin jack.....2 sets
CD/ LINE input terminal
RCA pin jacks.....4 sets
LINE input terminal
RCA pin jack.....2 sets
MIC1 input terminal
XLR connector/ phone jack (Ø 6.3 mm).....1 set
MIC2 input terminal
Phone jack (Ø 6.3 mm).....1 set
RETURN Input terminals
Phone jack (Ø 6.3 mm).....1 set
DIGITAL IN coaxial input terminal
RCA pin jacks.....4 sets
MASTER output terminal
XLR connector.....1 set
RCA pin jack.....1 sets
BOOTH output terminal
Phone jack (Ø 6.3 mm).....1 set
REC OUT output terminal
RCA pin jack.....1 sets
SEND output terminal
Phone jack (Ø 6.3 mm).....1 set
DIGITAL MASTER OUT coaxial output terminal
RCA pin jack.....1 sets
MIDI OUT terminal
5P DIN.....1 set
PHONES output terminal
Stereo phone jack (Ø 6.3 mm).....1 set
USB terminal
B type.....1 set
LINK terminal
LAN terminal (100Base-TX).....1 set

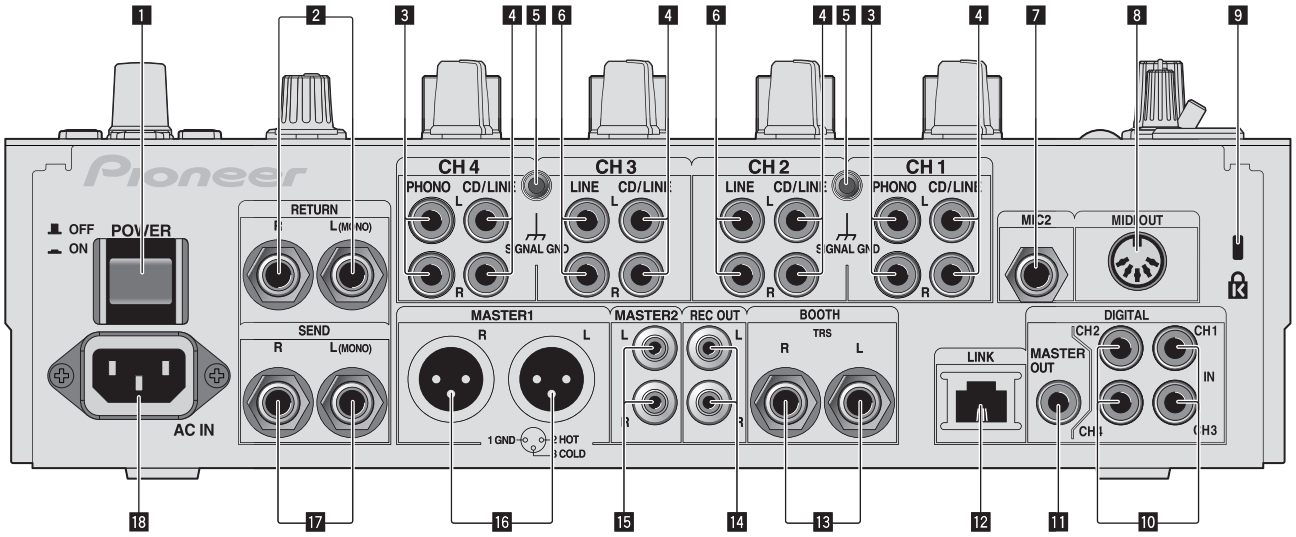
- The specifications and design of this product are subject to change without notice.

Accessories

- CD-ROM
  (DXX2619)
- USB cable
  (DDE1128)
- Power cord
  (SYXJ8: ADG7062, UXJCB: DDG1108, LXJ: ADG7062,
  KXJ5: XDG3066, /XJCN5: ADG7105)
- Operating instructions
  (SYXJ8: DRB1533, UXJCB: DRB1542, LXJ: DRB1543,
  KXJ5: DRB1545, /XJCN5: DRB1544)

2.2 PANEL FACILITIES

Rear panel



1 POWER button
Turns this unit's power on and off.

2 RETURN terminals
Connect to the output terminal of an external effector. When the [**L (MONO)**] channel only is connected, the [**L (MONO)**] channel input is simultaneously input to the [**R**] channel.

3 PHONO terminals
Connect to a phono level (MM cartridge) output device. Do not input line level signals.
To connect a device to the [**PHONO**] terminals, remove the short-circuit pin plug inserted in the terminals.
Insert this short-circuit pin plug into the [**PHONO**] terminals when nothing is connected to them to cut external noise.

4 CD/LINE terminals
Connect to a DJ player or a line level output component.

5 SIGNAL GND terminal
Connect an analog player's ground wire here. This helps reduce noise when the analog player is connected.

6 LINE terminals
Connect to a cassette deck or a line level output component.

7 MIC2 terminal
Connect a microphone here.

8 MIDI OUT terminal
Connect this to the MIDI IN terminal on an external MIDI sequencer.

9 Kensington security slot

10 DIGITAL IN terminal
Connect these to the digital coaxial output terminals on DJ players, etc. The sound may be momentarily interrupted when the output signal sampling frequency is switched.

11 DIGITAL MASTER OUT terminals
Outputs the master channel audio signals.

12 LINK terminal
Connect these to the LINK terminals on Pioneer DJ players or the LAN ports of computers on which rekordbox is installed (PRO DJ LINK).
To connect multiple devices, use a switching hub (commercially available).
Use a 100Base-TX-compatible switching hub. Some switching hubs may not operate properly.

13 BOOTH terminals
Output terminals for a booth monitor, compatible with balanced or unbalanced output for a TRS connector.

14 REC OUT terminals
This is an output terminal for recording.

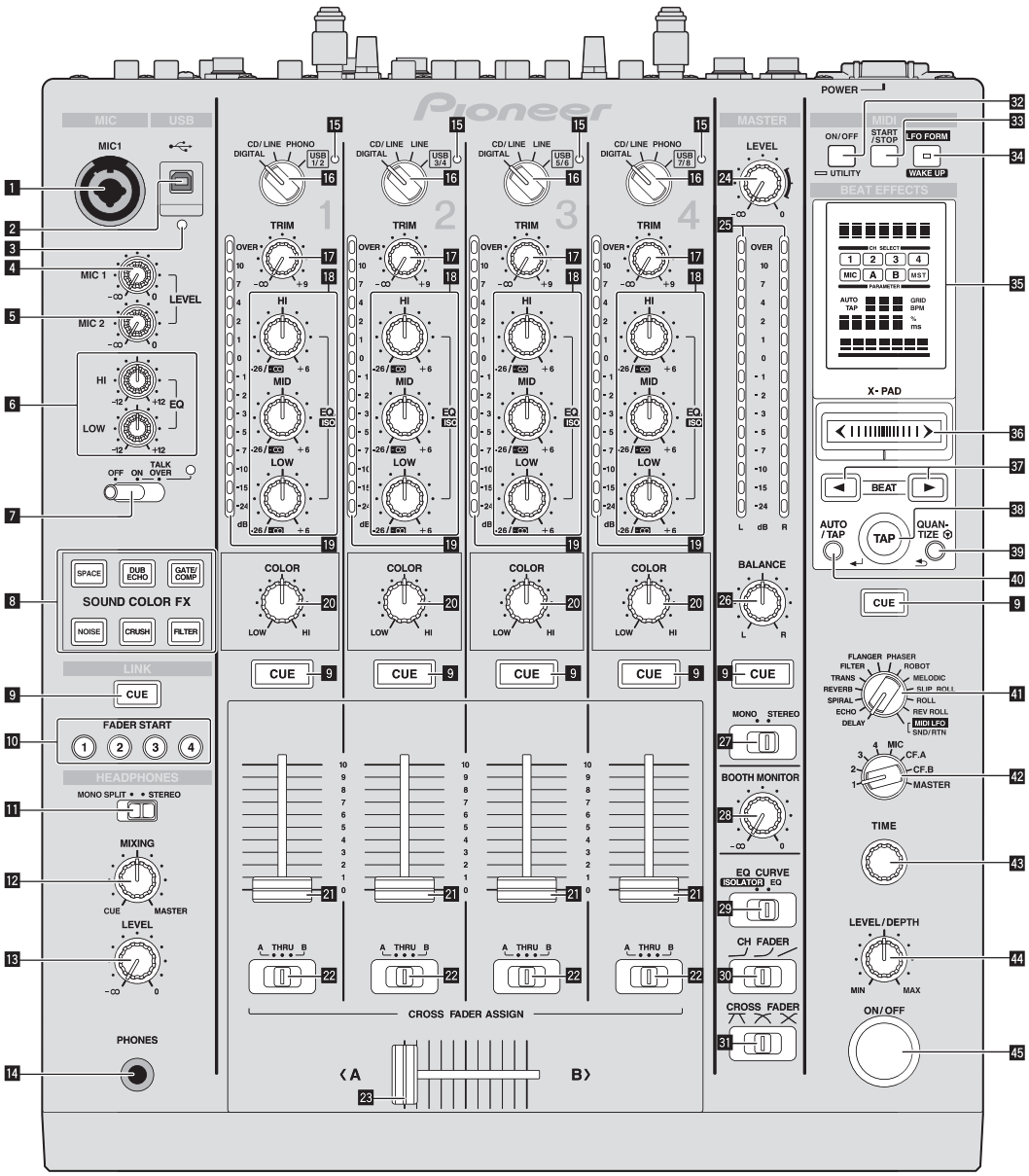
15 MASTER2 terminals
Connect to a power amplifier, etc.

16 MASTER1 terminals
Connect to a power amplifier, etc.

17 SEND terminals
Connect to the input terminal of an external effector. When the [**L (MONO)**] channel only is connected, a monaural audio signal is output.

18 AC IN
Connect to a power outlet using the included power cord. Wait until all connections between the equipment are completed before connecting the power cord. Be sure to use the included power cord.

Control Panel



1 MIC1 terminal
Connect a microphone here.

2 USB terminal
Connect the computer.

3 USB connection indicator
Lights when signals are being exchanged with the computer.

4 MIC1 LEVEL control
Adjusts the sound level output from the [**MIC1**] channel.

5 MIC2 LEVEL control
Adjusts the sound level output from the [**MIC2**] channel.

6 EQ (HI, LOW) controls
These adjust the tone quality of the [**MIC1**] and [**MIC2**] channels.

7 OFF, ON, TALK OVER selector switch
Turns the microphone on/off.

8 SOUND COLOR FX buttons
These turn the SOUND COLOR FX effects on/off.

9 CUE buttons
Press the [**CUE**] button(s) for the channel(s) you want to monitor.

10 FADER START (1, 2, 3, 4) buttons
These turn the fader start function on/off.

11 MONO SPLIT, STEREO selector switch
Switches how the monitor sound output from the headphones is distributed.

12 MIXING controls
These adjust the monitor volume balance of the sound of channels for which the [**CUE**] button is pressed and the sound of the [**MASTER**] channel.

13 LEVEL control
Adjusts the sound level output from the headphones.

14 PHONES terminal
Connect headphones here.

15 USB audio input indicator
Lights when sound is being input from the computer to the various channels.

16 DIGITAL, CD/LINE, PHONO, LINE, USB */* selector switch
Select the input source of each channel from the components connected to this unit.

17 TRIM control
Adjusts the level of audio signals input in each channel.

18 EQ/ISO (HI, MID, LOW) controls
These adjust the sound quality of the different channels.

19 Channel Level Indicator
Displays the sound level of the different channels before passing through the channel faders.

20 COLOR controls
These change the parameters of the SOUND COLOR FX of the different channels.

21 Channel Fader
Adjusts the level of audio signals output in each channel.

22 CROSS FADER ASSIGN (A, THRU, B) selector switch
Set the output destination of each channel to [**A**] or [**B**].

23 Crossfader
Outputs audio signals assigned by the crossfader assign switch corresponding to the curve characteristics selected by [**CROSS FADER**] (Crossfader Curve Selector Switch).

24 MASTER LEVEL controls
Adjusts the sound level output from the [**MASTER**] channel.

25 Master Level Indicator
Displays the sound level output from the [**MASTER**] channel.

26 BALANCE controls
Adjusts the left/right balance of the sound output from the [**MASTER1**] terminals, etc.

27 MONO, STEREO selector switch
Switches the sound output from the [**MASTER1**] terminals, etc., between monaural and stereo.

28 BOOTH MONITOR controls
Adjusts the level of audio signals output at the [**BOOTH**] terminal.

29 EQ CURVE (ISOLATOR, EQ) selector switch
Switches the function of the [**EQ/ISO** (**HI**, **MID**, **LOW**)] controls.

30 CH FADER (⌒, ⌒, ⌒) selector switch
Switches the channel fader's curve characteristics.

31 CROSS FADER (⌒, ⌒, ⌒) selector switch
This switches the crossfader curve characteristics.

32 ON/OFF (UTILITY) button
— **ON**/**OFF**: Turns the MIDI function on/off.
— **UTILITY**: Displays the [**USER SETUP**] or [**CLUB SETUP**] screen.

33 START/STOP button
Sends the MIDI start/MIDI stop signals.

34 LFO FORM (WAKE UP) button
— **LFO FORM**: When [**MIDI LFO**] is selected at BEAT EFFECT, the MIDI signal's waveform switches each time the button is pressed.
— **WAKE UP**: Cancels the auto standby mode.

35 Main unit display

36 X-PAD
Adjusts the quantitative parameter of the BEAT EFFECT function.

37 BEAT ◄, ► buttons
Sets the beat fraction for synchronizing the effect sound.

38 TAP (ENTER) button
— **TAP**: When the BPM measurement mode is set to [**TAP**], the BPM is input manually by tapping the button with a finger.
— **ENTER**: Used to change this unit's settings.

39 QUANTIZE button
- Used to change this unit's settings.
- When the QUANTIZE function is turned on for the BEAT EFFECT function, the effect's starting point is set to the nearest beat.

40 AUTO/TAP button
Switches the BPM measurement mode.

41 DELAY, ECHO, SPIRAL, REVERB, TRANS, FILTER, FLANGER, PHASER, ROBOT, MELODIC, SLIP ROLL, ROLL, REV ROLL, SND/RTN (MIDI LFO) selector switch
Switches the BEAT EFFECT effect type.

42 1, 2, 3, 4, MIC, CF.A, CF.B, MASTER selector switch
Switches the channel to which the BEAT EFFECT is to be applied.

43 TIME control
Adjust the BEAT EFFECT's time parameter.

44 LEVEL/DEPTH control
Adjusts the BEAT EFFECT's quantitative parameter.

45 ON/OFF button
Turns the BEAT EFFECT function on/off.

Do not pull on the channel fader and crossfader knobs with excessive force. The knobs are not designed to be removed. Pulling the knobs strongly may result in damaging the unit.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

Items to be checked after servicing / DJM

To keep the product quality after servicing, confirm recommended check points shown below.

No.	Procedures	Check points
1	Check the firmware version in Test mode.	The firmware version must be the latest one. If it is not the latest one, be sure to update it.
2	Confirm whether the customer complain has been solved. If the customer complain occurs with the specific source, such as Mic, each Input, Fader, Equalizer, and Trim, input that specific source for checking.	The customer complain must not be reappeared. Audio and operations must be normal.
3	Check the analog audio input (Check the MIC1, MIC2 and RETURN.) (Make the analog connections with CDJ player, analog player and MIC.)	Audio and operations must be normal.
4	Check the analog audio output (MASTER1, 2, REC, BOOTH and SEND.) (Make the analog connection with CDJ player.)	Audio and operations must be normal.
5	Check the digital audio input/output (Make the dgital connection with CDJ player.)	Audio for each channel and operations must be normal.
6	Check DVS.	Make sure that PC applications function properly and that the audio signals and operations of each channel are normal.
7	Check the headphones output.	There must be no errors, such as noise, in the audio output.
8	Check playback, using the fader function. (Select the fader function then check operations of each channel with audio signals via the DSP.)	There must be no errors in audio output and operations of each channel.
9	Check the connection of each interface.	
	USB B	The device must be properly recognized by the PC.
	LINK	The LAN must be properly connected in Test mode.
10	Check the buttons and controls.	Make sure that all buttons and controls on the main unit function properly.
11	Check operations of the X-PAD.	Touch the X-PAD in Test mode and check that it operates properly.
12	Check the FL displays and LEDs.	Check that all the FL displays and LEDs light in Test mode.
13	Check the user settings.	They must be returned to those set before repair.
14	Check the appearance of the product.	No scratches or dirt on its appearance after receiving it for service.

See the table below for the items to be checked regarding audio.

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

3.2 JIGS LIST

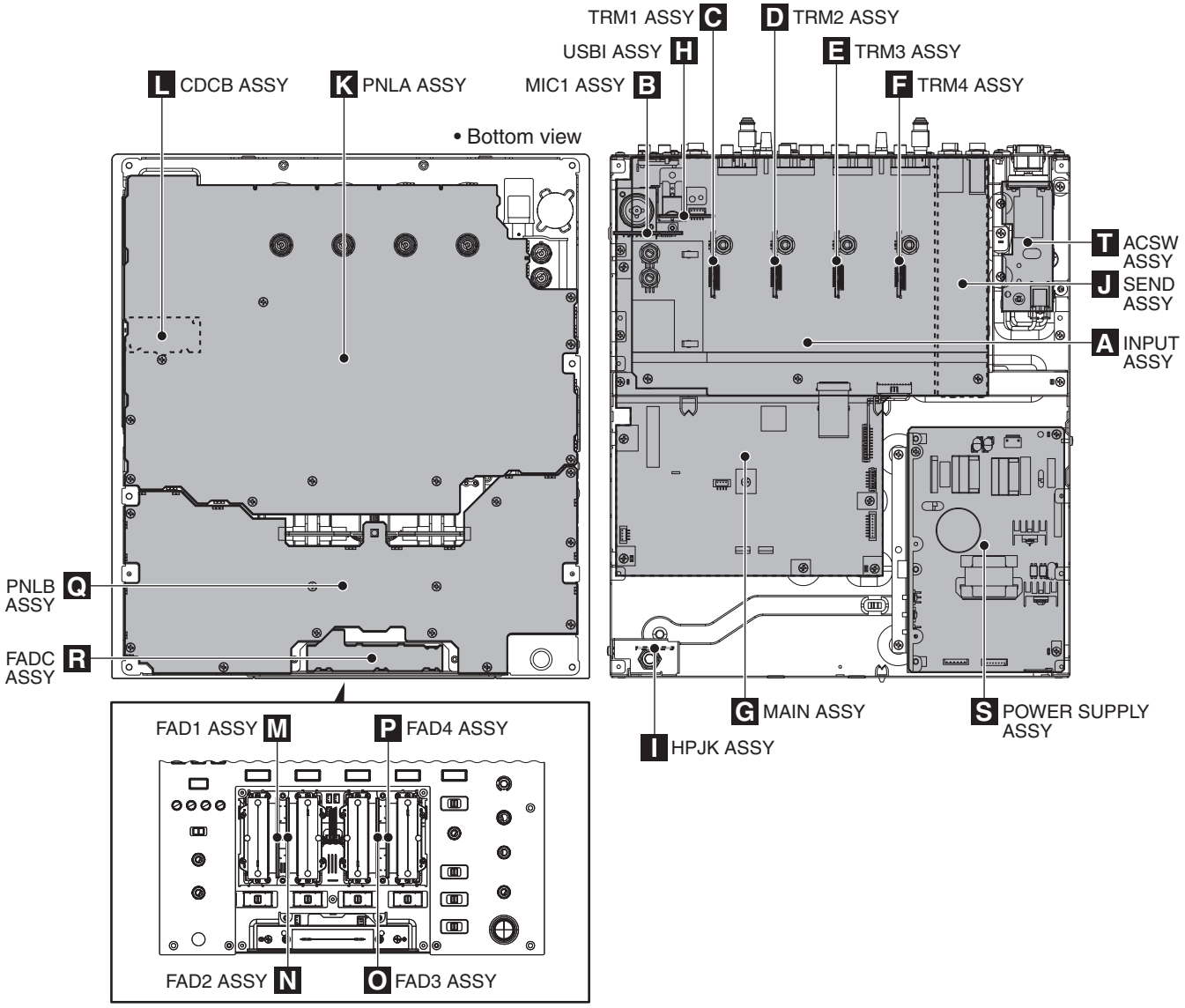
■ Jigs List

Jig Name	Part No.	Purpose of use / Remarks
USB cable	GGP1193	for PC connection, accessory

■ Lubricants and Glues List

Name	Part No.	Remarks
Lubricating oil	GYA1001	Refer to "9.4 CONTROL PANEL SECTION (1/2)".

3.3 PCB LOCATIONS



NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

LIST OF ASSEMBLIES

Mark	No.	Description	Part No.
NSP	1	MOTHER ASSY	DWM2418
	2	MAIN ASSY	DWX3190
	2	CDCB ASSY	DWX3191
	2	USBI ASSY	DWX3192
NSP	1	AUDIO ASSY	DWM2419
	2	INPUT ASSY	DWX3193
	2	SEND ASSY	DWX3195
	2	TRM1 ASSY	DWX3203
	2	TRM2 ASSY	DWX3204
	2	TRM3 ASSY	DWX3205
	2	TRM4 ASSY	DWX3206
NSP	1	SUB ASSY	DWM2420
	2	ACSW ASSY	DWR1490
	2	PNLB ASSY	DWX3197
	2	FAD1 ASSY	DWX3198
	2	FAD2 ASSY	DWX3199
	2	FAD3 ASSY	DWX3200
	2	FAD4 ASSY	DWX3201
	2	FADC ASSY	DWX3202
	2	MIC1 ASSY	DWX3207
	2	HPJK ASSY	DWX3208
	1	PNLA ASSY	DWX3196
⚠	1	POWER SUPPLY ASSY	DWR1492

A

B

C

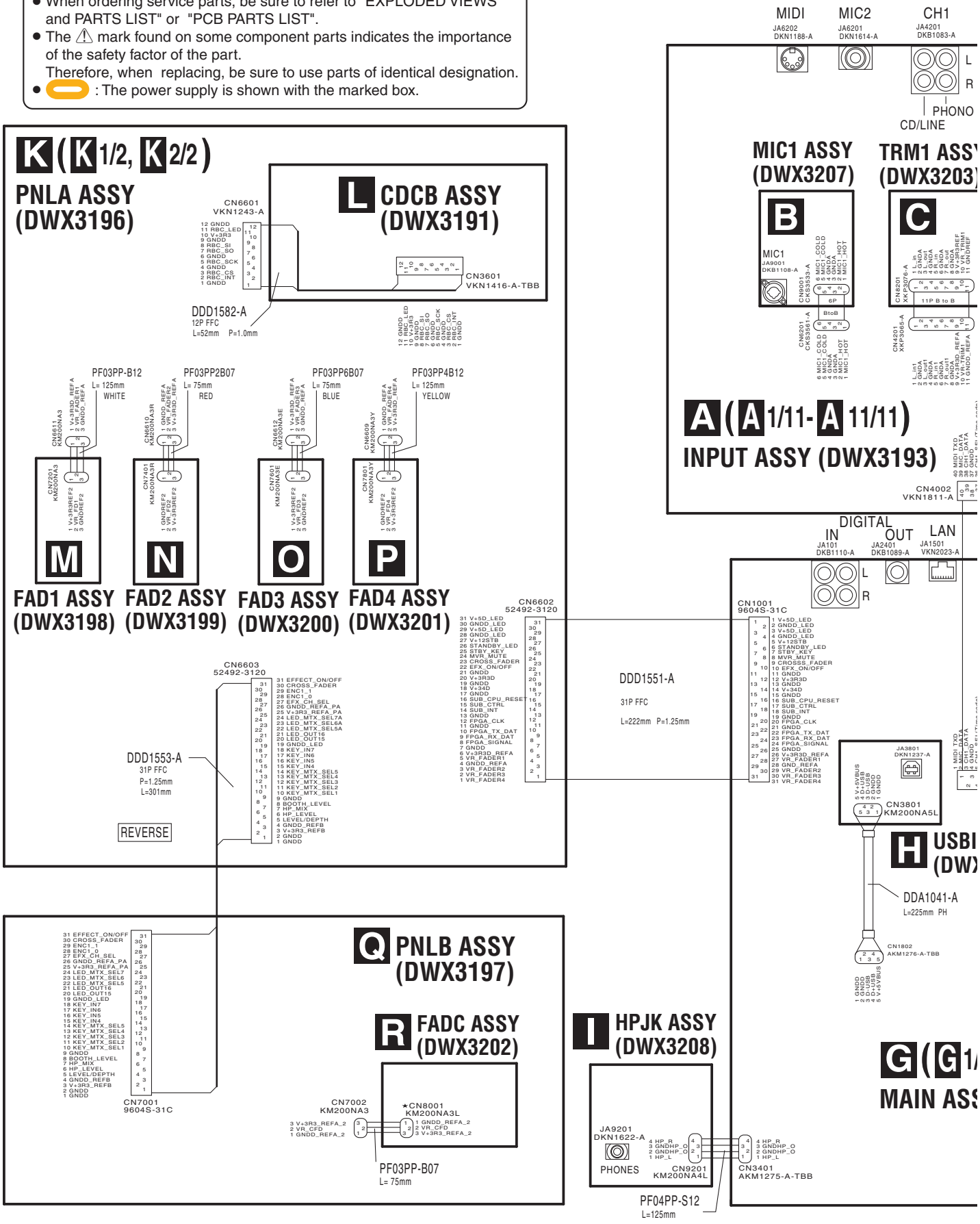
D

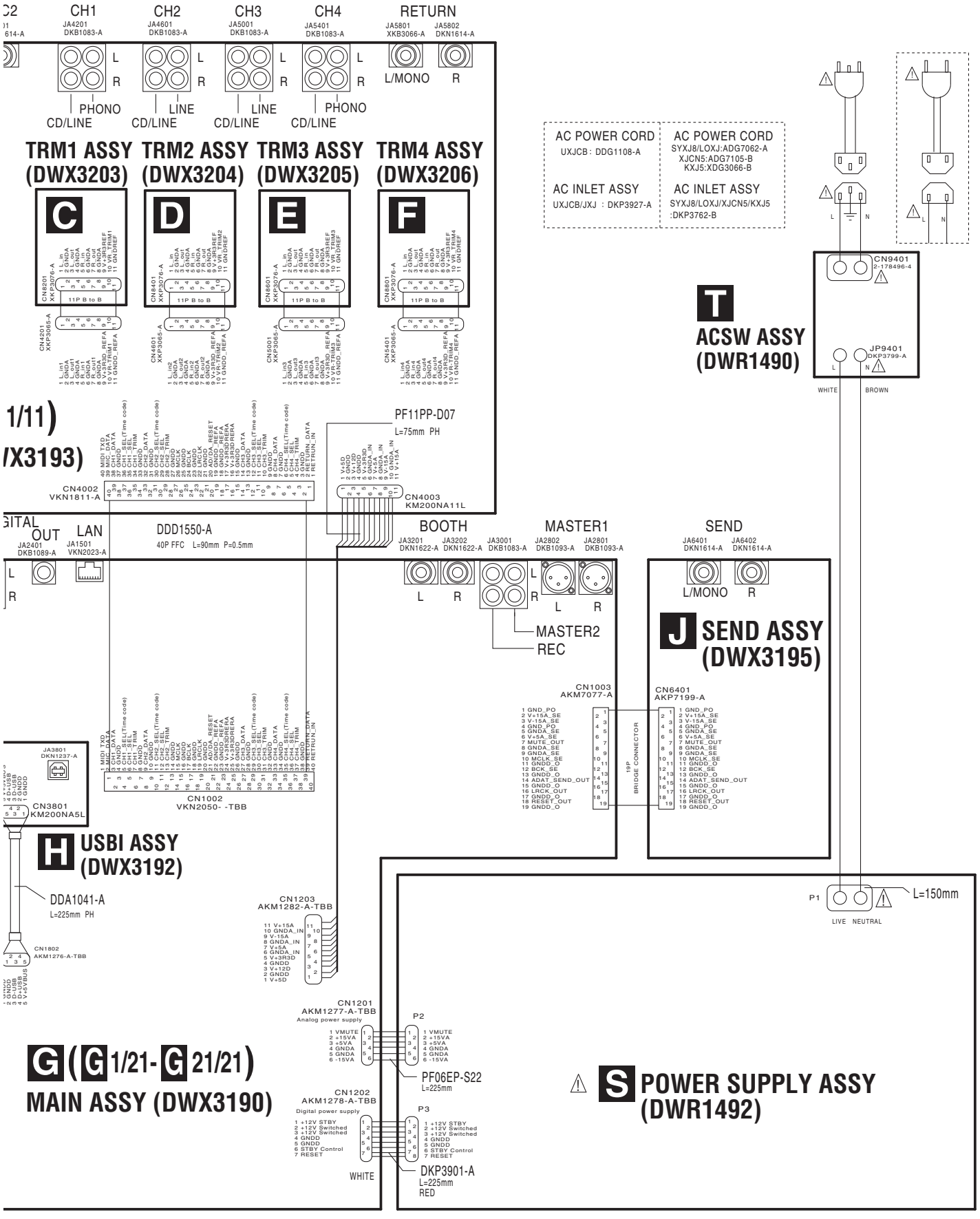
E

F

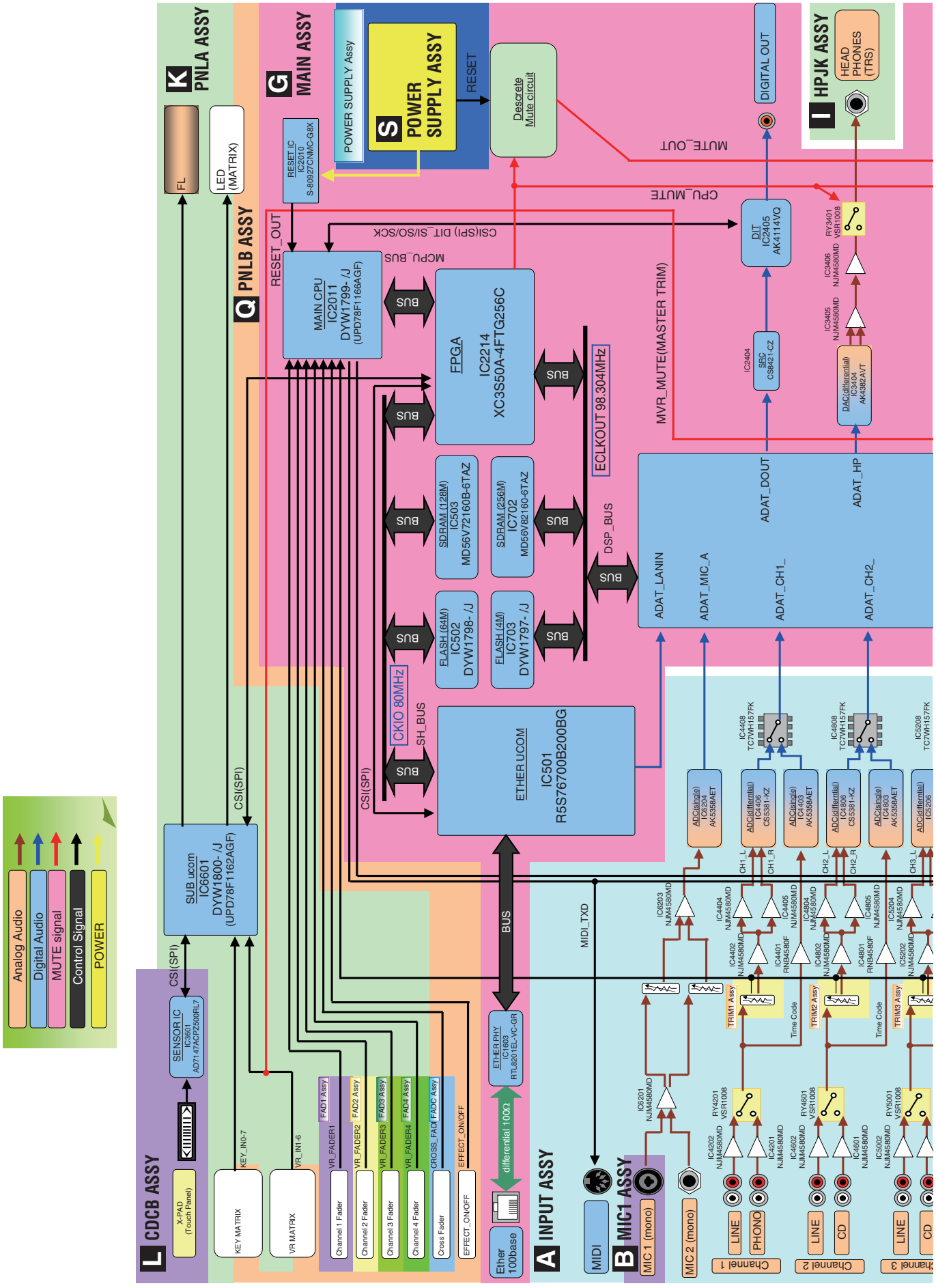
4. BLOCK DIAGRAM
4.1 OVERALL WIRING DIAGRAM

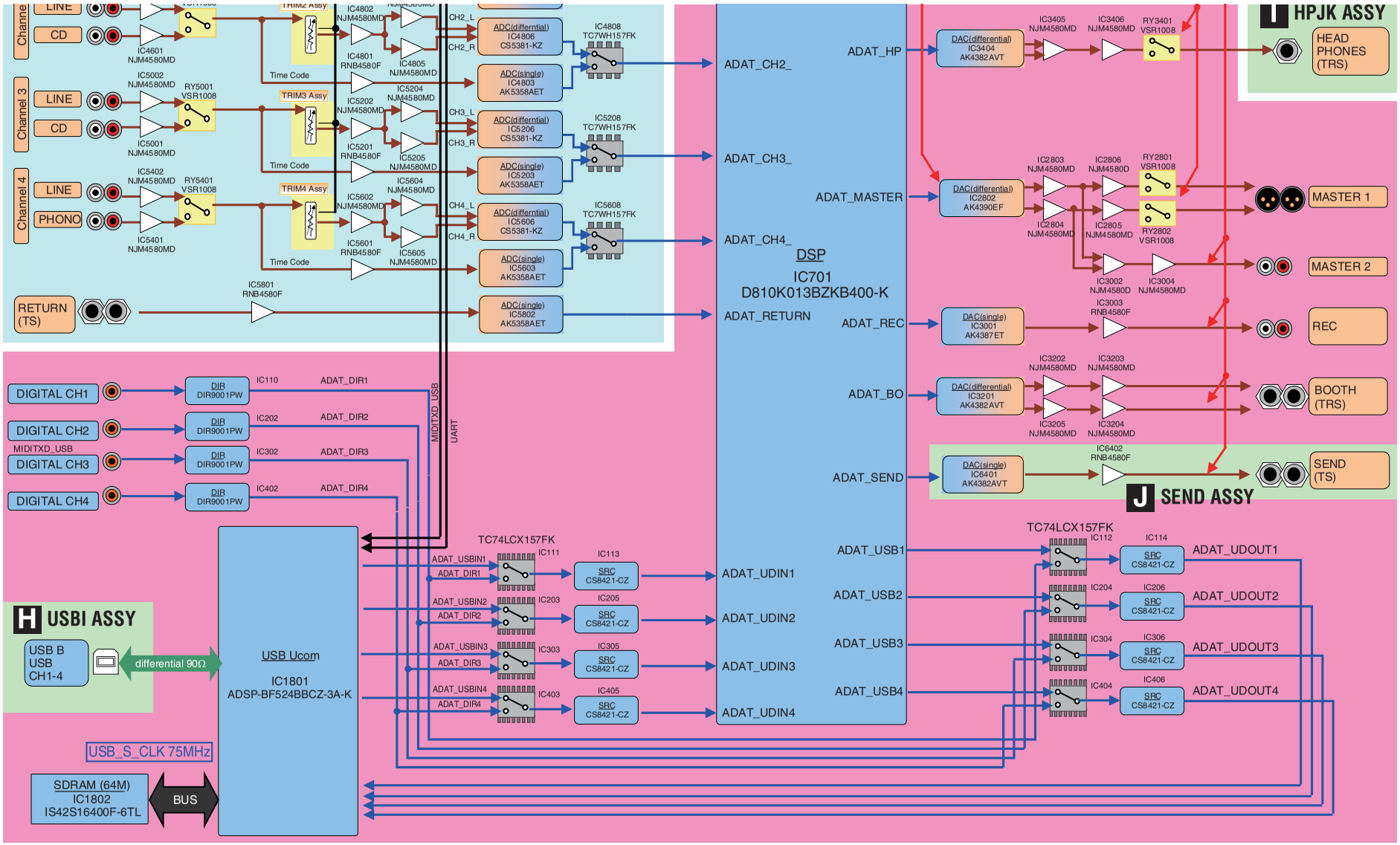
- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
  Therefore, when replacing, be sure to use parts of identical designation.
- : The power supply is shown with the marked box.



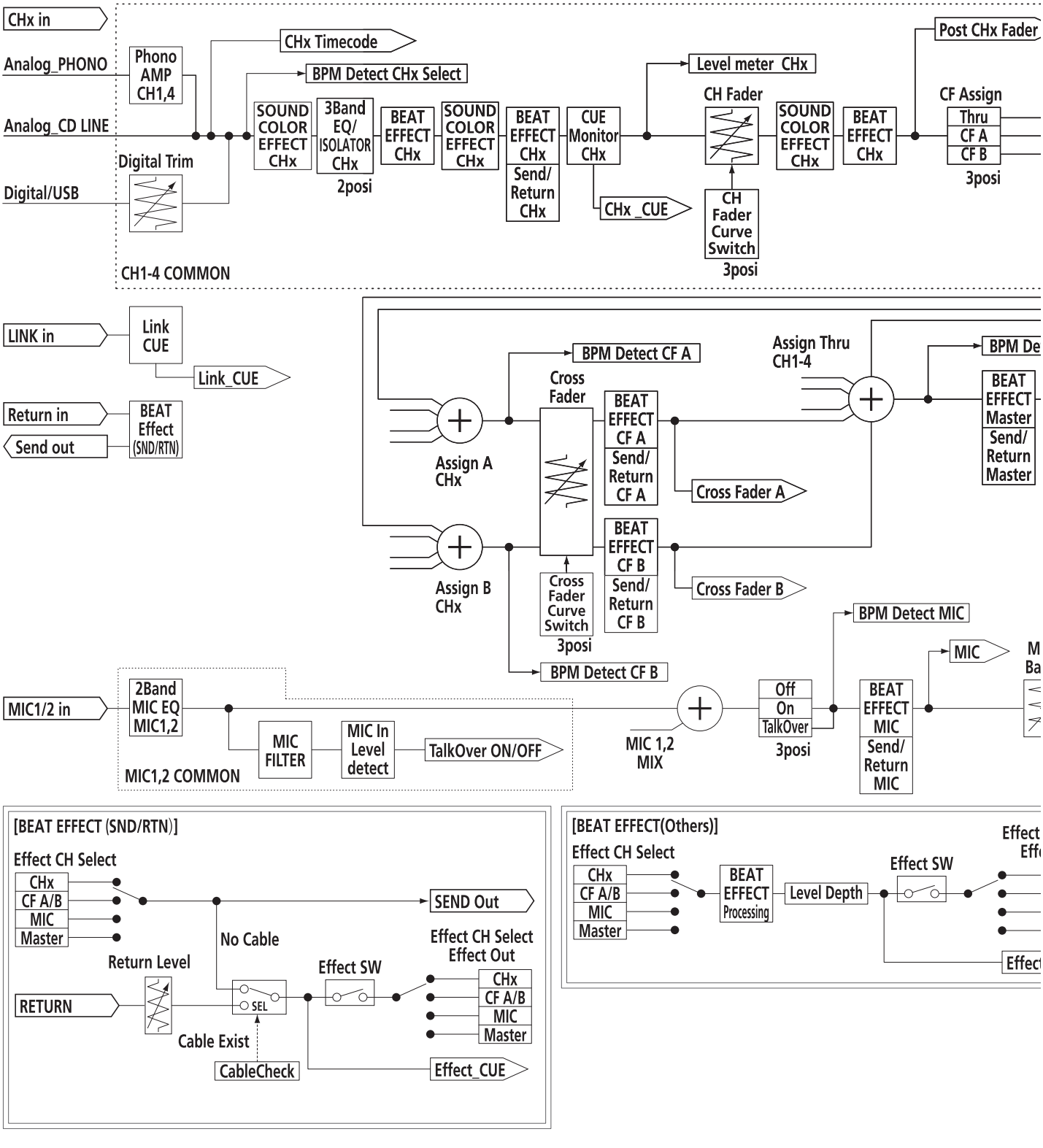

CH1
CH2
CH3
CH4
RETURN
JA4201 DKB1083-A
JA4601 DKB1083-A
JA5001 DKB1083-A
JA5401 DKB1083-A
JA5801 XKB3066-A
JA5802 DKN1614-A
L
R
L/MONO
PHONO
LINE
CD/LINE
TRM1 ASSY (DWX3203)
TRM2 ASSY (DWX3204)
TRM3 ASSY (DWX3205)
TRM4 ASSY (DWX3206)
C
D
E
F
CN8201 XKP3076-A
CN8401 XKP3076-A
CN8601 XKP3076-A
CN8801 XKP3076-A
11P B to B
CN4201 XKP3065-A
CN4401 XKP3065-A
CN5001 XKP3065-A
CN5401 XKP3065-A
AC POWER CORD
UXJCB : DDG1108-A
AC INLET ASSY
UXJCB/JXJ : DKP3927-A
AC POWER CORD
SYXJ8/LOXJ:ADG7062-A
XJCN5:ADG7105-B
KXJ5:XDG3066-B
AC INLET ASSY
SYXJ8/LOXJ/XJCN5/KXJ5
:DKP3762-B
CN9401 2-178496-4
JP9401 DKP3799-A
WHITE
BROWN
T
ACSW ASSY (DWR1490)
1/11)
/X3193)
PF11PP-D07
L=75mm PH
CN4002 VKN1811-A
CN4003 KM200NA11L
GITAL OUT
LAN
JA2401 DKB1089-A
JA1501 VKN2023-A
DDD1550-A
40P FFC L=90mm P=0.5mm
BOOTH
MASTER1
SEND
JA3201 DKN1622-A
JA3202 DKN1622-A
JA3001 DKB1083-A
JA2802 DKB1093-A
JA2801 DKB1093-A
JA6401 DKN1614-A
JA6402 DKN1614-A
MASTER2
REC
J
SEND ASSY (DWX3195)
CN1003 AKM7077-A
CN6401 AKP7199-A
19P
BRIDGE CONNECTOR
JA3801 DKN1237-A
CN3801 KM200NA5L
CN1002 VKN2050- -TBB
H
USBI ASSY (DWX3192)
DDA1041-A
L=225mm PH
CN1802 AKM1276-A-TBB
CN1203 AKM1282-A-TBB
CN1201 AKM1277-A-TBB
Analog power supply
P2
PF06EP-S22
L=225mm
CN1202 AKM1278-A-TBB
Digital power supply
P3
DKP3901-A
L=225mm
RED
WHITE
G (G 1/21- G 21/21)
MAIN ASSY (DWX3190)
S
POWER SUPPLY ASSY (DWR1492)
P1
L=150mm
LIVE
NEUTRAL

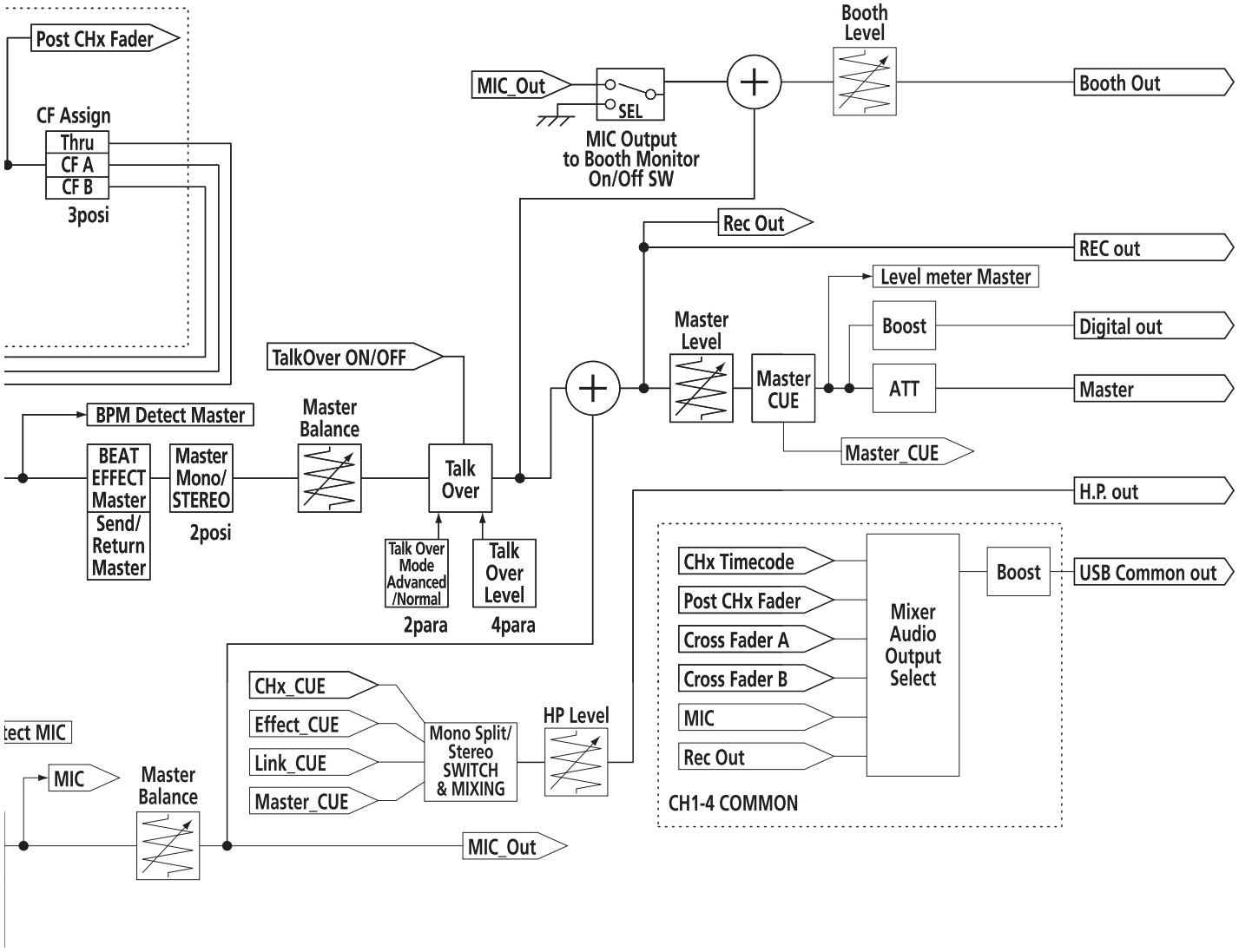
4.2 AUDIO SYSTEM BLOCK DIAGRAM



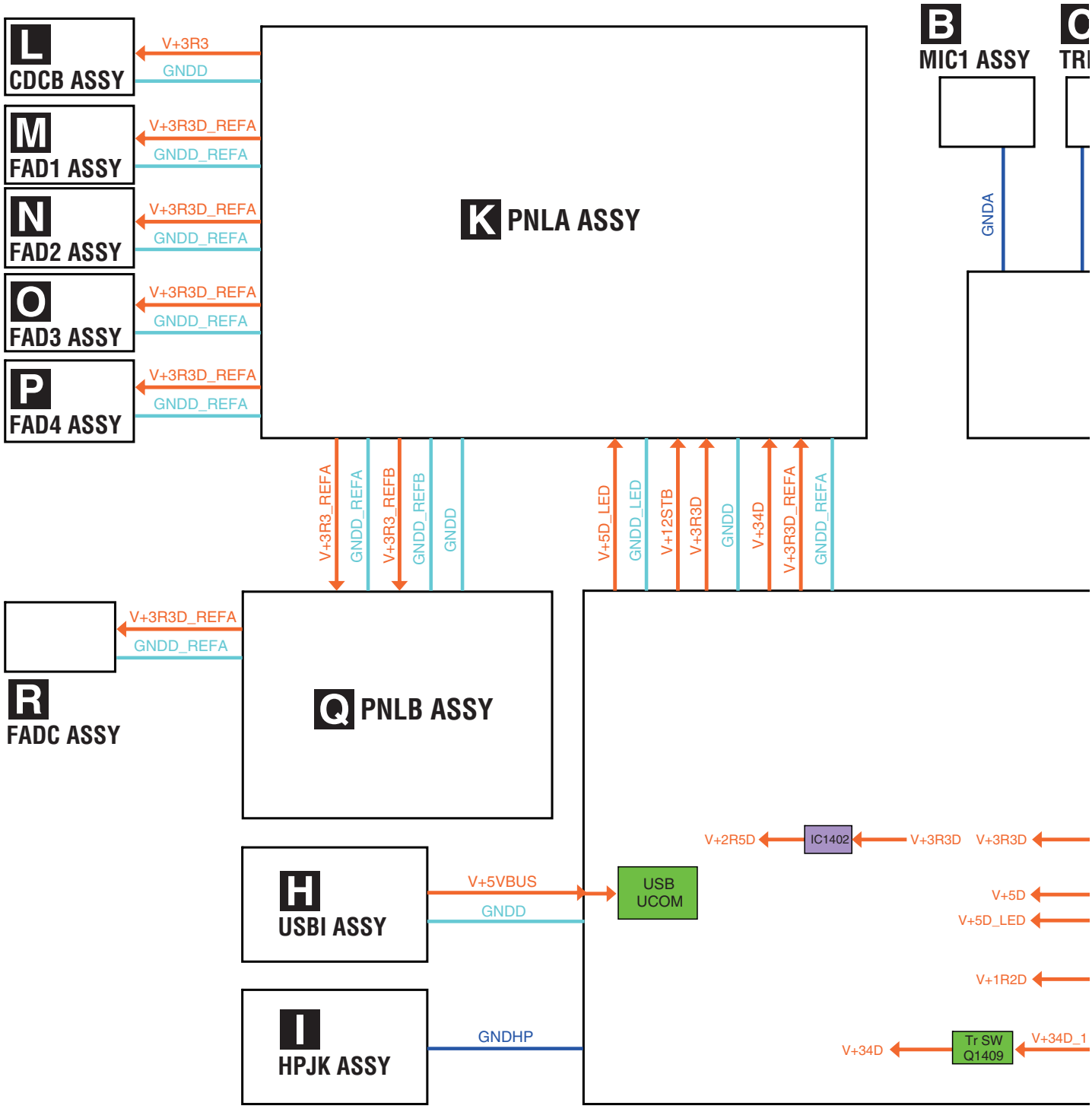

Channel 1
LINE
CD
IC4601
NJM4580MD
Channel 3
LINE
CD
IC5002
NJM4580MD
RY5001
VSR1008
IC5001
NJM4580MD
Channel 4
LINE
PHONO
IC5402
NJM4580MD
RY5401
VSR1008
IC5401
NJM4580MD
TRIM2 Assy
TRIM3 Assy
TRIM4 Assy
Time Code
IC4802
NJM4580MD
IC4801
RNB4580F
IC4805
NJM4580MD
IC5202
NJM4580MD
IC5201
RNB4580F
IC5204
NJM4580MD
IC5205
NJM4580MD
IC5602
NJM4580MD
IC5601
RNB4580F
IC5604
NJM4580MD
IC5605
NJM4580MD
CH2_L
CH2_R
CH3_L
CH3_R
CH4_L
CH4_R
ADC(differntial)
IC4806
CS5381-KZ
ADC(single)
IC4803
AK5358AET
ADC(differntial)
IC5206
CS5381-KZ
ADC(single)
IC5203
AK5358AET
ADC(differntial)
IC5606
CS5381-KZ
ADC(single)
IC5603
AK5358AET
IC4808
TC7WH157FK
IC5208
TC7WH157FK
IC5608
TC7WH157FK
RETURN
(TS)
IC5801
RNB4580F
ADC(single)
IC5802
AK5358AET
ADAT_CH2_
ADAT_CH3_
ADAT_CH4_
ADAT_RETURN
DSP
IC701
D810K013BZKB400-K
ADAT_HP
ADAT_MASTER
ADAT_REC
ADAT_BO
ADAT_SEND
DAC(differential)
IC3404
AK4382AVT
IC3405
NJM4580MD
IC3406
NJM4580MD
RY3401
VSR1008
HEAD
PHONES
(TRS)
J HPJK ASSY
DAC(differential)
IC2802
AK4390EF
IC2803
NJM4580MD
IC2804
NJM4580MD
IC2806
NJM4580D
IC2805
NJM4580MD
RY2801
VSR1008
RY2802
VSR1008
MASTER 1
MASTER 2
IC3002
NJM4580D
IC3004
NJM4580MD
DAC(single)
IC3001
AK4387ET
IC3003
RNB4580F
REC
DAC(differential)
IC3201
AK4382AVT
IC3202
NJM4580MD
IC3203
NJM4580MD
IC3205
NJM4580MD
IC3204
NJM4580MD
BOOTH
(TRS)
DAC(single)
IC6401
AK4382AVT
IC6402
RNB4580F
SEND
(TS)
J SEND ASSY
DIGITAL CH1
DIGITAL CH2
MIDITXD_USB
DIGITAL CH3
DIGITAL CH4
DIR
DIR9001PW
IC110
IC202
IC302
IC402
ADAT_DIR1
ADAT_DIR2
ADAT_DIR3
ADAT_DIR4
MIDITXD_USB
UART
TC74LCX157FK
ADAT_USBIN1
ADAT_DIR1
ADAT_USBIN2
ADAT_DIR2
ADAT_USBIN3
ADAT_DIR3
ADAT_USBIN4
ADAT_DIR4
IC111
IC203
IC303
IC403
SRC
CS8421-CZ
IC113
IC205
IC305
IC405
ADAT_UDIN1
ADAT_UDIN2
ADAT_UDIN3
ADAT_UDIN4
ADAT_USB1
ADAT_USB2
ADAT_USB3
ADAT_USB4
TC74LCX157FK
IC112
IC204
IC304
IC404
IC114
IC206
IC306
IC406
ADAT_UDOUT1
ADAT_UDOUT2
ADAT_UDOUT3
ADAT_UDOUT4
H USBI ASSY
USB B
USB
CH1-4
differential 90Ω
USB Ucom
IC1801
ADSP-BF524BBCZ-3A-K
USB_S_CLK 75MHz
SDRAM (64M)
IC1802
IS42S16400F-6TL
BUS

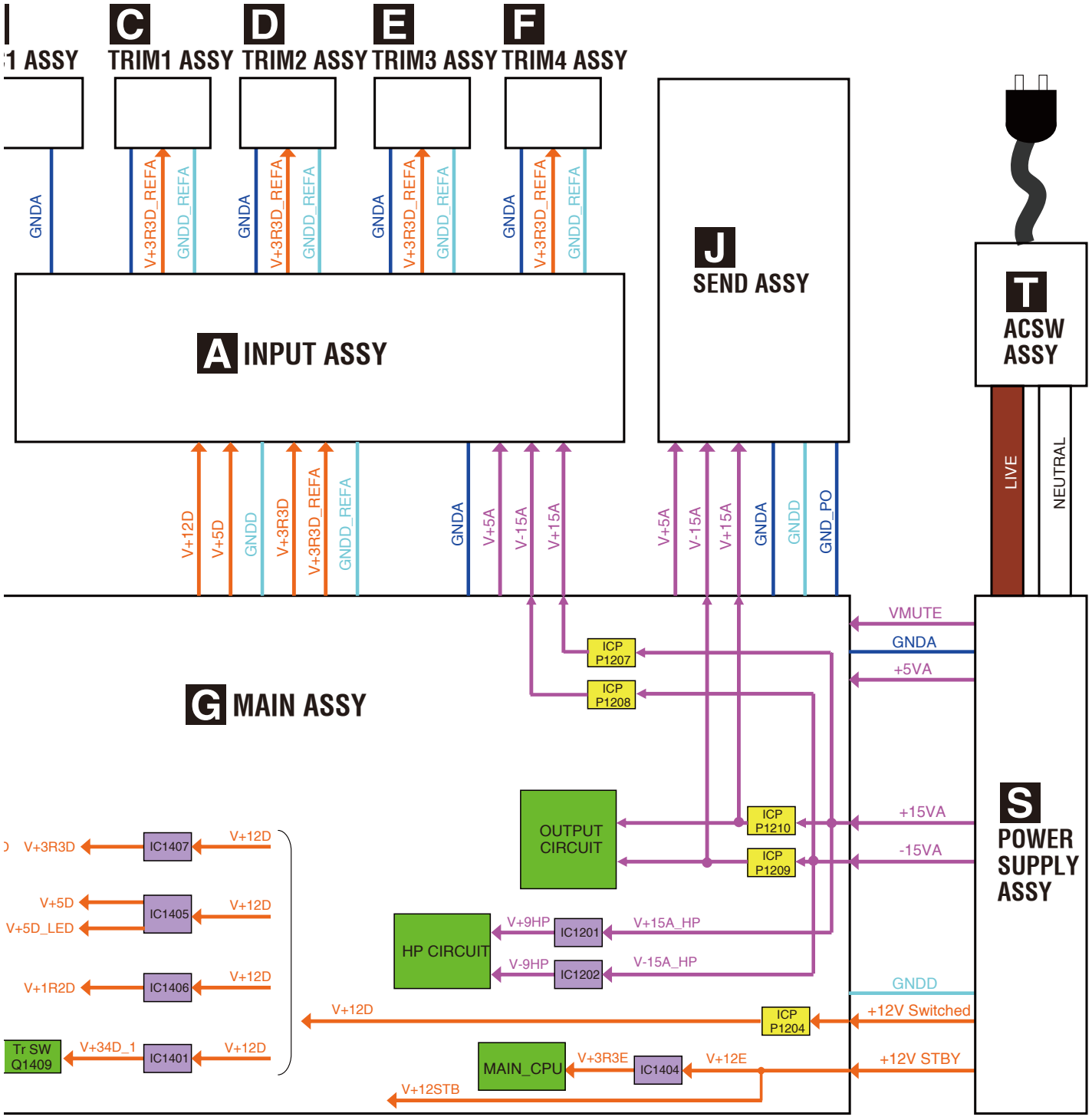
4.3 DSP BLOCK DIAGRAM




Post CHx Fader
CF Assign
Thru
CF A
CF B
3posi
MIC_Out
SEL
MIC Output
to Booth Monitor
On/Off SW
Booth
Level
Booth Out
Rec Out
REC out
Level meter Master
Master
Level
Boost
Digital out
Master
CUE
ATT
Master
Master_CUE
TalkOver ON/OFF
BPM Detect Master
Master
Balance
BEAT
EFFECT
Master
Send/
Return
Master
Master
Mono/
STEREO
2posi
Talk
Over
Talk Over
Mode
Advanced
/Normal
2para
Talk
Over
Level
4para
H.P. out
CHx Timecode
Post CHx Fader
Cross Fader A
Cross Fader B
MIC
Rec Out
Mixer
Audio
Output
Select
Boost
USB Common out
CH1-4 COMMON
CHx_CUE
Effect_CUE
Link_CUE
Master_CUE
Mono Split/
Stereo
SWITCH
& MIXING
HP Level
MIC
Master
Balance
MIC_Out
Effect CH Select
Effect Out
CHx
CF A/B
MIC
Master
Effect_CUE
[Mono Split / Stereo SWITCH & MIXING]
CHx Cue On/Off SW
CHx_CUE
Effect Cue On/Off SW
Effect_CUE
Link Cue On/Off SW
Link_CUE
Master Cue On/Off SW
Master_CUE
CUE
Mixing
MIXING
Master
Mixing
L
R
L
R
SEL
SEL
Mono Split
Stereo
Mono Split
Stereo
MONO SPLIT/
STEREO SWITCH
2posi
H.P. MIX L Out
H.P. MIX R Out

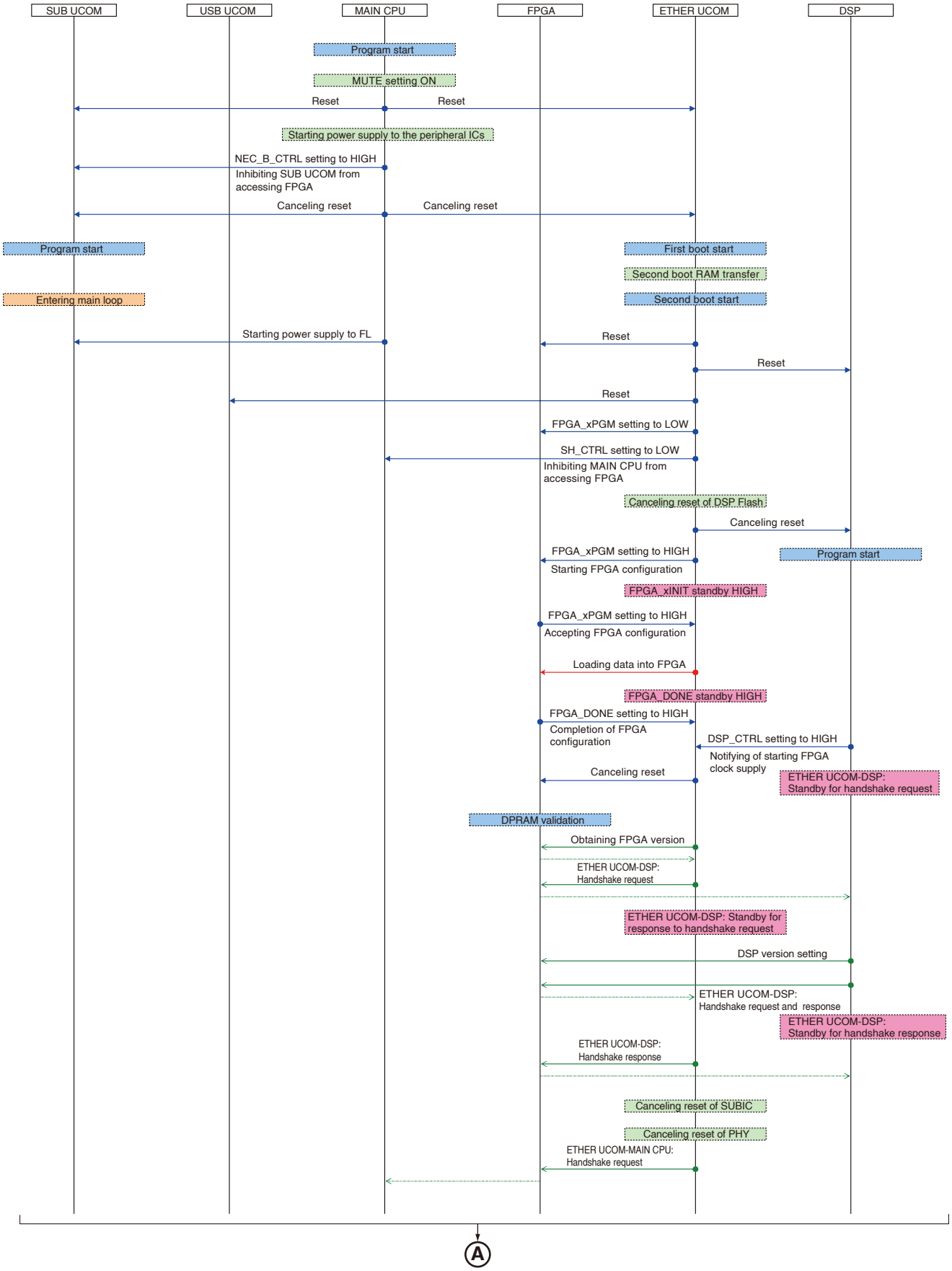
4.4 POWER BLOCK DIAGRAM

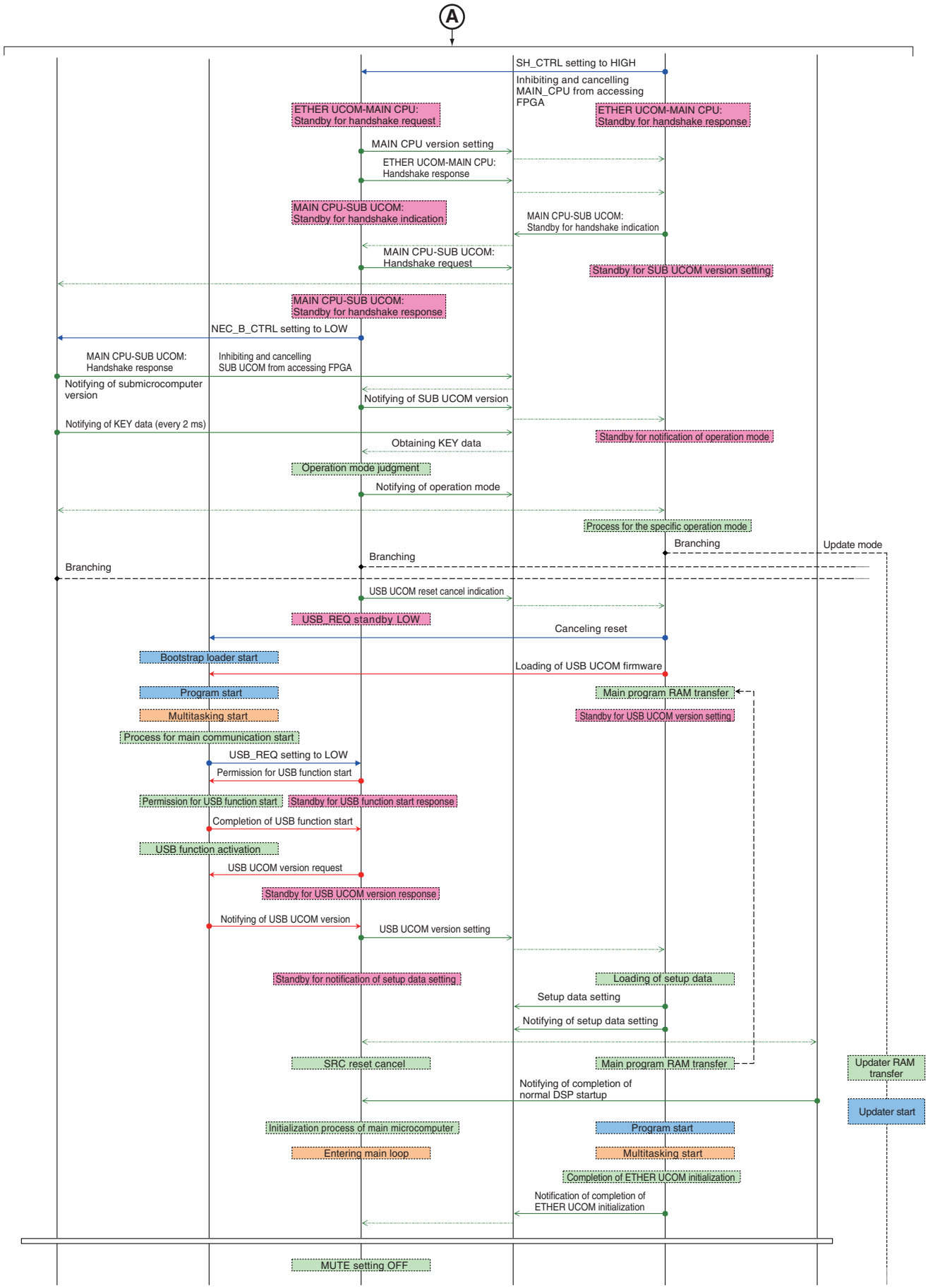



C
TRIM1 ASSY
D
TRIM2 ASSY
E
TRIM3 ASSY
F
TRIM4 ASSY
GNDA
V+3R3D_REFA
GNDD_REFA
A INPUT ASSY
J
SEND ASSY
T
ACSW
ASSY
LIVE
NEUTRAL
V+12D
V+5D
GNDD
V+3R3D
V+3R3D_REFA
GNDD_REFA
GNDA
V+5A
V-15A
V+15A
GNDD
GND_PO
G MAIN ASSY
VMUTE
GNDA
+5VA
ICP P1207
ICP P1208
OUTPUT CIRCUIT
ICP P1210
ICP P1209
+15VA
-15VA
S
POWER
SUPPLY
ASSY
V+3R3D
IC1407
V+12D
V+5D
V+5D_LED
IC1405
V+1R2D
IC1406
HP CIRCUIT
V+9HP
IC1201
V+15A_HP
V-9HP
IC1202
V-15A_HP
GNDD
+12V Switched
ICP P1204
Tr SW Q1409
V+34D_1
IC1401
MAIN_CPU
V+3R3E
IC1404
V+12E
+12V STBY
V+12STB

5. DIAGNOSIS
5.1 POWER ON SEQUENCE

■ Sequece Diagram




A
SH_CTRL setting to HIGH
Inhibiting and cancelling MAIN_CPU from accessing FPGA
ETHER UCOM-MAIN CPU: Standby for handshake request
ETHER UCOM-MAIN CPU: Standby for handshake response
MAIN CPU version setting
ETHER UCOM-MAIN CPU: Handshake response
MAIN CPU-SUB UCOM: Standby for handshake indication
MAIN CPU-SUB UCOM: Standby for handshake indication
MAIN CPU-SUB UCOM: Handshake request
Standby for SUB UCOM version setting
MAIN CPU-SUB UCOM: Standby for handshake response
NEC_B_CTRL setting to LOW
MAIN CPU-SUB UCOM: Handshake response
Inhibiting and cancelling SUB UCOM from accessing FPGA
Notifying of submicrocomputer version
Notifying of SUB UCOM version
Notifying of KEY data (every 2 ms)
Standby for notification of operation mode
Obtaining KEY data
Operation mode judgment
Notifying of operation mode
Process for the specific operation mode
Branching
Update mode
Branching
Branching
USB UCOM reset cancel indication
USB_REQ standby LOW
Canceling reset
Bootstrap loader start
Loading of USB UCOM firmware
Program start
Main program RAM transfer
Multitasking start
Standby for USB UCOM version setting
Process for main communication start
USB_REQ setting to LOW
Permission for USB function start
Permission for USB function start
Standby for USB function start response
Completion of USB function start
USB function activation
USB UCOM version request
Standby for USB UCOM version response
Notifying of USB UCOM version
USB UCOM version setting
Standby for notification of setup data setting
Loading of setup data
Setup data setting
Notifying of setup data setting
SRC reset cancel
Main program RAM transfer
Updater RAM transfer
Notifying of completion of normal DSP startup
Updater start
Initialization process of main microcomputer
Program start
Entering main loop
Multitasking start
Completion of ETHER UCOM initialization
Notification of completion of ETHER UCOM initialization
MUTE setting OFF

5.2 TROUBLESHOOTING

Contents

*Point to be checked – Assys are classified with prefix.
[1-**] MAIN Assy
[2-**] INPUT Assy
[3-**] SEND Assy
[4-**] PNLA Assy
[5-**] HPJK Assy
[6-**] POER SUPPLY Assy

[0] Prior Confirmation

[0-1] Checking Internal Cables

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Disconnection, breakage, or loose connection of internal cables	Relevant part	Check that all the cables are securely connected. Check that there is no breakage in the cables.	Securely connect the cables. If a cable is broken, replace it.	4.1 OVERALL CONNECTION DIAGRAM

[1] Failure in Startup

[1-1] The unit dose not turn on, and the LED of the LFO FORM (WAKE UP) button does not flash.

A V+12STBY power failure or MAIN_CPU (IC2011) startup error may be suspected.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Power failure	MAIN Assy CN1202-1pin 1-1	Check for the V+12STBY power.	• If the V+12STBY power cannot be confirmed, go to [2]. • If the V+12STBY power can be confirmed, go to [3].	4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS
2	Power failure Wire defect	POWER SUPPLY P3-1pin 5-1	Check for the V+12STBY power.	• If the V+12STBY power can be confirmed, the wire DKP3901 may be defective. Replace it. • If the V+12STBY power cannot be confirmed, the POWER SUPPLY Assy may be defective. Replace it.	
3	Power failure	MAIN Assy IC1404-4pin 1-3	Check for the V+3R3E power.	• If the V+3R3E power can be confirmed, go to [4]. • If the V+3R3E power cannot be confirmed, the 3.3V REGULATOR (IC1404) block may be defective. Check for the status of soldering and replace it.	
4	RESET signal error	MAIN Assy R2023 1-39	Check for the CPU_RESET signal.	• If an output signal can be confirmed, go to [5]. • If an output signal cannot be confirmed, the RESET IC (IC2010) block may be defective. Check for the status of soldering and replace it.	10.41 WAVEFORMS MAIN ASSY 1-39
5	20 MHz CLK error	MAIN Assy R2019 1-40	Check for the 20M_CLK signal.	• If an output signal cannot be confirmed, the crystal (X2001) block may be defective. Check for the status of soldering and replace it.	10.41 WAVEFORMS MAIN ASSY 1-40
6	MAIN_CPU defective	MAIN Assy	If the symptom persists after the above corrections.	The MAIN CPU (IC2011) may be defective. Replace it.	—

[1-2] The unit does not turn on, and the LED of the LFO FORM (WAKE UP) button flashes once.

Communication error between the MAIN_CPU (IC2011) and DSP (IC701).

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	DSP (IC701) does not start. Devices • DSP (IC701) • FLASH (IC703) • SDRAM (IC702)	MAIN Assy [POWER] L702 1-55 L701 1-56 L703 1-57 R782 1-58 [RESET] R671 1-26 R674 1-27 [CLK] R896 1-59	[POWER] V+3R3D_DSP V+1R2D_DSP V+1R2D_DPLL V+3R3D_DSP_MEM [RESET] DSP_RESET Check that the signal level of DFLASH_RST is High. [CLK] Check if the 24 MHz clock is input to 24.5M_CLK_DSP.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-26 1-27 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-59

[1-3] The unit does not turn on, and the LED of the LFO FORM (WAKE UP) flashes three times.

Communication error between MAIN_CPU (IC2011) and ETHER_ICOM (IC501).

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	ETHER_UCOM (IC501) does not start. Devices • ETHER UCOM (IC501) • FLASH (IC502) • SDRAM (IC503)	MAIN Assy [POWER] L502 1-23 L501 1-24 L503 1-25 R613 1-22 [RESET] R673 1-43 [CLK] R2020 1-41	[POWER] Check that power at each point is normal. V+1R2D_LAN V+3R3D_LAN V+1R2D_LAN_PLL V+3R3D_LAN_MEM [RESET] Check that the signal level of SUB_SH_RESET is High. [CLK] Check if the 20 MHz clock is input to 20M_CLK_SH.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-43 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-41
2	FPGA (IC2214) configuration is not completed. Devices • FPGA (IC2214) • FLASH (IC502)	MAIN Assy [POWER] R2239 1-50 R2268 1-51 R2280 1-52 [RESET] R717 1-30 [CLK] R2304 1-53 [Communication line] R2335 1-54	[POWER] V+3R3D_FPGA V+1R2D_FPGA V+3R3D_FPGA_AUX [RESET] Check that the signal level of SH_FPGA_RST_X is High. [CLK] Check if the 20 MHz clock is input to 24M_CLK_FPGA. [Communication line] Check that the signal level of SH_FPGA_DONE is High.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-30 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-53 [Communication line] 10.41 WAVEFORMS MAIN ASSY 1-54

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
3	DSP (IC701) does not start. Devices • DSP (IC701) • FLASH (IC703) • SDRAM (IC702)	MAIN Assy [POWER] L702 1-55 L701 1-56 L703 1-57 R782 1-58 [RESET] R671 1-26 R674 1-27 [CLK] R896 1-59	[POWER] V+3R3D_DSP V+1R2D_DSP V+1R2D_DPLL V+3R3D_DSP_MEM [RESET] DSP_RESET Check that the signal level of DFLASH_RST is High. [CLK] Check if the 24 MHz clock is input to 24.5M_CLK_DSP.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-26 1-27 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-59

[1-4] The unit does not turn on, and the LED of the LFO FORM (WAKE UP) flashes five times.

Communication error between MAIN_CPU (IC2011) and SUB_UCOM (IC6601).

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	SUB_UCOM (IC6601) does not start. Devices • SUB_UCOM (IC6601)	PNLB Assy [POWER] R6615 4-19 [RESET] R6611 4-17 [CLK] X6601 4-18	[POWER] V+3R3D_PA [RESET] Check that the signal level of SUB_CPU_RESET is High. [CLK] Check if the 20 MHz clock is input. As the drive circuit is in an IC, a normal waveform check cannot be performed. Simply check whether or not it oscillates.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS PNLB ASSY 4-17 [CLK] 10.41 WAVEFORMS PNLB ASSY 4-18

[1-5] The unit does not turn on, and the LED of the LFO FORM (WAKE UP) flashes six times.

Communication error between MAIN_CPU (IC2011) and USB_UCOM (IC1801).

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	USB_UCOM (IC1801) does not start. Devices • USB_UCOM (IC1801) • SDRAM (IC1802)	MAIN Assy [POWER] L1802 1-31 L1801 1-32 R1806 1-33 R1817 1-34 [RESET] C1831 1-36 [CLK] R2304 1-35	[POWER] V+1R2D_USB V+3R3D_USB V+3R3D_USB_MEM V+2R5D_USB_PLL [RESET] Check that the signal level of USB_RESET is High. [CLK] Check if the 24 MHz clock is input to 24M_CLK_USB.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-36 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-35

[1-6] The unit does not turn on, and the LED of the LFO FORM (WAKE UP) flashes seven times.

Communication error between MAIN_CPU (IC2011) and DIT (IC2405).

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Power Signal line	MAIN Assy [POWER] R2425 1-73 [RESET] C2411 1-69 [CLK] R2409 1-68	[POWER] Check for the voltage of the V+3R3D_DIT power. [RESET] Check that the signal level of DIT_RESET is High. [CLK] Check that 24M CLK is input.	[POWER] If an error is detected, check for the power supply source on the power supply block diagram, and repair it if it has an error. [RESET] If the signal level is not High, check for the signal supply source of the RESET signal, and repair it if it has an error. [CLK] If no signal is input, check for the signal supply source of the CLK signal and repair it if it has an error.	[POWER] 4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [RESET] 10.41 WAVEFORMS MAIN ASSY 1-69 [CLK] 10.41 WAVEFORMS MAIN ASSY 1-68
2	Defective part	MAIN Assy DIT (IC2405)	If the symptom persists after the above corrections.	DIT (IC2405) may be defective. Replace it.	—

[1-7] The unit does not turn on, and the LED flashes endlessly.

The unit is shut down in error by the Power Monitoring Circuit.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Power failure	See "5.4 VOLTAGE MONITORING CIRCUIT."	Check for power at each point, following "5.4 VOLTAGE MONITORING CIRCUIT."	Repair the defective parts.	5.4 VOLTAGE MONITORING CIRCUIT

[2] AUDIO INPUT

[2-1] No signal is input to the CD/LINE, PHONO connectors.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
	Prior Confirmation	DIGITAL, CD/LINE, PHONO, LINE, USB */* selector/TRIM	Confirm on the screen that the selector is set properly.		Operating instructions
1	Loose connection /defective parts	INPUT Assy IC4408/IC4808/ IC5208/IC5608 6 pin Representative CH1 2-32	[Checking the Audio Timecode select block] Check that the TC_SEL* signal level is Low.	• If it is low, go to [2]. • If it is high, check for loose connection with the MAIN Assy, improper part-mounting status for communication, or imporper mounting status of the MAIN CPU. If no problem is still found, the MAIN CPU (IC201) may be defective. Replace it.	10.41 WAVEFORMS INPUT ASSY 2-32
2	Loose connection /defective parts	INPUT Assy IC4406(CH1) IC4806(CH2) IC5206(CH3) IC5606(CH4) 16, 17, 20, 21 pin Representative CH1_R- 2-20 /CH1_R+ 2-21	[Checking the ADC block] 10.41 WAVEFORMS INPUT ASSY 2-32 Check for an audio signal at the input connector of ADC.	If no audio signal is input to ADC, a problem in an analog circuit at a previous stage may be suspected. • If no audio signal is input, go to [5]. • If an audio signal is input, go to [3].	10.41 WAVEFORMS INPUT ASSY 2-20 2-21
3	Loose connection /defective parts	INPUT Assy IC4406(CH1) IC4806(CH2) IC5206(CH3) IC5606(CH4) - 1 pin Representative CH1 2-22	Check for the RESET signal of ADC.	• If the RESET signal level is L, go to [9]. • If the RESET signal level is H, go to [4].	10.41 WAVEFORMS INPUT ASSY 2-22
4	Loose connection /defective parts	INPUT Assy IC4406(CH1) IC4806(CH2) IC5206(CH3) IC5606(CH4) LRCK: 3 pin Representative 2-23 BCLK: 4 pin Representative 2-24 MCLK: 5 pin Representative 2-25	10.41 WAVEFORMS INPUT ASSY 2-32 Check for the CLK signal of ADC.	• If no CLK signal is input, go to [11]. • If the CLK signal is input, ADC must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-23 2-24 2-25
5	Loose connection /defective parts	INPUT Assy IC4402(CH1) IC4802(CH2) IC5202(CH3) IC5602(CH4) Input: 2, 3, 5, 6 pin Representative CH1 2-18 after TRIM Output: 1, 7 pin Representative CH1 R 2-19	[Checking an Intermediate Buffer block] Check for the signal input to and output from the Intermediate Buffer block.	• If a singal is input but not output, this block must be improperly soldered or defective. • If no signal is input, go to [6].	10.41 WAVEFORMS INPUT ASSY 2-18 2-19
6	Loose connection /defective parts	INPUT Assy CN4201(CH1) CN4601(CH2) CN5001(CH3) CN5401(CH4) 1 pin, 3 pin, 5 pin, 7 pin Representative CH1 R 2-17 2-18	[Checking the TRIM] Check for an audio signal at the periphery of TRIM.	• If a signal is interrupted at the periphery of TRIM, check for the mounting status or soldering status of TRIM. If no problem is found, replace the TRIM Assy. • If there is no signal before TRIM, go to [7].	10.41 WAVEFORMS INPUT ASSY 2-17 2-18
7	Loose connection /defective parts	INPUT Assy IC4201(CH1 PHONO) IC4202(CH1 LINE) IC4601(CH2 CD) IC4602(CH2 LINE) IC5001(CH3 CD) IC5002(CH3 LINE) IC5401(CH4 PHONO) IC5402(CH4 CD) 1 pin, 7 pin Representative CH1 LINE R 2-16	[Checking the Input Buffer block] Check if an audio signal is output from the operation amplifier.	• If no singal is output, this block must be improperly soldered or defective. • If an audio signal is output, go to [8].	10.41 WAVEFORMS INPUT ASSY 2-16

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
8	Loose connection /defective parts	INPUT Assy/ MAIN Assy LINE_SEL* Representative LINE_SEL1 2-14	[Checking the RELAY block] Check for the LINE_SEL* signal. If the input selector is set to PHONO, the LINE_SEL* signal level is H. If the input selector is set to CD/LINE, the LINE_SEL* signal level is L.	• If a LINE_SEL* signal is not output properly, check for loose connection with the MAIN Assy, improper part mounting status for communication, or improper mounting of the MAIN CPU. If there is no problem, the MAIN CPU (IC2011) may be defective. Replace it. • If a LINE_SEL* signal is output properly, this block must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-14
9	Loose connection /defective parts	INPUT Assy IC4009/IC4010 2 pin, 4 pin Representative RESET_IN 2-9 RESET_IN1 2-8	[Checking the RESET signal path] Check for the RESET signal.	• If the signal level at Pin 2 is H and that at Pin 4 is L, IC4009/IC4010 must be soldered impropely or defective. • If the signal level at Pin 2 is L, go to [10].	10.41 WAVEFORMS INPUT ASSY 2-9 2-8
10	Loose connection /defective parts	INPUT Assy IC4005 2 pin, 3 pin AD/DA_RESET 2-7 BCLK 2-12	[Checking the RESET signal path] Check for the RESET signal.	• If the signal level at Pin 2 is L, go to [12]. • If the signal level at Pin 3 is not normal, check for BCLK in [13]. • If the signal level at Pin 2 is H and that at Pin 3 is normal, IC4005 is soldered improperly or defective.	10.41 WAVEFORMS INPUT ASSY 2-7 2-12
11	Loose connection /defective parts	INPUT Assy LRCLK: IC4002/IC4006 BCLK: IC4003/IC4007 MCLK: IC4004/IC4008 2 pin, 4 pin Representative LRCLK_IN_2 2-6 LRCLK 2-13 BCLK_IN_2 2-3 BCLK 2-12 MCLK_IN_2 2-2 MCLK 2-11	[Checking the CLK signal path] Check for the LRCLK, BCLK, and MCLK signals.	• If the signal level at Pin 2 is normal and Pin 4 has no signal, IC4002/IC4006/IC4003/IC4007/IC4004 10.41 WAVEFORMS INPUT ASSY 2-18 2-19 /IC4008 must be improperly soldered or defective. • If the signal at Pin 2 is not normal, go to [13].	10.41 WAVEFORMS INPUT ASSY 2-6 2-13 2-3 2-12 2-2 2-11
12	Loose connection /defective parts	MAIN Assy R709 1-28	[Checking the RESET signal path] Check for the RESET signal.	If no problem is found, ETHER UCOM (IC501) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-28
13	Loose connection /defective parts	MAIN Assy LRCLK: IC2206 2,4 pin 1-44 1-49 BCLK: IC2209 2,4 pin 1-45 1-48 MCLK: IC2210 2,4 pin 1-46 1-47	[Checking the CLK signal path] Check for the LRCLK, BCLK, and MCLK signals.	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC2206/IC2209/IC2210 must be improperly soldered or defective. • If the signal at Pin 2 is not normal, FPGA (IC2214) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-44 1-49 1-45 1-48 1-46 1-47

[2-2] No signal is input to the DIGITAL connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
	Prior Confirmation	DIGITAL, CD/LINE, PHONO, LINE, USB */* selector/TRIM	Confirm on the screen that the selector is set properly.		
1	Loose connection /defective parts	MAIN Assy IC101(CH1) IC201(CH2) IC301(CH3) IC401(CH4) -5 pin Representative CH1_SPDIF 1-6	Check if a signal is input to DIGITAL properly.	If any of the signals is not input, IC101(CH1) /IC201(CH2)/IC301(CH3)/IC401(CH4) may be defective.	10.41 WAVEFORMS MAIN ASSY 1-6
2	Loose connection /defective parts	MAIN Assy IC110(CH1) IC202(CH2) IC302(CH3) IC402(CH4) -21 pin Representative DIR_RESET 1-11	Check that the RESET signal level of the DIR is High.	• If it is H, go to [3]. • If it is L and IC504 has no problem, ETHER UCOM (IC501) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-11
3	Loose connection /defective parts	MAIN Assy IC110(CH1) IC202(CH2) IC302(CH3) IC402(CH4) • LRCKO: 10 pin • BCKO: 11 pin • SCKO: 4 pin • DOUT: 12 pin Representative 1-8 1-9 1-7 1-10	Check for the LRCKO, BCKO, SCKO, DOUT signal output from DIR.	• If a signal is output, go to [4]. • If any of the signals is not output, IC110(CH1) /IC202(CH2)/IC302(CH3)/IC402(CH4) may be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-8 1-9 1-7 1-10

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
4	Loose connection /defective parts	MAIN Assy IC111(CH1) IC203(CH2) IC303(CH3) IC403(CH4) -9 pin Representative ADATIN_SRC1 1-16	Check for the digital audio signal at DIGI/USB SW.	• If there is a signal, go to [6]. • If there is no signal, go to [5].	10.41 WAVEFORMS MAIN ASSY 1-16
5	Loose connection /defective parts	MAIN Assy IC111(CH1) IC203(CH2) IC303(CH3) IC403(CH4) -9 pin Representative DIGI_SEL1 1-12	Check that the DIGI_SEL* signal level is Low. IC111(CH1)/IC203(CH2)/IC303(CH3)/ IC403(CH4) 1 pin	• If it is L, but no signal is output, IC111(CH1) /IC203(CH2)/IC303(CH3)/IC403(CH4) must be improperly soldered or defective. • If it is not L, MAIN CUP: IC2011 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-12
6	Loose connection /defective parts	MAIN Assy UDIN1 UDIN2 UDIN3 UDIN4 Test land Representative 1-17	Check for the output signal at SRC.	• If a signal is outout, DSP (IC701) must be improperly soldered or defective. • If a signal I not output, go to [7].	10.41 WAVEFORMS MAIN ASSY 1-17
7	Loose connection /defective parts	MAIN Assy IC113(CH1) IC205(CH2) IC305(CH3) IC405(CH4) 5 pin Representative 1-13	Check that the CH*SRC_RESET signal level is High.	• If it is L, Ether UCOM (IC501) must be improperly soldered or defective. • If it is H, go to [8].	10.41 WAVEFORMS MAIN ASSY 1-13
8	Loose connection /defective parts	MAIN Assy IC113(CH1) IC205(CH2) IC305(CH3) IC405(CH4) -7, 8 pin Representative 1-14 1-15	Check for the CLK signal (ILRCK, ISCLK) at SRC.	• If there is no CLK signal, IC111(CH1)/IC203 (CH2)/IC303(CH3)/IC403(CH4) must be improperly soldered or defective. • If there is a CLK signal, IC113(CH1)/IC205 (CH2)/IC305(CH3)/IC405(CH4) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-14 1-15

[2-3] No signal is input to the MIC1/MIC2 connectors.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
	Prior Confirmation	OFF, ON, TALK OVER switch	Confirm on the screen that the selector is set properly.		
1	Loose connection /defective parts	INPUT Assy IC6204 MIC1: 2 pin 2-41 MIC2: 1 pin 2-44	Check for an audio signal at the input connector of the ADC.	If no audio signal is input to the ADC, a problem in an analog circuit at a previous stage may be suspected. • If no signal is input, go to [2]. • If a signal is input, go to [3].	10.41 WAVEFORMS INPUT ASSY 2-41 2-44
2	Loose connection /defective parts	INPUT Assy VR6202 2-39 2-40 VR6201 2-42 2-43	Check for an audio signal at the periphery of the TRIM.	• If a signal is interrupted at the periphery of the TRIM, VR6202/VR6201 must be improperly soldered or defective. • If there is no signal before the TRIM, the MIC1 /MIC2 AMP block must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-39 2-40 2-42 2-43
3	Loose connection /defective parts	INPUT Assy IC6204 13 pin 2-45	Check for the RESET signal of the ADC.	• If the signal level is L, go to [5]. • If the signal level is H, go to [4].	10.41 WAVEFORMS INPUT ASSY 2-45
4	Loose connection /defective parts	INPUT Assy LRCK: IC6204 10pi 2-48 BCLK: IC6204 12 pin 2-46 MCLK: IC6204 11 pin 2-47	Check for the CLK signal of the ADC. • LRCK • BCLK • MCLK	• If there is no CLK signal, go to [7]. • If there is a CLK signal but no signal is output from the ADC, the ADC must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-48 2-46 2-47
5	Loose connection /defective parts	INPUT Assy IC4010 2 pin 2-9 4 pin 2-10	Check for the RESET signal.	• If the signal level at Pin 2 is H and that at Pin 4 is L, IC4010 must be improperly soldered or defective. • If the signal level at Pin 2 is L, go to [6].	10.41 WAVEFORMS INPUT ASSY 2-9 2-10
6	Loose connection /defective parts	INPUT Assy IC4005 2 pin, 3 pin 2-7 2-12	Check for the RESET signal.	• If the signal level at Pin 2 is L, go to [8]. • If the signal level at Pin 3 is not normal, check for BCLK in [7]. • If a signal at Pin 2 is H and that at Pin 3 is normal, IC4005 must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-7 2-12

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
7	Loose connection /defective parts	INPUT Assy • LRCK: IC4006 2 pin 2-11, 4 pin 2-2 • BCLK: IC4007 2 pin 2-12, 4 pin 2-4 • MCLK: IC4008 2 pin 2-13, 4 pin 2-6	Check for the LRCLK, BCLK, and MCLK signals.	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC4006/IC4007/IC4008 must be improperly soldered or defective. • If the signal at Pin 2 is not normal, go to [9].	10.41 WAVEFORMS INPUT ASSY 2-11 2-2 2-12 2-4 2-13 2-6
8	Loose connection /defective parts	MAIN Assy R709 1-28	[Checking the RESET signal path] Check for the RESET signal.	• If no problem with the signal is found, check for the cable connection with the MAIN Assy and the parts mounted along the communication line. • If no problem is found, ETHER UCOM (IC501) may be improperly soldered.	10.41 WAVEFORMS MAIN ASSY 1-28
9	Loose connection /defective parts	MAIN Assy LRCLK: IC2206 2, 4 pin 1-44 1-49 BCLK: IC2209 2, 4 pin 1-45 1-48 MCLK: IC2210 2, 4 pin 1-46 1-47	[Checking the CLK signal path] Check for the LRCLK, BCLK, and MCLK signals.	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC2206/IC2209/IC2210 must be improperly soldered or defective. • If a signal at Pin 2 is not normal, FPGA (IC2214) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-44 1-49 1-45 1-48 1-46 1-47

[2-4] No signal is input to the RETURN connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
	Prior Confirmation	DELAY, ECHO, SPIRAL, REVERB, TRANS, FILTER, FLANGER, PHASER, ROBOT, MELODIC, SLIP ROLL, ROLL, REV ROLL, SND/RTN (MIDI LFO) SW /EFFECT ON/OFF button	• Check that the type for BEAT EFFECT is set to SND/RTN. • Check that the BEAT EFFECT is set to ON.		
1	Loose connection /defective parts	INPUT Assy CN4002 1 pin 2-15	Check that the RETURN IN signal level is H.	• If it is L, JA5801 must be improperly soldered or defective. • If it is H, go to [2].	10.41 WAVEFORMS INPUT ASSY 2-15
2	Loose connection /defective parts	INPUT Assy IC5802 1 pin 2-34 , 2 pin 2-33	Check for an audio signal at the input connector of the ADC.	If no audio signal is input to the ADC, a problem in an analog circuit at a previous stage may be suspected. • If no singal is input, the Input Buffer block must be improperly soldered or defective. • If a signal is input, go to [3].	10.41 WAVEFORMS INPUT ASSY 2-34 2-33
3	Loose connection /defective parts	INPUT Assy IC5802 13 pin 2-35	Check for the RESET signal of the ADC.	• If the signal level is L, go to [5]. • If the signal level is H, go to [4].	10.41 WAVEFORMS INPUT ASSY 2-35
4	Loose connection /defective parts	INPUT Assy • LRCK: IC5802 10 pin 2-38 • BCLK: IC5802 12 pin 2-36 • MCLK: IC5802 11 pin 2-37	Check for the CLK signal of the ADC. LRCK, BCLK, MCLK	• If there is no signal, go to [7]. • If there is a CLK signal but no signal is output from the ADC, the ADC must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-38 2-36 2-37
5	Loose connection /defective parts	INPUT Assy IC4009 2 pin 2-9, 4 pin 2-8 RESET_IN1	Check for Pins 2 and 4 of IC4009.	• If a signal at Pin 2 is H and that at Pin 4 is L, IC4009 must be improperly soldered or defective. • If the singal level at Pin 2 is L, go to [6].	10.41 WAVEFORMS INPUT ASSY 2-9 2-8
6	Loose connection /defective parts	INPUT Assy IC4005 2 pin, 3 pin 2-7 2-12	Check for Pins 2 and 3 of IC4005.	• If the singal level at Pin 2 is L, go to [8]. • If a signal at Pin 3 is not normal, check for BCLK in [7]. • If the signal level at Pin 2 is H and that at Pin 3 is normal, IC4005 must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-7 2-12
7	Loose connection /defective parts	INPUT Assy • LRCK: IC4002 2 pin 2-11, 4 pin 2-1 • BCLK: IC4003 2 pin 2-12, 4 pin 2-3 • MCLK: IC4004 2 pin 2-13, 4 pin 2-5	Check for the LRCLK, BCLK, and MCLK signals.	• If a signal at Pin 2 is normal and Pin 4 has no signal, IC4002/IC4003/IC4004 must be improperly soldered or defective. • If a signal at Pin 2 is not normal, go to [9].	10.41 WAVEFORMS INPUT ASSY 2-11 2-1 2-12 2-3 2-13 2-5
8	Loose connection /defective parts	MAIN Assy R709 1-28	[Checking the RESET signal path] Check for the RESET signal.	• If no problem with the signal is found, check for the cable connection with the MAIN Assy and the parts mounted along the communication line. • If no problem is found, ETHER UCOM (IC501) may be improperly soldered.	10.41 WAVEFORMS MAIN ASSY 1-28

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
9	Loose connection /defective parts	MAIN Assy LRCLK: IC2206 2,4 pin 1-44 1-49 BCLK: IC2209 2,4 pin 1-45 1-48 MCLK: IC2210 2,4 pin 1-46 1-47	[Checking the CLK signal path] Check for the LRCLK, BCLK, and MCLK signals.	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC2206/IC2209/IC2210 must be improperly soldered or defective. • If a signal at Pin 2 is not normal, FPGA (IC2214) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-44 1-49 1-45 1-48 1-46 1-47

[3] AUDIO OUTPUT

[3-1] No signal is output from the MASTER1/MASTER2 connectors.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Prior Confirmation	MASTER1 / MASTER2	Identify the connector(s) that do(es) not output signals.	• If neither MASTER 1 nor 2 connector outputs, go to [2]. • If only the MASTER 1 connector does not output, go to [11]. • If only the MASTER2 connector does not output, go to [13].	
2	Loose connection /defective parts	MAIN Assy IC2802-10,11,20, 21 pin 1-92 1-93 1-90 1-91 IC2803 1,7 pin 1-94 1-95 /IC2804-1,7 pin 1-96 1-97	[Checking the Shaping Noise Filter] Check for the DAC differential audio signal output.	• If a signal is output from the DAC output (Pins 10, 11, 20, and 21 of IC2802) but no signal is output from Pins 1 and 7 of IC2803/IC2804, the Shaping Noise Filter block must be improperly soldered or defective. • If no signal is output from the DAC output (Pins 10, 11, 20, and 21 of IC2802), go to [3].	10.41 WAVEFORMS MAIN ASSY 1-92 1-93 1-90 1-91 1-94 1-95 1-96 1-97
3	Loose connection /defective parts	MAIN Assy IC2802-29 pin 1-89	Check that a signal is output from the ADAT_MASTER_OUT.	• If no signal is output, the DSP(IC701) must be improperly soldered or defective. • If a signal is output, go to [4].	10.41 WAVEFORMS MAIN ASSY 1-89
4	Loose connection /defective parts	MAIN Assy IC2802-1 pin 1-84	Check that the MVR_MUTE_OUT signal level is Low.	• If it is H, failure of the PNLA may be suspected. Check for the MASTER LEVEL operation in test mode. • If it is L, go to [5].	10.41 WAVEFORMS MAIN ASSY 1-84
5	Loose connection /defective parts	MAIN Assy IC2802-27 pin 1-85	Check that the RESET_OUT signal level is High.	• If it is H, go to [8]. • If it is L, go to [6].	10.41 WAVEFORMS MAIN ASSY 1-85
6	Loose connection /defective parts	MAIN Assy IC2601-2,4 pin 1-78 1-82	Check for the RESET_OUT signal.	• If a signal level at Pin 2 is H and that at Pin 4 is L, IC2601 must be improperly soldered or defective. • If the singal level at Pin 2 is L, go to [7].	10.41 WAVEFORMS MAIN ASSY 1-78 1-82
7	Loose connection /defective parts	MAIN Assy R709 1-28	Check for the mounting status of the RESET signal line R709.	• If no problem is found, ETHER UCOM (IC501) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-28
8	Loose connection /defective parts	MAIN Assy IC2802 LRCLK 30 pin BCLK 28 pin MCLK 24 pin 1-88 1-87 1-86	Check for the CLK signal of IC2802. LRCK, BCLK, MCLK	• If [3], [4], [5], and [8] are normal but a signal is not output from the DAC (Pins 10, 11, 20, and 21 of IC2802), IC2802 must be improperly soldered or defective. • If no CLK signal is found, go to [9].	10.41 WAVEFORMS MAIN ASSY 1-88 1-87 1-86
9	Loose connection /defective parts	MAIN Assy LRCK: IC2604 2,4 pin 1-77 1-81 BCLK: IC2603 2,4 pin 1-76 1-80 MCLK: IC2602 2,4 pin 1-75 1-79	Check for Pins 2 and 4 of LRCK: IC2604 BCLK: IC2603 MCLK: IC2602	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC2604/IC2603/IC2602 must be improperly soldered or defective. • If a signal at Pin 2 is not normal, go to [10].	10.41 WAVEFORMS MAIN ASSY 1-77 1-81 1-76 1-80 1-75 1-79
10	Loose connection /defective parts	MAIN Assy LRCK: IC2205 2,4 pin 1-49 1-44 BCLK: IC2207 2,4 pin 1-48 1-45 MCLK: IC2208 2,4 pin 1-47 1-46	Check for Pins 2 and 4 of LRCK: IC2205 BCLK: IC2207 MCLK: IC2208	• If the signal at Pin 2 is normal and Pin 4 has no signal, IC2205/IC2207/IC2208 must be improperly soldered or defective. • If a signal at Pin 2 is not normal, FPGA (IC2214) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-49 1-44 1-48 1-45 1-47 1-46
11	Loose connection /defective parts	MAIN Assy IC2806-1,7 pin 1-98 1-99 IC2805-1,7 pin 1-100 1-101	Check for the Balanced Output AMP.	• If no signal is output, IC2806/IC2805 must be improperly soldered or defective. • If a signal is output, go to [12].	10.41 WAVEFORMS MAIN ASSY 1-98 1-99 1-100 1-101
12	Loose connection /defective parts	MAIN Assy MUTE_M1 1-102	Check that the MUTE_M1 (test land) signal level is Low.	• If it is H, Q2836/Q2837 must be improperly soldered or defective. If a CPU_MUTE_OUT signal is not output properly, go to [13]. • If it is L, RY2801/RY2802 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-102

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
13	Loose connection /defective parts	MAIN Assy IC2011 86 pin 1-38	Check that the signal level at Pin 86 of CPU_MUTE: MAIN_CPU (IC2011) is Low.	• If it is H, IC2011 must be improperly soldered or defective. • If it is L, Q2001/R2014/R2608 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-38
14	Loose connection /defective parts	MAIN Assy MUTE_O 1-83	[No audio output from the MASTER2] Check that the MUTE_OUT signal level is Low.	• If it is L, Q3007/Q3008 must be improperly soldered or defective. • If it is H, Q2601/Q2602/Q2603 must be improperly soldered or defective. If the CPU_MUTE signal is not supplied properly, go to [13].	10.41 WAVEFORMS MAIN ASSY 1-83
15	Loose connection /defective parts	MAIN Assy 1-108 1-109	[No audio output from the MASTER2] Check the signal at the MASTER2_L/ MASTER2_R (test land).	• If no singal is found, the Bal -> Unbal AMP block must be improperly soldered or defective. • If there is a singal but no final output signal, the Output AMP block must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-108 1-109

[3-2] No signal is output from the REC connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection /defective parts	MAIN Assy MUTE_O 1-83	Check that the MUTE_OUT signal level is Low.	• If it is L, Q3005/Q3006 must be improperly soldered or defective. • If it is H, Q2601/Q2602/Q2603 must be improperly soldered or defective. If the CPU_MUTE signal level is not L, go to [13] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-83
2	Loose connection /defective parts	MAIN Assy AOUTL_REC AOUTR_REC REC_L REC_R 1-110 1-111 1-112 1-113	Check the audio signals input to and output from IC3003.	• If a signal is interrupted at the periphery of IC3003, IC3003 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC3003, go to [3].	10.41 WAVEFORMS MAIN ASSY 1-110 1-111 1-112 1-113
3	Loose connection /defective parts	MAIN Assy IC3001 3 pin 1-105	Check that a signal is supplied to the ADAT_REC_OUT.	• If no signal is found, DSP(IC701) must be improperly soldered or defective. • If a signal is found, go to [4].	10.41 WAVEFORMS MAIN ASSY 1-105
4	Loose connection /defective parts	MAIN Assy IC3001 5 pin 1-107	Check that the RESET_OUT signal level is High.	• If it is H, go to [5]. • If it is L, go to [6] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-107
5	Loose connection /defective parts	MAIN Assy IC3001 LRCK: 4 pin BCLK: 2 pin MCLK: 1 pin 1-106 1-104 1-103	Check for the CLK signal of the IC3001.	If [3], [4], and [5] are normal but a singal is not output from the DAC (Pins 10 and 11 of IC3001), IC3001 must be improperly soldered or defective. • If a CLK signal is not found, go to [9] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-106 1-104 1-103

[3-3] No signal is output from the BOOTH connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection /defective parts	MAIN Assy MUTE_O 1-83	Check that the MUTE_OUT signal level is Low.	• If it is L, Q3205/Q3206/Q3207/Q3208 must be improperly soldered or defective. • If it is H, Q2601/Q2602/Q2603 must be improperly soldered or defective. If the CPU_MUTE signal level is not L, go to [13] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-83
2	Loose connection /defective parts	MAIN Assy IC3203 1-123 1-124 1-127 1-128 IC3204 1-125 1-126 1-129 1-130	Check the audio signals input to and output from IC3203/IC3204.	• If a signal is interrupted at the periphery of IC3203/IC3204, IC3203/IC3204 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC3203/IC3204, go to [3].	10.41 WAVEFORMS MAIN ASSY 1-123 1-124 1-127 1-128 1-125 1-126 1-129 1-130

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
3	Loose connection /defective parts	MAIN Assy IC3202 1-119 1-120 1-123 1-124 IC3205 1-121 1-122 1-125 1-126	Check the audio signals input to and output from IC3202/IC3205.	• If a signal is interrupted at the periphery of IC3202/IC3205, IC3202/IC3205 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC3202/IC3205, go to [4].	10.41 WAVEFORMS MAIN ASSY 1-119 1-120 1-123 1-124 1-121 1-122 1-125 1-126
4	Loose connection /defective parts	MAIN Assy IC3201-3 pin 1-116	Check that a signal is supplied to the ADAT_BOOTH_OUT.	• If no signal is found, DSP(IC701) must be improperly soldered or defective. • If a signal is found, go to [5].	10.41 WAVEFORMS MAIN ASSY 1-116
5	Loose connection /defective parts	MAIN Assy IC3201-5 pin 1-118	Check that the RESET_OUT signal level is High.	• If a signal level is High, go to [6] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-118
6	Loose connection /defective parts	MAIN Assy IC3201 LRCK: 4 pin 1-117 BCLK: 2 pin 1-115 MCLK: 1 pin 1-114	Check for the CLK signal of the IC3001. LRCK, BCLK, MCLK	• If a CLK signal is not found, go to [9] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-117 1-115 1-114

[3-4] No signal is output from the SEND connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection /defective parts	MAIN Assy CN1003/ SEND Assy CN6401	Check the connection status of CN1003/ CN6401.		
2	Loose connection /defective parts	MAIN Assy / SEND Assy MUTE_OUT MUTE_O 1-83	Check that the MUTE_OUT signal level is Low.	• If it is L, Q6403/Q6404 must be improperly soldered or defective. • If it is H, Q2601/Q2602/Q2603 must be improperly soldered or defective. If the CPU_MUTE signal level is not L, go to [13] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-83
3	Loose connection /defective parts	SEND Assy IC6402 3-6 3-7 3-8 3-9	Check the audio signals input to and output from IC6402.	• If a signal is interrupted at the periphery of IC6402, IC6402 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC6402, go to [4].	10.41 WAVEFORMS SEND ASSY 3-6 3-7 3-8 3-9
4	Loose connection /defective parts	SEND Assy IC6401-3 pin 3-4	Check that a signal is supplied to the ADAT_SEND_OUT.	• If no signal is found, DSP(IC701) must be improperly soldered or defective. • If a signal is found, go to [5].	10.41 WAVEFORMS SEND ASSY 3-4
5	Loose connection /defective parts	SEND Assy IC6401 5 pin	Check that the RESET_OUT signal level is High.	• If it is H, go to [6]. • If it is L, check for R709. If no problem is found, ETHER UCOM (IC501) must be improperly soldered or defective.	
6	Loose connection /defective parts	SEND Assy LRCK: 4 pin 3-3 BCLK: 2 pin 3-2 MCLK: 1 pin 3-1	Check for the CLK signal of the IC6401.	• If a CLK signal is not found, go to [9] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS SEND ASSY 3-3 3-2 3-1

[3-5] No signal is output from the PHONES connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection /defective parts	MAIN Assy / HPJK Assy	Check for the connection between the MAIN Assy and HPJK Assy.	Correct any power connections.	
2	Loose connection /defective parts	HPJK Assy CN9201-1 pin,4 pin 5-1 5-2	Check for the signals at Pins 1 and 4 of CN9201.	• If a signal is found, the HPJK ASSY or wires are defective. Replace them. • If no signal is found, go to [3].	10.41 WAVEFORMS HPJK ASSY 5-1 5-2
3	Loose connection /defective parts	MAIN Assy RY3401-3 pin,8 pin 1-144 1-145	Check for the signals at Pins 3 and 8 of RY3401.	• If a signal is found, go to [3]. • If no signal is found, go to [5].	10.41 WAVEFORMS MAIN ASSY 1-144 1-145
4	Loose connection /defective parts	MAIN Assy CPU_MUTE 1-38	Check that the CPU_MUTE signal level is High.	• If it is H, Q3409 must be improperly soldered or defective. • If the CPU_MUTE signal is not supplied properly, go to [13] of [3-1] No signal is output from the MASTER1/MASTER2 connectors. • If no problem is found, RY3401 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-38

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
5	Loose connection /defective parts	MAIN Assy IC3406 HP_L1/HP_L2 1-140 1-142 HP_R1/HP_R2 1-141 1-143	Check the audio signals input to and output from IC3406.	• If a signal is interrupted at the periphery of IC3406, IC3406 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC3406, go to [6].	10.41 WAVEFORMS MAIN ASSY 1-140 1-142 1-141 1-143
6	Loose connection /defective parts	MAIN Assy IC3405 HP_L+/L-/L1 1-136 1-137 1-140 HP_R+/R-/R1 1-139 1-138 1-141	Check the audio signals input to and output from IC3405.	• If a signal is interrupted at the periphery of IC3405, IC3405 or peripheral parts must be improperly soldered or defective. • If no signal is input to IC3405, go to [7].	10.41 WAVEFORMS MAIN ASSY 1-136 1-137 1-140 1-139 1-138 1-141
7	Loose connection /defective parts	MAIN Assy IC3404-3 pin 1-131	Check that a signal is supplied to the ADAT_HP.	• If no signal is found, DSP(IC701) must be improperly soldered or defective. • If a signal is found, go to [8].	10.41 WAVEFORMS MAIN ASSY 1-131
8	Loose connection /defective parts	MAIN Assy IC3404-5 pin 1-132	Check that the DIR_ADC_DAC_RESET signal level is High.	• If it is H, go to [9]. • If it is L, check for R709. If no problem is found, ETHER UCOM (IC501) must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-132
9	Loose connection /defective parts	MAIN Assy LRCK: IC3201-4 pin 1-135 BCLK: IC3201-2 pin 1-134 MCLK: IC3201-1 pin 1-133	Check for the CLK signal of the IC3404.	• If a CLK signal is not found, go to [9] of [3-1] No signal is output from the MASTER1/MASTER2 connectors.	10.41 WAVEFORMS MAIN ASSY 1-135 1-134 1-133

[3-6] No signal is output from the DIGITAL MASTER OUT connector.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection /defective parts	MAIN Assy IC2405-16 pin 1-74	Check for the signal at Pin 16 of DIT (IC2405).	• If a signal is output, parts between IC2405 and JA2401 must be improperly soldered or defective. • If no signal is output, go to [2].	10.41 WAVEFORMS MAIN ASSY 1-74
2	Loose connection /defective parts	MAIN Assy DIT_RESET: 31 pin 1-69 LRCK_DOUT: 24 pin 1-71 BCLK_DOUT: 26 pin 1-72 DAUX: 28 pin XTI: 30 pin DIT_TXD: 33 pin 1-65 DIT_SCK: 34 pin 1-66 DITD_CS: 35 pin 1-67	Check for input signal at each points of IC2405. • A signal level at Pin 31 of the DIT_RESET must be High. • LRCK_DOUT: 24 pin • BCLK_DOUT: 26 pin • DAUX: 28 pin • XTI: 30 pin • DIT_TXD: 33 pin • DIT_SCK: 34 pin • DITD_CS: 35 pin	• If Pin 31 of DIT_RESET is not High, check for R710. If no problem is found, Ether UCOM (IC501) must be improperly soldered or defective. • If the signals at Pin 24 of LRCK, Pin 26 of BCLK, and Pin 28 of DAUX are not normal, go to [3]. • If the signal at Pin 30 of XTI is not normal and no problem is found on IC2403, FPGA (IC2214) must be improperly soldered or defective. • If signals at Pin 33 of the DIT_TXD, Pin 34 of the DIT_SCK, and Pin 35 of the DITD_CS are not normal, MAIN UCOM (IC2011) must be improperly soldered or defective. • If both are normal and no signal is detected at Pin 16 of IC2405, IC2405 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-69 1-71 1-72 1-70 1-68 1-65 1-66 1-67
3	Loose connection /defective parts	MAIN Assy DOUT_SRC_RESET: 5 pin 1-63 SRC_LRCK: 7 pin 1-61 SRC_BCLK: 8 pin 1-62 ADAT_DOUT: 9 pin 1-60 MS_SEL: 15 pin 1-64	Check for input signal at each points of DOUT SRC (IC2404). • A signal level at Pin 5 of the DOUT_SRC_ RESET must be High. • SRC_LRCK: 7 pin • SRC_BCLK: 8 pin • ADAT_DOUT: 9 pin • MS_SEL: 15 pin	• If Pin 5 of DOUT_SRC_RESET is not High, check for R708. If no problem is found, Ether UCOM (IC501) must be improperly soldered or defective. • If the signals at Pin 7 of the LRCK and Pin 8 of the SCLK are not normal but no problem is found on IC2401/IC2402, FPGA (IC2214) must be improperly soldered or defective. • If no signal is found at Pin 9 of the ADAT_DOUT, DSP (IC701) must be improperly soldered or defective. • If the signal at Pin 15 of the MS_SEL is not normal and Q2403/Q2402/Q2401 do not function properly, they must be improperly soldered or defective. If the DOUT_MS_SEL signal is not supplied properly, check for R711. If no problem is found, Ether UCOM (IC501) must be improperly soldered or defective. • If both are normal and no signal is output from IC2404, IC2404 must be improperly soldered or defective.	10.41 WAVEFORMS MAIN ASSY 1-63 1-61 1-62 1-60 1-64

[4] DVS

[4-1] No analog timecode signal input to the mixer

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
0	Prior Confirmation	DIGITAL, CD/LINE, PHONO, LINE, USB */* selector/PC settings	• Check that the selector is set to USB*/*. • Check that the DJM-900 nexus utility of the connected PC is set properly. • Check that the timecode (control) CD is connected to the CD connector and the timecode (control) record is connected to the PHONO connector.		Operating instructions
1	Loose connection /defective parts	MAIN Assy V+5VBUS 1-37 / USBI Assy	• Check for the connections of CN1802/CN3801. • Check that the voltage at Pin 5 (V+5VBUS) of CN1802 is about 5 V (4.75 to 5.25) using a PC connected.	• Correct any poor connections. • If the voltage at Pin 5 (V+5VBUS) of CN1802 is not about 5 V (4.75 to 5.25), replace the USBI Assy.	
2	Loose connection /defective parts	INPUT Assy TC_SEL* 2-32 / MAIN Assy	[Checking the Audio Timecode select block] Check that the TC_SEL* signal level (Pin 6 of IC4408/IC4808/IC5208/IC5608) is H.	• If it is not H, MAIN CUP (IC2011) must be improperly soldered or defective. • If it is H, go to [3].	10.41 WAVEFORMS INPUT ASSY 2-32
3	Loose connection /defective parts	INPUT Assy CH*_ADAT_TIME 2-27	Check that a signal is input at Pin 2 of IC4408/IC4808/IC5208/IC5608.	• If no signal is input, go to [4]. • If a signal is input, IC4408/IC4808/IC5208/ IC5608 must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-27
4	Loose connection /defective parts	INPUT Assy Representative CH1_TIME_R 2-26	[Checking a Timecode ADC block] Check that a singal is input to the input connector of the Timecode ADC. IC4403(CH1)/IC4803(CH2)/IC5203(CH3) /IC5603(CH4) 1 pin, 2 pin	If no audio signal is input to the ADC, a problem in an analog circuit at a previous stage may be suspected. • If no signal is input, go to [4]. • If a signal is input, go to [5].	10.41 WAVEFORMS INPUT ASSY 2-26
5	Loose connection /defective parts	INPUT Assy Before TRIM/ CH*_TIME_ L/CH*_TIME_R 2-26	[Checking an Timecode Buffer block] Check for a signal at the periphery of the Timecode Buffer. IC4401(CH1)/IC4801(CH2)/IC5201(CH3) /IC5601(CH4)	If a signal is interrupted at the periphery of the Timecode Buffer, this block must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-26
6	Loose connection /defective parts	INPUT Assy Representative CH1_RESET :13 pin 2-28 LRCK: 10 pin 2-31 MCLK: 11 pin 2-30 BCLK: 12 pin 2-29	[Checking a Timecode ADC block] Check for signals at IC4403(CH1)/IC4803 (CH2)/IC5203(CH3)/IC5603(CH4). A signal level at Pin 13 of the RESET_IN* should be H. • LRCK: 10 pin • MCLK: 11 pin • BCLK: 12 pin	If a signal level at Pin 13 of the RESET_IN* is not H, go to [9] of [2-1] No signal is input to the CD/LINE, PHONO connectors. • LRCK: 10 pin • MCLK: 11 pin • BCLK: 12 pin If no signal is input, go to [11] of [2-1] No signal is input to CD/LINE, PHONO connectors. • If both are normal and there is no signal at Pin 9, IC4403(CH1)/IC4803(CH2)/IC5203(CH3)/ IC5603(CH4) must be improperly soldered or defective.	10.41 WAVEFORMS INPUT ASSY 2-28 2-31 2-30 2-29

[4-2] No signal is input to and output from the USB 1 to 4 connectors.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
0	Prior Confirmation	DIGITAL, CD/LINE, PHONO, LINE, USB */* selector/PC settings	• Check that the selector is set to USB*/*. • Check that the DJM-900 nexus utility of the connected PC is set properly.		Operating instructions
1	Loose connection /defective parts	MAIN Assy / V+5VBUS 1-37 USBI Assy	• Check for the connections of CN1802/CN3801. • Check that the voltage at Pin 5 (V+5VBUS) of CN1802 is about 5 V (4.75 to 5.25) using a PC connected.	• Correct any poor connections. • If the voltage at Pin 5 (V+5VBUS) of CN1802 is not about 5 V (4.75 to 5.25), replace the USBI Assy.	

[5] Indicator (FL/LED) not lit

SUB UCOM (IC6601) controls the FL/LED.
MAIN_CPU controls only LFO FORM (WAKE UP) button LED and EFFECT ON/OFF button LED.

[5-1] The FL does not light.

Driver power to the FL is supplied within the MAIN Assy.

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Power failure	PNLA Assy V6601 24 pin 4-12 1 pin 4-10 25 pin 4-9 MAIN Assy IC1407 V+3R3D Block 1-2 IC1405 V+5D Block 1-5 IC1401 V+34D Block 1-4	Check for the voltage of the FL (V+3R3D_PA/V+5D_LED_PA/V+34D_PA).	If no loose connection is detected with the FL of the PNLA Assy but power voltage is not detected, check the mounting status of the DC-DC converter IC and peripheral parts for each voltage point of the MAIN Assy. If an error is detected, repair the defective parts.	4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS
2	Filament voltage error of the FL	PNLA Assy Voltage between pins 1 to 32 of V6601 4-11	Check that the FL filament voltage is 2.3 V ± 20%.	If the voltage is outside the normal range, a bias circuit error of the FL may be suspected. Check the mounting status of Q6601, Q6602, and peripheral parts. If there is no problem, Q6601 or Q6602 may be defective. Replace them.	—
3	Signal errors	PNLA Assy V6601 22 pin 4-14 21 pin 4-13 23 pin 4-15 24 pin 4-16	Check for the output signal of the FL communication line and the cable connection status in the PNLA Assy. • FL_SCK • FL_TXD • FL_LAT • FL_BK	If no signal is output, check for the mounting status of SUB UCOM (IC6601). If there is no problem, the port may be defective. Replace it. If soldering is improper, resolder it.	10.41 WAVEFORMS PNLA ASSY 4-14 4-13 4-15 4-16
4	Defective FL	PNLA Assy	If the symptom persists after the above corrections.	FL may be defective. Replace it.	—

[6] X-PAD

SUB UCOM (IC6601) controls the X-PAD.

[6-1] Pressing on the JOG dial not be detected

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection	PNLA Assy CDCB Assy	Check for loose connection on the signal line from the power source and SUB UCOM (IC6601) to the touch sensor IC (IC3601).	If any connection on the power or signal line is improper, correct it.	
2	Signal errors	PNLA Assy CN6601 10 pin 4-2 5 pin 4-5 8 pin 4-3 7 pin 4-4 3 pin 4-6 2 pin 4-7	Check for input and output signals of the communication line of the touch sensor IC in the PNLA Assy when power is supplied and the unit is turned on. • V+3R3 (power) • RBC_SCK • RBC_SI • RBC_SO • RBC_CS • RBC_INT	If there is no signal when the unit is turned on, check the mounting status of SUB UCOM (IC6601). If there is no problem, the port may be defective. Replace it.	4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS 10.41 WAVEFORMS PNLA ASSY 4-5 4-3 4-4 4-6 4-7
3	Touch sensor IC defective	PNLA Assy (the same points checked in No.2)	Check that the input and output signals of the touch sensor IC communication line in the PNLA Assy with the X-PAD touched in normal operation. (the same points checked in No.2)	If there are no input or output signals, the touch sensor IC (IC3601) may be defective. As this part cannot be replaced, replace the Assy.	—

[6-2] The X-PAD LEDs not light

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	Loose connection	PNLA Assy CN6602 27 pin 4-8 /MAIN Assy	Check for drive voltage of V+12_STB of the LED.	If any connection on the power line is improper, correct it.	4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS
2	Signal errors	PNLA Assy IC6601 79 pin 4-21 80 pin 4-20	Check if the LED drive signal is output from SUB uCOM (IC6601 Pins 79 and 80).	If the touch sensor functions normally but no signal is output, check the mounting status of the periphery of Q6651 to Q6654. If there is no problem, SUB UCOM (IC6601) port may be defective. Replace it.	10.41 WAVEFORMS PNLA ASSY 4-21 4-20
3	Defective LED	PNLA Assy CN6601 11⇔12 pin 4-1	Check for the voltage (2.7–4.2 V) at both electrodes of the LED.	If no voltage is detected, the LED may be defective. Replace it.	

[7] LAN

[7-1] No LAN communication

No.	Cause	Diagnostics Point	Item to be Checked	Corrective Action	Reference
1	—	—	Perform the Mode 12:Device Test in Test mode, and check if normal status is displayed for LAN, MACAd, IPAdd, and Subn.	• If all show normal status, go to [2]. • If LAN is NG, go to [3]. If MACAd, IPAdd, and Subn are abnormal, data stored in the Flash (IC502) for the ETHER UCOM may be damaged. Replace the entire MAIN Assy. Note: The Flash (IC502) DYW1798 for the ETHER UCOM is not a service part for MAC address administration. Replace it with the MAIN Assy.	6.1 TEST MODE
2	Error between the LAN connectors (JA1601) and ETHER -PHY (IC1603)	MAIN Assy 1-18	Check that the status of TRANS (T1601), Filters (F1601, F1602), etc.	Repair the defective parts.	—
3	• Part defective • Signal error	MAIN Assy [POWER] L1601 1-20 [CLK] R1629 1-21 [Communication line] 1-19 Representative R1631	Error between ETHER-PHY (IC1603) and ETHER Ucom (IC501) may be suspected. [POWER] • Power V+3R3D [CLK] • 25M CLK * (25M_CLK_PHY) [Communication line] • Check for the MII BUS line.	Repair the defective parts.	4.3 POWER BLOCK DIAGRAM 5.3 INFORMATION ON POWER DIAGNOSTICS [CLK] 10.41 WAVEFORMS MAIN ASSY 1-21 [Communication line] 10.41 WAVEFORMS MAIN ASSY 1-19
4	Part defective	MAIN Assy	If the symptom persists after the above corrections.	ETHER-PHY (IC1603) may be defective. Replace it.	—

5.3 INFORMATION ON POWER DIAGNOSTICS

G MAIN ASSY

Observing Point	Name	Remarks	Normal Voltage Level	Possible defective point when a voltage error is generated	Standby State (Power SW ON)
1	VMUTE		14.3-19.9	MUTE CIRCUIT(Q2603etc)	OFF
2	V+18VMUTE (V+18VMUTE_*)		14.3-19.9	MUTE CIRCUIT(Q2603etc)	OFF
3	V+15A (V+15A_*)		14.2-15.8	OUTPUT CIRCUIT(MAIN ASSY), INPUT CIRCUIT(INPUT ASSY)	OFF
4	V-15A (V-15A_*)		-15.8 - -14.3	OUTPUT CIRCUIT(MAIN ASSY), INPUT CIRCUIT(INPUT ASSY)	OFF
5	V+5A (V+5A_*)		4.7-5.3	OUTPUT CIRCUIT(MAIN ASSY), INPUT CIRCUIT(INPUT ASSY)	OFF
6	+12V Switched	Before the ICP	11.3-12.7	ALL DIGITAL CIRCUIT	OFF
7	V+12D (V+12D_*)	After the ICP	11.3-12.7	ALL DIGITAL CIRCUIT	OFF
8	V+12STBY (V+12E)		11.3-12.7	MAIN_CPU(IC2011), RESET IC(IC2010)	**ON**
9	V+9HP		8.55-9.45	HP CIRCUIT	OFF
10	V-9HP		-9.4 - -8.6	HP CIRCUIT	OFF
11	V+3R3E (V+3R3E_*)		3.15-3.45	MAIN_CPU(IC2011), RESET IC(IC2010)	**ON**
12	V+5D (V+5D_*)		4.8-5.3	FL.,LED,MIDI,DIGITAL OUT	OFF
13	V+3R3D (V+3R3D_*)		3.15-3.45	ALL DIGITAL CIRCUIT	OFF
14	V+1R2D (V+1R2D_*)		1.1-1.27	FPGA(IC2214),DSP(IC701),Ether UCOM(IC501),USB UCOM(IC1801)	OFF
15	V+2R5D (V+2R5D_*)		2.37-2.62	SRC,USB UCOM(IC1801)	OFF
16	V+34D_1	Before the TrSW	31-36	FL.	OFF
17	V+34D	After the TrSW	31-36	FL.	OFF
18	V+5VBUS	Power of the connected PC	4.75-5.25	USB communication failure	**ON**

A INPUT ASSY

19	V+15A	After the ICP	14.2-15.8	INPUT CIRCUIT	OFF
20	V-15A	After the ICP	-15.8 - -14.3	INPUT CIRCUIT	OFF
21	V+5A		4.7-5.3	INPUT CIRCUIT	OFF
22	V+12D	After the ICP	11.3-12.7	INPUT CIRCUIT RELAY(RY4201, 4601,5001,5401)	OFF
23	V+5D		4.8-5.3	MIDI OUT	OFF
24	V+3R3D		3.15-3.45	DIGITAL CIRCUIT	OFF

J SEND ASSY

25	V+15A_SE	After the ICP	14.2-15.8	SEND OUTPUT CIRCUIT	OFF
26	V-15A_SE	After the ICP	-15.8 - -14.3	SEND OUTPUT CIRCUIT	OFF
27	V+5A_SE		4.7-5.3	SEND_DAC(IC6401)	OFF

K PNLA ASSY

28	V+5D_LED		4.8-5.3	FL.,LED,	OFF
29	V+12STB		11.3-12.7	LED(X-PAD,LFO FORM)	**ON**
30	V+3R3D		3.15-3.45	FL.,SUB UCOM(IC6601)	OFF
31	V+34D		31-36	FL.	OFF
32	V+3R3D_REFA		3.15-3.45	CH1-4 FADER,CROSS FADER	OFF

Q PNLB ASSY

33	V+3R3D_REFA		3.15-3.45	CROSS FADER	OFF

L CDCB ASSY

34	V+3R3		3.15-3.45	CDC SENSOR(IC3601)	OFF

ex)V+5A_* • • • • • V+5A_BO,V+5A_HP,V+5A_M1 etc • • •

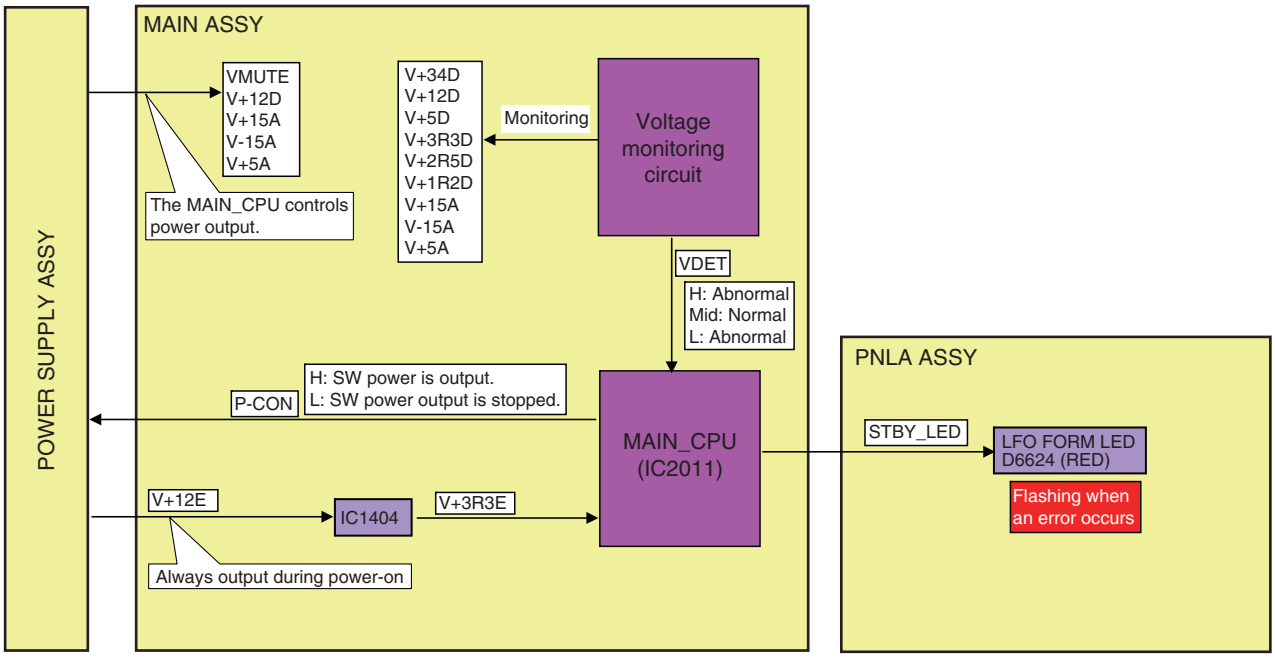
5.4 VOLTAGE MONITORING CIRCUIT

■ Voltage-Monitoring Circuit

This unit monitors the voltages of the main power-supply ICs, using the VDET signal.
The VDET signal level is middle (+1.08 V to +1.32 V) during normal operations. When the level becomes outside the middle level, as shown in the table below, an error is informed to the MAIN CPU (IC2011).

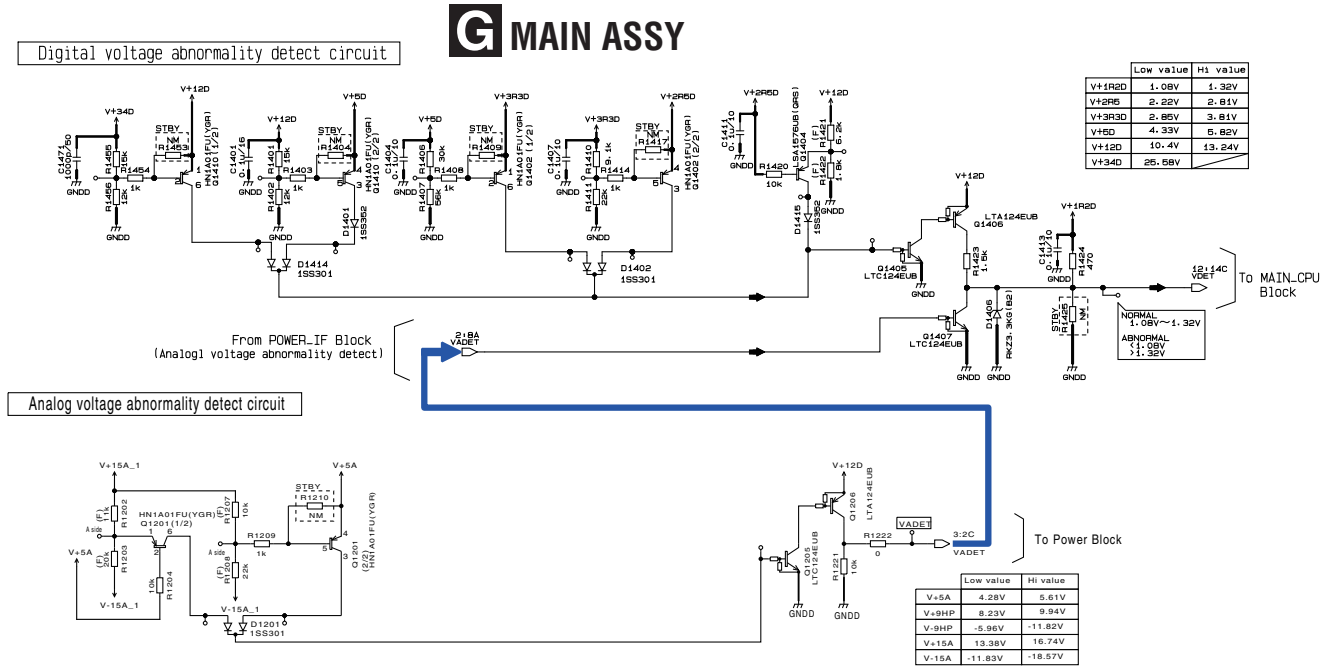
Product behavior when an error is generated

Upon reception of the VDET signal that informs of power failure, the MAIN CPU sets the P-CON signal to Low and stops the switching-system output from SW power.



The MAIN CPU also informs of power failure with flashing of the LFO FORM button, by sending the STBY_LED signal:
Flashing intervals: 250 ms (lit for 125 ms/unlit for 125 ms)
As the switching-system output is stopped, the indications other than the LFO FORM button are unlit and all the switches and VRs are disabled.

Schematic diagram of the voltage monitoring section



	Low value	Hi value
V+1R2D	1.08V	1.32V
V+2R5	2.22V	2.81V
V+3R3D	2.85V	3.81V
V+5D	4.33V	5.82V
V+12D	10.4V	13.24V
V+34D	25.58V	

	Low value	Hi value
V+5A	4.28V	5.61V
V+9HP	8.23V	9.94V
V-9HP	-5.96V	-11.82V
V+15A	13.38V	16.74V
V-15A	-11.83V	-18.57V

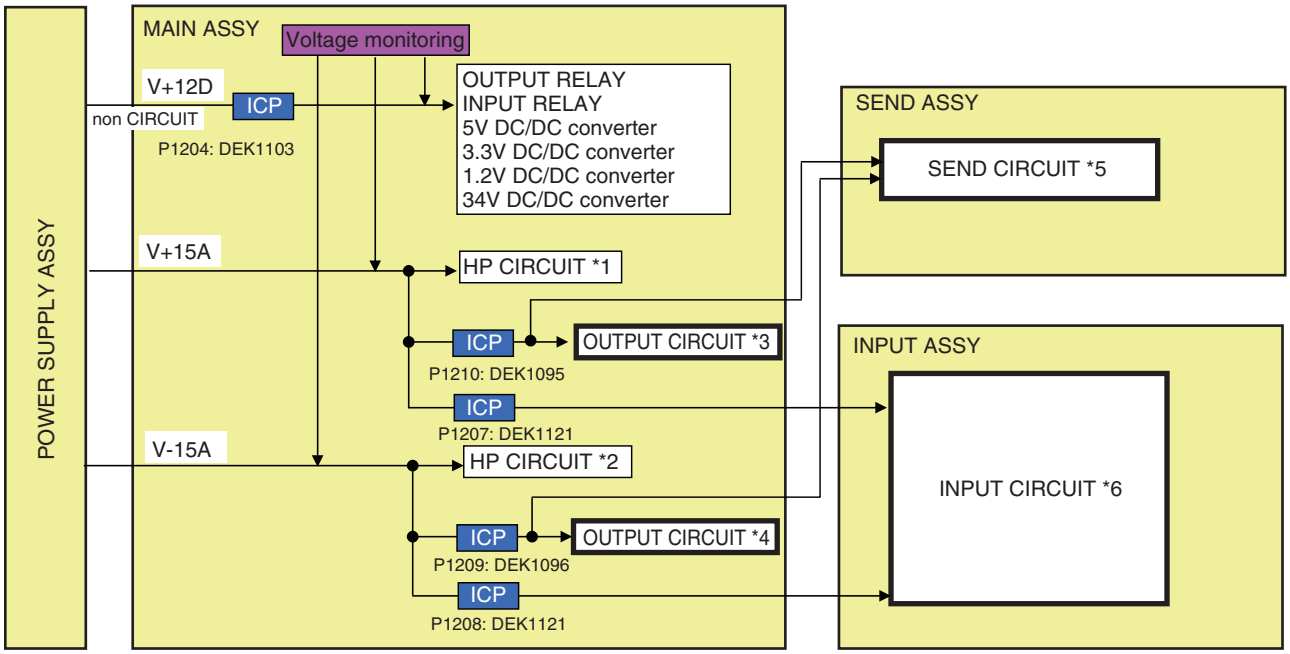
Table 1: List of voltage values for power monitoring and statuses of the voltage comparator transistors

State	Power	Voltage	Statuses of voltage comparator transistors														VDET Voltage
			Q1410 (1/2)	Q1410 (2/2)	Q1402 (1/2)	Q1402 (2/2)	Q1404	Q1405	Q1406	Q1201 (1/2)	Q1201 (2/2)	Q1203 (1/2)	Q1203 (2/2)	Q1205	Q1206	Q1407	
In normal operation			OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Mid
When an error is generated	V+34D	< 25.58V	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
	V+12D	< 10.4V	OFF	**ON**	OFF	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
		> 13.24V	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
	V+5D	< 4.33V	OFF	OFF	**ON**	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
		> 5.82V	OFF	**ON**	OFF	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	HI
	V+3R3D	< 2.85V	OFF	OFF	OFF	**ON**	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	HI
		> 3.81V	OFF	OFF	**ON**	OFF	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	HI
	V+2R5D	< 2.22V	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
		> 2.81V	OFF	OFF	OFF	ON	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Hi
	V+1R2D	< 1.08V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	< 1.08V
		> 1.32V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	> 1.32V
	V+15A	< 13.38V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	**ON**	**ON**	**ON**	Low
		> 16.74V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	**ON**	**ON**	**ON**	Low
	V-15A	< -18.57V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	**ON**	**ON**	**ON**	Low
		> -11.83V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	**ON**	**ON**	**ON**	Low
	V+5A	< 4.28V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	**ON**	**ON**	**ON**	Low
		> 5.61V	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	**ON**	Low

5.5 ABOUT THE PROTECTOR

This unit monitors the voltages of the main power-supply ICs, using the voltage-monitoring circuit. As the ICPs (IC protectors) are also used, some circuits cannot be monitored by the voltage-monitoring circuit when any wire for an ICP is broken.
(Circuits with thick frames in the figure below)
When any of the circuit blocks indicated in thick frames (located after the ICPs) in the figure below is in failure, also check for a broken wire for the ICP.

■ Locations of the ICPs



■ Names of the Power-Supply ICs

V+15A

Before the ICP *1	After the ICP (P1210)		After the ICP (P1207)	
	OUTPUT BLOCK *3&5		INPUT BLOCK *6	
MAIN	MAIN	SEND	MAIN	INPUT
V+15A_1	V+15A_O	V+15A_SE	V+15A_IN	V+15A_IN
V+15A_HP	V+15A_SE			
V+15A_HP_1	V+15A_SE_1			
	V+15A_BO			
	V+15A_M2			
	V+5A_REC			
	V+15A_M1			
	V+15A_M1_ICP			

V-15A

Before the ICP *2	After the ICP (P1209)		After the ICP (P1208)	
	OUTPUT BLOCK *4&5		INPUT BLOCK *6	
MAIN	MAIN	SEND	MAIN	INPUT
V-15A_1	V-15A_O	V-15A_SE	V-15A_IN	V-15A_IN
V-15A_HP	V-15A_SE			
V-15A_HP_1	V-15A_SE_1			
	V-15A_BO			
	V-15A_M2			
	V-5A_REC			
	V-15A_M1			
	V-15A_M1_ICP			

■ Diagnostic procedures when the wire for an ICP is broken

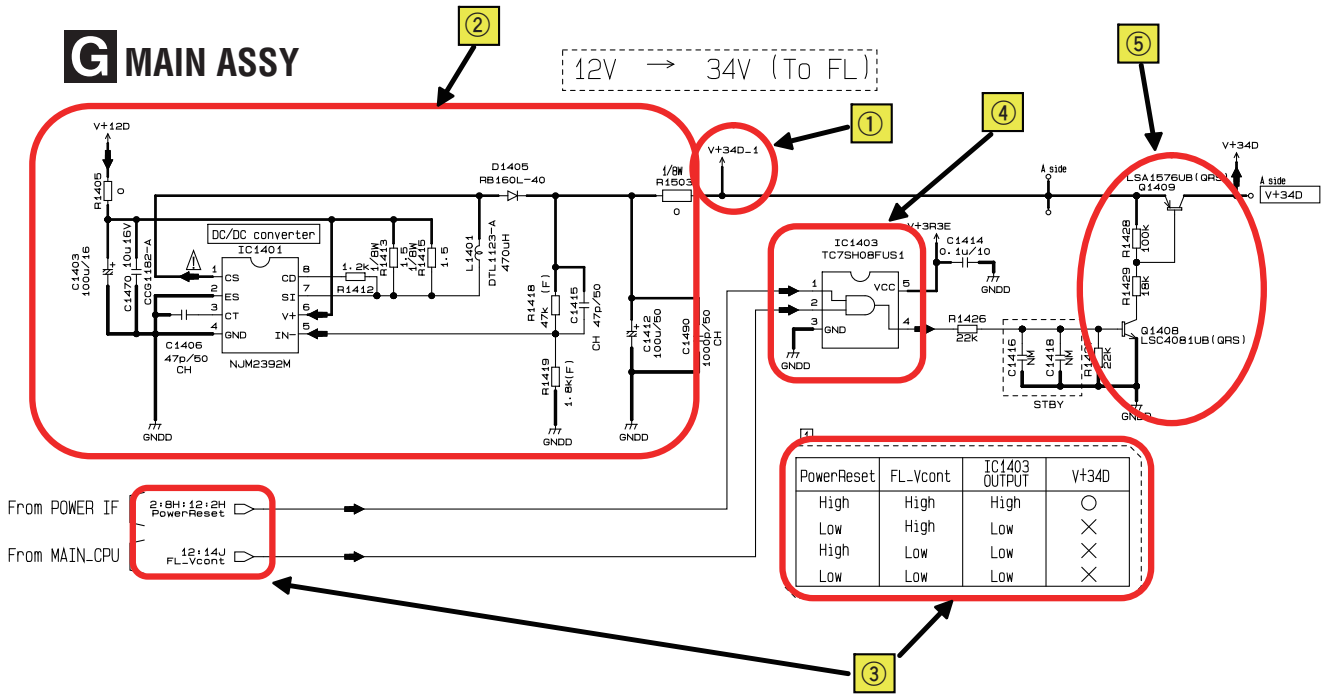
1. Unplug the AC power cord.
2. Check for any error, such as short-circuiting or defective parts, in the circuits subsequent to the ICP.
3. Repair the detective part.
4. Replace the ICP.

5.6 DIAGNOSIS OF V+34D

The driver power output for the FL (V+34D) is controlled with a transistor switch.

■ Diagnostic procedures when only V+34D is not output

① Check V+34D_1 at the prior stage of the transistor (Q1409).
② If no signal is detected at V+34D_1, the mounting status of the peripheral parts of the 34V DC/DC converter (IC1401) may be improper or IC1401 itself may be defective.
③ If a signal is detected at V+34D_1, check the input signals to IC1403.
If PowerReset is L, check the connection up to SW power (DWR1492).
If FL_Vcont is L, the mounting status of the MAIN_CPU (IC2011) may be improper or IC2011 itself may be defective.
④ If both PowerReset and FL_Vcont are H:
If the output signal from IC1403 is L, the mounting status of IC1403 may be improper or IC1403 itself may be defective.
⑤ If the output signal from IC1403 is H, the mounting status of the peripheral parts of Q1408 or Q1409 may be improper or Q1408/Q1409 may be defective.



5.7 ERROR INDICATIONS

■ Indications of Errors during Startup

If an error is detected during a boot sequence, it will be indicated by flashing of the LFO FORM (WAKE UP) LED.

Error (in the order of detection)	Detecting Microcomputer	Indication	Cause	Diagnostic procedure
MAIN_CPU (IC2011)	MAIN_CPU (IC2011)	The unit will be forcefully started in Update mode. LFO FORM (WAKE UP) LED: Not flashing	Error of the ROM inside the MAIN_CPU (Depending on the degree of damage to the ROM, the unit may be in a state of power-off.)	Troubleshooting: "LFO FORM (WAKE UP) LED not flashing" in [1-1] No power, [1] Failure in Startup
DSP (IC701)	MAIN_CPU (IC2011)	Repeated once flashing of the LFO FORM (WAKE UP) LED (lit and unlit for 250 ms each 1 time then unlit for 1 s)	Error during the 1st command communication between the MAIN_CPU and DSP (via FPGA)	Troubleshooting: "LFO FORM (WAKE UP) LED flashing once" in [1-2] No power, [1] Failure in Startup
ETHER UCOM (IC501)	MAIN_CPU (IC2011)	Repeated 3-time flashing of the LFO FORM (WAKE UP) LED (lit and unlit for 250 ms each 3 times then unlit for 1 s)	Error during the 1st command communication between the MAIN_CPU and ETHER UCOM (via FPGA)	Troubleshooting: "LFO FORM (WAKE UP) LED flashing 3 times" in [1-3] No power, [1] Failure in Startup
SUB UCOM (IC6601)	MAIN_CPU (IC2011)	Repeated 5-time flashing of the LFO FORM (WAKE UP) LED (lit and unlit for 250 ms each 5 times then unlit for 1 s)	Error during the 1st command communication between the MAIN_CPU and SUB_UCOM (via FPGA)	Troubleshooting: "LFO FORM (WAKE UP) LED flashing 5 times" in [1-4] No power, [1] Failure in Startup
USB UCOM (IC1801)	MAIN_CPU (IC2011)	Repeated 6-time flashing of the LFO FORM (WAKE UP) LED (lit and unlit for 250 ms each 6 times then unlit for 1 s)	Serial communication error between the MAIN_CPU and USB UCOM	Troubleshooting: "LFO FORM (WAKE UP) LED flashing 6 times" in [1-5] No power, [1] Failure in Startup
DOUT DIT (IC2405)	MAIN_CPU (IC2011)	Repeated 7-time flashing of the LFO FORM (WAKE UP) LED (lit and unlit for 250 ms each 7 times then unlit for 1 s)	Serial communication error between the MAIN_CPU and DOUT DIT	Troubleshooting: "LFO FORM (WAKE UP) LED flashing 7 times" in [1-6] No power, [1] Failure in Startup

■ Indications of Errors during Power Failure

The LFO FORM LED infinite flashes (Intervals: 250 ms [Lit 125 ms/Unlit 125 ms]).

■ Indications of Errors during Updating

Effect Indication	Parameter Indication	Microcomputer in failure	Correspondence
ERROR	E001	MAIN CPU UPDATE error	Please update it again.
ERROR	E002	SUB UCOM UPDATE error	Please update it again.
ERROR	E003	DSP data UPDATE error	Please update it again.
ERROR	E004	DSP program UPDATE error	Please update it again.
ERROR	E005	USB UCOM UPDATE error	Please update it again.
ERROR	E006	ETHER UCOM UPDATE error	Please update it again.
ERROR	E007	FPGA UPDATE error	Please update it again.
ERROR	E008	Update file error	Download the update file again then perform updating.
ERROR	EE00	LINK cutting error	Please update it again.
ERROR	EEXX	LINK error XX : Error generation task ID	Please update it again.

5.8 CONNECTION CHECK WITH EACH INTERFACE

■ USB

[1. USB B connector]

Whether communication between the PC connected via the USB B connector and this unit is properly performed or not can be confirmed on the PC.
Note: The driver software must be installed beforehand.

■ **For checking, use the USB connection indicator of the unit.**

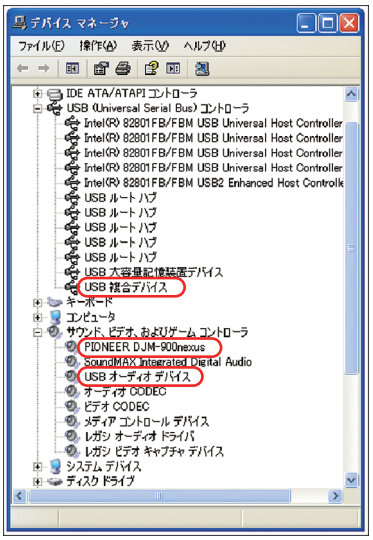
Lit: The indicator lights when the driver is recognized after connection with the PC is established.
Flashing: If the driver cannot be recognized after PC connection, the LED flashes (Intervals: 500 ms [lit: 250 ms/unlit: 250 ms
Unlit: When communication between the PC and the unit is interrupted, the LED goes dark.

■ **Use Device Manager for checking.**

If the PC and this unit are properly connected, the components of this unit are added in Device Manager (under Hardware) as devices.
If all components are properly displayed, the PC and this unit are properly communicating via the USB connector.

In a case of Windows XP:
Start, Control Panel, System, Hardware, then Device Manager
Devices to be added:

- Universal Serial Bus controllers
  USB Composite Device
- Under “Sound, video and game controllers”
  PIONEER DJM-900nexus
  USB Audio Device



A communication check may be easily performed if connection is made with Device Manager displayed on the PC screen.

■ LAN

[2. LINK]

You can check from this unit if the mixer can properly communicate via LAN.
*Use a Category 5 cable or a cable with higher specifications for connection.
Either a straight or cross LAN cable can be used when the unit is directly connected with the PC, but when the unit is connected with the PC via a hub, be sure to use a straight cable.

■ **Check the LAN conditions, using Test mode of this unit:**

① Start the unit in Test mode.
② Open "DEVICE" in “MODE 12: DEVICE TEST.”
③ The IP Address and Subnet Mask are indicated.
④ Check if the LAN is properly connected.

When the LAN is properly connected:

IP Address: xxx . xxx . xxx . xxx
Subnet Mask: yyy . yyy . yyy . yyy
The above x’s and y’s mean any numeric digits 0–9.
Four blocks of numerical string delimited by dots

When the LAN is not properly connected:

IP Address: EE . EE . EE . EE
Subnet Mask: EE . EE . EE . EE
All four blocks are filled with “EE.”

6. SERVICE MODE
6.1 TEST MODE

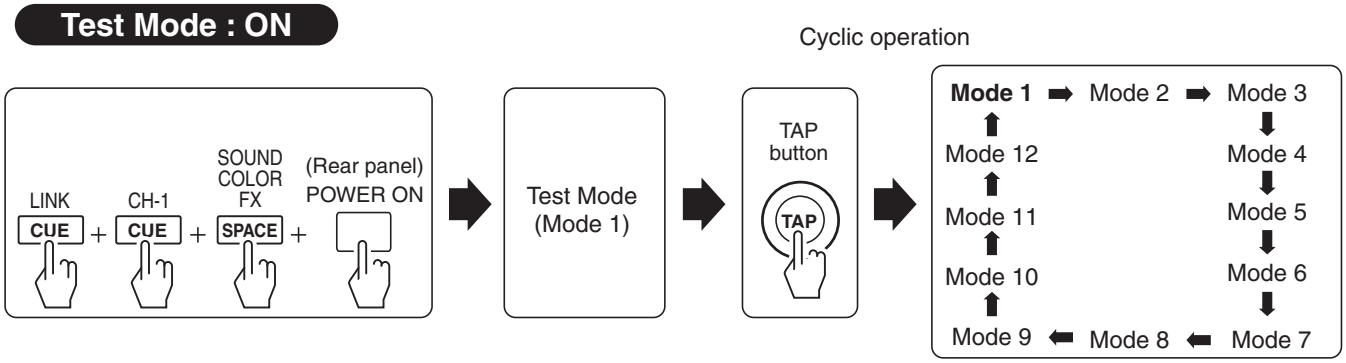
1. Description of Test Modes

The Following 12 test modes are provided for this unit:

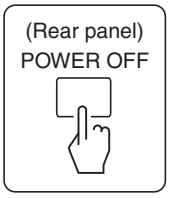
① Mode 1 : Confirmation of software version. "Version"
② Mode 2 : All LEDs & FL display "OFF" mode. "ALL CLR"
③ Mode 3 : ALL LEDs & FL display "ON" mode. "ALL SET"
④ Mode 4 : KEY operating test. "KEY TEST"
⑤ Mode 5 : SELECT SW Operating test. "SW TEST"
⑥ Mode 6 : Rotary VRs value test. "VOLTEST"
⑦ Mode 7 : Fader test. "FDRTEST"
⑧ Mode 8 : Channel Level Indicator LED test. "LEDTEST"
⑨ Mode 9 : X-PAD value test. "RBNTEST"
⑩ Mode 10 : AD values of the rotary VRs test. "VOL AD"
⑪ Mode 11 : AD values of the fader test. "FDR AD"
⑫ Mode 12 : Device test. "DEVICE"

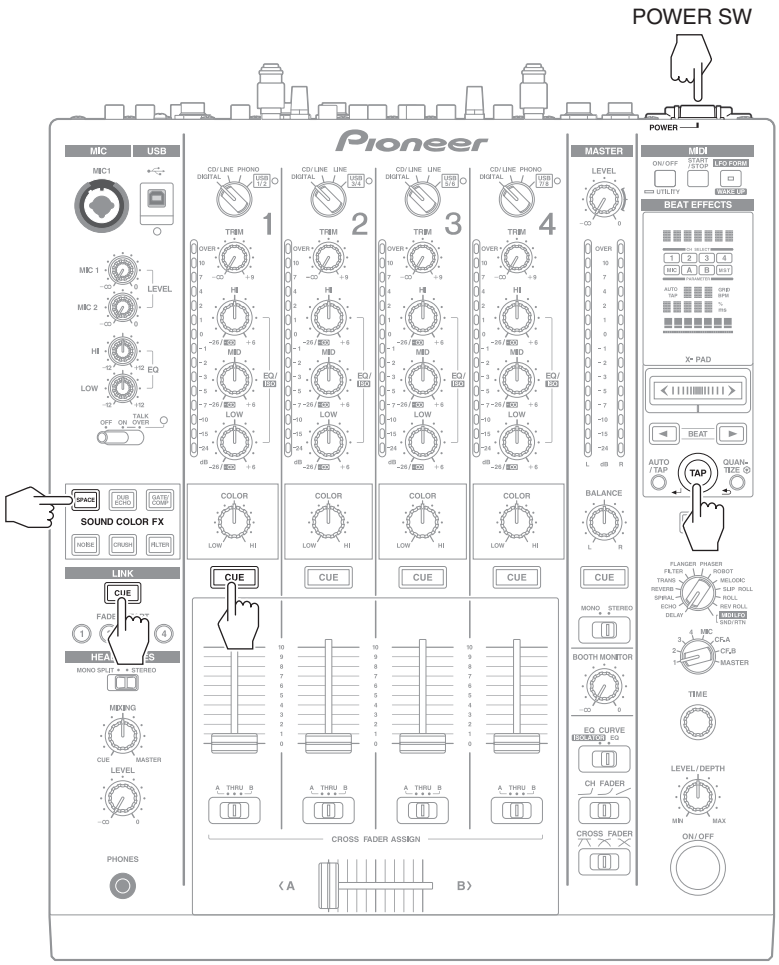
2. Test Mode

Test Mode : ON



Test Mode : CANCEL



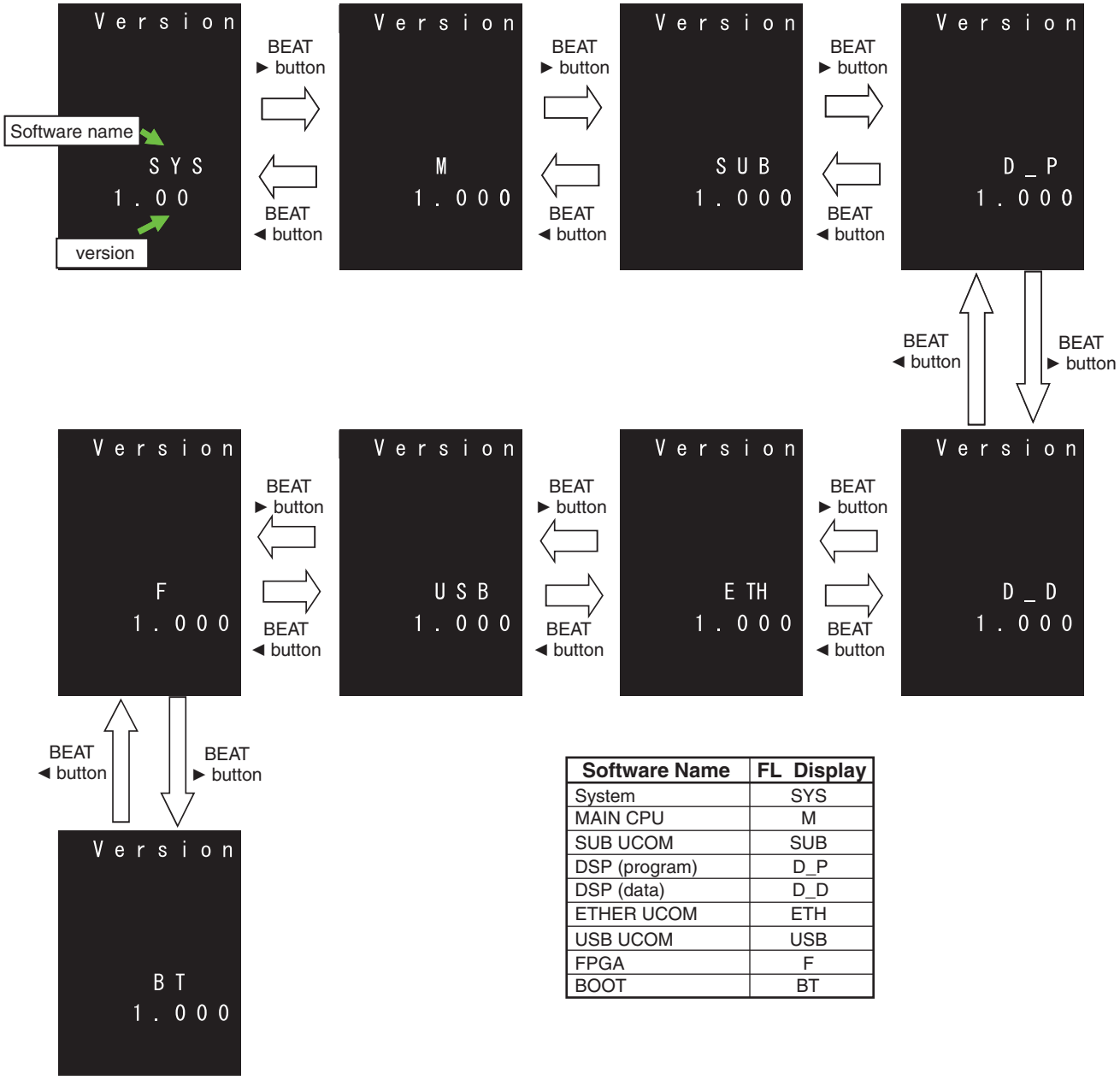


3. Test mode Contents

① Mode 1 : Confirmation of software version

- Mode for confirmation of the versions of the system, MAIN CPU, SUB UCOM, DSP (program), DSP (data), ETHER UCOM, USB UCOM, FPGA and BOOT.
  When this mode is entered, “Version” is displayed at the top of the FL display and the TAP key lights.

- Mode 1 consists of 9 pages for indicating the versions of the system, MAIN CPU, SUB UCOM, DSP (program), DSP (data), ETHER UCOM, USB UCOM, FPGA and BOOT.
  The pages can be changed by pressing the BEAT ◄, ► button.
  When Mode 1 is entered, the System Version Display mode is automatically entered.



Software Name	FL Display
System	SYS
MAIN CPU	M
SUB UCOM	SUB
DSP (program)	D_P
DSP (data)	D_D
ETHER UCOM	ETH
USB UCOM	USB
FPGA	F
BOOT	BT

② Mode 2 : All LEDs & FL display “OFF” mode

- Mode for extinguishing all the LEDs and FL segments.
  Only after this mode is entered, “ALL CLR” is displayed for 1 second at the top of the FL display.
  Note: The seven CUE button LEDs light dimly.

③ Mode 3 : All LEDs & FL display “ON” mode

- Mode for lighting all the LEDs and FL segments.
  Only after this mode is entered, “ALL SET” is displayed for 1 second at the top of the FL display.

④ Mode 4 : Key operating test

- Mode for indicating a pressed key with lighting of an LED and indication on the FL display.
  When this mode is entered, “KEYTEST” is displayed at the top of the FL display and the TAP key lights.

- The name of a pressed key is indicated on the FL display.

Operating Keys	Lighting LED	FL Display	Remark
FADER START 1 button	FADER START 1 button LED	FSCH1	
FADER START 2 button	FADER START 2 button LED	FSCH2	
FADER START 3 button	FADER START 3 button LED	FSCH3	
FADER START 4 button	FADER START 3 button LED	FSCH4	
CH1 CUE button	CH1 CUE button LED	CUE_1	
CH2 CUE button	CH2 CUE button LED	CUE_2	
CH3 CUE button	CH3 CUE button LED	CUE_3	
CH4 CUE button	CH4 CUE button LED	CUE_4	
LINK CUE button	LINK CUE button LED	CUE_L	
MASTER CUE button	MASTER CUE button LED	CUE_M	
EFFECT CUE button	EFFECT CUE button LED	CUE_E	
SOUND COLOR FX SPACE button	SOUND COLOR FX SPACE button LED	CFX_1	
SOUND COLOR FX DUB ECHO button	SOUND COLOR FX DUB ECHO button LED	CFX_2	
SOUND COLOR FX GATE/COMP button	SOUND COLOR FX GATE/COMP button LED	CFX_3	
SOUND COLOR FX NOISE button	SOUND COLOR FX NOISE button LED	CFX_4	
SOUND COLOR FX CRUSH button	SOUND COLOR FX CRUSH button LED	CFX_5	
SOUND COLOR FX FILTER button	SOUND COLOR FX FILTER button LED	CFX_6	
LFO FORM (WAKE UP) button	LFO FORM (WAKE UP) button LED	LFO	
ON/OFF (UTILITY) button	ON/OFF (UTILITY) button LED	MD_ON	
START/STOP button	None	MD_ST	
BEAT ◄ button	None	BEAT<	
BEAT ► button	None	BEAT>	
AUTO/TAP button	None	AUTO	
QUANTIZE button	QUANTIZE button LED	GRID	
ON/OFF button	ON/OFF button LED	EFXon	

⑤ Mode 5 : SELECT SW Operating test. "SW TEST"

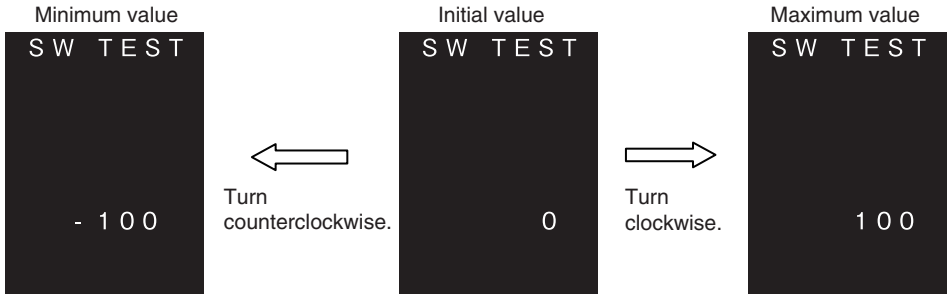
• When this mode is entered, “SW TEST” is displayed at the top of the FL display and the TAP key lights.

Operating Switches		Lighting LED		Remark
DIGITAL, CD/ LINE, PHONO, LINE, USB 1/2 selector switch CH1	: DIGITAL	CH1 Channel Level Indicator LED	4dB	
	: CD/LINE		7dB	
	: PHONO		10dB	
	: USB 1/2		OVER	
DIGITAL, CD/ LINE, PHONO, LINE, USB 3/4 selector switch CH2	: DIGITAL	CH2 Channel Level Indicator LED	4dB	
	: CD/LINE		7dB	
	: LINE		10dB	
	: USB 3/4		OVER	
DIGITAL, CD/ LINE, PHONO, LINE, USB 5/6 selector switch CH3	: DIGITAL	CH3 Channel Level Indicator LED	4dB	
	: CD/LINE		7dB	
	: LINE		10dB	
	: USB 5/6		OVER	
DIGITAL, CD/ LINE, PHONO, LINE, USB 7/8 selector switch CH4	: DIGITAL	CH4 Channel Level Indicator LED	4dB	
	: CD/LINE		7dB	
	: PHONO		10dB	
	: USB 7/8		OVER	
CROSS FADER ASSIGN (A, THRU, B) selector switch CH1	: Assign A	CH1 Channel Level Indicator LED	-24dB	
	: THRU		-15dB	
	: Assign B		-10dB	
CROSS FADER ASSIGN (A, THRU, B) selector switch CH2	: Assign A	CH2 Channel Level Indicator LED	-24dB	
	: THRU		-15dB	
	: Assign B		-10dB	
CROSS FADER ASSIGN (A, THRU, B) selector switch CH3	: Assign A	CH3 Channel Level Indicator LED	-24dB	
	: THRU		-15dB	
	: Assign B		-10dB	
CROSS FADER ASSIGN (A, THRU, B) selector switch CH4	: Assign A	CH4 Channel Level Indicator LED	-24dB	
	: THRU		-15dB	
	: Assign B		-10dB	
OFF, ON, TALK OVER selector switch	: OFF	CH1 Channel Level Indicator LED	-1dB	
	: ON		0dB	
	: TALK OVER		1dB	
MONO SPLIT, STEREO selector switch	: MONO SPLIT	CH1 Channel Level Indicator LED	-5dB	
	: STEREO		-3dB	
MONO, STEREO selector switch	: MONO	CH2 Channel Level Indicator LED	0dB	
	: STEREO		1dB	
EQ CURVE (ISOLATOR, EQ) selector switch	: ISOLATOR	CH2 Channel Level Indicator LED	-3dB	
	: EQ		-2dB	
CH FADER (⌒, ⌒, ⌒) selector switch	: Left	CH3 Channel Level Indicator LED	-1dB	
	: MID		0dB	
	: Right		1dB	
CROSS FADER (⌒, ⌒, ⌒) selector switch	: Left	CH4 Channel Level Indicator LED	-1dB	
	: MID		0dB	
	: Right		1dB	

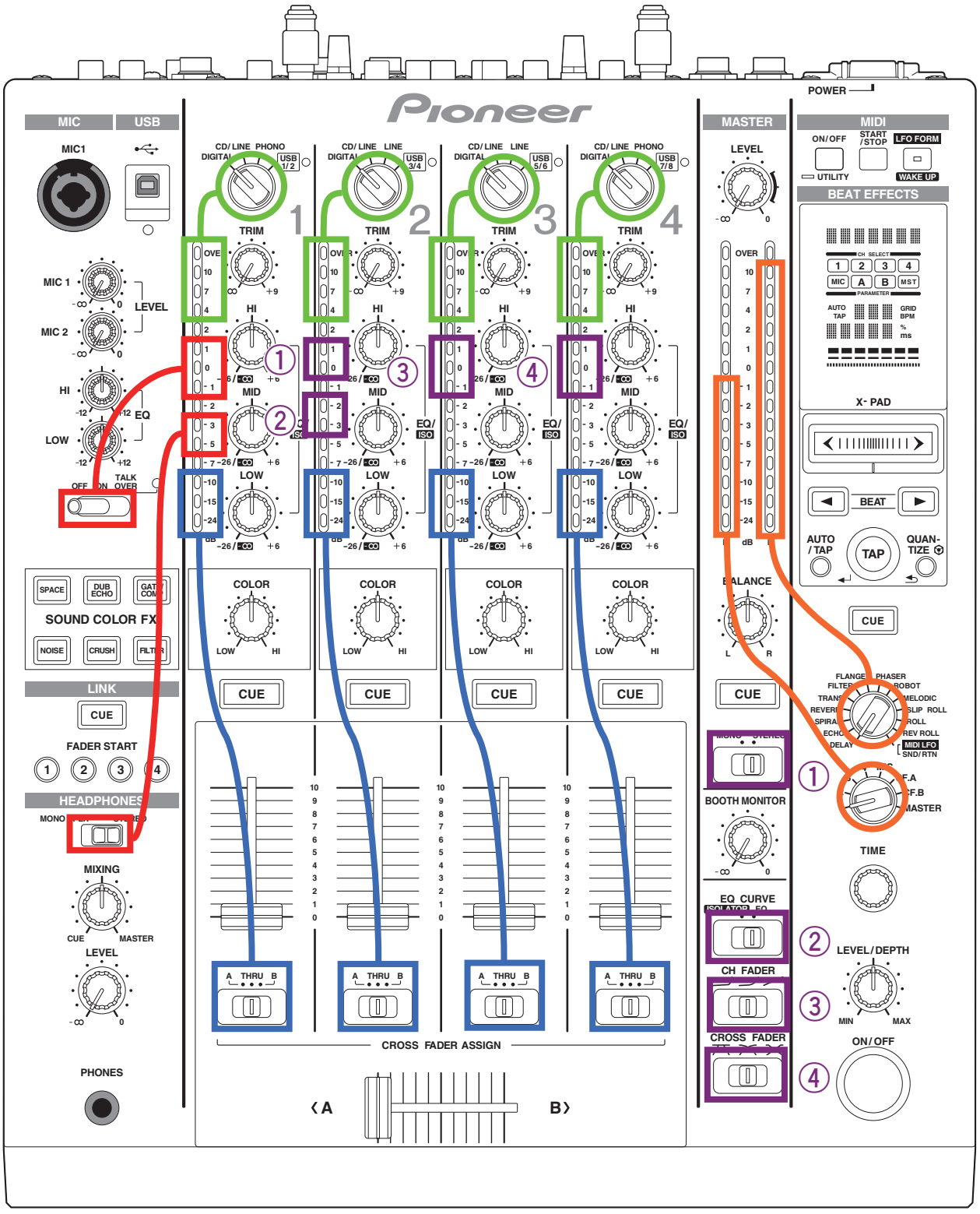
Operating Switches		Lighting LED		Remark
1, 2, 3, 4, MIC, CF.A, CF.B, MASTER selector switch	: 1	Master Level Indicator LED L CH	-24dB	
	: 2		-15dB	
	: 3		-10dB	
	: 4		-7dB	
	: MIC		-5dB	
	: CF.A		-3dB	
	: CF.B		-2dB	
	: MASTER		-1dB	
DELAY, ECHO, SPIRAL, REVERB, TRANS, FILTER, FLANGER, PHASER, ROBOT, MELODIC, SLIP ROLL, ROLL, REV ROLL, SND/RTN (MIDI LFO) selector switch	: DELAY	Master Level Indicator LED R CH	-24dB	
	: ECHO		-15dB	
	: SPIRAL		-10dB	
	: REVERB		-7dB	
	: TRANS		-5dB	
	: FILTER		-3dB	
	: FLANGER		-2dB	
	: PHASER		-1dB	
	: ROBOT		0dB	
	: MELODIC		1dB	
	: SLIP ROLL		2dB	
	: ROLL		4dB	
	: REV ROLL		7dB	
	: SND/RTN (MIDI LFO)		10dB	

This mode is also used to check operation of the TIME control.
The value displayed on the FL display increases/decreases as you turn the TIME control:

Operation range
Initial value: 0
Maximum value: 100
Minimum value: -100



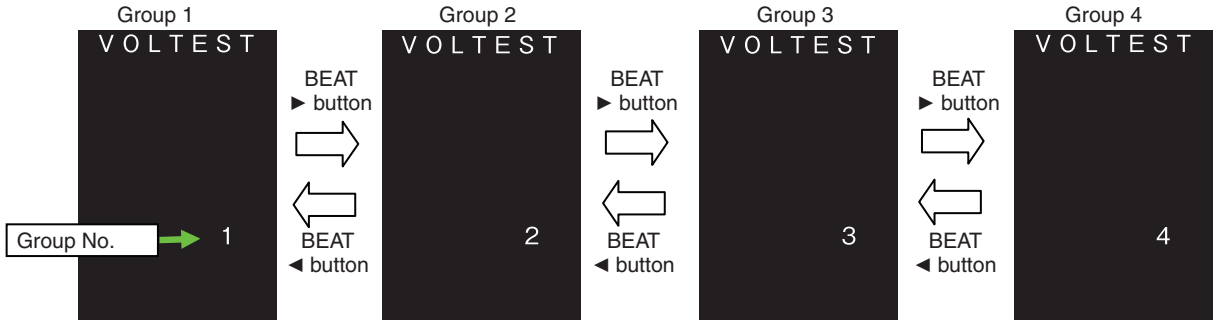
Correspondence diagram of Mode 5 : SELECT SW Operating test. "SW TEST"



⑥ Mode 6 : Rotary VRs value test. "VOLTEST"

- Mode for confirmation of the AD conversion value for each rotary VR on the operation panel with lighting of a channel level indicator LED or the segments on the FL display
  When this mode is entered, “VOLTEST” is displayed at the top of the FL display and the TAP key lights.

- To indicate the AD conversion values for several rotary VRs with a single level meter, the rotary VRs are divided into 4 groups.
  The group pages can be changed by pressing the BEAT ◄, ► button.



[Use of this mode during repair]
- For failure judgment of the rotary VRs
- For operation check of a rotary VR after replacement

• Group 1

Rotary VRs whose AD conversion values can be confirmed:
- CH1 TRIM control, CH2 TRIM control, CH3 TRIM control, CH4 TRIM control, EQ HI control, EQ LOW control, CH1 COLOR control

VR to be tested	Lit LED or FL	Remarks
CH1 TRIM control	CH1 Channel Level Indicator LED	"-∞": Lights off "+9": Full Illuminate
CH2 TRIM control	CH2 Channel Level Indicator LED	"-∞": Lights off "+9": Full Illuminate
CH3 TRIM control	CH3 Channel Level Indicator LED	"-∞": Lights off "+9": Full Illuminate
CH4 TRIM control	CH4 Channel Level Indicator LED	"-∞": Lights off "+9": Full Illuminate
EQ HI control	Master Level Indicator L LED	"-12": Lights off "+12": Full Illuminate
EQ LOW control	Master Level Indicator R LED	"-12": Lights off "+12": Full Illuminate
CH1 COLOR control	At the bottom of the FL display	"LOW": Lights off "HIGH": Full Illuminate

• Group 2

Rotary VRs whose AD conversion values can be confirmed:

• CH1 EQ/ISO HI control, CH2 EQ/ISO HI control, CH3 EQ/ISO HI control, CH4 EQ/ISO HI control, MIXING control, LEVEL control, CH2 COLOR control

VR to be tested	Lit LED or FL	Remarks
CH1 EQ/ISO HI control	CH1 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH2 EQ/ISO HI control	CH2 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH3 EQ/ISO HI control	CH3 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH4 EQ/ISO HI control	CH4 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
MIXING control	Master Level Indicator L LED	"CUE": Lights off "MASTER": Full Illuminate
LEVEL control	Master Level Indicator R LED	"-∞": Lights off "0": Full Illuminate
CH2 COLOR control	At the bottom of the FL display	"LOW": Lights off "HIGH": Full Illuminate

• Group 3

Rotary VRs whose AD conversion values can be confirmed:

• CH1 EQ/ISO MID control, CH2 EQ/ISO MID control, CH3 EQ/ISO MID control, CH4 EQ/ISO MID control, MASTER LEVEL control, BALANCE control, CH3 COLOR control

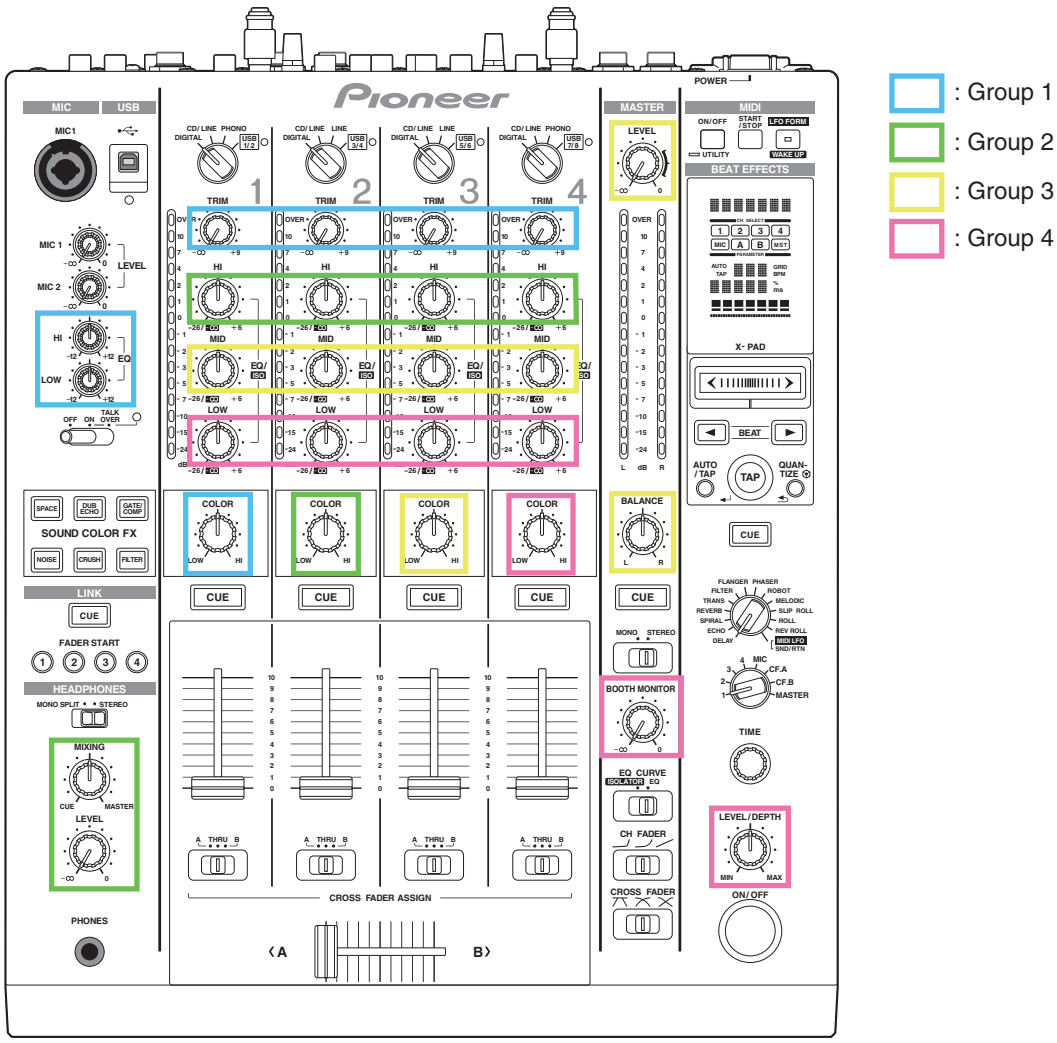
VR to be tested	Lit LED or FL	Remarks
CH1 EQ/ISO MID control	CH1 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH2 EQ/ISO MID control	CH2 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH3 EQ/ISO MID control	CH3 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH4 EQ/ISO MID control	CH4 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
MASTER LEVEL control	Master Level Indicator L LED	"-∞": Lights off "0": Full Illuminate
BALANCE control	Master Level Indicator R LED	"L": Lights off "R": Full Illuminate
CH3 COLOR control	At the bottom of the FL display	"LOW": Lights off "HIGH": Full Illuminate

• Group 4

Rotary VRs whose AD conversion values can be confirmed:

• CH1 EQ/ISO LOW control, CH2 EQ/ISO LOW control, CH3 EQ/ISO LOW control, CH4 EQ/ISO LOW control, BOOTH MONITOR control, LEVEL/DEPTH control, CH4 COLOR control

VR to be tested	Lit LED or FL	Remarks
CH1 EQ/ISO LOW control	CH1 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH2 EQ/ISO LOW control	CH2 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH3 EQ/ISO LOW control	CH3 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
CH4 EQ/ISO LOW control	CH4 Channel Level Indicator LED	"-∞/-26": Lights off "+6": Full Illuminate
BOOTH MONITOR control	Master Levele Indicator L LED	"-∞": Lights off "0": Full Illuminate
LEVEL/DEPTH control	Master Levele Indicator R LED	"MIN": Lights off "MAX": Full Illuminate
CH4 COLOR control	At the bottom of the FL display	"LOW": Lights off "HIGH": Full Illuminate



⑦ Mode 7 : Fader test. "FDRTEST"

• Mode for confirmation of the values of CH1–4 Channel FADER and CROSS FADER with the channel level indicator LEDs. When this mode is entered, “FDRTEST” is displayed at the top of the FL display and the TAP key lights.

[Use of this mode during repair]

• For failure judgment of the faders
• For operation check of a fader after replacement

Fader to be tested	Lit LED	Remarks
CH1 Channel Fader	CH1 Channel Level Indicator LED	"0": Lights off "10": Full Illuminate
CH2 Channel Fader	CH2 Channel Level Indicator LED	"0": Lights off "10": Full Illuminate
CH3 Channel Fader	CH3 Channel Level Indicator LED	"0": Lights off "10": Full Illuminate
CH4 Channel Fader	CH4 Channel Level Indicator LED	"0": Lights off "10": Full Illuminate
Cross Fader	Master Level Indicator L LED	"A": Full Illuminate "B": Lights off

⑧ Mode 8 : Channel Level Indicator LED test. "LEDTEST"

• Mode for confirming lighting of the Channel Levele Indicator LEDs
When this mode is entered, “LEDTEST” is displayed at the top of the FL display and the TAP key lights.
The LEDs for CH1 CUE button, CH2 CUE button, CH3 CUE button, CH4 CUE button, MASTER CUE button, and EFFECT CUE button light.

• Each time the CUE button is pressed, the channel level indicator LEDs for each channel light one by one from the bottom.
At first, all the LEDs are unlit.
If the CUE button is pressed after it was pressed 15 times (when the top LED is lit), all the LEDs become unlit again.

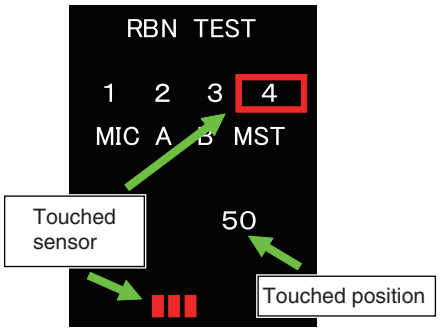
Button to be tested	Lit Meter	Remarks
CH1 CUE button	CH1 Channel Level Indicator LED	
CH2 CUE button	CH2 Channel Level Indicator LED	
CH3 CUE button	CH3 Channel Level Indicator LED	
CH4 CUE button	CH4 Channel Level Indicator LED	
MASTER CUE button	Master Level Indicator L LED	
EFFECT CUE button	Master Level Indicator R LED	

⑨ Mode 9 : X-PAD value test. "RBNTEST"

- Mode for confirmation of the X-PAD value with a channel level indicator LED and the FL display
  When this mode is entered, “RBNTEST” is displayed at the top of the FL display.

- The data item for a touched position on the X-PAD is expressed with a figure in the range of 0 to 127 and displayed in the middle of the FL display. The LEDs light according to the position touched on the X-PAD.

- The X-PAD consists of 8 sensors.
  A touched sensor is indicated on the FL display so that you can judge if it is functioning properly.
  The indication method is as shown below.



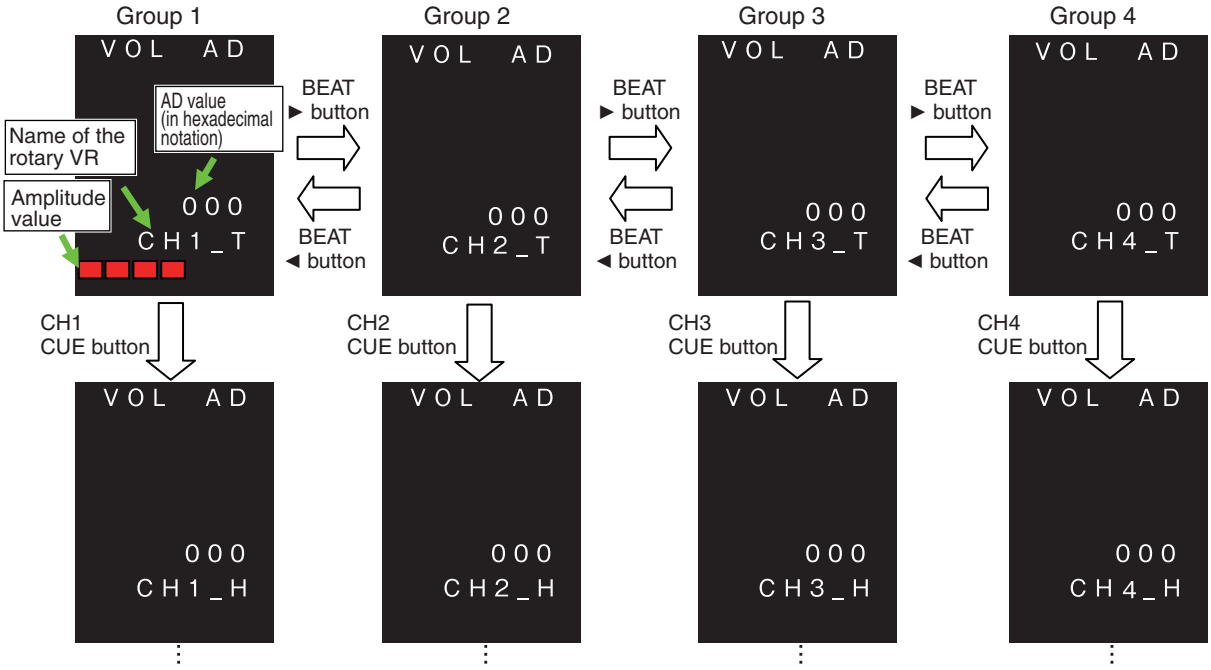
Operating Section	Lit LED or FL	Remarks
X-PAD	CH1 Channel Level Indicator LED	Left: Lights off Right: Full Illuminate
X-PAD	FL: BPM section on the FL display	Left: 0 Right: 127
X-PAD Sensor 1	CH and X-PAD sections on the FL display	CH section: Red frame around 1 X-PAD section: The 1st, 2nd, and 3rd segments light.
X-PAD Sensor 2	CH and X-PAD sections on the FL display	CH section: Red frame around 2 X-PAD section: The 5th, 6th, and 7th segments light.
X-PAD Sensor 3	CH and X-PAD sections on the FL display	CH section: Red frame around 3 X-PAD section: The 9th, 10th, and 11th segments light.
X-PAD Sensor 4	CH and X-PAD sections on the FL display	CH section: Red frame around 4 X-PAD section: The 13th, 14th, and 15th segments light.
X-PAD Sensor 5	CH and X-PAD sections on the FL display	CH section: Red frame around MIC X-PAD section: The 17th, 18th, and 19th segments light.
X-PAD Sensor 6	CH and X-PAD sections on the FL display	CH section: Red frame around A X-PAD section: The 21th, 22th, and 23th segments light.
X-PAD Sensor 7	CH and X-PAD sections on the FL display	CH section: Red frame around B X-PAD section: The 25th, 26th, and 27th segments light.
X-PAD Sensor 8	CH and X-PAD sections on the FL display	CH section: Red frame around MST X-PAD section: The 29th, 30th, and 31th segments light.

⑩ Mode 10 : AD values of the rotary VRs test. "VOL AD"

- Mode for displaying the AD values of rotary VRs on the FL display for confirmation.
  When this mode is entered, “VOL AD” is displayed at the top of the FL display.
  To indicate the AD values for several rotary VRs with a single level meter, the rotary VRs are divided into 4 groups.
  The group pages can be changed by pressing the BEAT ◄, ► button.
  When the groups are switched, the name of the VR at the top of the group list is displayed at the bottom of the FL display.
  The rotary VRs in a group can be changed by pressing the CH1–4 CUE button.

- The maximum amplitude value among AD conversion values for a rotary VR being tested can be confirmed on each page of this mode.
  The value is expressed with the number of segments lit at the bottom of the FL display. The measurement procedure is as indicated below.
  Turn the rotary VR you wish to test to a desired position then press the EFFECT CUE key to start measurement. To reset, press the EFFECT CUE key again. During measurement, the maximum amplitude value will be continuously displayed.
  The EFFECT CUE key is lit during measurement and goes dark when reset.
  Details on the amplitude value display are shown in the figures below.

An amplitude value in the range of ±1 to ±6 with regard to the VR value at the beginning of measurement is displayed.
For a value greater than +7 or less than -7, all the 7 segments are lit.



Note:
If the CUE button is pressed while the last VR on each group list is displayed, the top VR on that group list will then be displayed.
When the BEAT ◄, ► button is pressed for a layer lower than the 2nd one, the top VR on the list of the next group will be displayed.

[Use of this mode during repair]

- For failure judgment of the rotary VRs
  As a guide, amplitude values higher than +4 or lower than -4 may be judged as failure.
  The VRs can be set to any position during measurement. Possible symptoms are shown below.
  - The volume changes arbitrarily.
  - Interrupted sound leakage occurs even if the volume is decreased to the minimum at the Master or ZONE.
  - The MIDI signal is output even if the corresponding VR is not operated.
- For operation check of a rotary VR after replacement

• Group 1

Rotary VRs whose AD conversion values can be confirmed:

- CH1 TRIM control, CH1 EQ/ISO HI control, CH1 EQ/ISO MID control, CH1 EQ/ISO LOW control, CH1 COLOR control, EQ HI control, EQ LOW control

VR to be tested	FL Display Name	Remarks
CH1 TRIM control	CH1_T	"-∞": 000 "+9": 3FE
CH1 EQ/ISO HI control	CH1_H	"-∞/-26": 000 "+6": 3FE
CH1 EQ/ISO MID control	CH1_M	"-∞/-26": 000 "+6": 3FE
CH1 EQ/ISO LOW control	CH1_L	"-∞/-26": 000 "+6": 3FE
CH1 COLOR control	CH1_C	"LOW": 000 "HIGH": 3FE
EQ HI control	MIC_H	"-12": 000 "+12": 3FE
EQ LOW control	MIC_L	"-12": 000 "+12": 3FE

*As an AD value that is displayed on the FL display is the one before a hysteresis removal process, and as it has an amplitude, an error of about ±2 may be produced.

• Group 2

Rotary VRs whose AD conversion values can be confirmed:

- CH2 TRIM control, CH2 EQ/ISO HI control, CH2 EQ/ISO MID control, CH2 EQ/ISO LOW control, CH2 COLOR control, MIXING control, LEVEL control

VR to be tested	FL Display Name	Remarks
CH2 TRIM control	CH2_T	"-∞": 000 "+9": 3FE
CH2 EQ/ISO HI control	CH2_H	"-∞/-26": 000 "+6": 3FE
CH2 EQ/ISO MID control	CH2_M	"-∞/-26": 000 "+6": 3FE
CH2 EQ/ISO LOW control	CH2_L	"-∞/-26": 000 "+6": 3FE
CH2 COLOR control	CH2_C	"LOW": 000 "HIGH": 3FE
MIXING control	HP_MX	"CUE": 000 "MASTER": 3FE
LEVEL control	HP_LV	"-∞": 000 "0": 3FE

*As an AD value that is displayed on the FL display is the one before a hysteresis removal process, and as it has an amplitude, an error of about ±2 may be produced.

• Group 3

Rotary VRs whose AD conversion values can be confirmed:
• CH3 TRIM control, CH3 EQ/ISO HI control, CH3 EQ/ISO MID control, CH3 EQ/ISO LOW control, CH3 COLOR control, MASTER LEVEL control, BALANCE control

VR to be tested	FL Display Name	Remarks
CH3 TRIM control	CH3_T	"-∞": 000 "+9": 3FE
CH3 EQ/ISO HI control	CH3_H	"-∞/-26": 000 "+6": 3FE
CH3 EQ/ISO MID control	CH3_M	"-∞/-26": 000 "+6": 3FE
CH3 EQ/ISO LOW control	CH3_L	"-∞/-26": 000 "+6": 3FE
CH3 COLOR control	CH3_C	"LOW": 000 "HIGH": 3FE
MASTER LEVEL control	MSTLv	"-∞": 000 "0": 3FE
BALANCE control	MST_B	"L": 000 "R": 3FE

*As an AD value that is displayed on the FL display is the one before a hysteresis removal process, and as it has an amplitude, an error of about ±2 may be produced.

• Group 4

Rotary VRs whose AD conversion values can be confirmed:
• CH4 TRIM control, CH4 EQ/ISO HI control, CH4 EQ/ISO MID control, CH4 EQ/ISO LOW control, CH4 COLOR control, BOOTH MONITOR control, LEVEL/DEPTH control

VR to be tested	FL Display Name	Remarks
CH4 TRIM control	CH4_T	"-∞": 000 "+9": 3FE
CH4 EQ/ISO HI control	CH4_H	"-∞/-26": 000 "+6": 3FE
CH4 EQ/ISO MID control	CH4_M	"-∞/-26": 000 "+6": 3FE
CH4 EQ/ISO LOW control	CH4_L	"-∞/-26": 000 "+6": 3FE
CH4 COLOR control	CH4_C	"LOW": 000 "HIGH": 3FE
BOOTH MONITOR control	BOOTH	"-∞": 000 "0": 3FE
LEVEL/DEPTH control	LV/DP	"MIN": 000 "MAX": 3FE

*As an AD value that is displayed on the FL display is the one before a hysteresis removal process, and as it has an amplitude, an error of about ±2 may be produced.

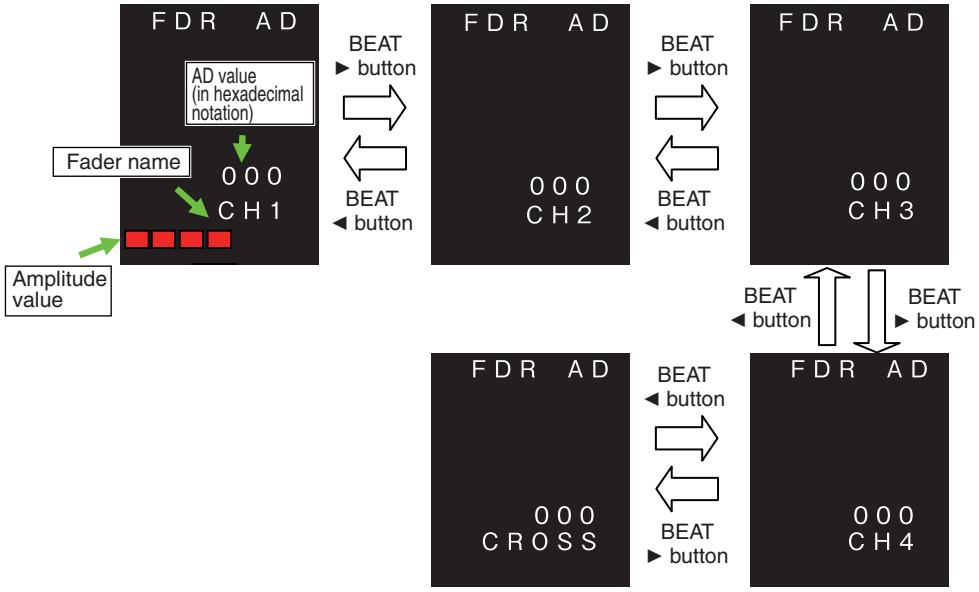
⑪ Mode 11 : AD values of the fader test. "FDR AD"

- Mode for displaying the AD values of the faders on the FL display for confirmation
  When this mode is entered, “FDR AD” is displayed at the top of the FL display and the TAP key lights.

- Mode 11 consists of 5 pages for indicating the values of 5 faders.
  The pages can be changed by pressing the BEAT ◄, ► button.
  When the groups are switched, the name of the VR at the top of the group list is displayed at the bottom of the FL display and its AD value is displayed in the middle.

- The maximum amplitude value among AD conversion values for a fader being tested can be confirmed on each page of this mode. The value is expressed with the number of segments lit at the bottom of the FL display. The measurement procedure is as indicated below.
  Set the fader you wish to test to a desired position then press the EFFECT CUE key to start measurement. To reset, press the EFFECT CUE key again. During measurement, the maximum amplitude value will be continuously displayed.
  The EFFECT CUE key is lit during measurement and goes dark when reset.
  Details on the amplitude value display are shown in the figures below.

An amplitude value in the range of ±1 to ±7 with regard to the VR value at the beginning of measurement is displayed.
For a value greater than +7 or less than -7, all the 7 segments are lit.



[Use of this mode during repair]

- For failure judgment of the faders
  As a guide, amplitude values higher than +4 or lower than -4 may be judged as failure.
  The VRs can be set to any position during measurement. Possible symptoms are shown below.
  - The volume changes arbitrarily.
  - Interrupted sound leakage occurs even if the volume is decreased to the minimum at the fader.
  - The MIDI signal is output even if the corresponding VR is not operated.
- For operation check of a fader after replacement

Faders that can be confirmed

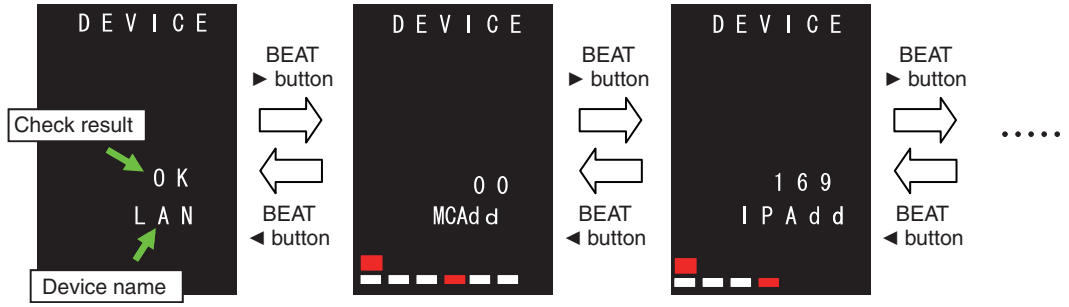
Fader to be tested	FL Display Name	Remarks
CH1 Channel Fader	CH1	"0": 000 "10": 3FE
CH2 Channel Fader	CH2	"0": 000 "10": 3FE
CH3 Channel Fader	CH3	"0": 000 "10": 3FE
CH4 Channel Fader	CH4	"0": 000 "10": 3FE
Cross Fader	CROSS	"A": 000 "B": 3FE

⑫ Mode 12 : Device test. "DEVICE"

- Mode for displaying the device information for confirmation
  When this mode is entered, “DEVICE” is displayed at the top of the FL display and the TAP button lights.

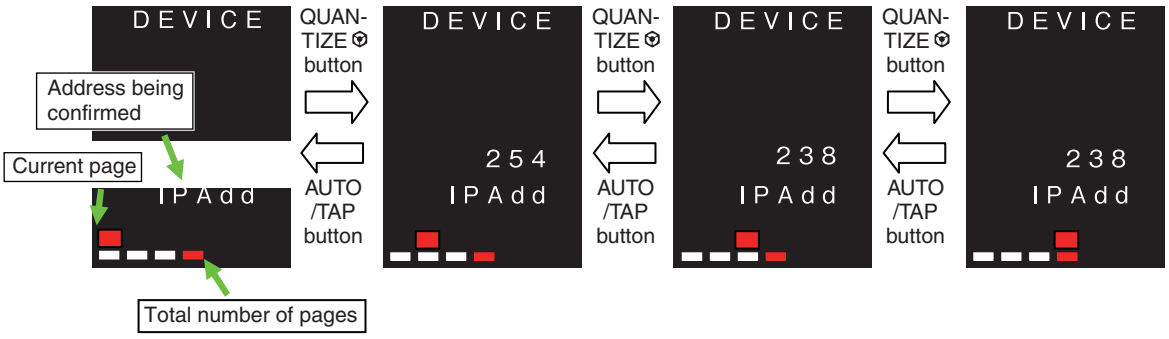
- Mode 12 consists of 4 pages for indicating the statuses of LAN, IP address, MAC address, and subnet mask.
  The pages can be changed by pressing the BEAT ◄, ► button.

- “OK” is displayed in the middle of the FL display when the device is operating properly, and “NG” is displayed when it is not properly operating.



- You can also check the address data for a device.
  The address data that can be confirmed are MAC address, IP address, and IP address, and they are indicated by 3 digits at a time in the middle of the FL display.
  If an address cannot be obtained, “EE” is displayed.
  The address data pages can be changed with the AUTO/TAP or QUANTIZE button.
  On the address data page, the current page No. and the total number of pages are displayed with lit segments at the bottom of the FL display.
  Note: With the QUANTIZE button, the pages can be changed cyclically, but with the AUTO/TAP button, the pages change only in one direction (the page will not change if you press the key on Page 1).

  Example: When the IP address is “169.254.238.238”

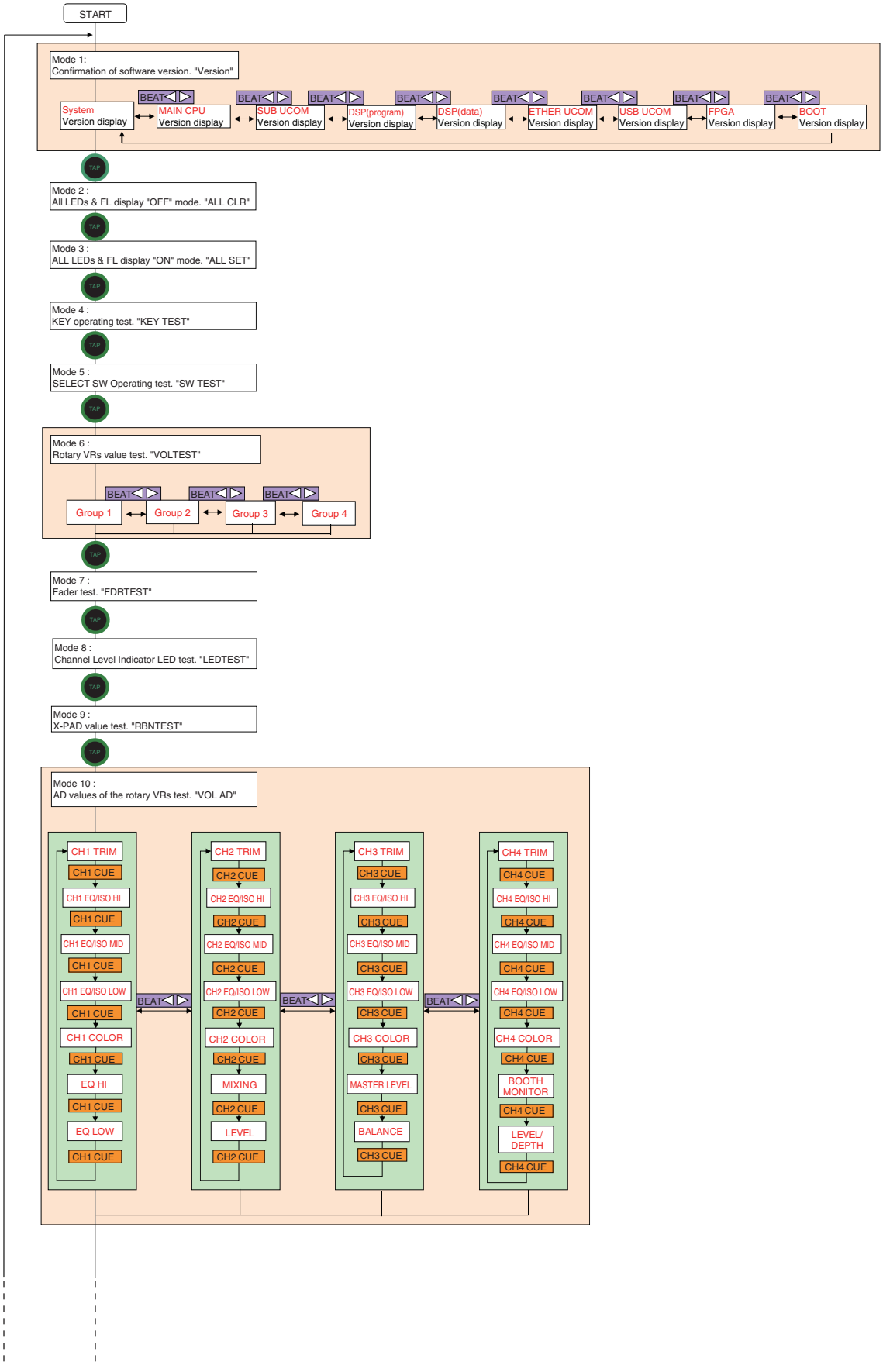


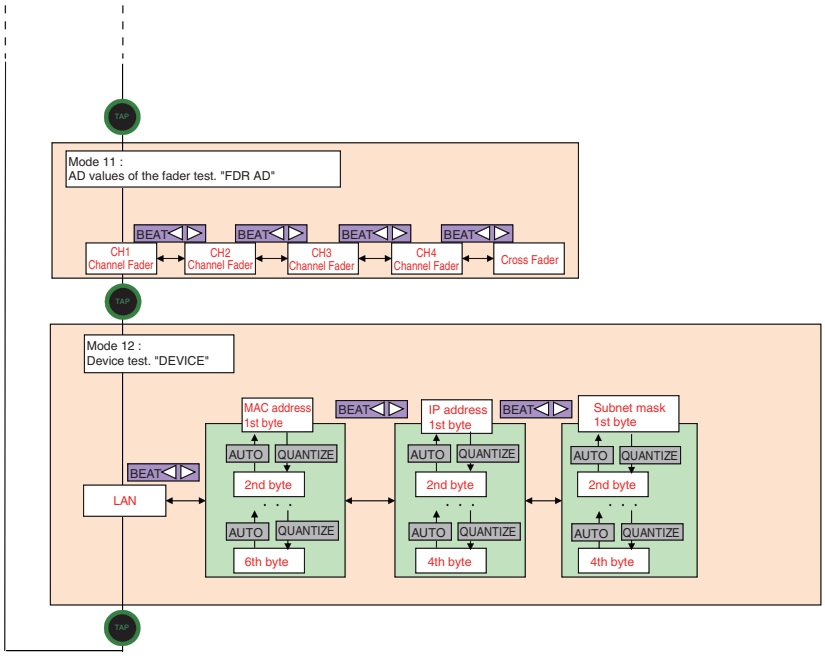
Devices and addresses that can be confirmed

Device, Address	FL Display Name	Remarks
LAN	LAN	Properly operating: OK, Not properly operating: NG
LAN (MAC Address)	MCAdd	: Address value
LAN (IP Address)	IPAd	Properly operating: Address value, Not properly operating: EE *1
LAN (Subnet Mask)	Subn	Properly operating: Address value, Not properly operating: EE *2

*1 “EE” is also displayed while the IP address is being obtained. If “EE” is displayed for more than 15 seconds, something is wrong.
*2 “EE” is also displayed before the subnet mask data are obtained.

4. Mode transition flowchart





6.2 ABOUT THE DEVICE

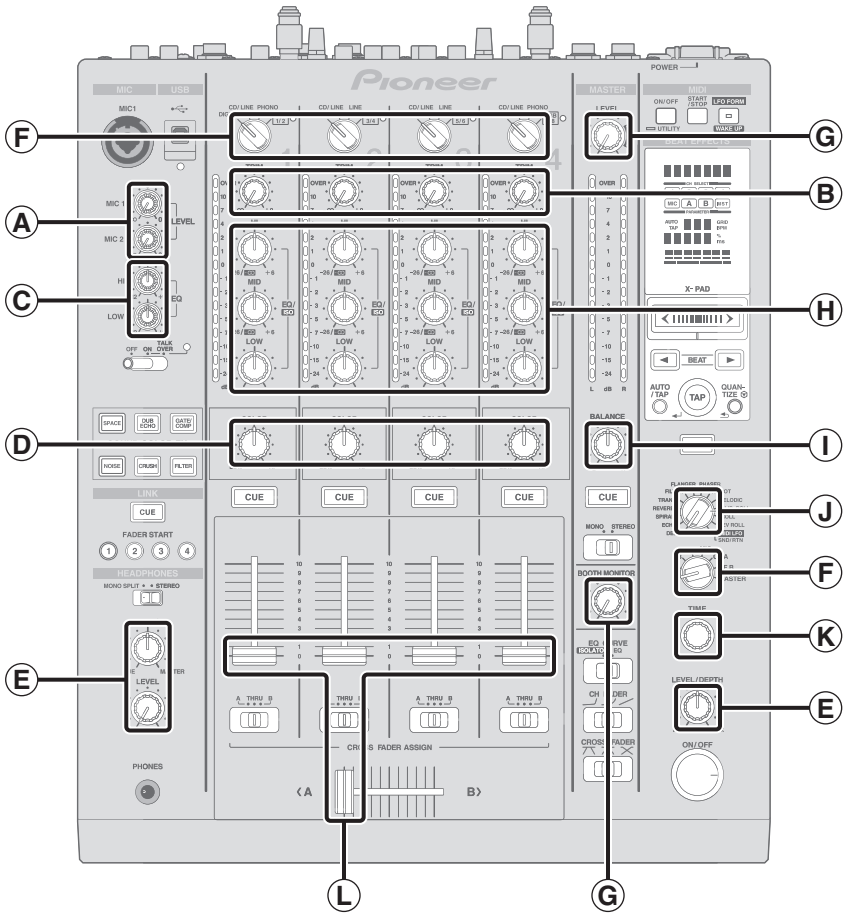
Device Name	Function	Part No.	Reference No.	Assy
MAIN CPU	Main control	DYW1799	IC2011	MAIN Assy
FPGA	For RAM, Digital input distinction, clock divider	XC3S50A-4FTG256C	IC2214	MAIN Assy
ETHER UCOM	CONTROLLER for Ether net, Main control support	R5S76700B200BG	IC501	MAIN Assy
FLASH (64M)	Memory for Ether UCOM (Firmware in MAC Address)	DYW1798	IC502	MAIN Assy
SDRAM (128M)	Memory for Ether UCOM (Work)	MD56V72160B-6TAZ	IC503	MAIN Assy
DSP	Audio DSP	D810K013BZKB400	IC701	MAIN Assy
FLASH (4M)	Memory for DSP (Firmware)	DYW1797	IC703	MAIN Assy
SDRAM (256M)	Memory for DSP (Work)	MD56V82160-6TAZ	IC702	MAIN Assy
USB UCOM	CONTROLLER for USB	ADSP-BF524BBCZ-3A	IC1801	MAIN Assy
SDRAM (64M)	Memory for USB UCOM (Work)	IS42S16400F-6TL	IC1802	MAIN Assy
ETHER PHY	PHY for Ether net LINK	RTL8201EL-VC-GR	IC1603	MAIN Assy
SUB UCOM	LED, FL, KEY, VR control	DYW1800	IC6601	PNLA Assy
CDC SENSOR	Contact position detection of a X-PAD	AD7147ACPZ500RL7	IC3601	CDCB Assy

Two or more FLASH and SDRAM are mounted in this unit.
Please judge the device which you should diagnose in reference to this list.

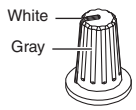
7. DISASSEMBLY

Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

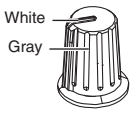
Knobs and Volumes Location



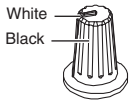
(A) Rotary SW Knob S (B) (DAA1178) ×2



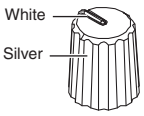
(B) Rotary SW Knob S (C) (DAA1204) ×4



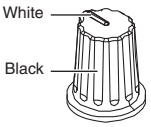
(C) Rotary SW Knob S (A) (DAA1177) ×2



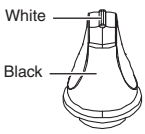
(D) Rotary SW Knob (HM) (DAA1256) ×4



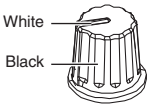
(E) Rotary Knob (BN) (DAA1220) ×3



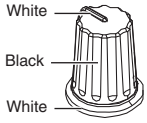
(F) FX Sel Knob (DAA1213) ×5



(G) Rotary SW Knob (MA) (DAA1198) ×2



(H) Rotary SW Knob (B) (DAA1176) ×12

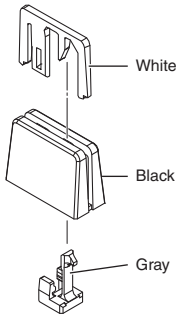


(L) Slider Knob 1 (DAC2684) ×5 + Slider Knob 2 (DAC2685) ×5 + Slider Knob Stopper (DNK5888) ×5

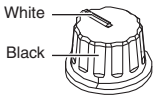
Slider Knob 2

Slider Knob 1

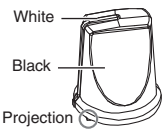
Slider Knob Stopper



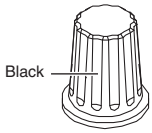
(I) Rotary Knob Low (BN) (DAA1265) ×1



(J) Select Knob (DAA1205) ×1



(K) Rotary SW Knob (C) (DAA1180) ×1

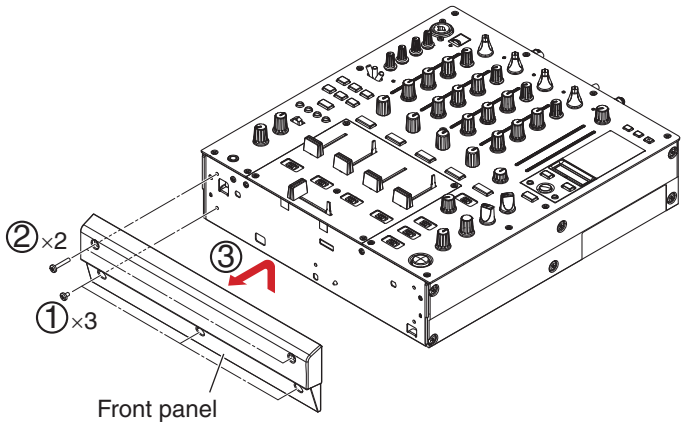


Disassembly

[1] Exterior Section

[1-1] Exterior section

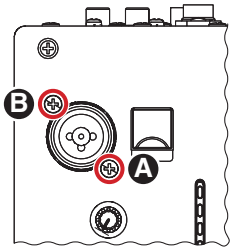
(1) Remove the three screws. (BCZ40P060FTB)
(2) Remove the two screws. (BSZ40P220FTB)
(3) Remove it to the front direction while lifting front panel on the top.

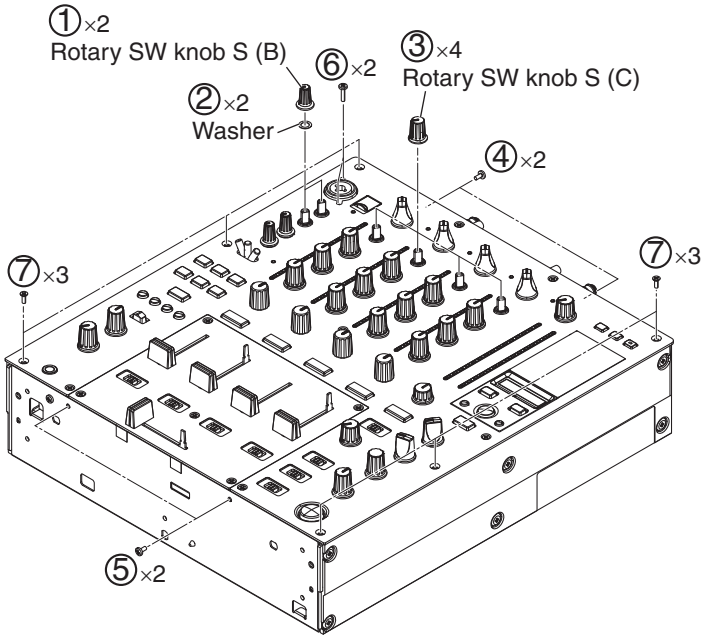


[1-2] Control panel section

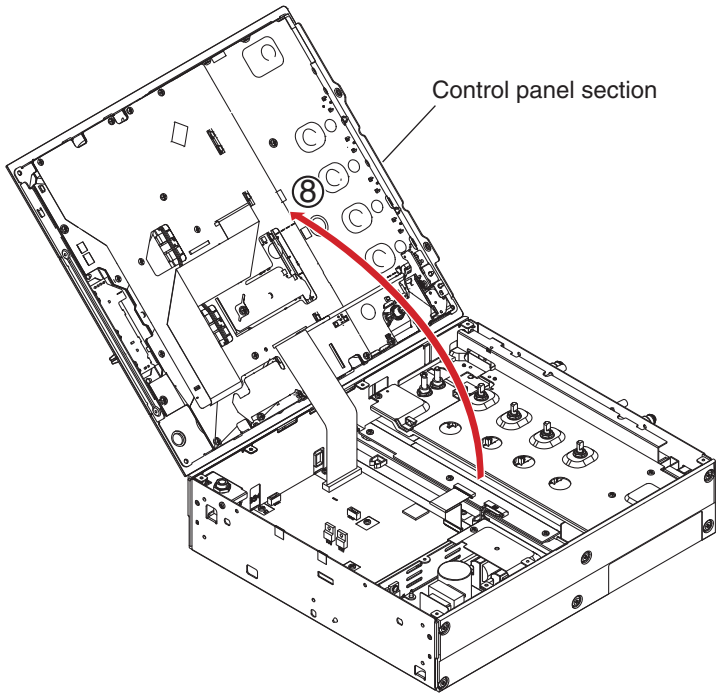
(1) Remove the two rotary SW knobs S (B).
(2) Remove the two washers.
(3) Remove the four rotary SW knob S (C).
(4) Remove the two screws. (BBZ30P060FTB)
(5) Remove the two screws. (BBZ30P060FTC)
(6) Remove the two screws. (BPZ30P120FTB)
(7) Remove the six screws. (CCZ30P080FTB)

Screw tightening order



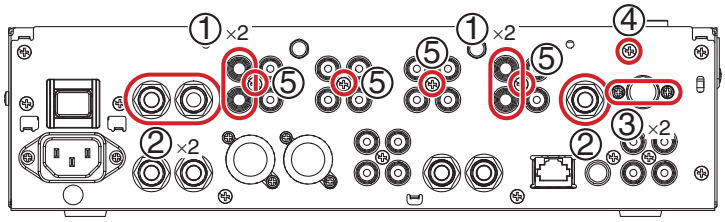


(8) Remove the control panel section.



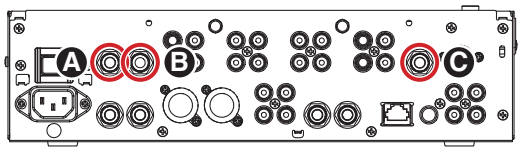
[2] INPUT Assy

(1) Disconnect the four short pin plugs.
(2) Remove the three washers and three nuts.
(3) Remove the two screws. (PMH30P100FTB)
(4) Remove the one screw. (BBZ30P060FTB)
(5) Remove the four screws. (BPZ30P080FTB)



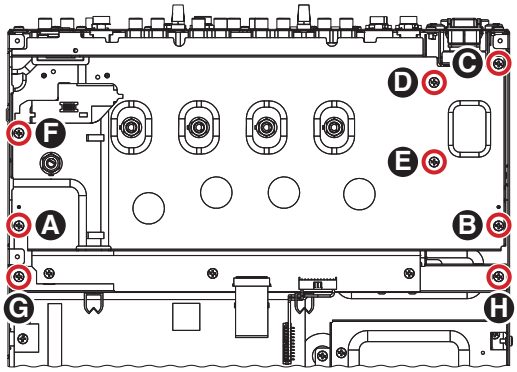
• Rear view

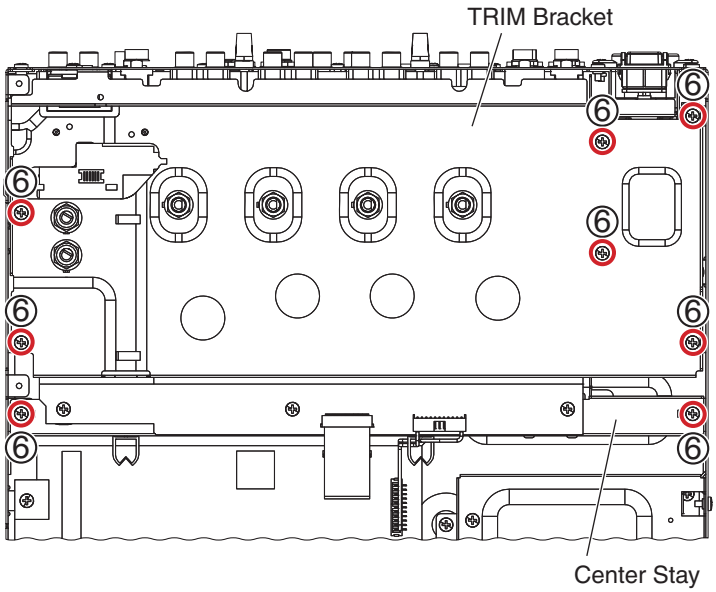
Nut tightening order



(6) Remove the eight screws. (BBZ30P060FTC)

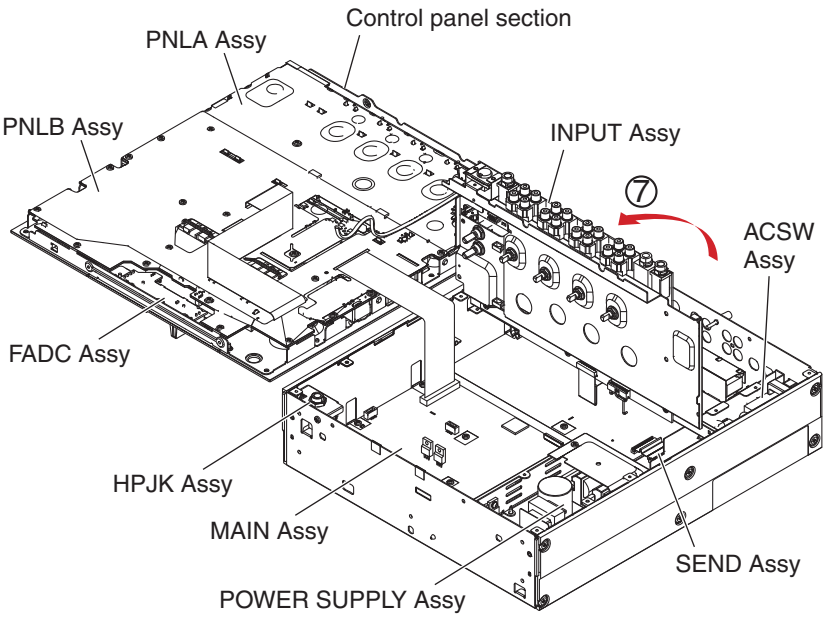
Screw tightening order





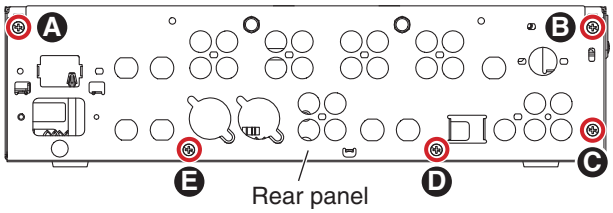
(7) Lift up the INPUT Assy to a front direction.

Diagnosis

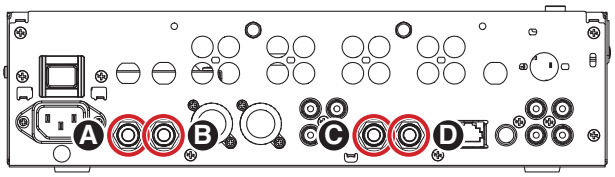


Reference information

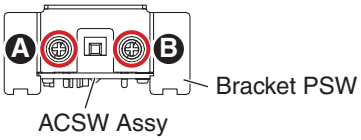
Screw tightening order (Rear panel)



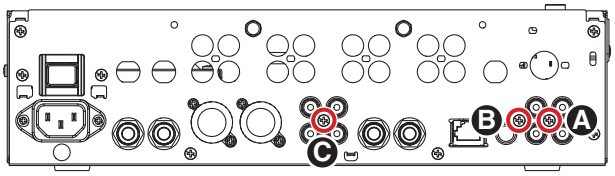
Nut tightening order (MAIN, SEND Assy)



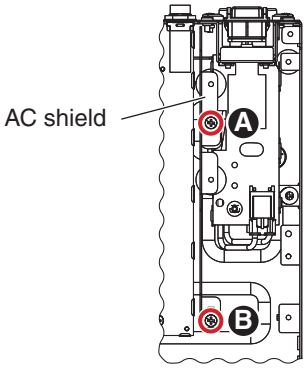
Screw tightening order (Bracket PSW)



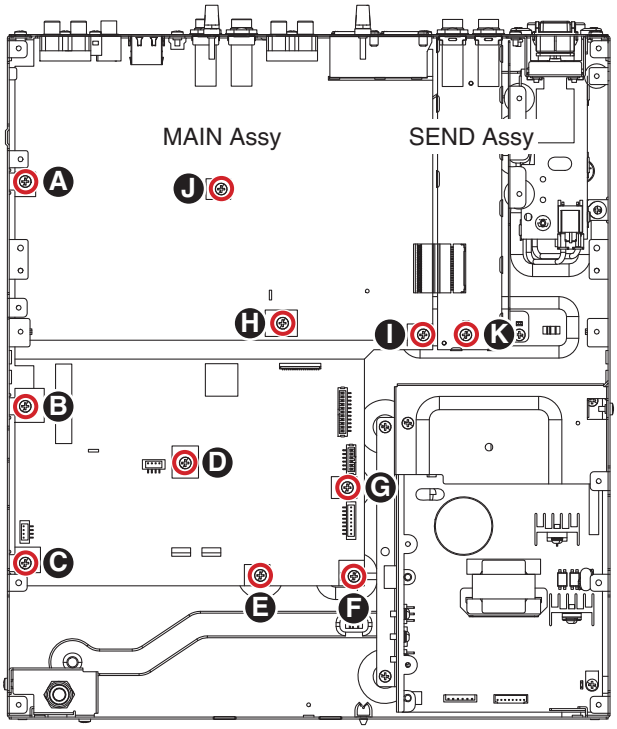
Screw tightening order (MAIN Assy)



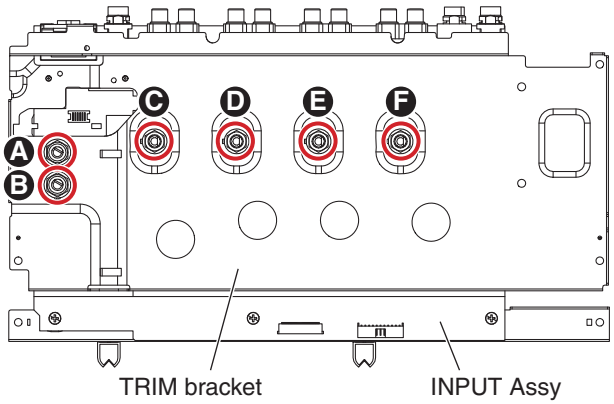
Screw tightening order (AC shield)



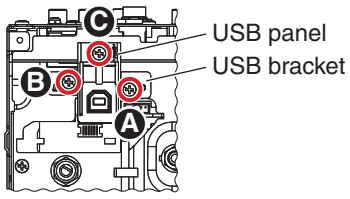
Screw tightening order (MAIN, SEND Assy)



Nut tightening order (INPUT Assy)



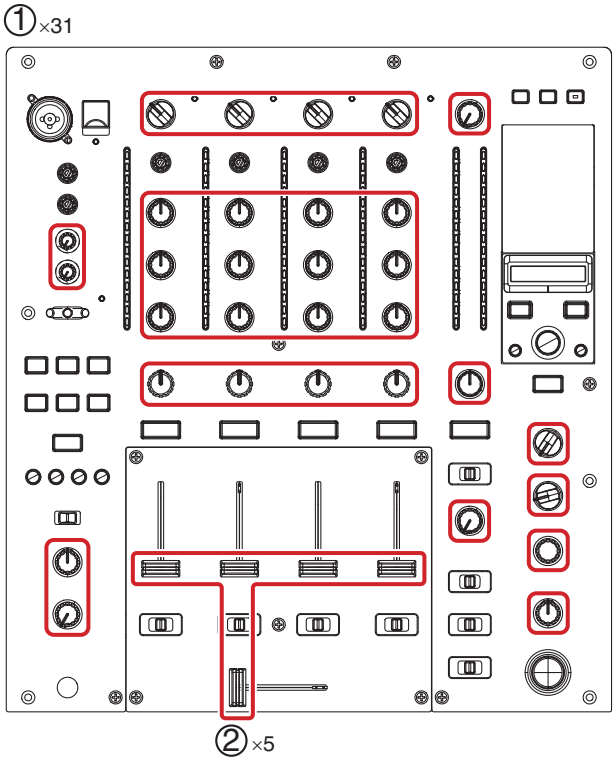
Screw tightening order (USB bracket)



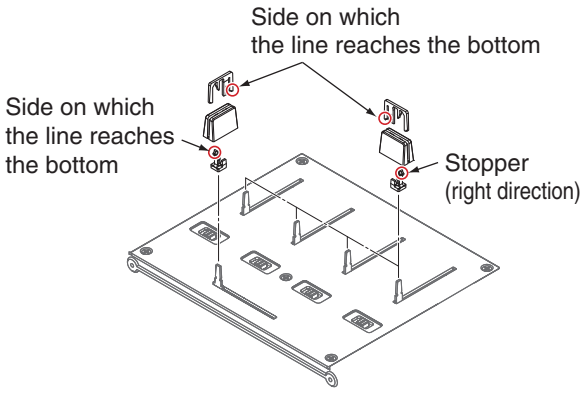
[3] Panel Section

[3-1] Control panel and Fader panel

(1) Remove the all knobs.
(2) Remove the five silider knobs 2,
five slider knobs 1, five slider knob stoppers.
(See below.)



The reference of the direction



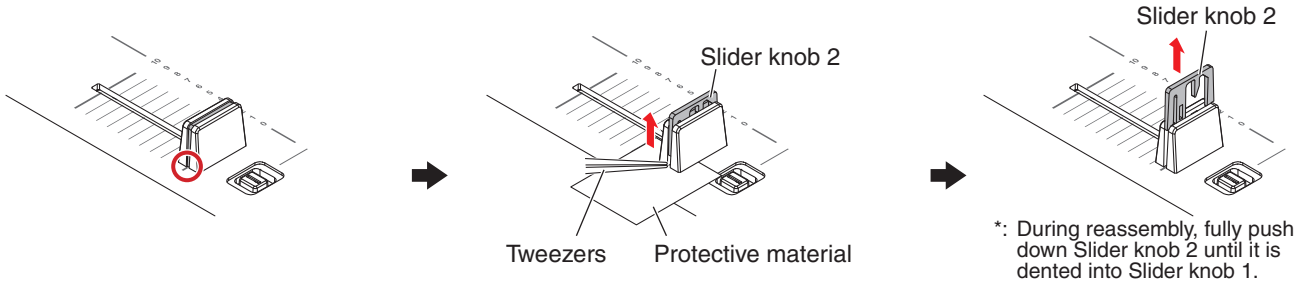
• Disassembly of the slider knob

The new slider knob adopted by this product is designed so that it is not pulled out easily.
Therefore, the method for removing the slider knob is different from the conventional method; it can only be pulled out after slider knob 2 is removed.

① Find the side on which the line reaches the bottom.

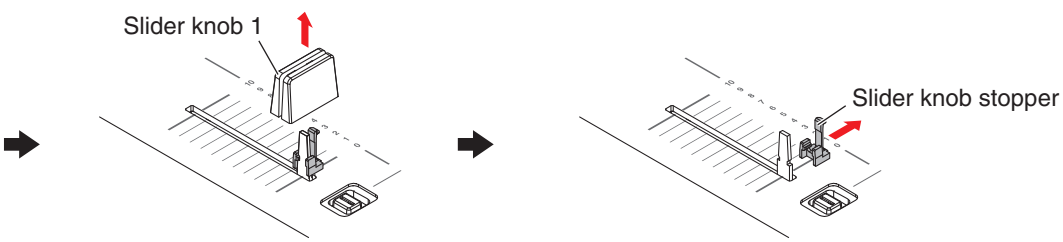
② Insert a pair of tweezers etc. beneath the line then push the slider knob 2 upward. To protect the panel from being scratched, use protective material.

③ Remove the slider knob 2.



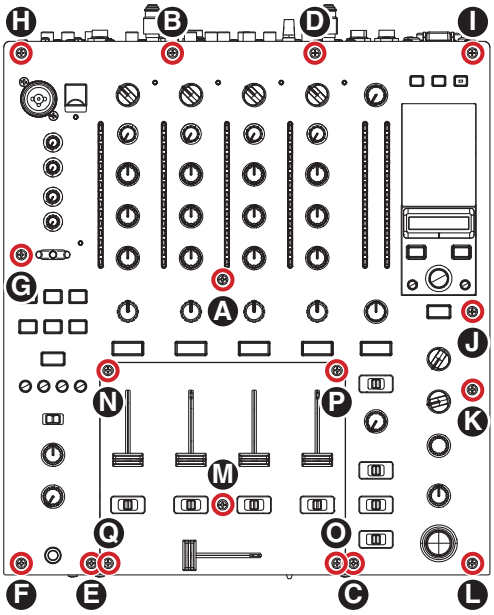
④ Remove the slider knob 1.

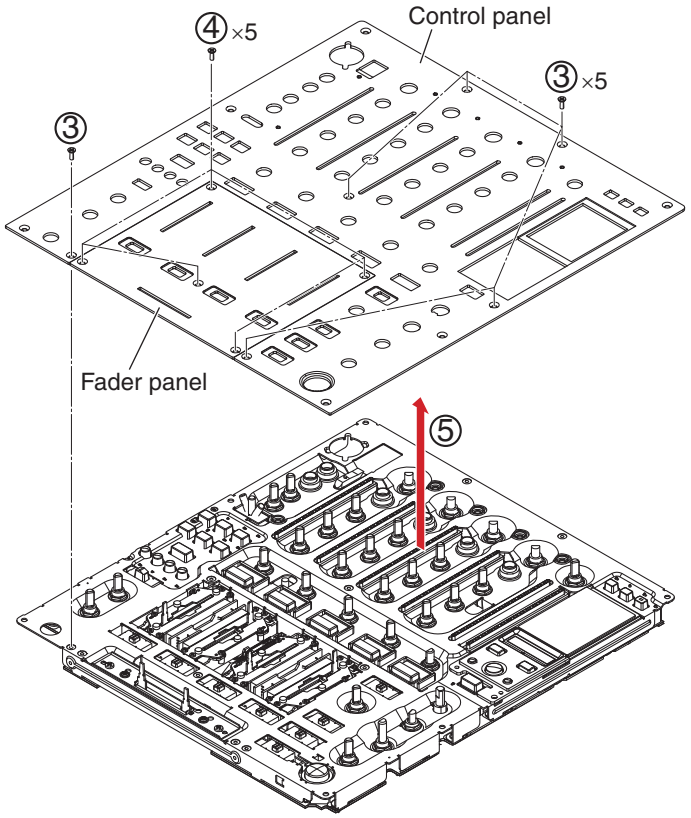
⑤ Remove the slider knob stopper.



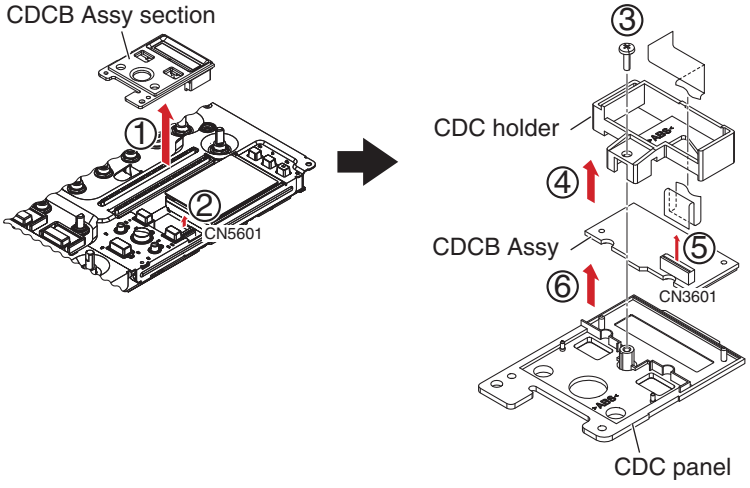
(3) Remove the 6 screws. (CCZ30P080FTB)
(4) Remove the 5 screws. (CCZ30P080FTB)
(5) Remove the Control panel and Fader panel.
Note:
When you remove only Fader panel, it is a process of step (2), (4).

Screw tightening order
(for MAIN unit)





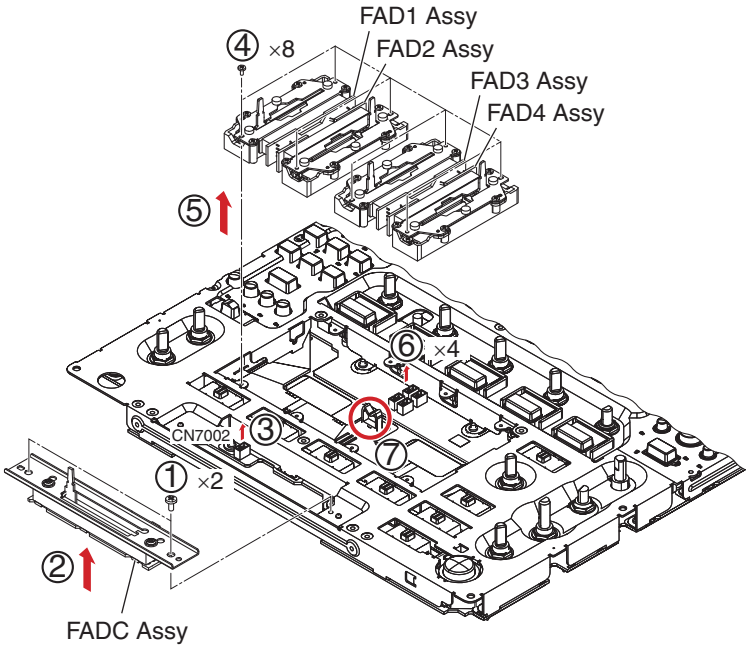
[3-2] CDCB Assy
(1) Remove the CDCB Assy section.
(2) Disconnect the one flexible cable. (CN5601)
(3) Remove the one screw. (BPZ26P080FTC)
(4) Remove the CDC holder.
(5) Disconnect the one flexible cable. (CN3601)
(6) Remove the CDCB Assy.



• Bottom view

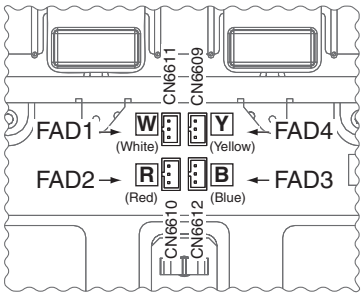
[3-3] Fader section

(1) Remove the two screws. (BBZ30P060FTC)
(2) Remove the FADC Assy.
(3) Disconnect the one connector. (CN7002)
(4) Remove the eight screws. (BSZ20P040FTB)
(5) Remove the FAD1 to FAD4 Assemblies.
(6) Disconnect the four connectors.
(CN6609 to 6612)
(7) Release the jumper wire from clamper.

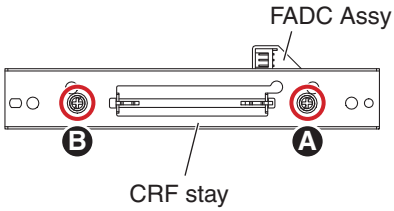


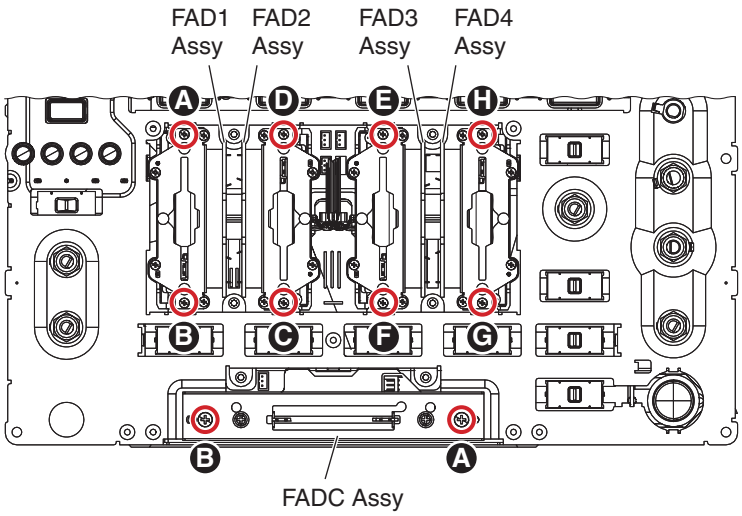
• Connectors color

Match the color of a connected connector.



Screw tightening order



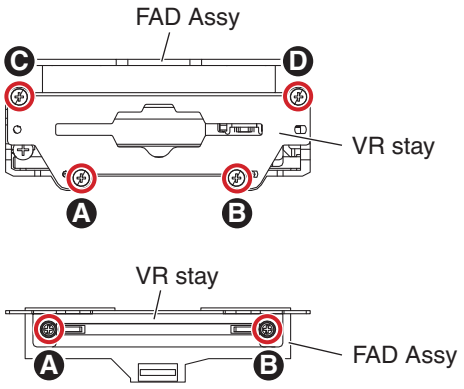


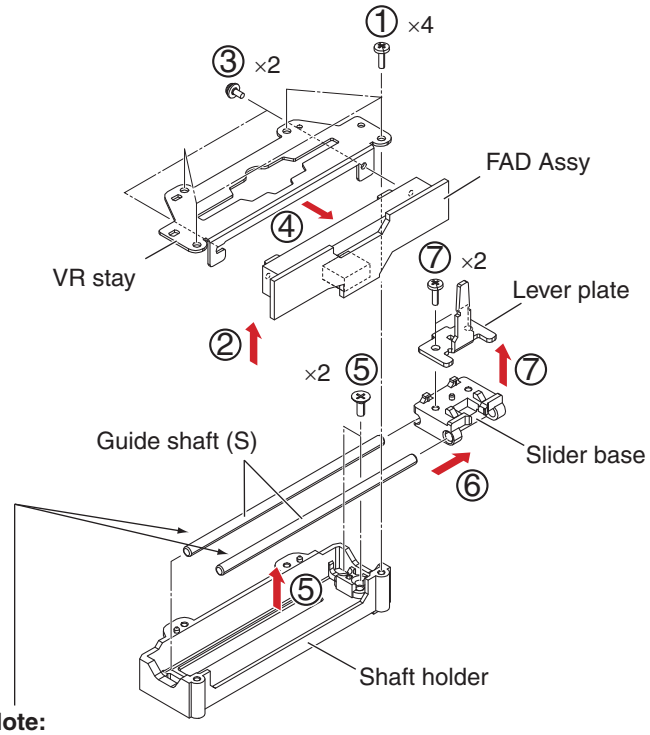
• FAD1 to FAD4 Assemblies

(1) Remove the four screws. (BPZ20P060FTC)
(2) Remove the FAD Assy with VR stay.
(3) Remove th two screws. (PMH20P040FTC)
(4) Remove the FAD Assy.

(5) Remove the two screws and remove the guide shaft (S) and slider base section. (CPZ26P080FTC)
(6) Remove the slider section from guide shaft (S).
(7) Remove the two screws and remove the lever plate. (BPZ20P060FTC)

Screw tightening order

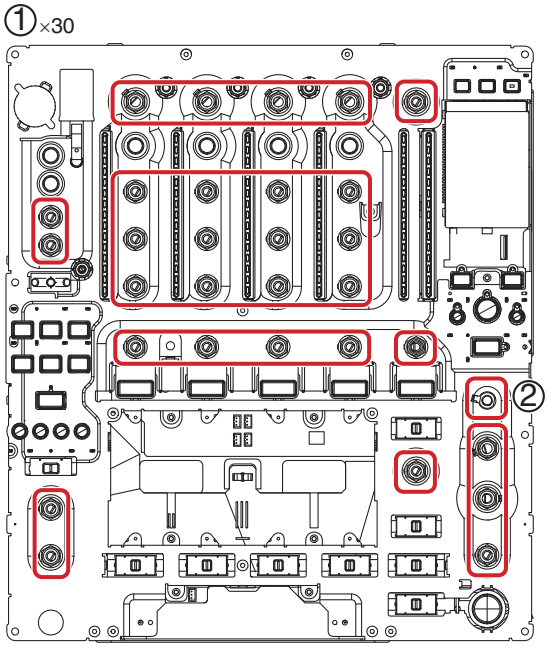




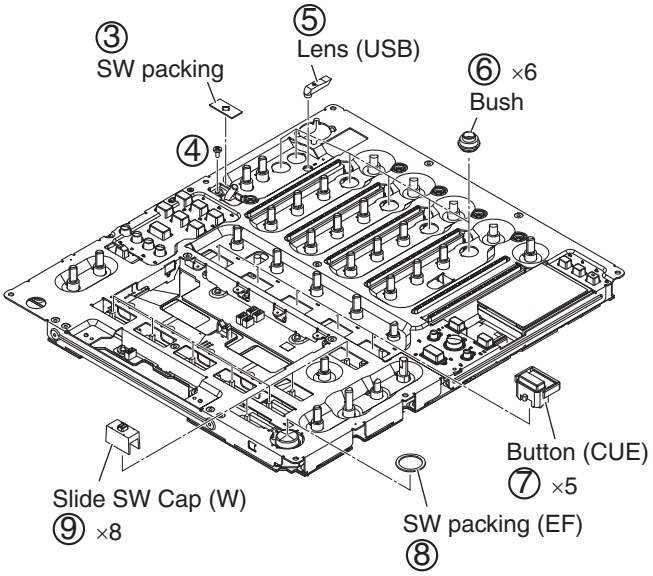
Note:
The grease application position when you assemble guide shaft(S) refer to "9.4 CONTROL PANEL SECTION (1/2)."

[3-4] PNLA and PNLB Assy

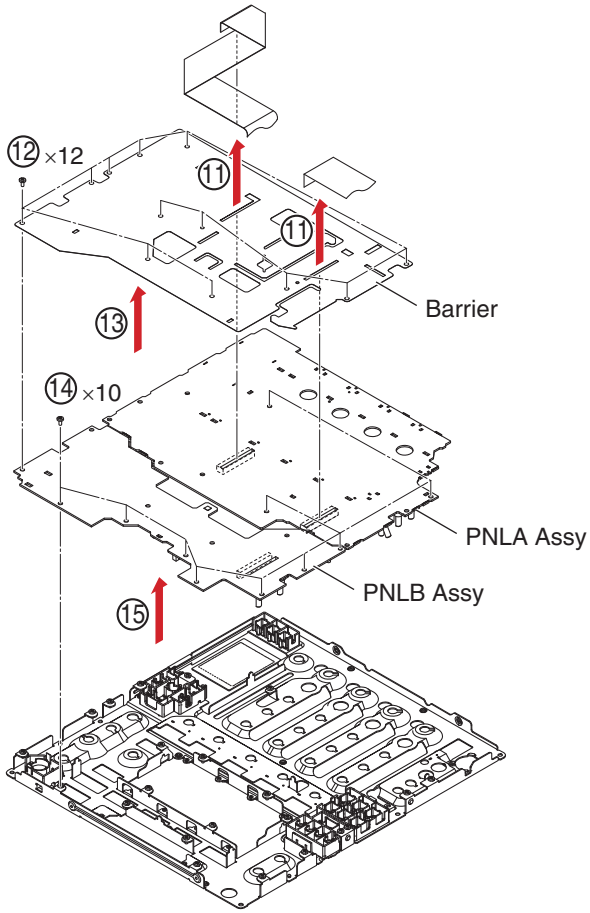
(1) Remove the 30 flange nuts M9.
(2) Remove the one nut.



(3) Remove the SW packing.
(4) Remove the one screw. (AMZ26P040FTC)
(5) Remove the lens (USB).
(6) Remove the six bushes.
(7) Remove the five buttons (CUE).
(8) Remove the SW packing (EF).
(9) Remove the eight slide SW caps (W).

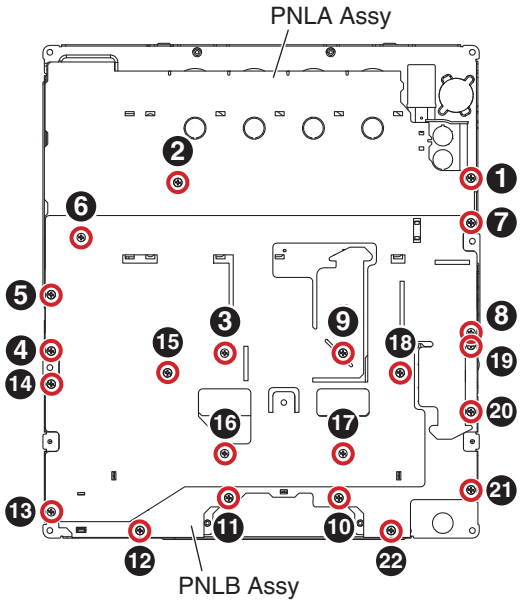


(10) Reverse the control panel section.
(11) Disconnect the two flexible cables.
(12) Remove the 12 screws. (BBZ30P060FTC)
(13) Remove the barrier.
(14) Remove the 10 screws. (BBZ30P060FTC)
(15) Remove the PNLA and PNLB assemblies.



• Bottom view

Screw tightening order



8. EACH SETTING AND ADJUSTMENT

8.1 NECESSARY ITEMS TO BE NOTED

It is recommended that you take note of the setting data before starting repair.
Use “8.5 Sheet for Confirmation of the User settings” for taking notes.
After repairing, be sure to check the version of the firmware (see “Mode 1: For confirmation of the version” in “TEST MODE”), and if it is not the latest one, update to the latest version.

Perform the each item when the following parts are replaced.

- MAIN Assy
  (MAIN CPU: IC2011, FLASH MEMORY IC: IC703)
- PNLA Assy
  (SUB UCOM: IC6601)

⇒
- Confirmation of the version of the firmware
- Updating to the latest version of the firmware

8.2 UPDATING OF THE FIRMWARE

[1] Downloading and Confirmation of the Updater Files

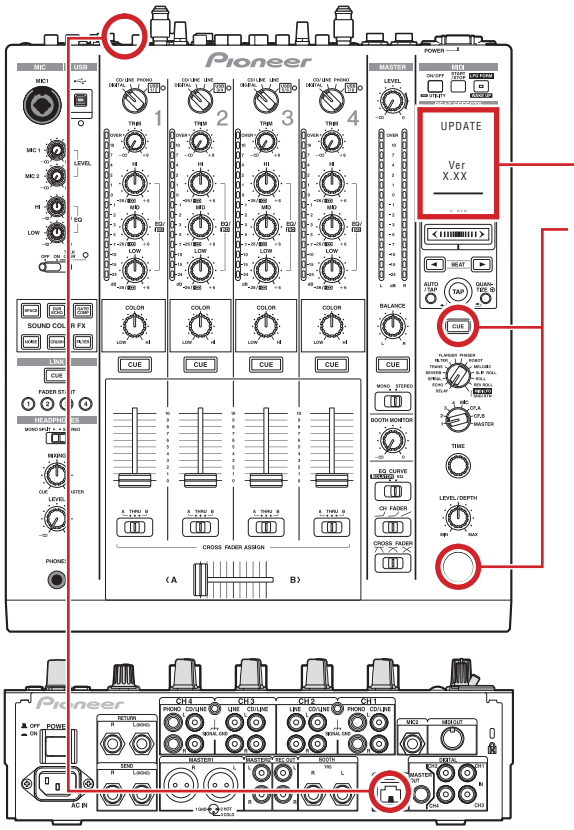
1. Download the zipped updater file for the latest firmware from Niis.
2. Unzip the downloaded file.

Unzipping the ZIP file generates the “DJM-900nexus_vxxx” folder.
Confirm that the following files are contained in the folder:

① DJM-900nexus_vxxx.exe
② DJM-900nexus_vxxx.upd
③ Update manual.pdf

- The above xxx denotes the version of new firmware.
- The extension (.exe or .upd) may not be displayed, depending on the setting of the computer.

[2] Preparation for Updating on the Main Unit



<STEP1>
Press [CUE (BEAT EFFECT)] and [ON/OFF (BEAT EFFECT)] with power button.
Move to update mode.

<STEP2>
Check the current version of your firmware by "current version" on VFD. (No need to update it if current version shows as x.xx. It is the latest firmware.)

<STEP3>
Connect your computer with this unit by LAN cable.

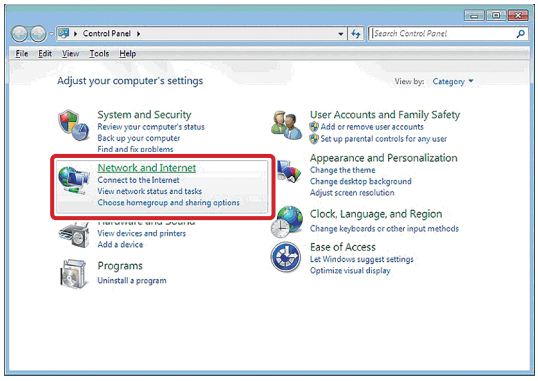
Connect LAN cable to the LINK terminal on rear on this unit.

[3] Network Setting on the PC

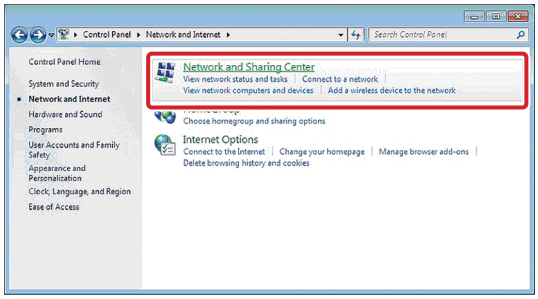
The network setting on the PC to be used for firmware updating must be set to DHCP or Auto IP.

For Microsoft Windows (Ex: Windows 7)

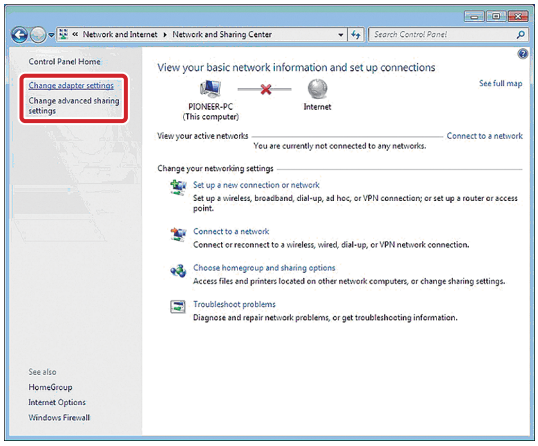
<STEP 1>
Open "Control Panel" -> "Network and Internet"
-> Network Connections.



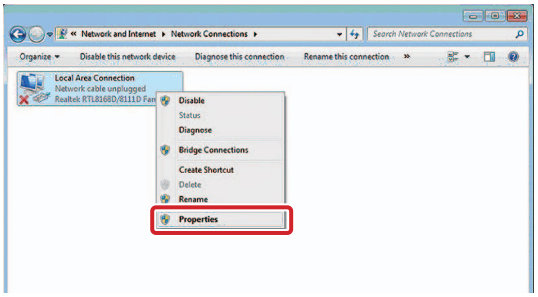
<STEP 2>
Open "Network and Sharing Center."
(For Windows XP, go to <STEP 4>.



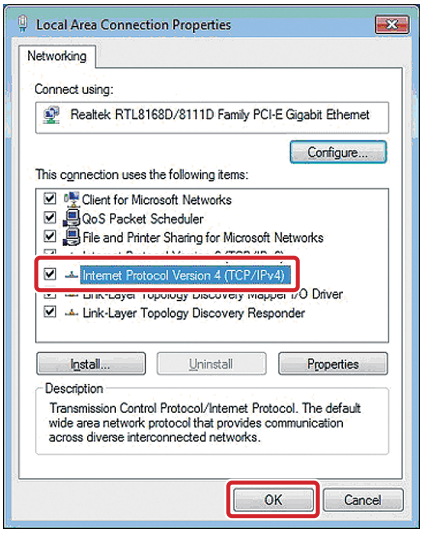
<STEP 3>
Open "Change adapter setting".



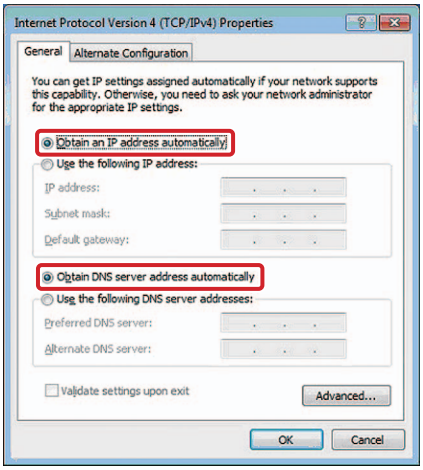
<STEP 4>
Open "Properties" of network device this unit connected.
(Right click on icon -> Property)



<STEP 5>
Select "Internet Protocol (TCP/IP) and click on "Properties."
(For Windows XP, check the checkbox “Notify me when this connection has limited or no connectivity.”)



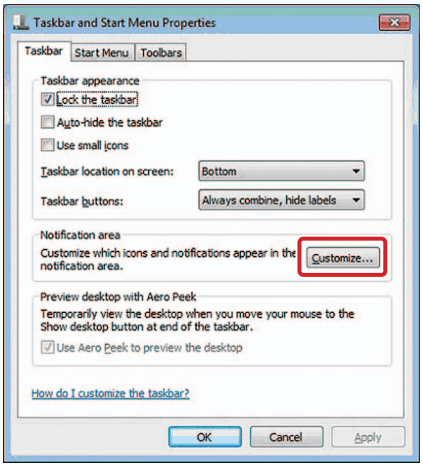
<STEP 6>
Select "Obtain an IP address automatically","Obtain DNS server address automatically".



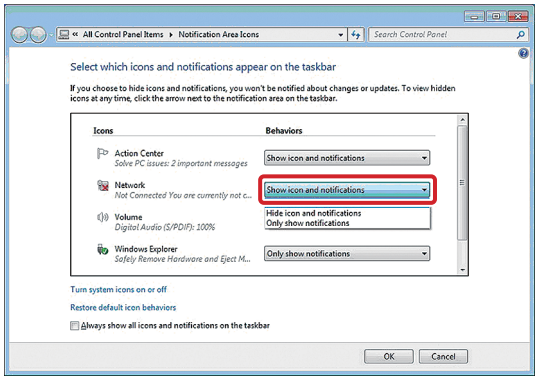
<STEP 7>
Close “Network Connections” by clicking on "OK."
(For Windows XP, this completes the network setting.)

<STEP 8>
Right click on task bar -> Select "Properties".

<STEP 9>
Select "Notification area" then "Customize."
(For Windows Vista, check the “Network” checkbox.)



<STEP 10>
Select "Show icon and notifications" on network.



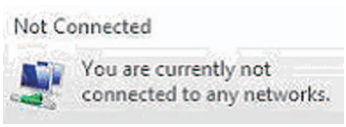
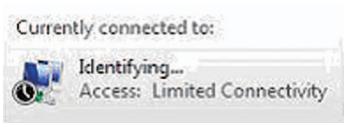
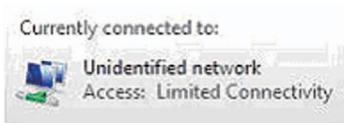
<STEP 11>
Close "Properties" by "OK".

For Mac OS X
Select “System Environment Settings,” “Network,”
“Ethernet,” then “Using DHCP”

[4] Confirmation of Network Connection between the PC and this Unit

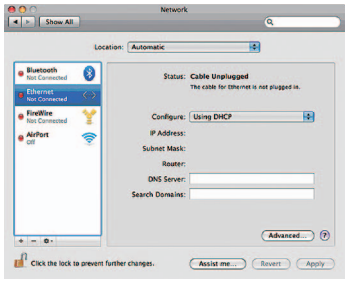
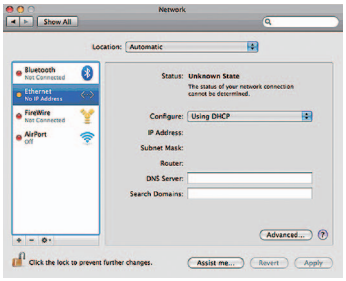
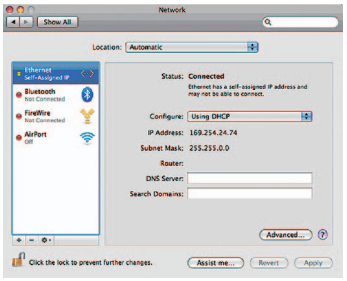
For Microsoft Windows

Check the connection status of the PC and this unit, with the icon on the task bar (on the right bottom of the PC screen).

Icon / Message			Status of connection
7	Vista	XP	
			LAN cable is unconnected. Check the cable is connected.
				Checking the status of connection. Wait a minute.
				DJM-900NXS is connected. Start update tool.

For Mac OS X

Check the connection status of the PC and this unit, by selecting “System Environment Settings,” “Network,” then “Ethernet.”

		
LAN cable is unconnected. Check the cable is connected.	Checking the status of connection. Wait a minute.	DJM-900NXS is connected. Start update tool.

[5] Executing Updating

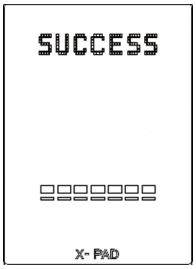
* Close all of applications before updating.
* If you were setting firewall by security software, it would not be able to transfer the data to mixer.
  Please read the operation manual of the security softwareor canncelt the firewall.

<STEP 1>
Double click "DJM900nexus_vxxx.exe".
Start update tool.

<STEP 2>
Select language.

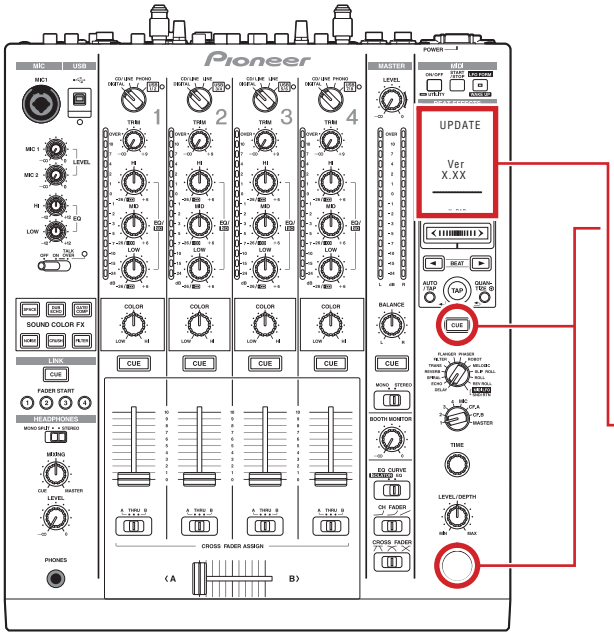
<STEP 3>
Start updating by pressing "Start".
* NEVER remove power/LAN cable on updating.
* If the waiting picture remains more than 30 seconds, the network connection might not work. Press Cannel button and update again after connecting it.

<STEP 4>
Confirm the updating completed.
Updating completed when "SUCCESS" message shows.



<STEP 5>
Restart this unit.
* Please adjust network setting as original if you adjusted it in 3-1.

[6] Confirmation of the Firmware Version



<STEP1>
Press [CUE (BEAT EFFECT)] and [ON/OFF (BEAT EFFECT)] with power button.
Move to update mode.

<STEP2>
Check it is the latest version.
Update was completed if it shows "x.xx".

■ Error Message and Details (for Windows)

Title	Message	Detail
Formatting Error	Cannot find the EXE file_I1	Cannot find the EXE file. Restart the application.
	Cannot find the UpdateFile_I4	Cannot find the update file or update file is not correct. Download the file and update again.
	Cannot connect to the MIXER_I5	Failed connection with mixer. Check the status of network and restart the application.
	Cannot find the Network Interface_I6	Cannot find the network setting to connect with mixer. Check the status of network and restart the application.
	Cannot find the Network Interface_I9	Cannot find network interface to connect with mixer. Check the status of network and restart the application.
Connection Error	Cannot connect the MIXER_C1	Could not connect with mixer. Check the status of network and restart the application.
	Cannot connect the MIXER_C2	Could not connect with mixer. Check the status of network and restart the application.
	Cannot send the update data_C4	Failed data transfer to mixer. Stand up mixer again by update mode and restart the application.
Data Transfer Error	Cannot find the UpdateFile_S1	Cannot find the update file. Download the file and update again.
	Cannot find the UpdateFile_S2	Failed data transfer to mixer. The file might have a problem. Stand up mixer again by update mode and restart the application.
	Cannot find the UpdateFile_S3	Failed data transfer to mixer. Stand up mixer again by update mode and restart the application.

■ Error Message and Details (for Mac)

Title	Message	Detail
Formatting Error	Cannot find the EXE file_I2	Cannot find the EXE file. Restart the application.
	Cannot find the EXE file_I3	Cannot find the EXE file. Restart the application.
	Cannot find the UpdateFile_I4	Cannot find the update file or update file is not correct. Download the file and update again.
	Cannot get the Host name_I7	Cannot get the host name. Check the status of network and restart the application.
	Cannot get the IP Address_I8	Cannot get IP address. Check the status of network and restart application.
	Cannot find the Network Interface_I9	Cannot find network I/F to connect with mixer. Check the status of network and restart the application.
Connection Error	Cannot connect the MIXER_C1	Could not connect with mixer. Check the status of network and restart the application.
	Cannot connect the MIXER_C2	Could not connect with mixer. Check the status of network and restart the application.
	Cannot connect the MIXER_C3	Could not connect with mixer. Check the status of network and restart the application.
	Cannot send the update data_C4	Failed data transfer to mixer. Stand up mixer again by update mode and restart the application.
Data Transfer Error	Cannot find the UpdateFile_S1	Cannot find the update file. Download the file and update again.
	Cannot find the UpdateFile_S2	Failed data transfer to mixer. The file might have a problem. Stand up mixer again by update mode and restart the application.
	Cannot find the UpdateFile_S3	Failed data transfer to mixer. Stand up mixer again by update mode and restart the application.

8.3 HOW TO CONFIRM THE DVS

Necessary Items

- PC with the USB driver and TRAKTOR (demo version or TRAKTOR DDJ-T1 EDITION possible) installed
  Can download the Traktor demo version from the following URL.
  http://www.native-instruments.com/#/en/products/dj/traktor-pro-2/?page=1975
- Media (CD, etc.) for checking operations, CDJ player

Check Procedures

1. Connect this unit and a PC, using the USB cable.
2. Connect the audio output of CDJ Player to the CD/LINE of CH1 of this unit.
3. Set the DIGITAL, CD/LINE, PHONO, LINE, and USB */* selectors to USB1/2.
4. For details on settings to be made on the PC, see “Settings for the Driver” and “Settings on TRAKTOR” below.
5. Play back the CDJ Player, and check the following items:
   - The level meters of Input Routing and Master Out on the TRAKTOR move in sync with audio output signals (see the photos below).
   - The USB audio input indicator of CH1 turn on.
   - The Master Out is output normally.

   *Repeat the above steps for channels 2 to 4, to check the DVS paths.

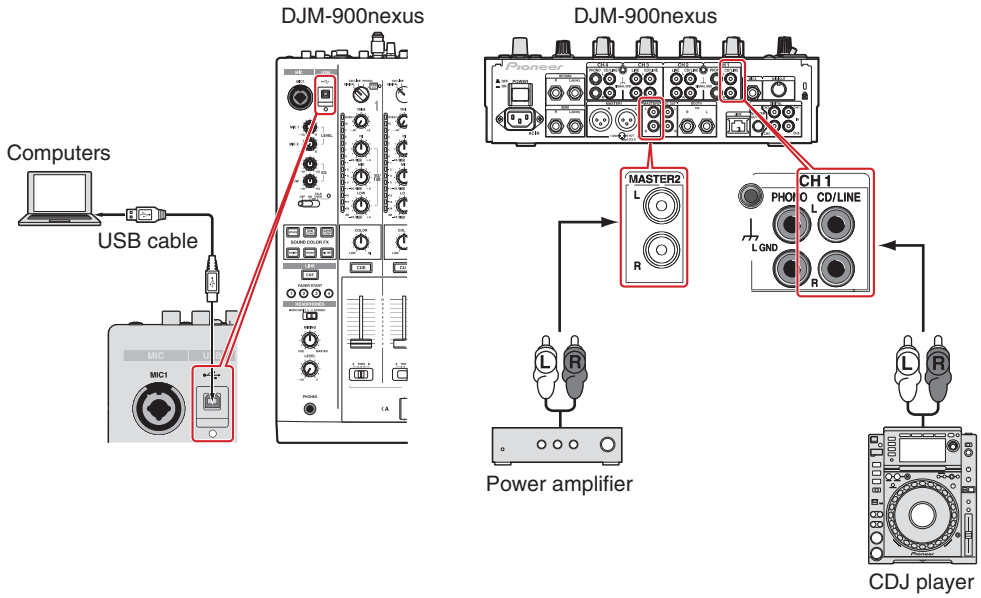
[TRAKTOR Input Routing level meter]

[TRAKTOR Master Out level meter]

[USB audio input indicator]

Note:
The Master Out signal will not be output if the MAIN volume control (indicated with a red frame) is set to the minimum volume position.
If the MAIN volume indicators are not displayed on the screen, set the TRAKTOR screen to Full screen.

[Connection Diagram (When the CDJ Player is Connected to CH1)]



Settings for the Driver

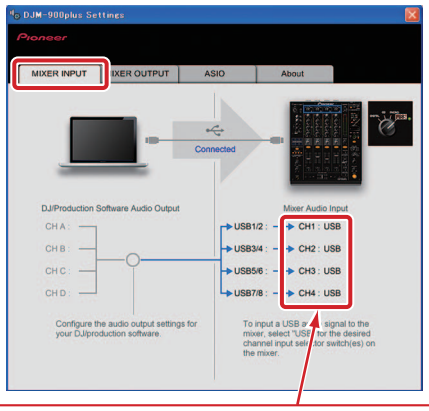
Start up the "DJM-900nexus Settings Utility".

(Reference)

For Windows

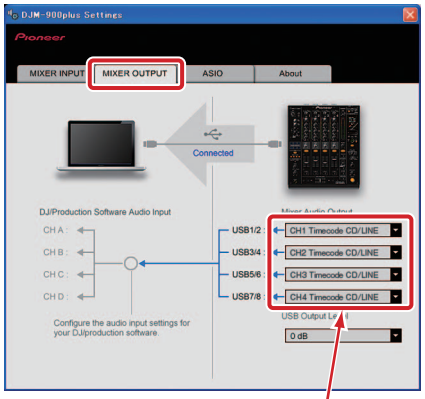
Click [Start] menu → [All Programs] → [Pioneer] → [DJM-900nexus] → [DJM-900nexus Settings Utility].

MIXER INPUT



When the DIGITAL, CD/LINE, PHONO, LINE, and USB */* selectors of the mixer are set to USB*/*, “USB” must be displayed on the PC screen.

MIXER OUTPUT

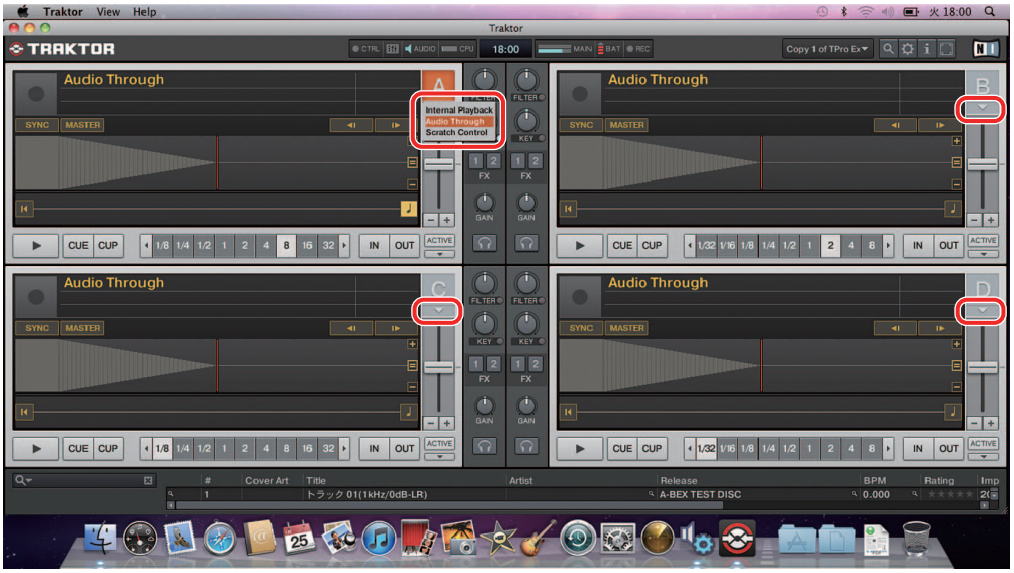


Set the Timecode CD/LINE.

Settings on TRAKTOR

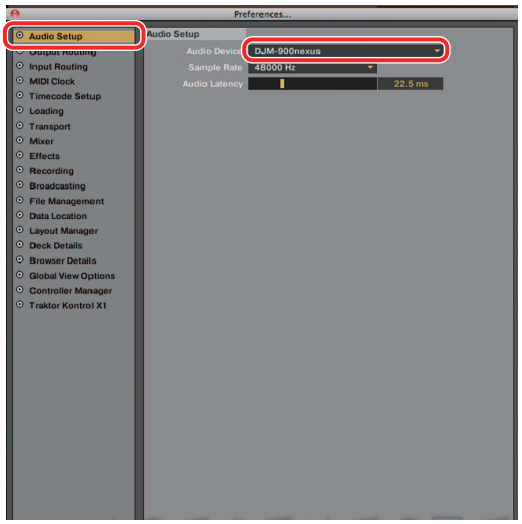
① After starting TRAKTOR, select the deck layout, as shown below.
View > Layouts, or Layout selector
If a 4-deck screen option is not available, see Note 1.

② Click on the ▼ symbol beneath A to D then select “Audio Through” from the pulldown menu.

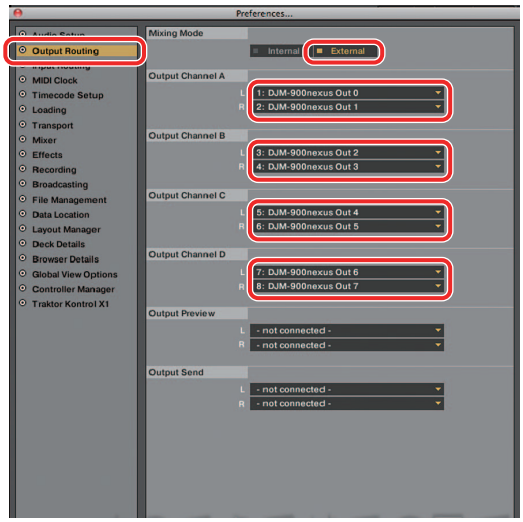


③ Select Traktor then Preferences, or click on the Preferences button.

④ In Audio Setup, select DJM-900nexus.



⑤ In Output Routing, set Mixing Mode to External, and Output Channel A-D, as shown in the figure below.



⑥ In Input Routing, set Input Channel A–D, as shown in the figure below.

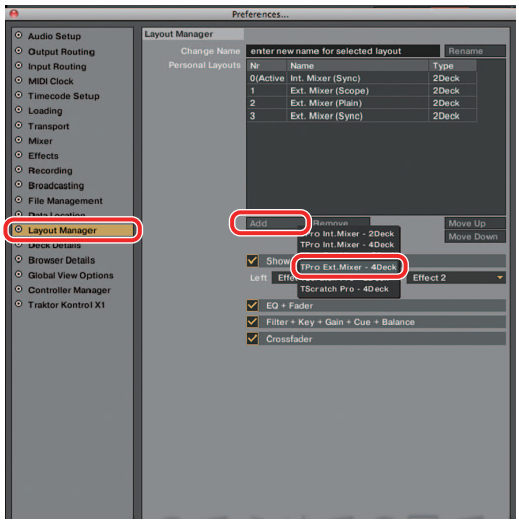
With the above settings, CH 1 of the mixer is assigned to Deck A, CH 2 to Deck B, CH 3 to Deck C, and CH 4 to Deck D.

⑦ Close the Preferences window, by clicking on the Close (×) button.

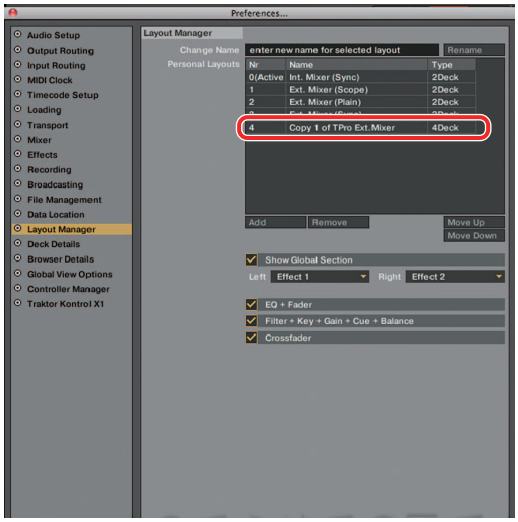
Note 1:

How to add a 4-deck screen option

If a 4-deck screen option is not available on the Layouts menu, proceed as follows:
Traktor > Preferences
In Layout Manager, click on “Add” then select “Tpro Ext.Mixer - 4Deck.”



After confirming that 4Deck is added to Layout, close the Preferences window, by clicking on the Close (×) button.



8.4 USER SETABLE ITEMS

	Setting Item	FL Display	Setting Area	Initial Value (Factory settings)	Part No.	Part Name	Ref No.	Assy	Content to be Stored
USER SETUP	Fader Start	F.S.	ON/OFF	OFF	DYW1798	Flash ROM	IC502	MAIN	UTILITY setting
	MIDI CH	MIDI CH	1 to 16	1					
	MIDI Button Type	MIDI BT	Toggle/Trigger	Toggle					
	TALK OVER MODE	TLK MOD	ADVANCED / NORMAL	ADVANCED					
	TALK OVER LEVEL	TLK LVL	-24dB/-18dB/-12dB/-6dB	-18dB					
CLUB SETUP	Digital Master Out Level	DOUT LV	-19dB/-15dB/-10dB/-5dB	-19dB					
	Digital Out Sampling Rate	DOUT FS	48kHz/96kHz	96kHz					
	MASTER ATT.	MST ATT	-6dB/-3dB/0dB	0dB					
	Auto Standby	AUTOSTB	ON/OFF	ON					
	Mic Output To Booth Monitor	MIC BTH	ON/OFF	ON					
	PC Utility	PC UTLY	ON/OFF	ON					
	Factory Reset	INITIAL	YES/NO	NO					

8.5 SHEET FOR CONFIRMATION OF THE USER SETTING

When you write down a setting item, please make use of this seat.

USER SETUP

Fader Start

OFF	ON

MIDI CH

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

MIDI Button Type

TGL	TRG

TALK OVER MODE

NOR	ADV

TALK OVER LEVEL

-24dB	-18dB	-12dB	-6dB

CLUB SETUP

Digital Master Out Level

-19dB	-15dB	-10dB	-5dB

Digital Out Sampling Rate

48kHz	96kHz

MASTER ATT.

-6dB	-3dB	0dB

Auto Standby

OFF	ON

Mic Output To Booth Monitor

OFF	ON

PC Utility

OFF	ON

Factory Reset

NEVER perform FACTORY RESET before taking note of setting data.

A

B

C

D

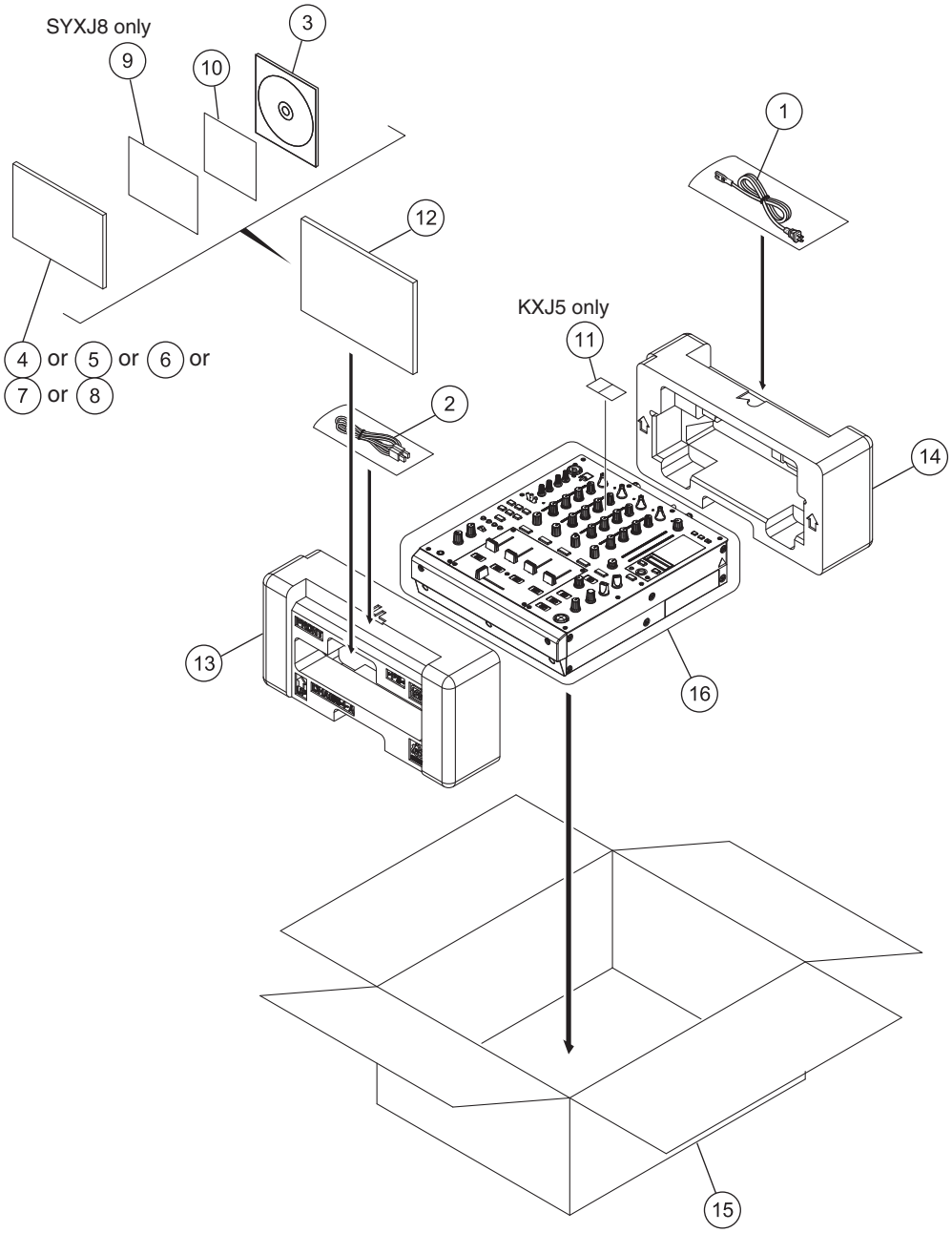
E

F

9. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

9.1 PACKING SECTION



(1) PACKING SECTION PARTS LIST

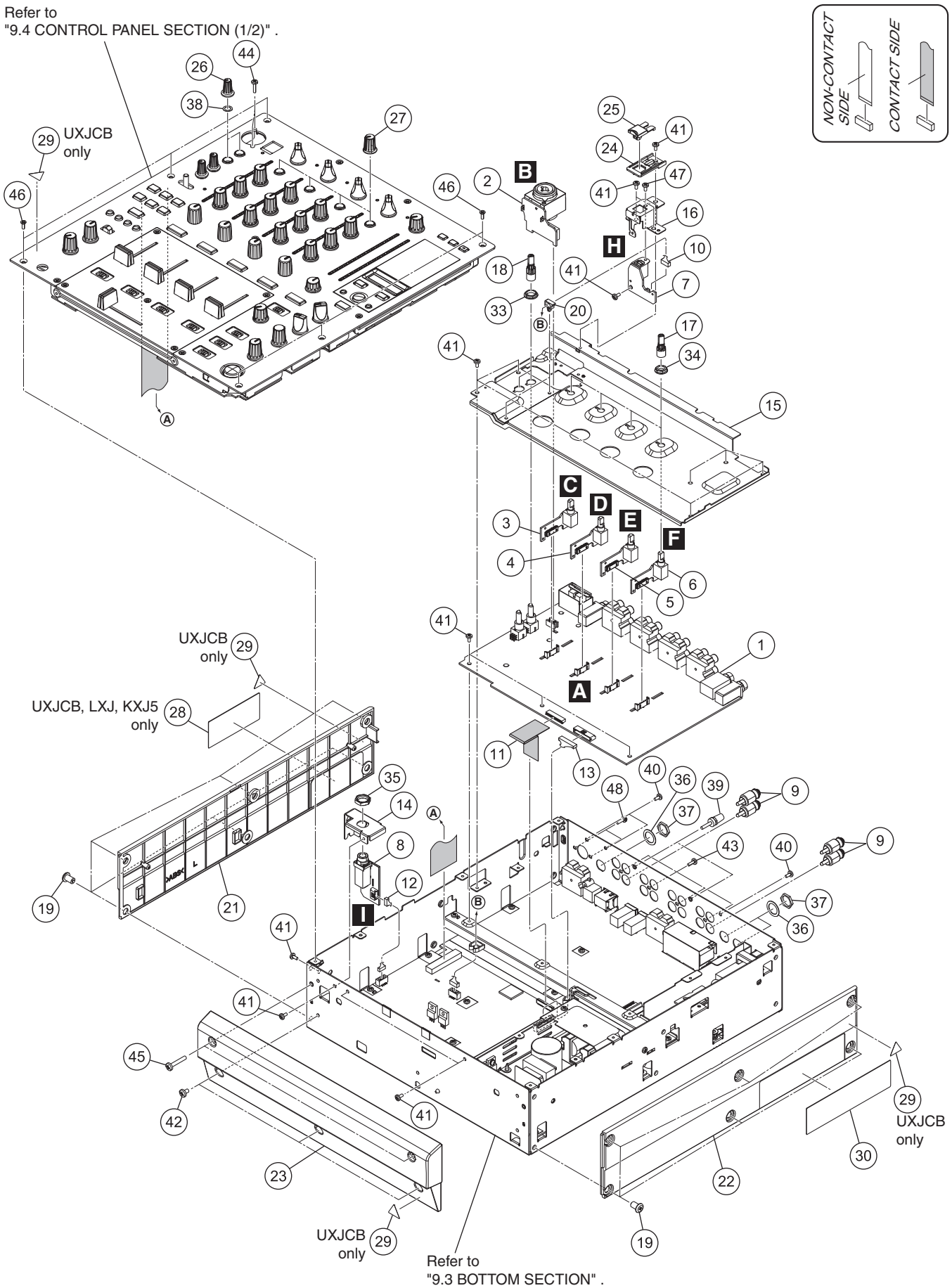
Mark	No.	Description	Part No.
⚠	1	Power Cord	See Contrast table (2)
	2	USB Cable	DDE1128
	3	CD-ROM	DXX2619
	4	Operating Instructions	See Contrast table (2)
	5	Operating Instructions	See Contrast table (2)
	6	Operating Instructions	See Contrast table (2)
	7	Operating Instructions	See Contrast table (2)
	8	Operating Instructions	See Contrast table (2)
NSP	9	Warranty Card (WY)	See Contrast table (2)
NSP	10	Flier	See Contrast table (2)
NSP	11	Recycle Label (M)	See Contrast table (2)
NSP	12	Polyethylene Bag	AHG7117
	13	Pad A	DHA1854
	14	Pad B	DHA1855
	15	Packing Case	See Contrast table (2)
	16	Packing Sheet	RHC1023

(2) CONTRAST TABLE

DJM-900NXS/SYXJ8, UXJCB, LXJ, KXJ5 and XJCN5 are constructed the same except for the following:

Mark	No.	Symbol and Description	DJM-900NXS /SYXJ8	DJM-900NXS /UXJCB	DJM-900NXS /LXJ	DJM-900NXS /KXJ5	DJM-900NXS /XJCN5
⚠	1	Power Cord	ADG7062	DDG1108	ADG7062	XDG3066	ADG7105
	4	Operating Instructions (En, Fr, De, It, Nl, Es, Ru)	DRB1533	Not used	Not used	Not used	Not used
	5	Operating Instructions (En)	Not used	DRB1542	Not used	Not used	Not used
	6	Operating Instructions (En, Es, Zhtw)	Not used	Not used	DRB1543	Not used	Not used
	7	Operating Instructions (Ko)	Not used	Not used	Not used	DRB1545	Not used
	8	Operating Instructions (En, Zhcn)	Not used	Not used	Not used	Not used	DRB1544
NSP	9	Warranty Card (WY)	ARY7107	Not used	Not used	Not used	Not used
NSP	10	Flier	DRH1108	DRH1109	DRH1109	DRH1107	DRH1107
NSP	11	Recycle Label (M)	Not used	Not used	Not used	DRW2307	Not used
	15	Packing Case	DHG2937	DHG2977	DHG2978	DHG2981	DHG2980

9.2 EXTERIOR SECION



(1) EXTERIOR SECTION PARTS LIST

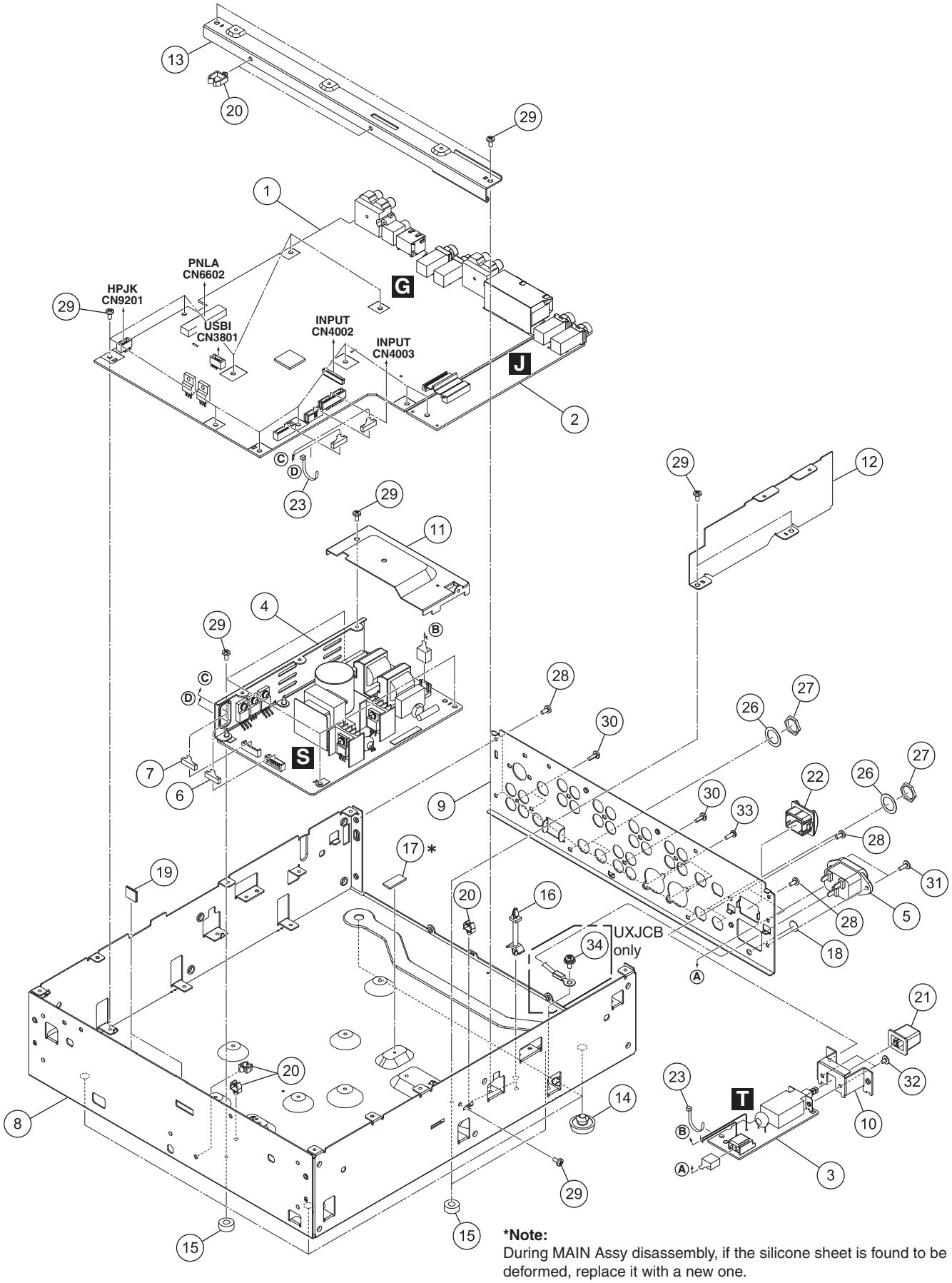
Mark	No.	Description	Part No.
	1	INPUT Assy	DWX3193
	2	MIC1 Assy	DWX3207
	3	TRM1 Assy	DWX3203
	4	TRM2 Assy	DWX3204
	5	TRM3 Assy	DWX3205
	6	TRM4 Assy	DWX3206
	7	USBI Assy	DWX3192
	8	HPJK Assy	DWX3208
	9	Short Pin Plug	AKM7008
	10	USB Cable (5P)	DDA1041
	11	40P FFC	DDD1550
	12	Connector Assy	PF04PP-S12
	13	Connector Assy	PF11PP-D07
	14	HP Stay	DNF1820
	15	TRIM Bracket	DNF1864
	16	USB Bracket	DNF1868
	17	Extension Shaft A	DNK5365
	18	Extension Shaft B	DNK5366
	19	Rivet (Plastic)	AEC1877
	20	Locking Mini Clamp	DEC2439
	21	Side Panel L	DNK5363
	22	Side Panel R	DNK5364
	23	Front Panel	DNK5845
	24	USB Panel	DNK5847
	25	USB Cover B	DNK5868
	26	Rotary SW Knob S (B)	DAA1178
	27	Rotary SW Knob S (C)	DAA1204
NSP	28	Caution Label	See Contrast table (2)
NSP	29	Label	See Contrast table (2)
NSP	30	Name Label	See Contrast table (2)
	31	•••••	
	32	•••••	
	33	Flange Nut M9	DBN1008
	34	Flange Nut M7	DBN1011
	35	Nut M12	DBN1018
	36	Washer	DEC2920
	37	Nut	NKX2FTC
	38	Washer	WA62D095D025
	39	Terminal Screw	AKE-031
	40	Screw	BBZ30P060FTB
	41	Screw	BBZ30P060FTC
	42	Screw	BCZ40P060FTB
	43	Screw	BPZ30P080FTB
	44	Screw	BPZ30P120FTB
	45	Screw	BSZ40P220FTB
	46	Screw	CCZ30P080FTB
	47	Screw (M3x5)	DBA1340
	48	Screw	PMH30P100FTB

(2) CONTRAST TABLE

DJM-900NXS/SYXJ8, UXJCB, LXJ, KXJ5 and XJCN5 are constructed the same except for the following:

Mark	No.	Symbol and Description	DJM-900NXS /SYXJ8	DJM-900NXS /UXJCB	DJM-900NXS /LXJ	DJM-900NXS /KXJ5	DJM-900NXS /XJCN5
NSP	28	Caution Label	Not used	DRW2429	DRW2430	DRW2432	Not used
NSP	29	Label	Not used	DRW1975	Not used	Not used	Not used
NSP	30	Name Label	DRW2463	DRW2472	DRW2473	DRW2476	DRW2475

9.3 BOTTOM SECTION



BOTTOM SECTION PARTS LIST

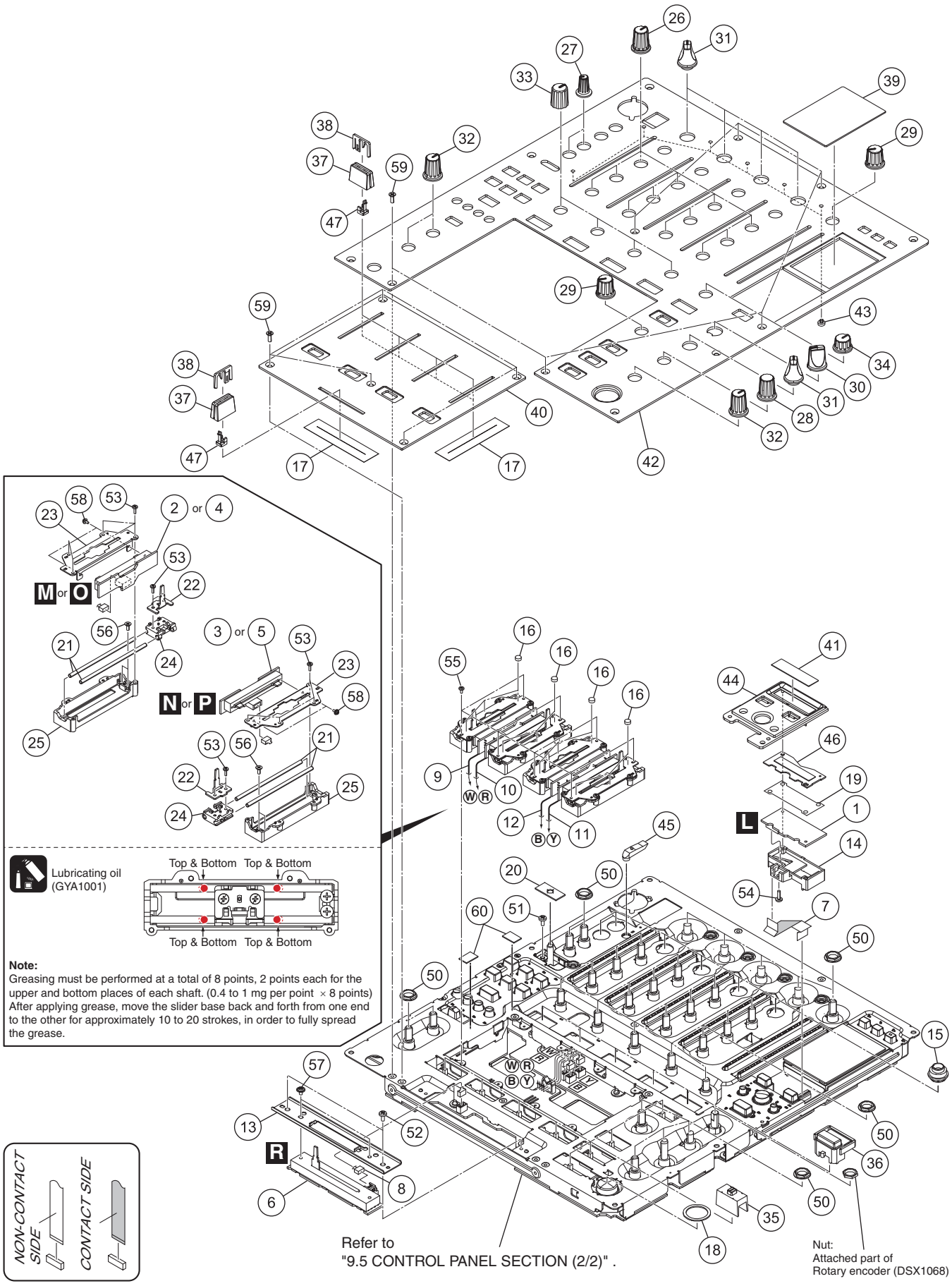
Mark	No.	Description	Part No.
	1	MAIN Assy	DWX3190
	2	SEND Assy	DWX3195
	3	ACSW Assy	DWR1490
⚠	4	POWER SUPPLY Assy	DWR1492
⚠	5	AC Inlet Assy	See Contrast table (2)
	6	Connector Assy	DKP3901
	7	Connector Assy	PF06EP-S22
NSP	8	Chassis	DNA1410
	9	Rear Panel	See Contrast table (2)
	10	Bracket PSW	DNF1759
	11	Power Shield	DNF1815
	12	AC Shield	DNF1816
	13	Center Stay	DNF1867
	14	Foot (Rubber)	REC-434
NSP	15	Spacer	AEB7092
	16	PCB Support	AEC7513
NSP	17	Silicon Rubber D5 L	DEB1456
	18	Blind Label	DEC2928
	19	Tape	DEC3053
	20	Holder	VEC1355
	21	Power Knob	DAC2306
	22	Power Knob Guard	DNK4534
	23	Binder	ZCA-SKB90BK
	24	•••••	
	25	•••••	
	26	Washer	DEC2920
	27	Nut	NKX2FTC
	28	Screw	BBZ30P060FTB
	29	Screw	BBZ30P060FTC
	30	Screw	BPZ30P080FTB
	31	Screw	IBZ30P080FTB
	32	Screw	IMZ30P040FTC
	33	Screw	PPZ30P080FTB
	34	Screw	See Contrast table (2)

(2) CONTRAST TABLE

DJM-900NXS/SYXJ8, UXJCB, LXJ, KXJ5 and XJCN5 are constructed the same except for the following:

Mark	No.	Symbol and Description	DJM-900NXS /SYXJ8	DJM-900NXS /UXJCB	DJM-900NXS /LXJ	DJM-900NXS /KXJ5	DJM-900NXS /XJCN5
⚠	5	AC Inlet Assy (2P)	DKP3762	Not used	DKP3762	DKP3762	DKP3762
⚠	5	AC Inlet Assy (3P)	Not used	DKP3927	Not used	Not used	Not used
	9	Rear Panel	DNC2020	DNC2037	DNC2038	DNC2041	DNC2040
	34	Screw	Not used	PMH40P080FTC	Not used	Not used	Not used

9.4 CONTROL PANEL SECTION (1/2)



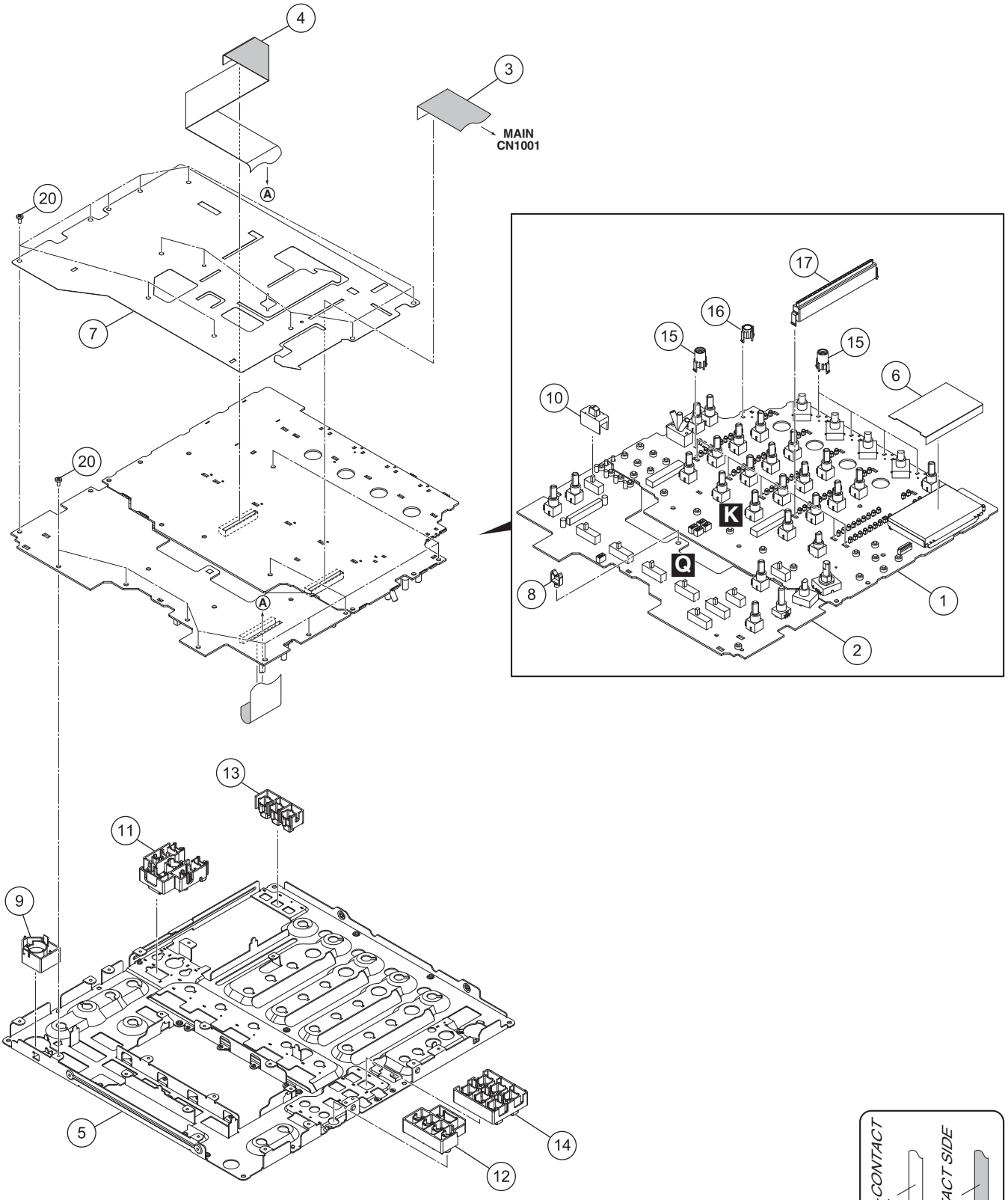
CONTROL PANEL SECTION (1/2) PARTS LIST

Mark	No.	Description	Part No.
	1	CDCB Assy	DWX3191
	2	FAD1 Assy	DWX3198
	3	FAD2 Assy	DWX3199
	4	FAD3 Assy	DWX3200
	5	FAD4 Assy	DWX3201
	6	FADC Assy	DWX3202
	7	FFC	DDD1582
	8	Connector Assy	PF03PP-B07
	9	Connector Assy	PF03PP-B12
	10	Connector Assy	PF03PP2B07
	11	Connector Assy	PF03PP4B12
	12	Connector Assy	PF03PP6B07
	13	CRF Stay	DNF1870
	14	CDC Holder	DNK5842
	15	Bush	DNK5974
	16	SW Cushion HH48/2	DEC2538
	17	Fader Packing	DEC2903
	18	SW Packing (EF)	DEC2929
	19	CDC Tape	DEC3324
	20	SW Packing	DED1177
NSP	21	Guide Shaft (S)	DLA1918
	22	Lever Plate	DNH2954
	23	VR Stay	DNH2955
	24	Slider Base	DNK5851
	25	Shaft Holder	DNK5852
	26	Rotary SW Knob (B)	DAA1176
	27	Rotary SW Knob S (A)	DAA1177
	28	Rotary SW Knob (C)	DAA1180
	29	Rotary SW Knob (MA)	DAA1198
	30	Select Knob	DAA1205
	31	FX Sel Knob	DAA1213
	32	Rotary Knob (BN)	DAA1220
	33	Rotary SW Knob (HM)	DAA1256
	34	Rotary Knob Low (BN)	DAA1265
	35	Slide SW Cap (W)	DAC2401
	36	Button (CUE)	DAC2503
	37	Slider Knob 1	DAC2684
	38	Slider Knob 2	DAC2685
	39	FL Panel	DAH2829
	40	Fader Panel	DAH2830
	41	CDC Sheet	DEC3325
	42	Control Panel	DNB1186
	43	Lens	DNK4532
	44	CDC Panel	DNK5846
	45	Lens (USB)	DNK5848

Mark	No.	Description	Part No.
	46	Lens (CDC)	DNK5871
	47	Slider Knob Stopper	DNK5888
	48	•••••	
	49	•••••	
	50	Flange Nut M9	DBN1008
	51	Screw	AMZ26P040FTC
	52	Screw	BBZ30P060FTC
	53	Screw	BPZ20P060FTC
	54	Screw	BPZ26P080FTC
	55	Screw	BSZ20P040FTB
	56	Screw	CPZ26P080FTC
	57	Screw	IMZ30P040FTC
	58	Screw	PMH20P040FTC
	59	Screw	CCZ30P080FTB
	60	Spacer TFTB	DEC3300

9.5 CONTROL PANEL SECTION (2/2)

• Bottom view



CONTROL PANEL SECTION (2/2) PARTS LIST

Mark	No.	Description	Part No.
	1	PNLA Assy	DWX3196
	2	PNLB Assy	DWX3197
	3	31P FFC	DDD1551
	4	31P FFC	DDD1553
	5	Panel Stay	DND1265
	6	Barrier FL	DEC3351
	7	Barrier	DEC3382
	8	Wire Saddle	XEC3100
	9	Effect Knob	DAC2304
	10	Slide SW Cap	DAC2400
	11	Button (TAP)	DAC2653
	12	Button (LINK)	DAC2654
	13	Button (MIDI)	DAC2655
	14	Button (CFX)	DAC2656
	15	Lens Holder	DNK4533
	16	Lens Holder (S)	DNK5849
	17	Lebel Meter Assy	DXB1882
	18	•••••	
	19	•••••	
	20	Screw	BBZ30P060FTC

10. SCHEMATIC DIAGRAM
10.1 INPUT ASSY (1/11)

A 1/11 INPUT ASSY (DWX3193)

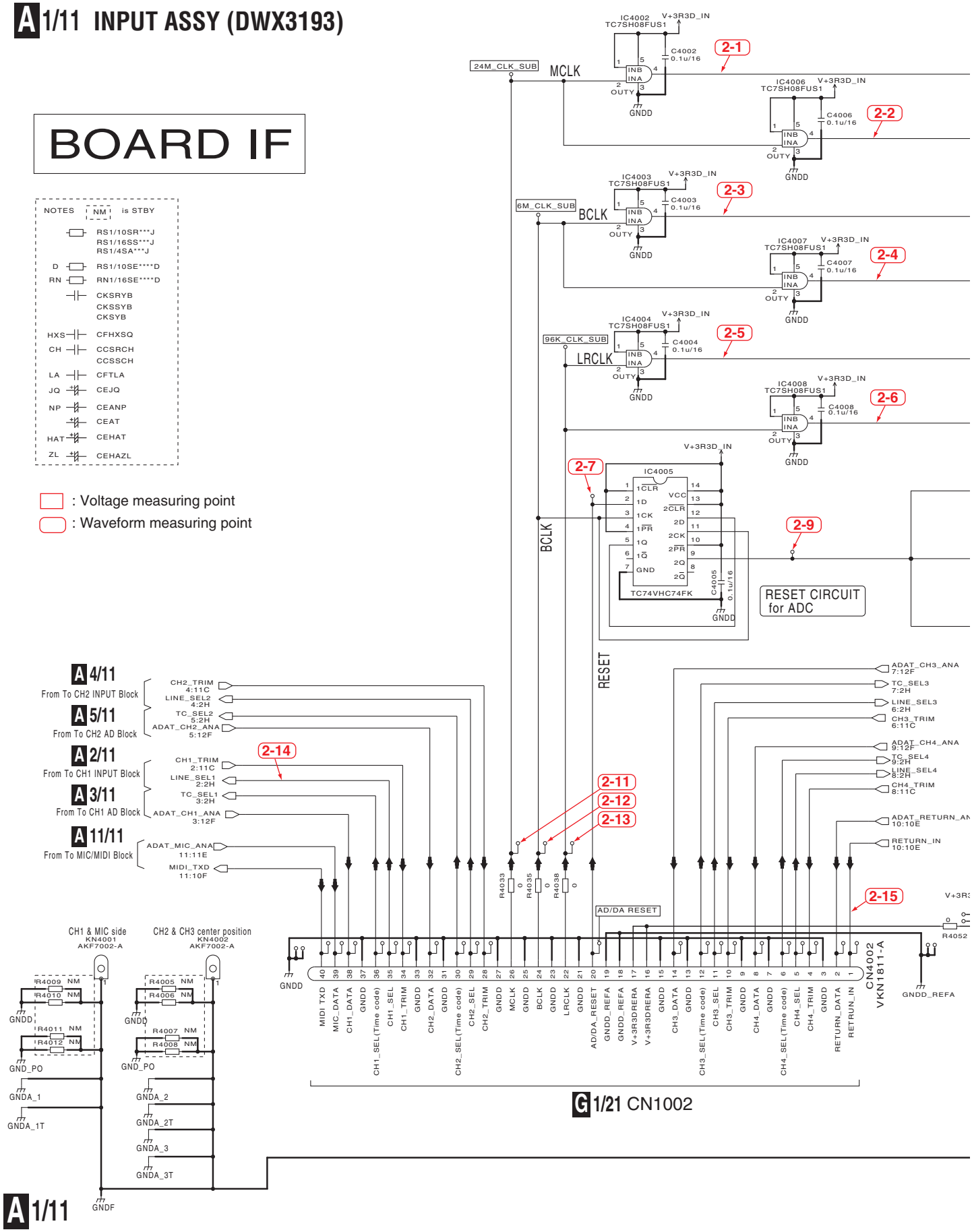
BOARD IF

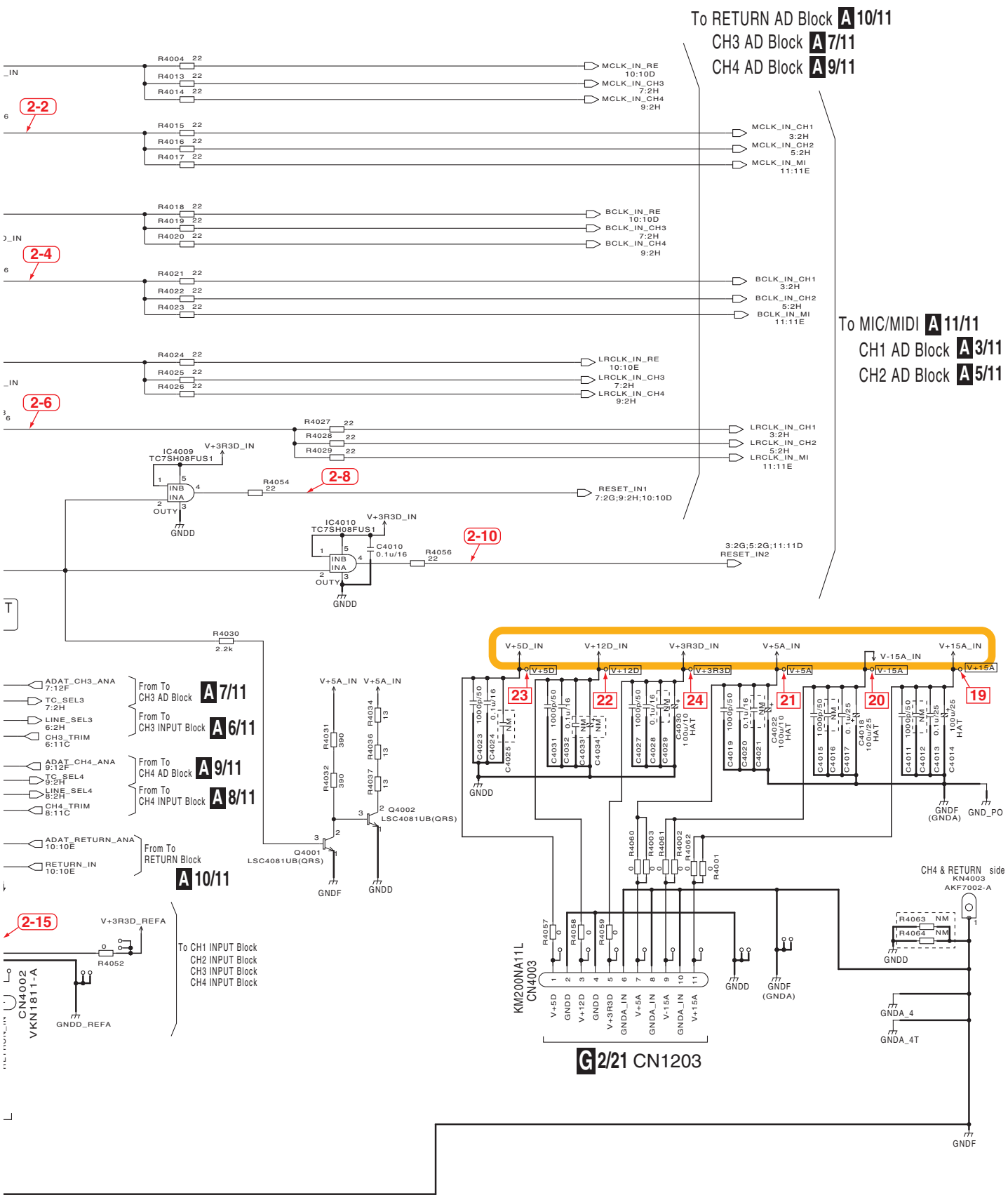
NOTES NM is STBY

	RS1/10SR***J RS1/16SS***J RS1/4SA***J	
D	RS1/10SE****D	
RN	RN1/16SE****D	
	CKSRYB CKSSYB CKSYB	
HXS	CFHXSQ	
CH	CCSRCH CCSSCH	
LA	CFTLA	
JQ	CEJQ	
NP	CEANP	
	CEAT	
HAT	CEHAT	
ZL	CEHAZL	

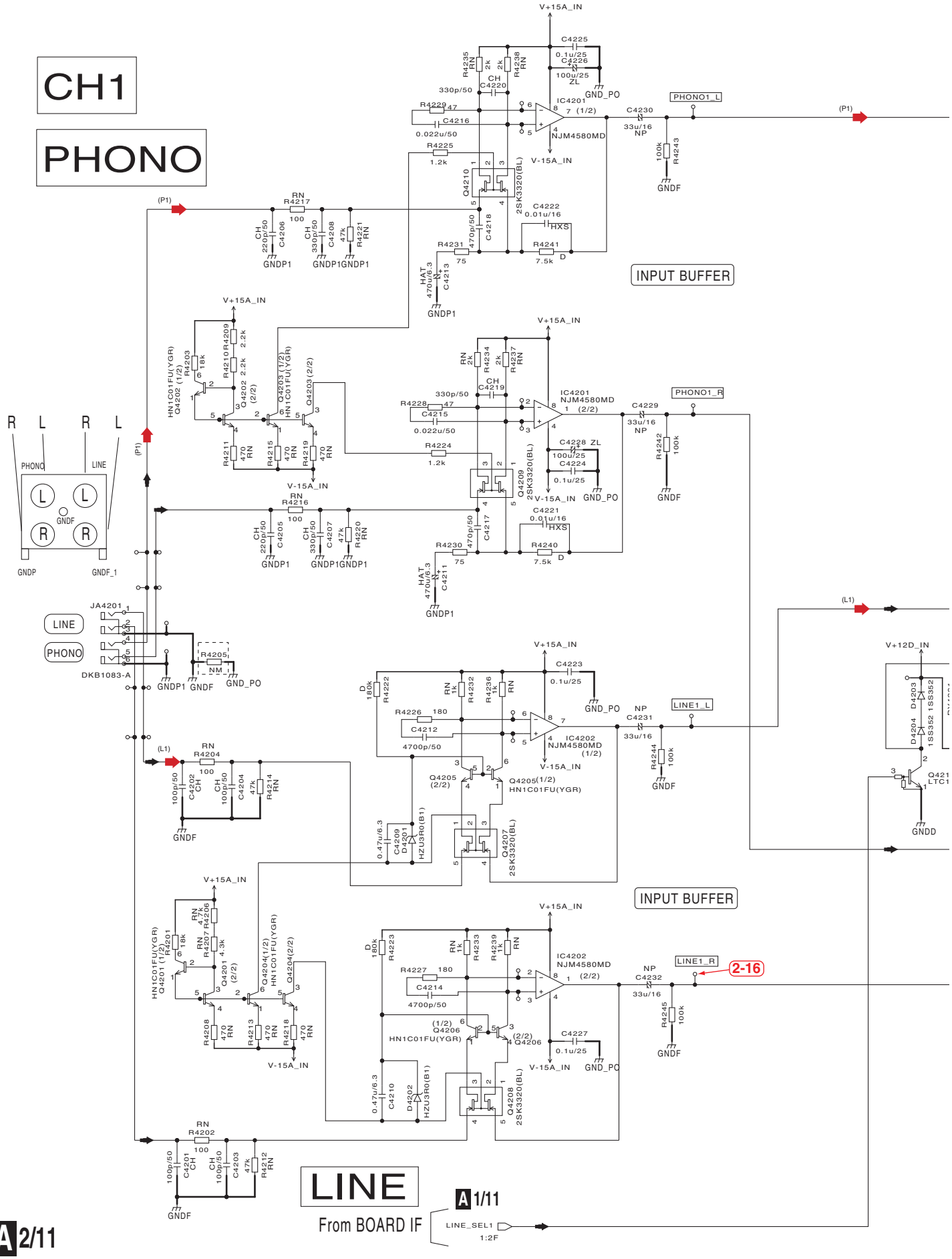
: Voltage measuring point

: Waveform measuring point

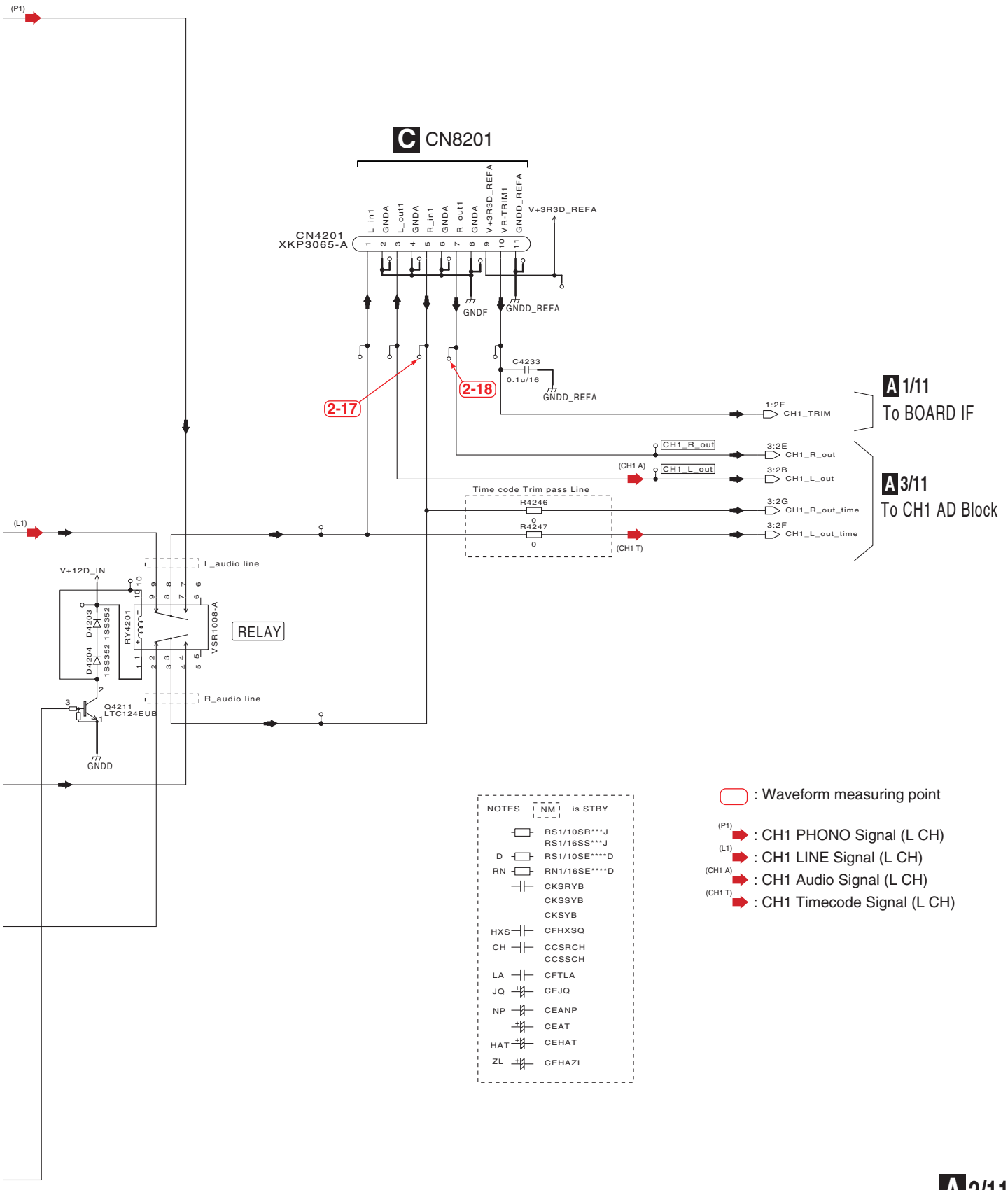



To RETURN AD Block A 10/11
CH3 AD Block A 7/11
CH4 AD Block A 9/11
To MIC/MIDI A 11/11
CH1 AD Block A 3/11
CH2 AD Block A 5/11
R4004 22
R4013 22
R4014 22
MCLK_IN_RE 10:10D
MCLK_IN_CH3 7:2H
MCLK_IN_CH4 9:2H
2-2
R4015 22
R4016 22
R4017 22
MCLK_IN_CH1 3:2H
MCLK_IN_CH2 5:2H
MCLK_IN_MI 11:11E
R4018 22
R4019 22
R4020 22
BCLK_IN_RE 10:10D
BCLK_IN_CH3 7:2H
BCLK_IN_CH4 9:2H
2-4
R4021 22
R4022 22
R4023 22
BCLK_IN_CH1 3:2H
BCLK_IN_CH2 5:2H
BCLK_IN_MI 11:11E
R4024 22
R4025 22
R4026 22
LRCLK_IN_RE 10:10E
LRCLK_IN_CH3 7:2H
LRCLK_IN_CH4 9:2H
2-6
R4027 22
R4028 22
R4029 22
LRCLK_IN_CH1 3:2H
LRCLK_IN_CH2 5:2H
LRCLK_IN_MI 11:11E
IC4009 TC7SH08FUS1
V+3R3D_IN
R4054 22
2-8
RESET_IN1 7:2G;9:2H;10:10D
GNDD
IC4010 TC7SH08FUS1
V+3R3D_IN
C4010 0.1u/16
R4056 22
2-10
3:2G;5:2G;11:11D RESET_IN2
R4030 2.2k
ADAT_CH3_ANA 7:12F
TC_SEL3 7:2H
LINE_SEL3 6:2H
CH3_TRIM 6:11C
From To CH3 AD Block A 7/11
From To CH3 INPUT Block A 6/11
ADAT_CH4_ANA 9:12F
TC_SEL4 9:2H
LINE_SEL4 8:2H
CH4_TRIM 8:11C
From To CH4 AD Block A 9/11
From To CH4 INPUT Block A 8/11
ADAT_RETURN_ANA 10:10E
RETURN_IN 10:10E
From To RETURN Block A 10/11
V+5A_IN
R4031 390
R4032 390
R4034 13
R4036 13
R4037 13
Q4001 LSC4081UB(QRS)
Q4002 LSC4081UB(QRS)
GNDF
GNDD
2-15
V+3R3D_REFA
R4052 0
CN4002 VKN1811-A
GNDD_REFA
To CH1 INPUT Block
CH2 INPUT Block
CH3 INPUT Block
CH4 INPUT Block
V+5D_IN
V+12D_IN
V+3R3D_IN
V+5A_IN
V-15A_IN
V+15A_IN
23
22
24
21
20
19
GNDF (GNDA)
GND_PO
R4060 0
R4003 0
R4061 0
R4002 0
R4062 0
R4001 0
R4057 0
R4058 0
R4059 0
KM200NA11L CN4003
V+5D
GNDD
V+12D
V+3R3D
GNDA_IN
V+5A
V-15A
V+15A
G 2/21 CN1203
CH4 & RETURN side KN4003 AKF7002-A
R4063 NM
R4064 NM
GNDA_4
GNDA_4T
A 1/11

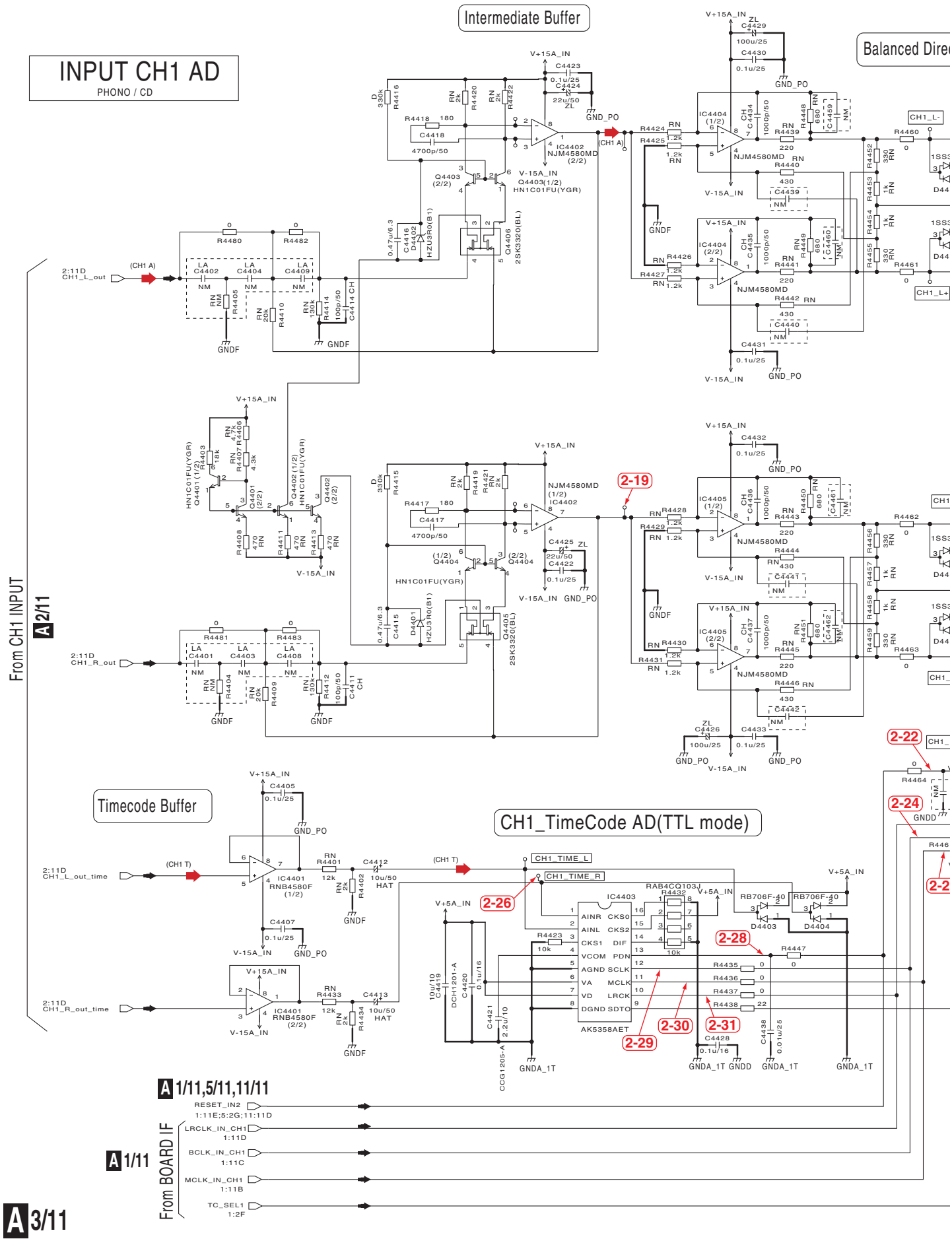
10.2 INPUT ASSY (2/11)



A 2/11 INPUT ASSY (DWX3193)

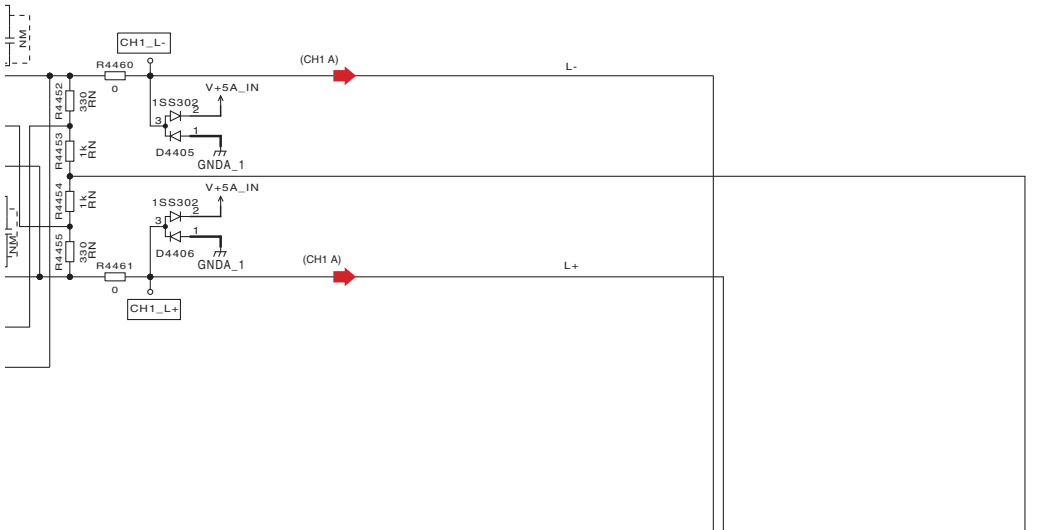


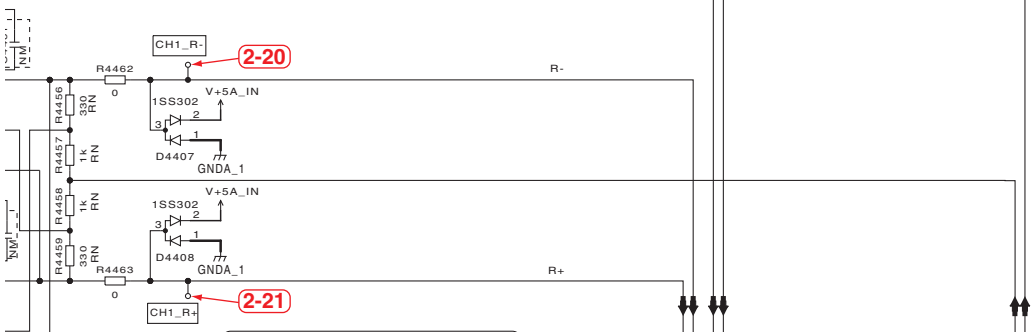
10.3 INPUT ASSY (3/11)



A 3/11 INPUT ASSY (DWX3193)

Balanced Direct ADC Driver





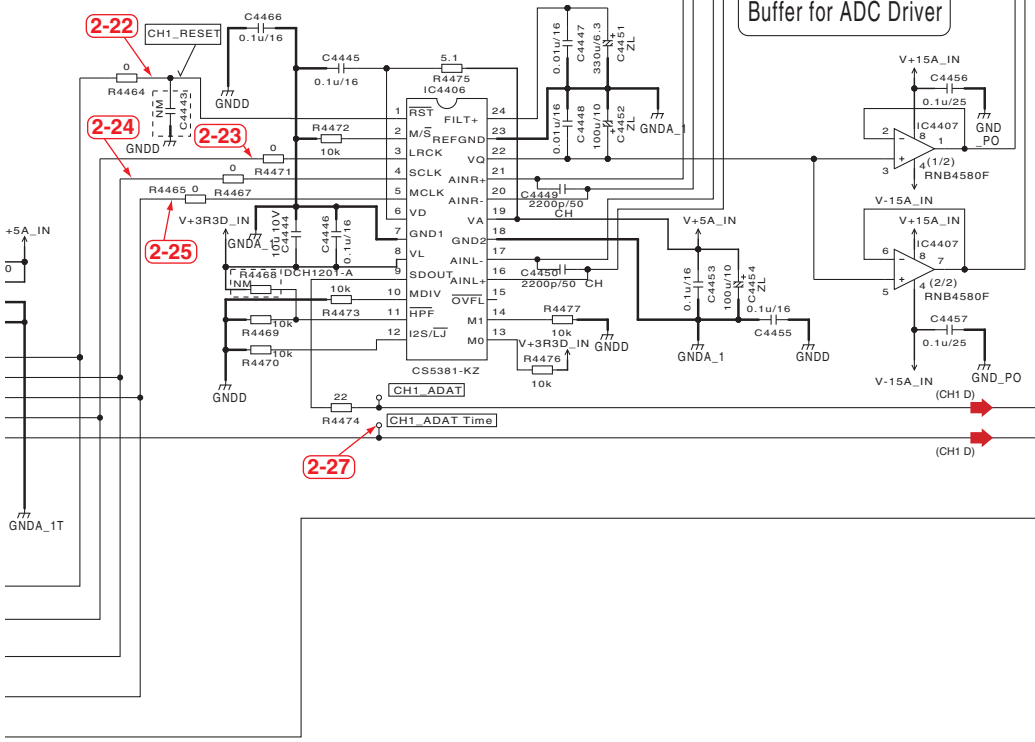
NOTES NM is STBY

	RS1/10SR***J RS1/16SS***J
D	RS1/10SE****D
RN	RN1/16SE****D
	CKSRYB CKSSYB CKSYB
HXS	CFHXSQ
CH	CCSRCH CCSSCH
LA	CFTLA
JQ	CEJQ
NP	CEANP
	CEAT
HAT	CEHAT
ZL	CEHAZL

: Waveform measuring point

(CH1 A) : CH1 Audio Signal (L CH)
(CH1 T) : CH1 Timecode Signal (L CH)
(CH1 D) : CH1 DIGITAL Signal

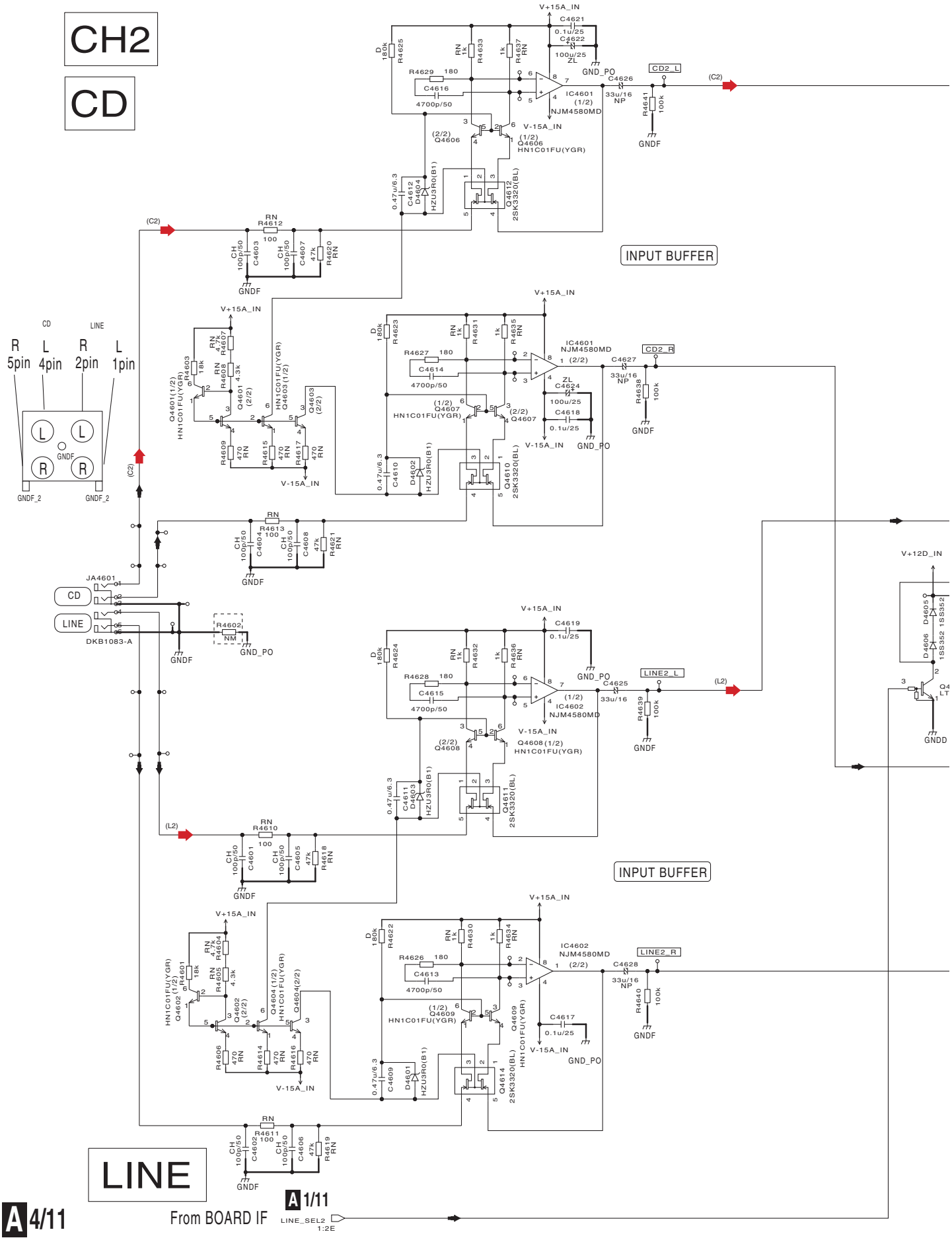
CH1_ADC(CMOS mode)



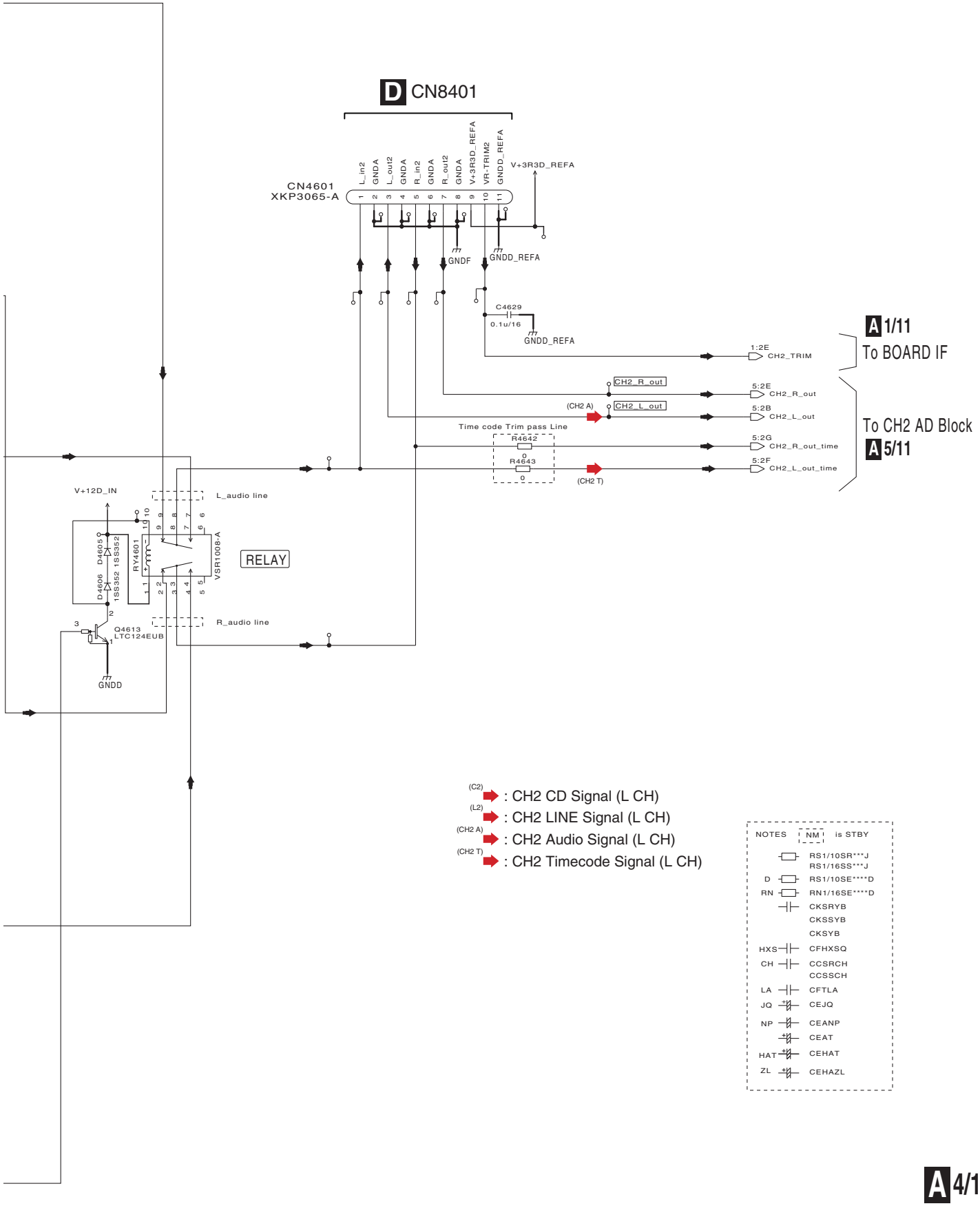
Buffer for ADC Driver

Audio timecode select

10.4 INPUT ASSY (4/11)



A 4/11 INPUT ASSY (DWX3193)



(C2) : CH2 CD Signal (L CH)

(L2) : CH2 LINE Signal (L CH)

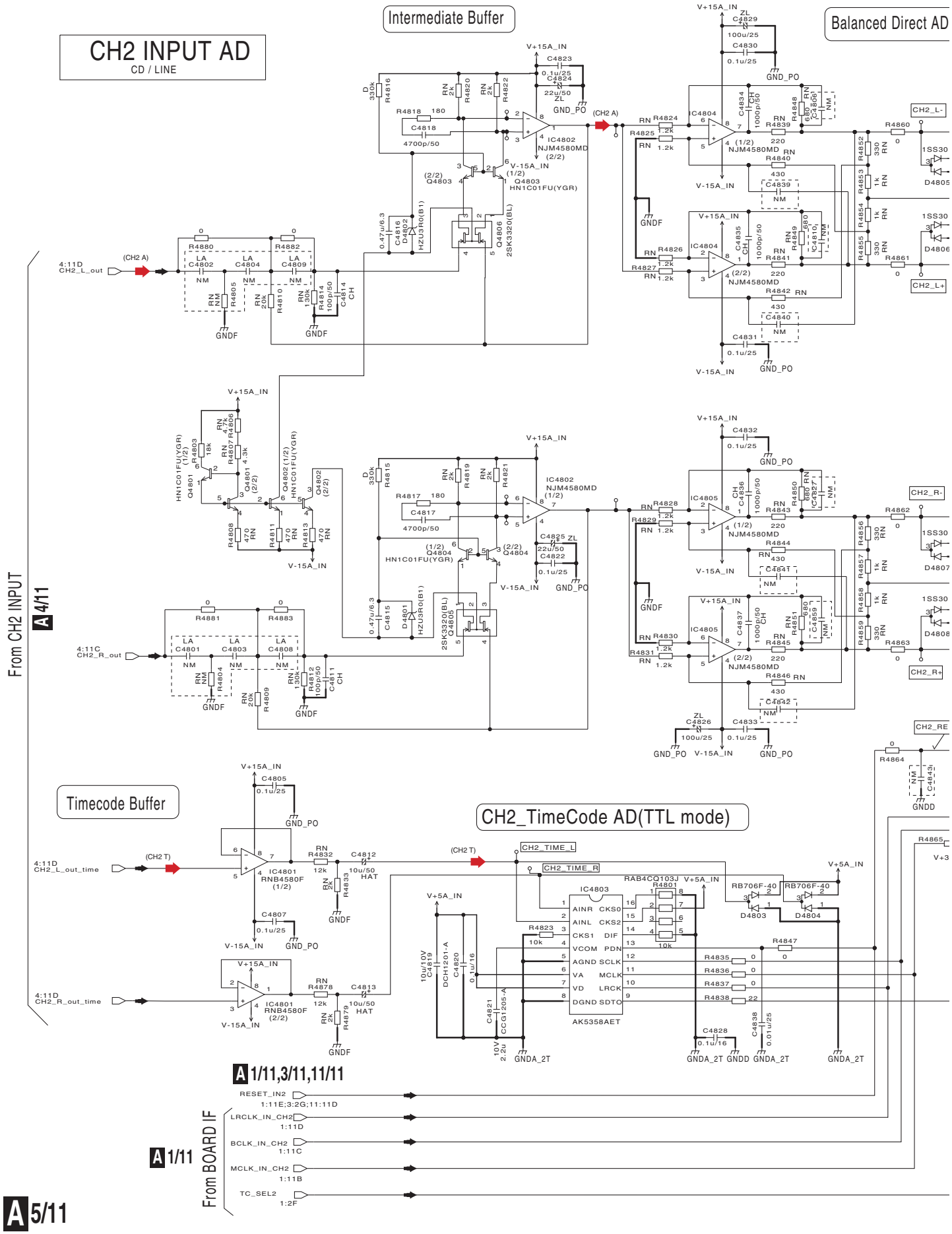
(CH2 A) : CH2 Audio Signal (L CH)

(CH2 T) : CH2 Timecode Signal (L CH)

NOTES NM is STBY

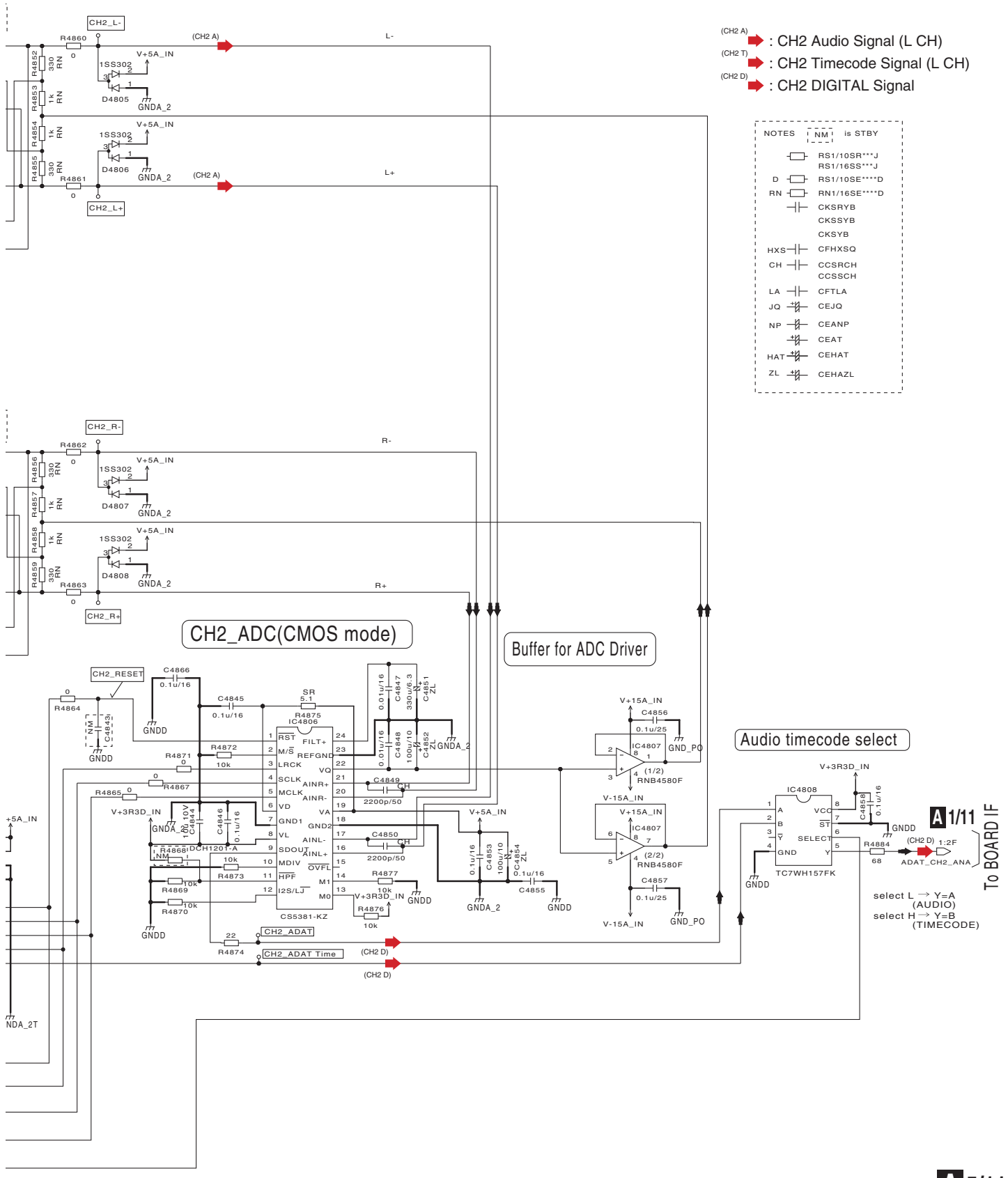
	RS1/10SR***J
	RS1/16SS***J
D	RS1/10SE****D
RN	RN1/16SE****D
	CKSRYB
	CKSSYB
	CKSYB
HXS	CFHXSQ
CH	CCSRCH
	CCSSCH
LA	CFTLA
JQ	CEJQ
NP	CEANP
	CEAT
HAT	CEHAT
ZL	CEHAZL

10.5 INPUT ASSY (5/11)

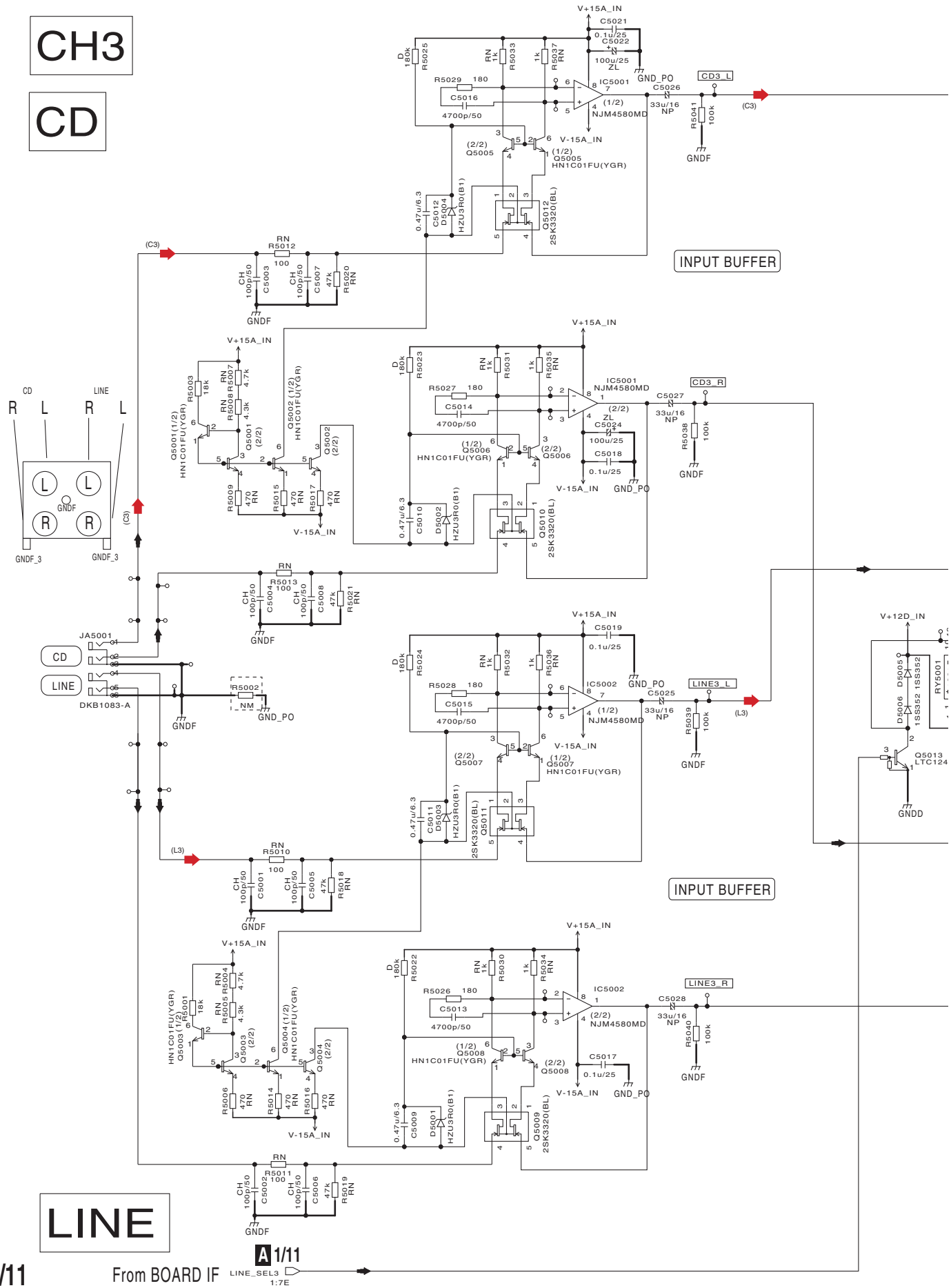


Balanced Direct ADC Driver

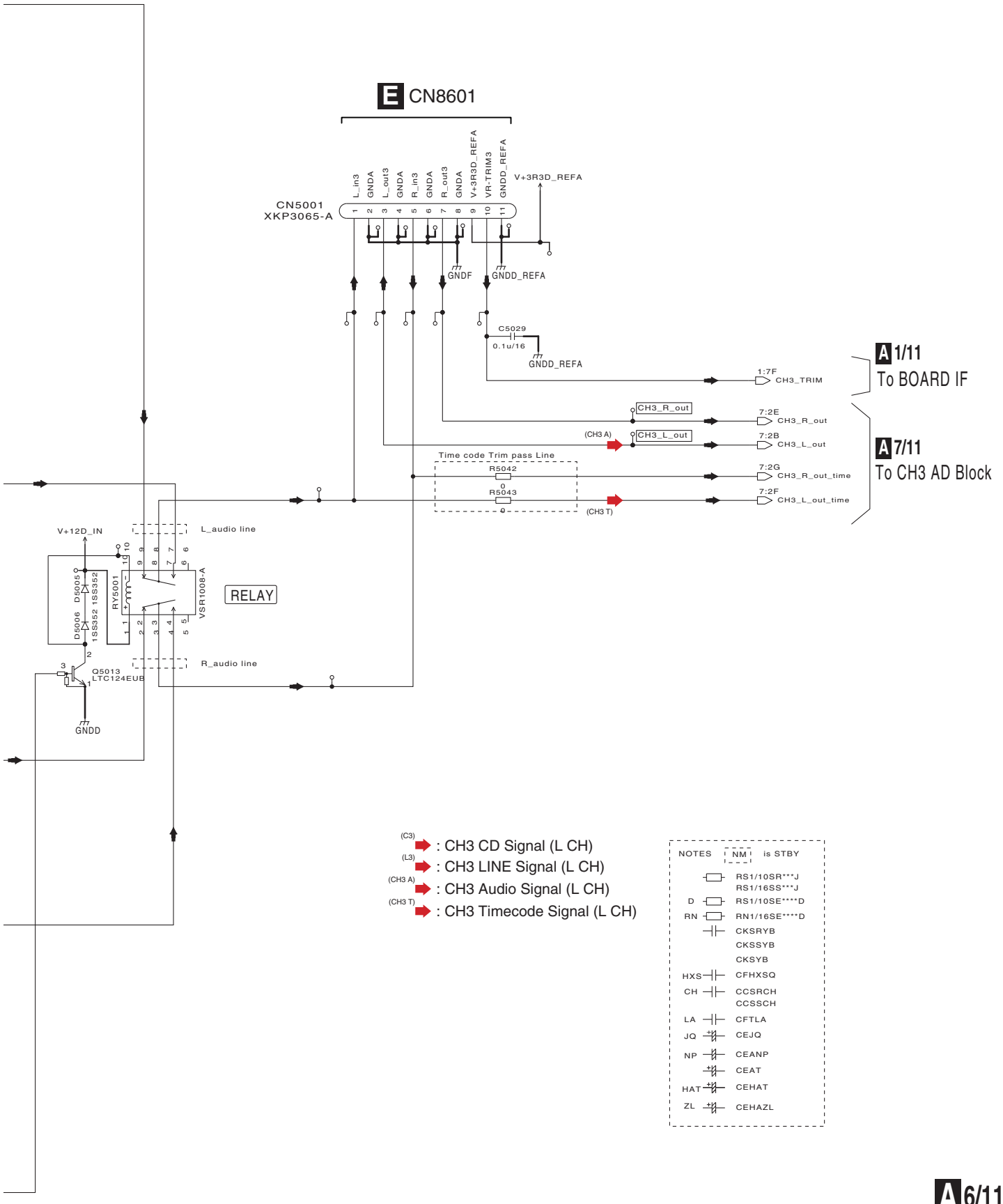
A 5/11 INPUT ASSY (DWX3193)



10.6 INPUT ASSY (6/11)



A 6/11 INPUT ASSY (DWX3193)

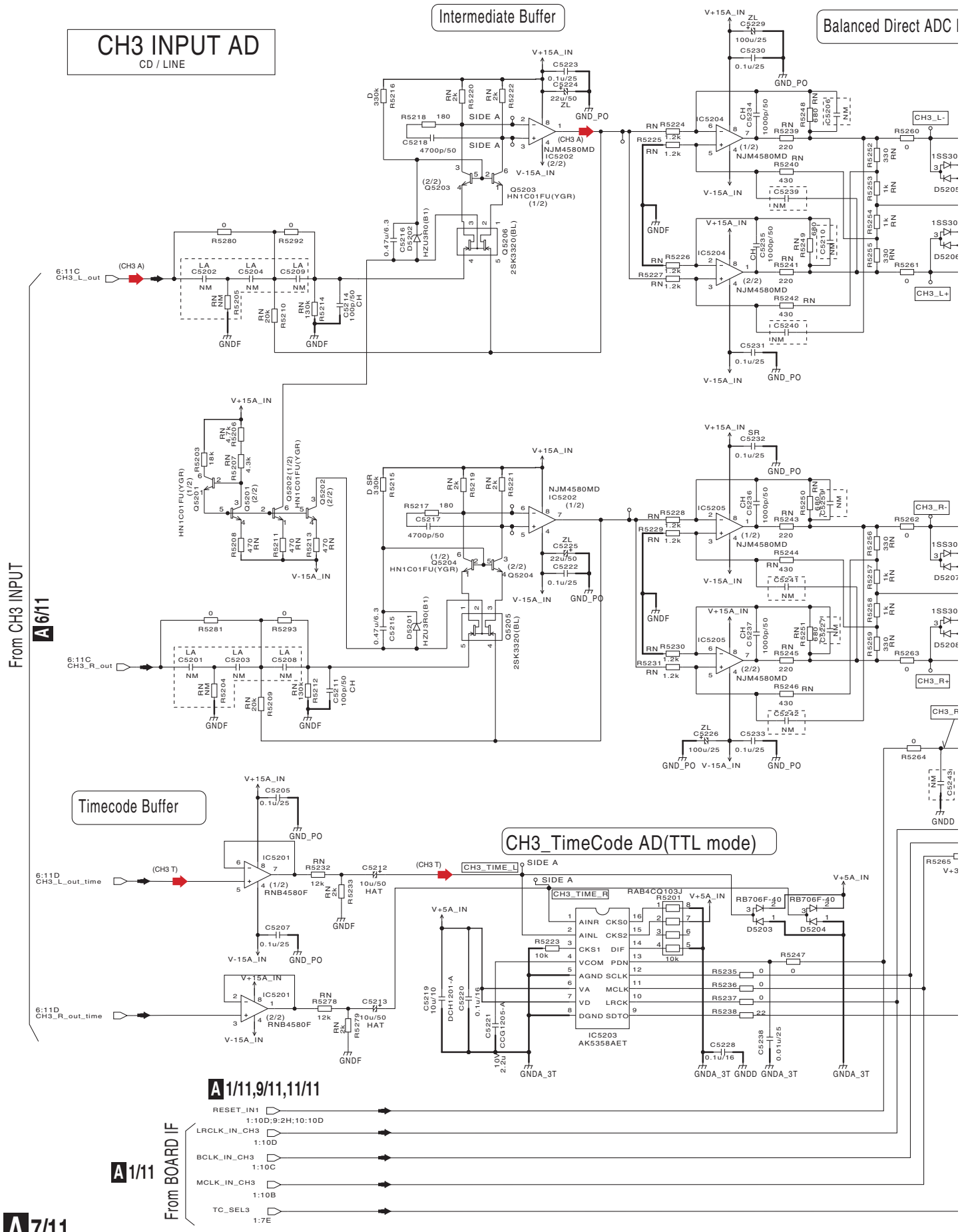


(C3) : CH3 CD Signal (L CH)
(L3) : CH3 LINE Signal (L CH)
(CH3 A) : CH3 Audio Signal (L CH)
(CH3 T) : CH3 Timecode Signal (L CH)

NOTES NM is STBY

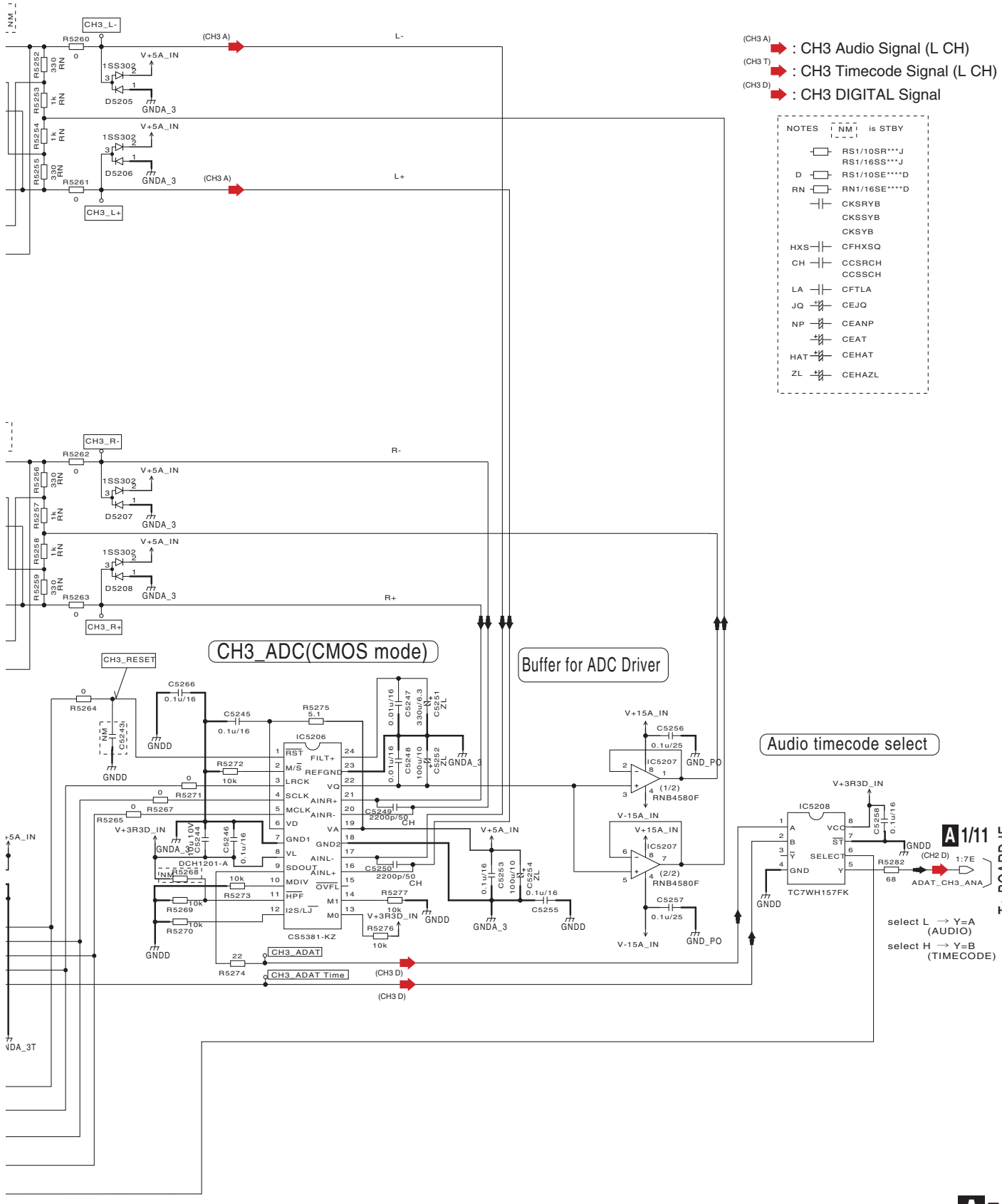
	RS1/10SR***J
	RS1/16SS***J
D	RS1/10SE****D
RN	RN1/16SE****D
	CKSRYB
	CKSSYB
	CKSYB
HXS	CFHXSQ
CH	CCSRCH
	CCSSCH
LA	CFTLA
JQ	CEJQ
NP	CEANP
	CEAT
HAT	CEHAT
ZL	CEHAZL

10.7 INPUT ASSY (7/11)

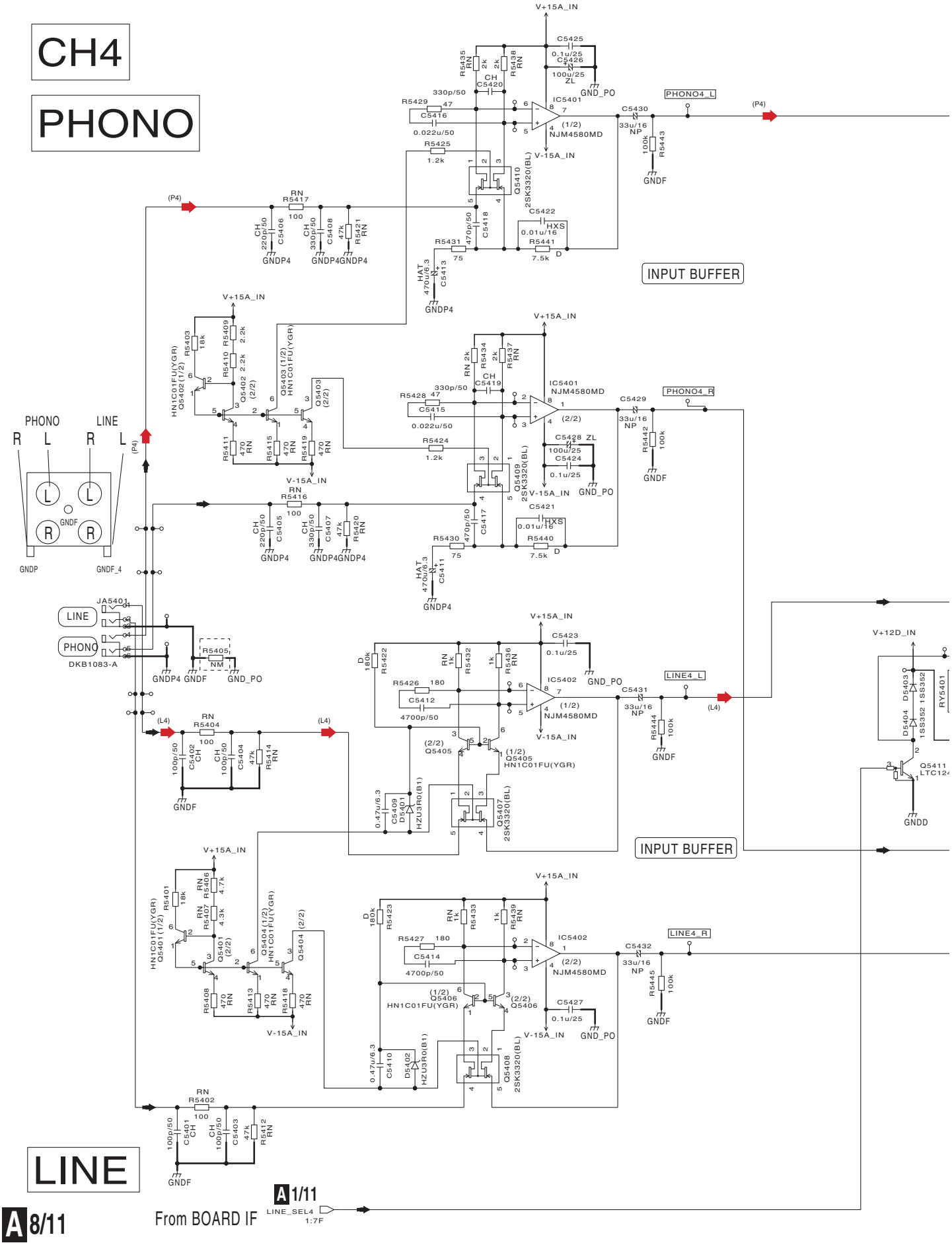


lanced Direct ADC Driver

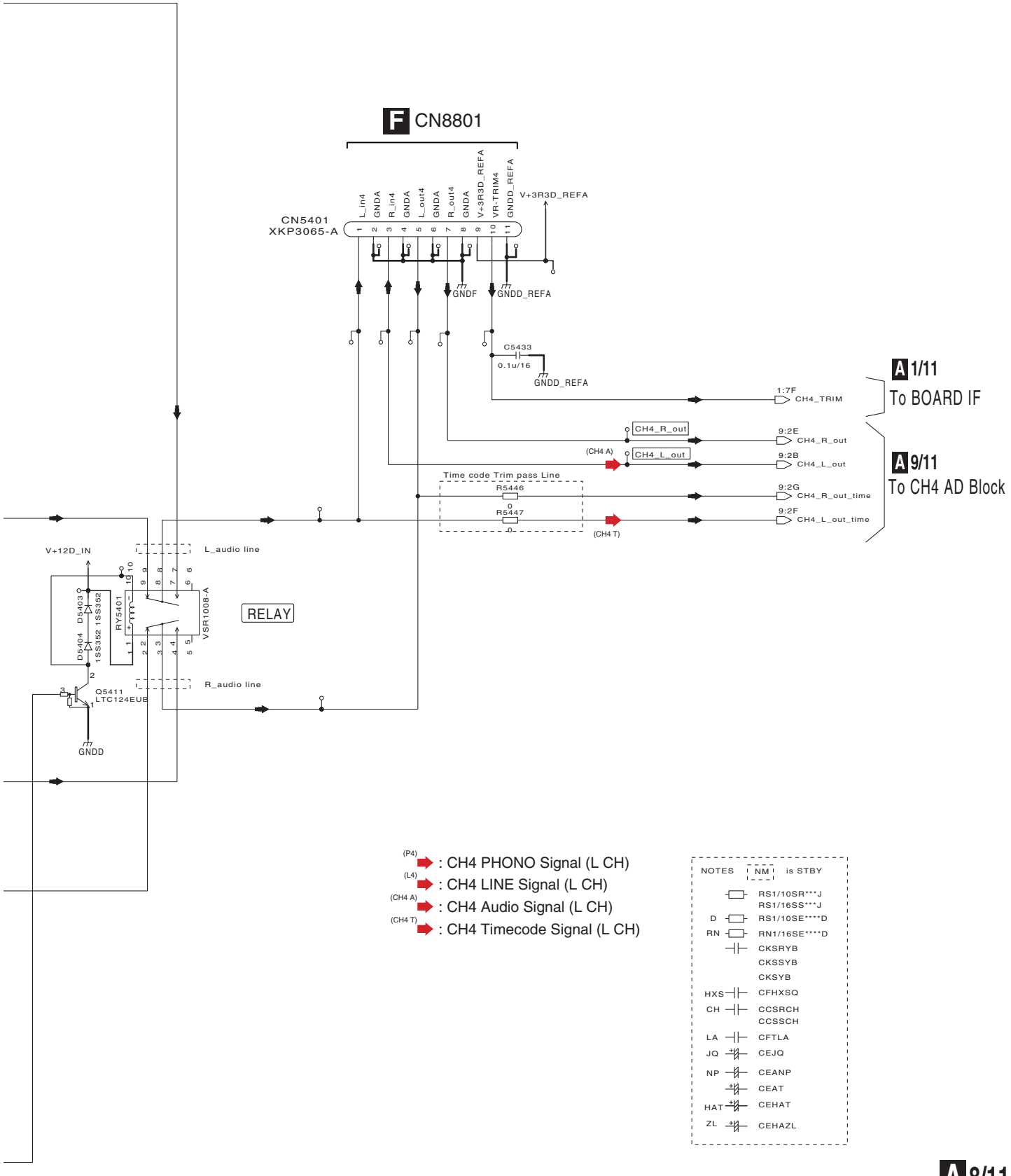
A 7/11 INPUT ASSY (DWX3193)



10.8 INPUT ASSY (8/11)



A 8/11 INPUT ASSY (DWX3193)

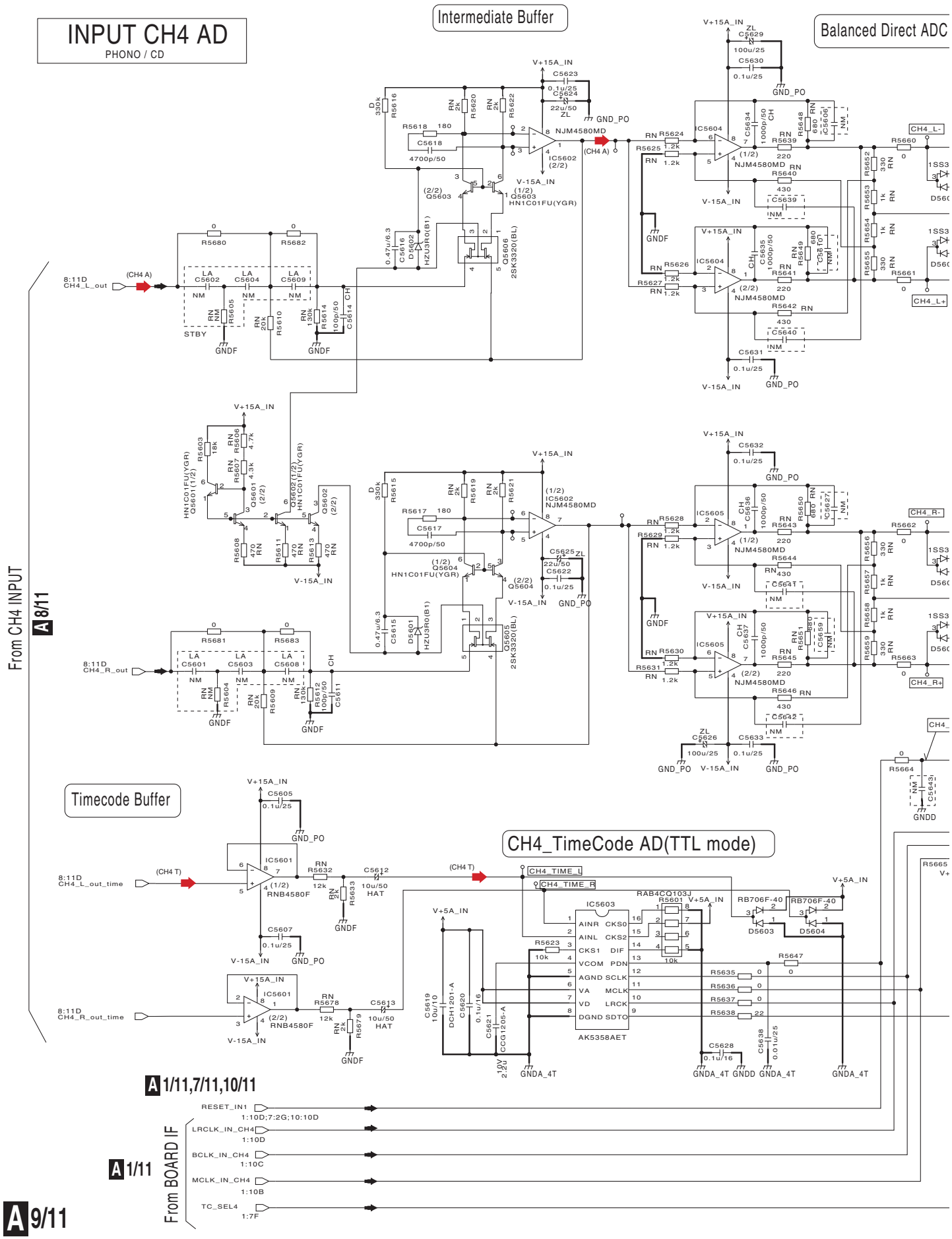


(P4) : CH4 PHONO Signal (L CH)
(L4) : CH4 LINE Signal (L CH)
(CH4 A) : CH4 Audio Signal (L CH)
(CH4 T) : CH4 Timecode Signal (L CH)

NOTES NM is STBY

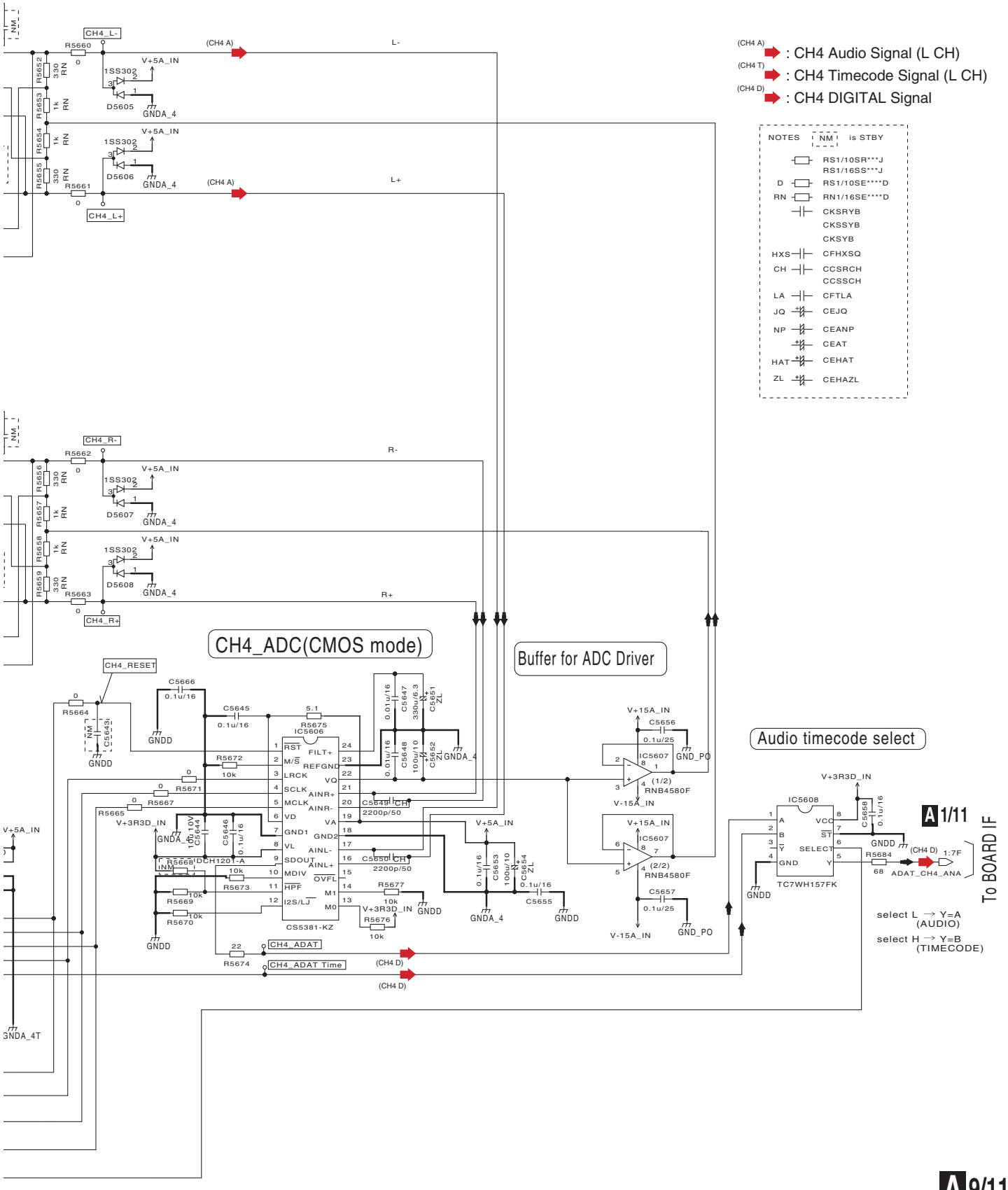
	RS1/10SR***J
	RS1/16SS***J
D	RS1/10SE****D
RN	RN1/16SE****D
	CKSRYB
	CKSSYB
	CKSYB
HXS	CFHXSQ
CH	CCSRCH
	CCSSCH
LA	CFTLA
JQ	CEJQ
NP	CEANP
	CEAT
HAT	CEHAT
ZL	CEHAZL

10.9 INPUT ASSY (9/11)



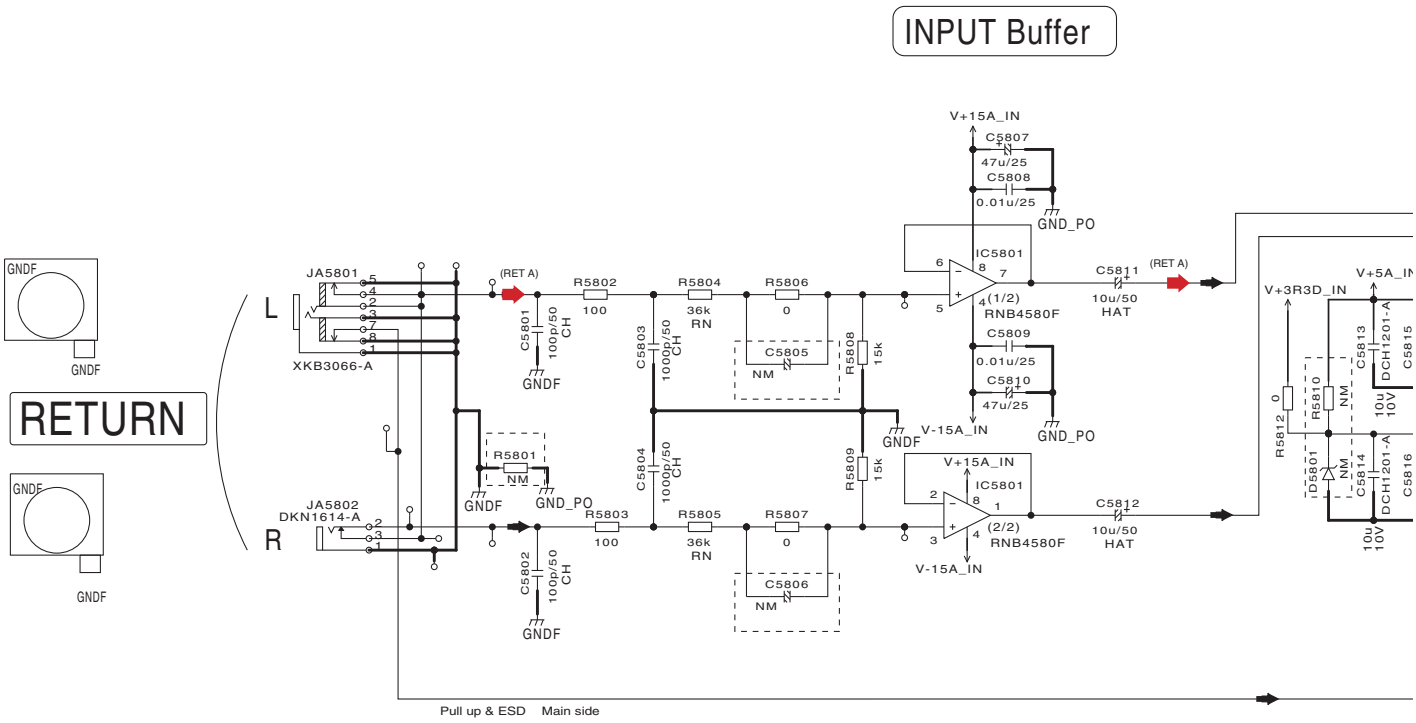
alanced Direct ADC Driver

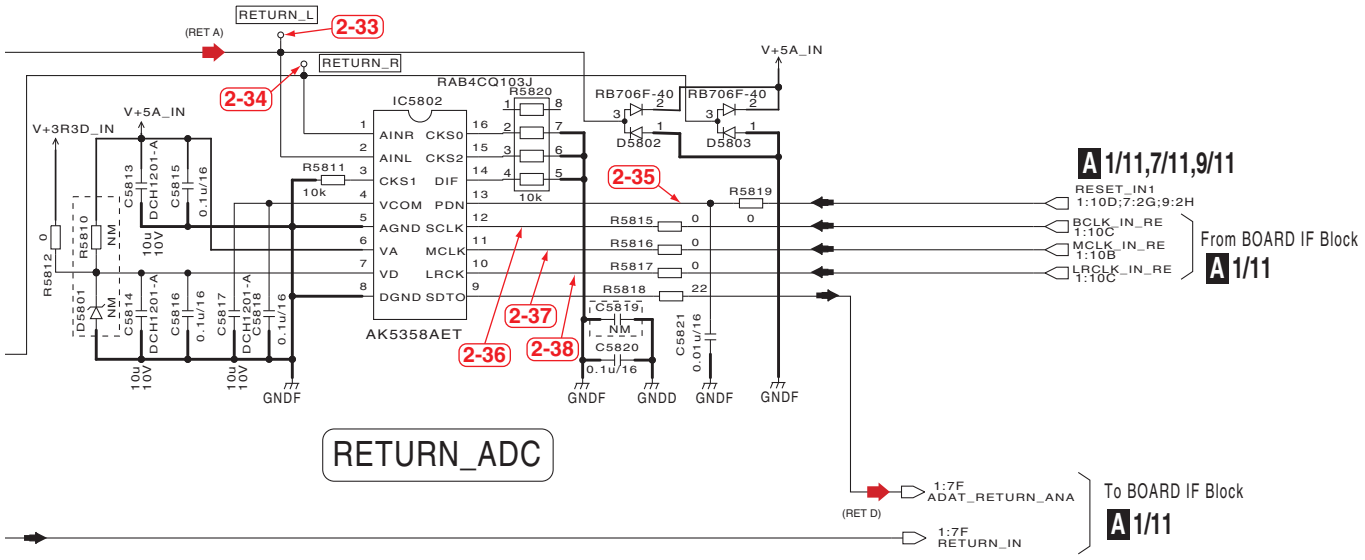
A 9/11 INPUT ASSY (DWX3193)



10.10 INPUT ASSY (10/11)

RETURN





: Waveform measuring point

(RET A) : RETURN Audio Signal (L CH)

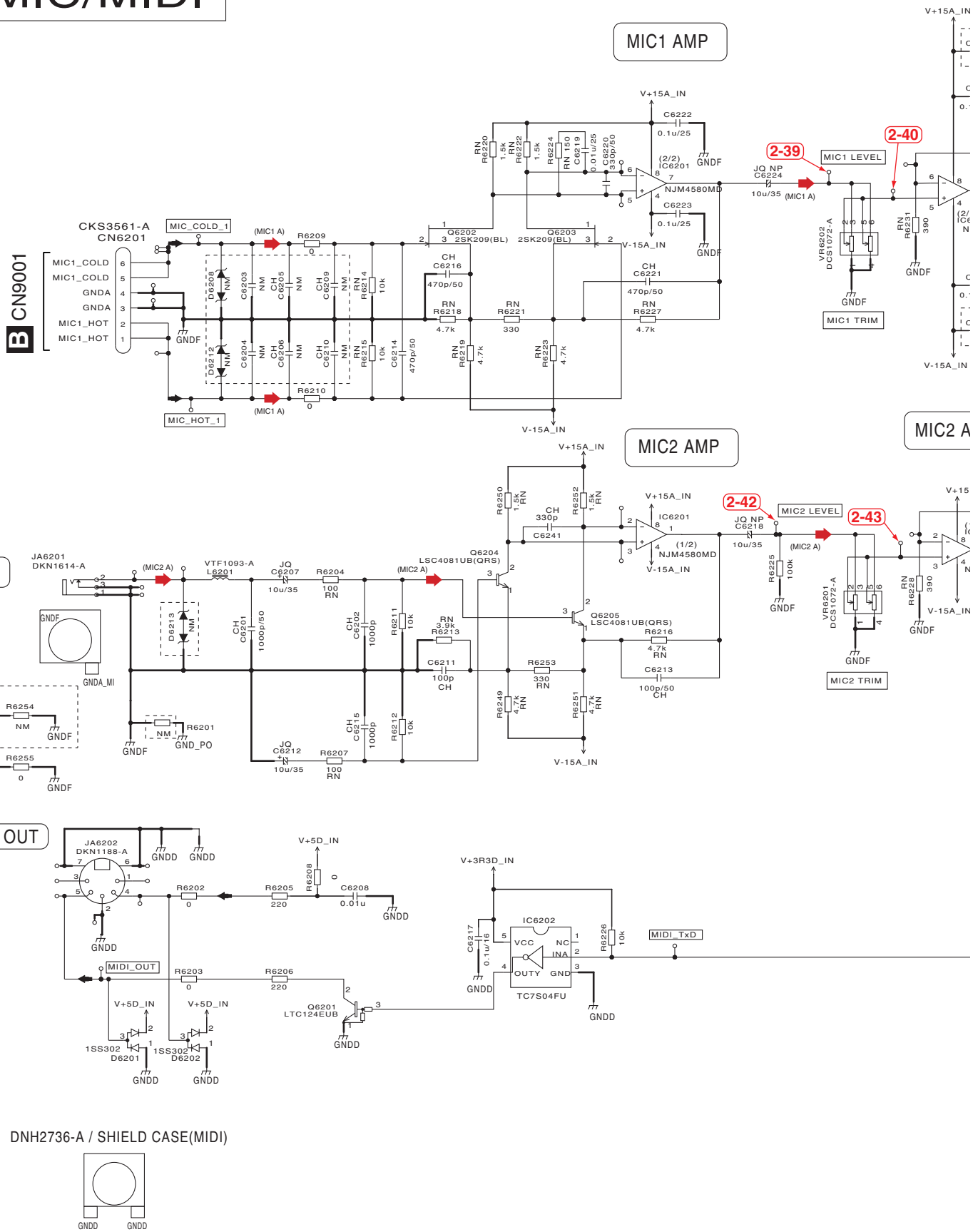
(RET D) : RETURN DIGITAL Signal

NOTES NM is STBY

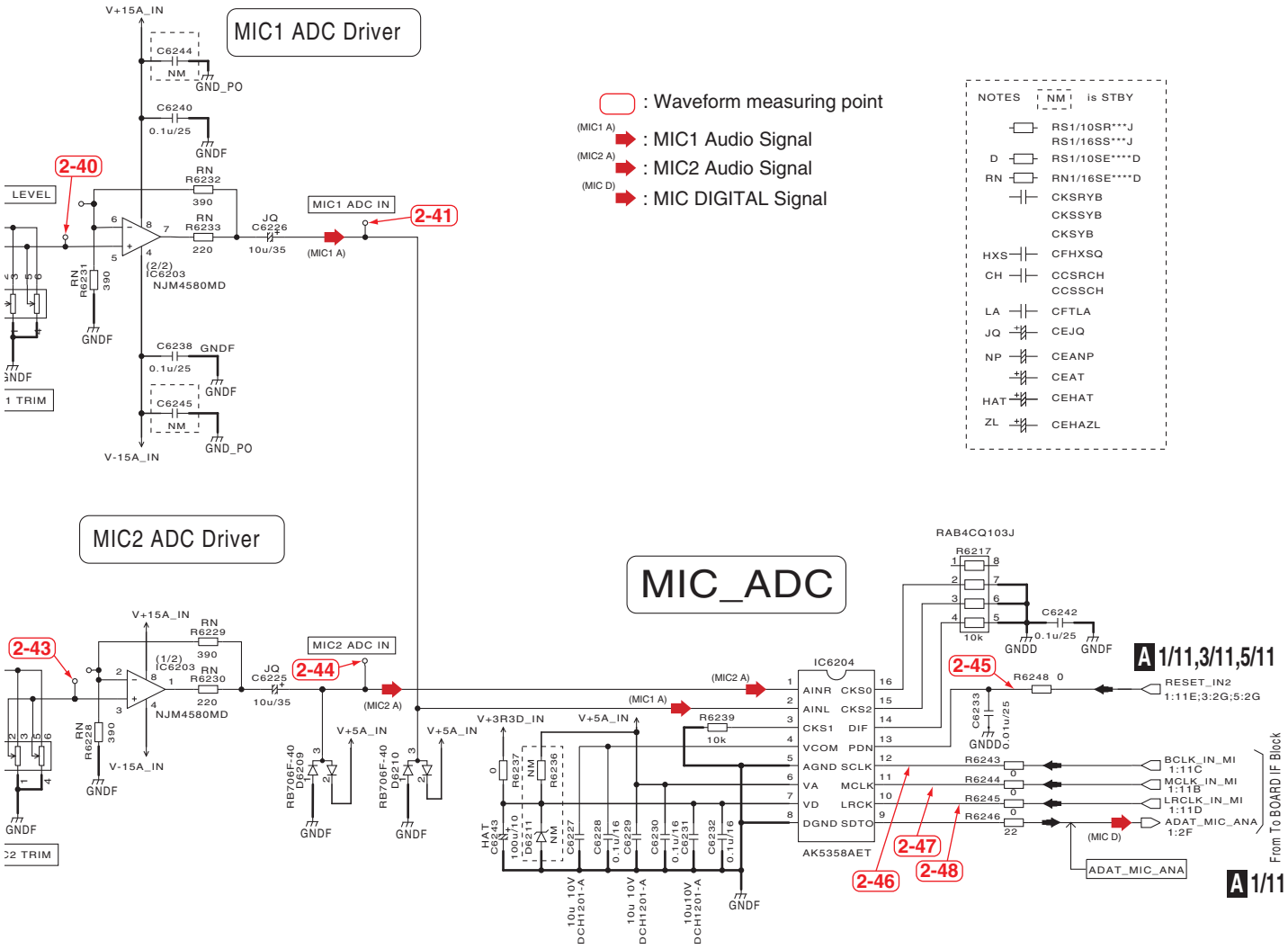
	RS1/10SR***J
	RS1/16SS***J
D	RS1/10SE****D
RN	RN1/16SE****D
	CKSRYB
	CKSSYB
	CKSYB
HXS	CFHXSQ
CH	CCSRCH
	CCSSCH
LA	CFTLA
JQ	CEJQ
NP	CEANP
	CEAT
HAT	CEHAT
ZL	CEHAZL

10.11 INPUT ASSY (11/11)

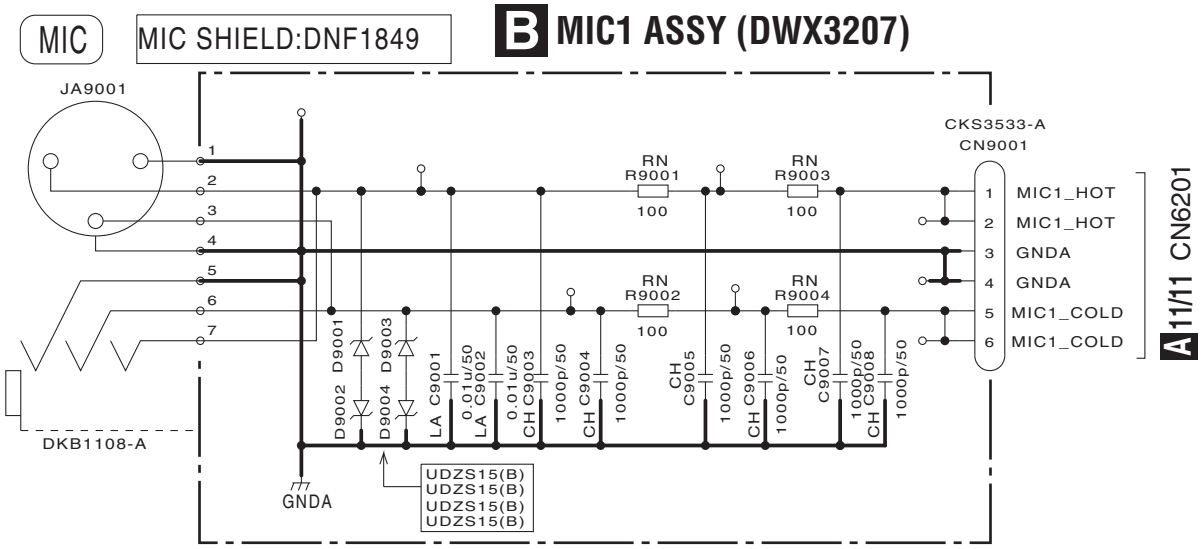
MIC/MIDI

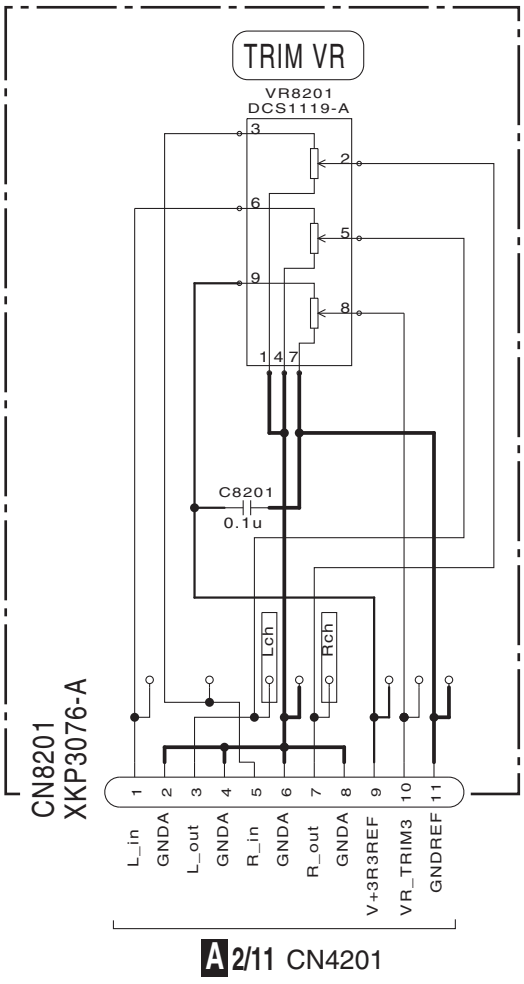


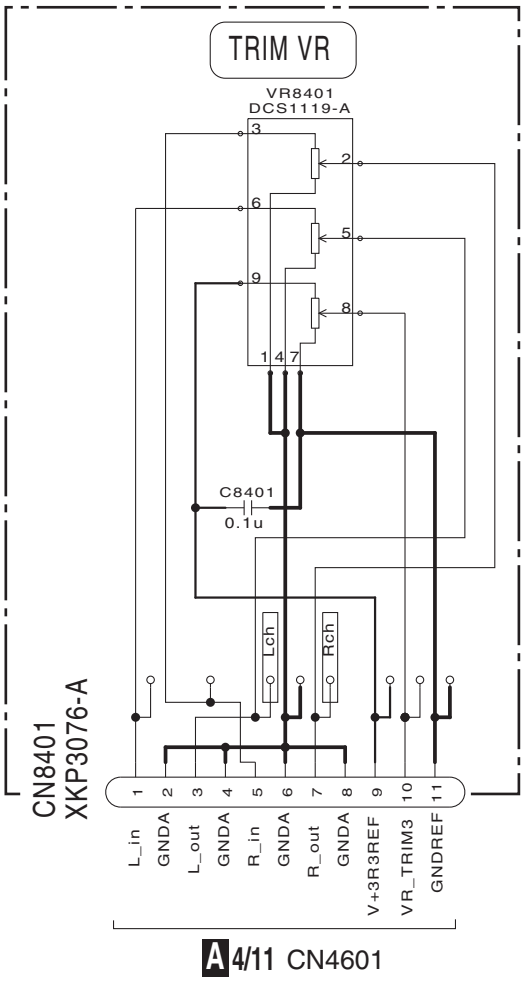
A 11/11


MIC1 ADC Driver
MIC2 ADC Driver
MIC_ADC
: Waveform measuring point
: MIC1 Audio Signal
: MIC2 Audio Signal
: MIC DIGITAL Signal
NOTES NM is STBY
RS1/10SR***J
RS1/16SS***J
RS1/10SE****D
RN1/16SE****D
CKSRYB
CKSSYB
CKSYB
CFHXSQ
CCSRCH
CCSSCH
CFTLA
CEJQ
CEANP
CEAT
CEHAT
CEHAZL
V+15A_IN
V-15A_IN
GNDF
GND_PO
MIC1 ADC IN
MIC2 ADC IN
NJM4580MD
IC6204
AK5358AET
RAB4CQ103J
V+3R3D_IN
V+5A_IN
RB706F-40
2-40
2-41
2-43
2-44
2-45
2-46
2-47
2-48
A 1/11,3/11,5/11
A 1/11
RESET_IN2
1:11E;3:2G;5:2G
BCLK_IN_MI
1:11C
MCLK_IN_MI
1:11B
LRCLK_IN_MI
1:11D
ADAT_MIC_ANA
1:2F
MIDI_TXD
1:2F
From To BOARD IF Block

10.12 MIC1 and TRM1 to TRM4 ASSYS







B C D

NOTES NM is STBY

CH — CCSRCH

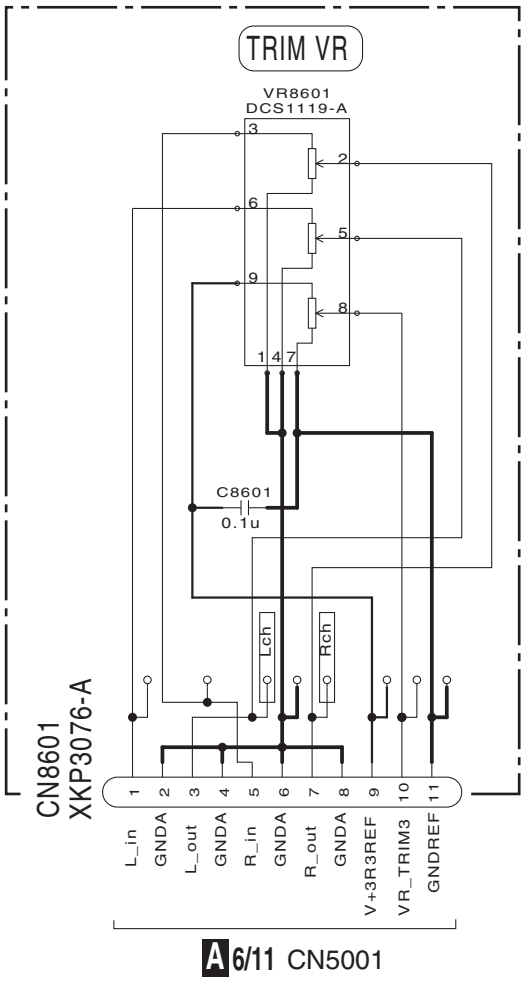
LA — CFTLA

RN — RN1/16SE****D

NOTES

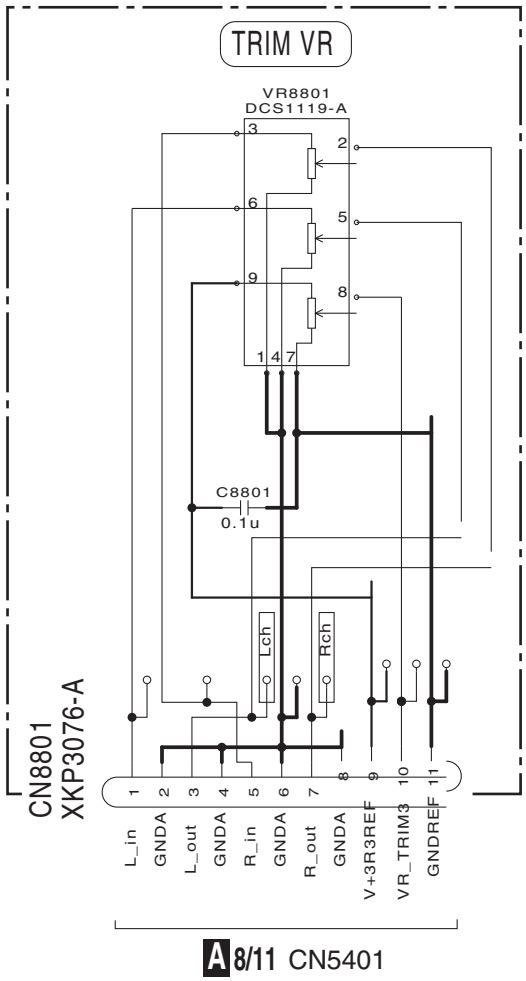
CKSRYB

E TRM3 ASSY (DWX3205)



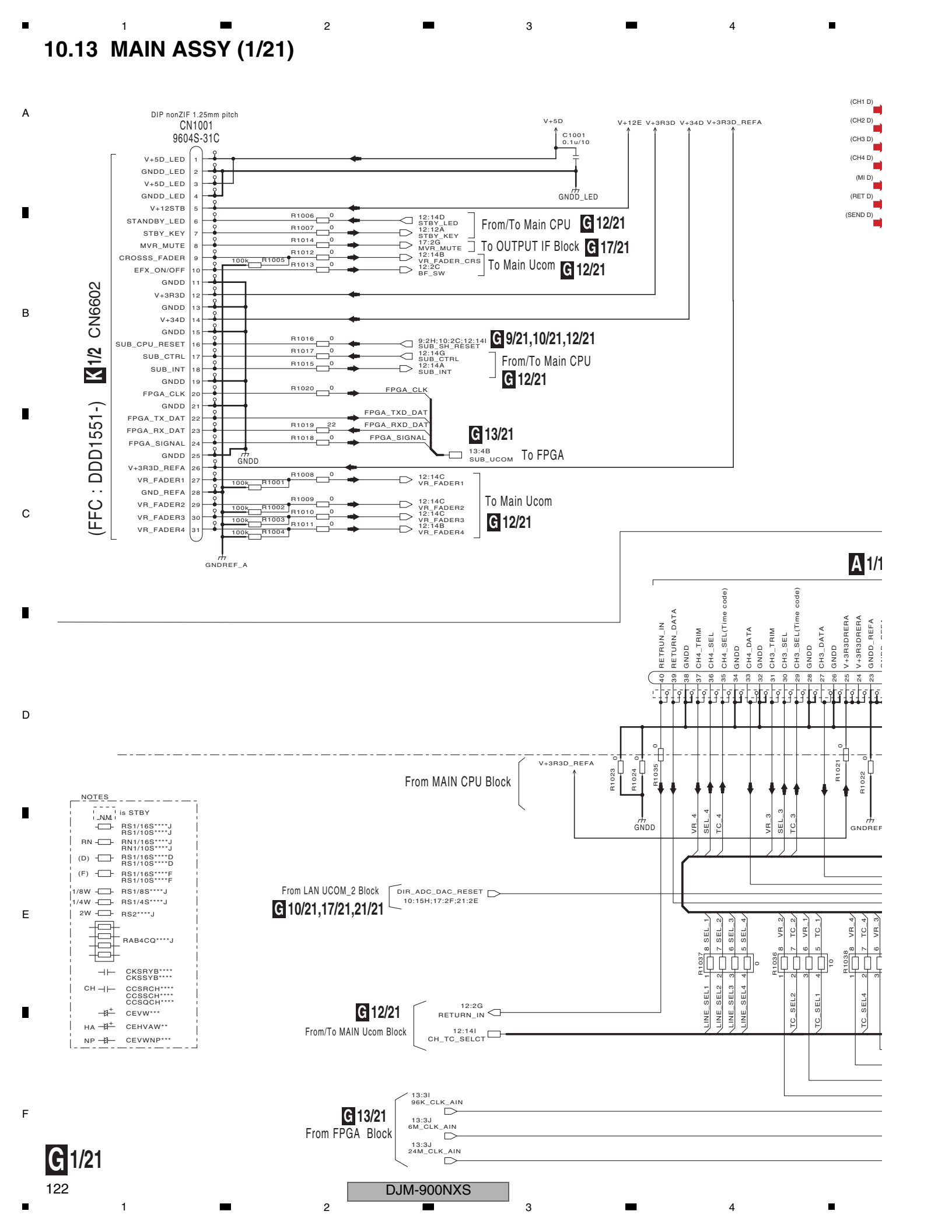
A 6/11 CN5001

F TRM4 ASSY (DWX3206)



A 8/11 CN5401

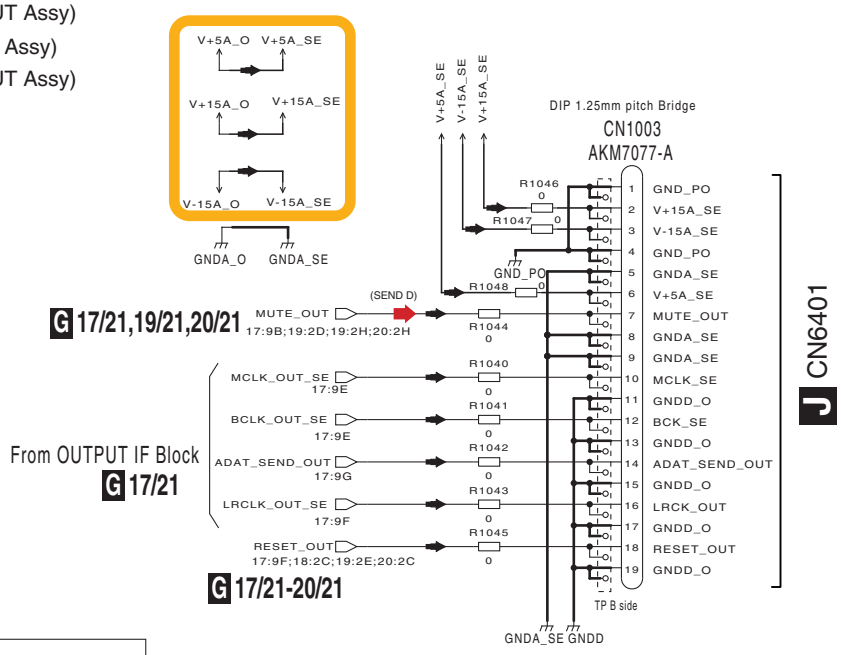
10.13 MAIN ASSY (1/21)

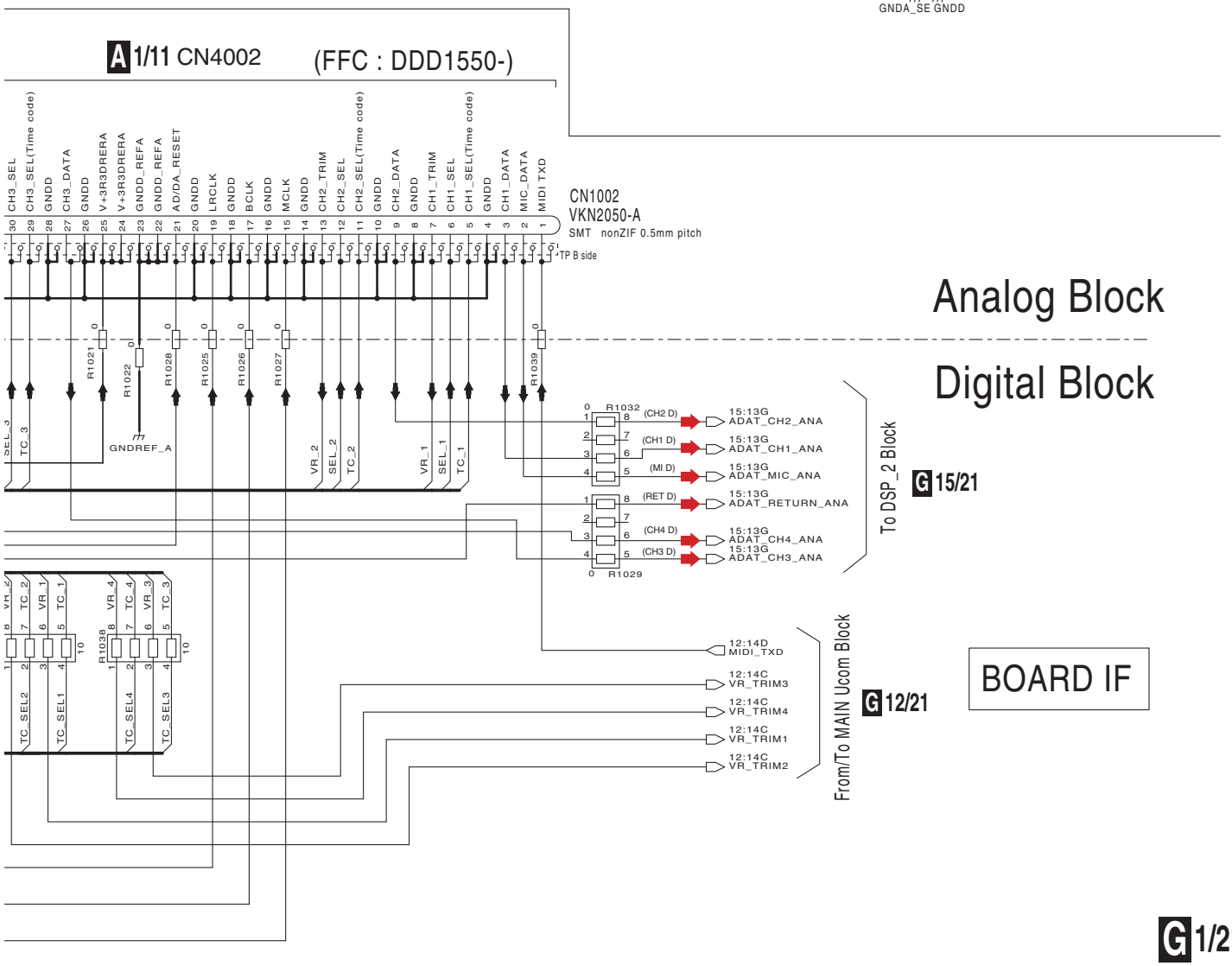


G 1/21

(CH1 D) : CH1 DIGITAL Signal (from INPUT Assy)
(CH2 D) : CH2 DIGITAL Signal (from INPUT Assy)
(CH3 D) : CH3 DIGITAL Signal (from INPUT Assy)
(CH4 D) : CH4 DIGITAL Signal (from INPUT Assy)
(MI D) : MI DIGITAL Signal (from INPUT Assy)
(RET D) : RET DIGITAL Signal (from INPUT Assy)
(SEND D) : SEND OUT DIGITAL Signal

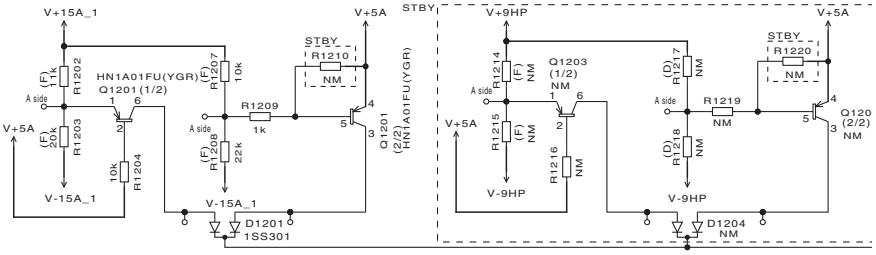
G 1/21 MAIN ASSY (DWX3190)



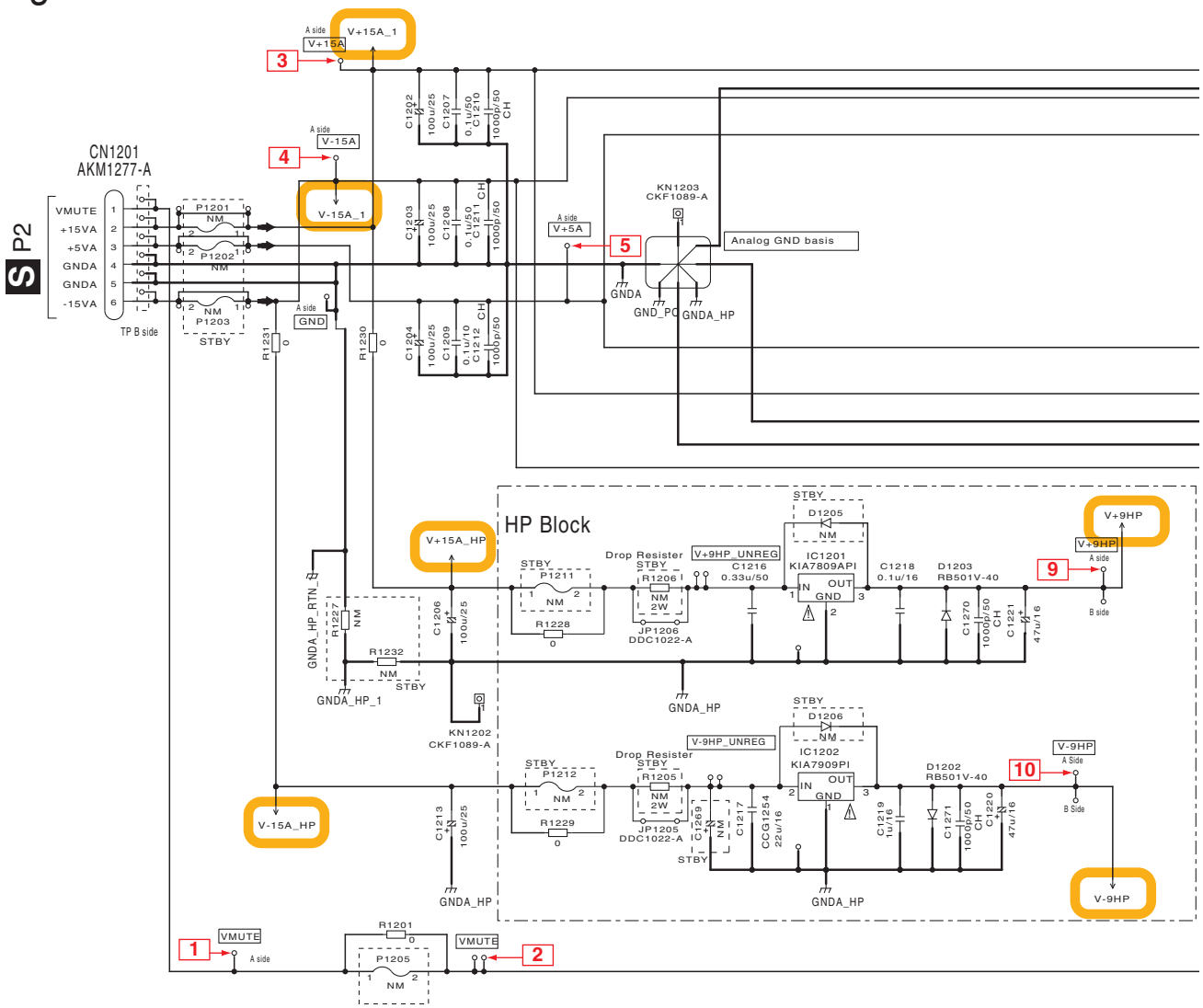


10.14 MAIN ASSY (2/21)

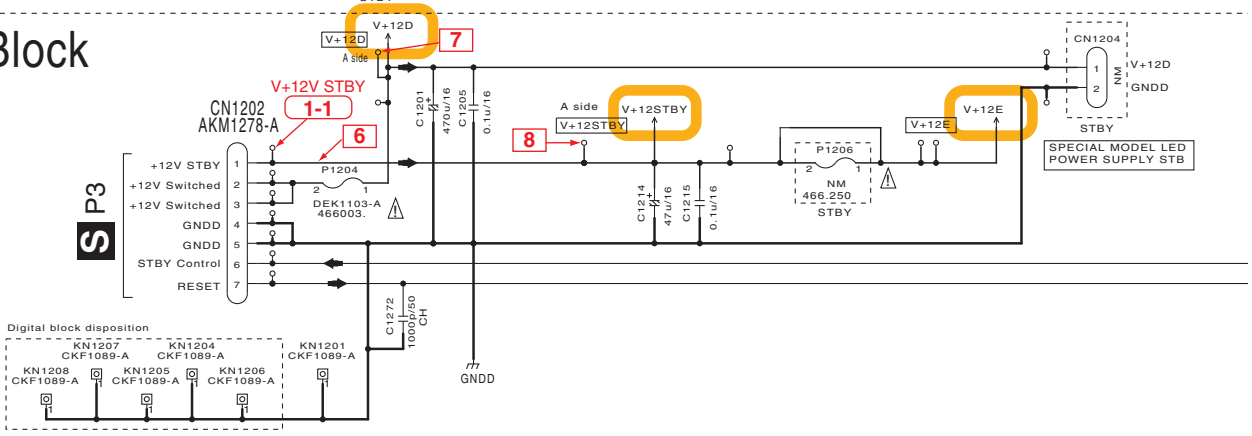
Analog voltage abnormality detect circuit



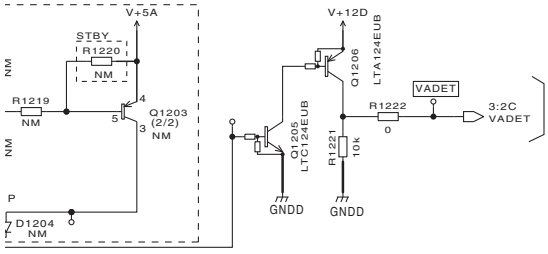
Analog Block



Digital Block

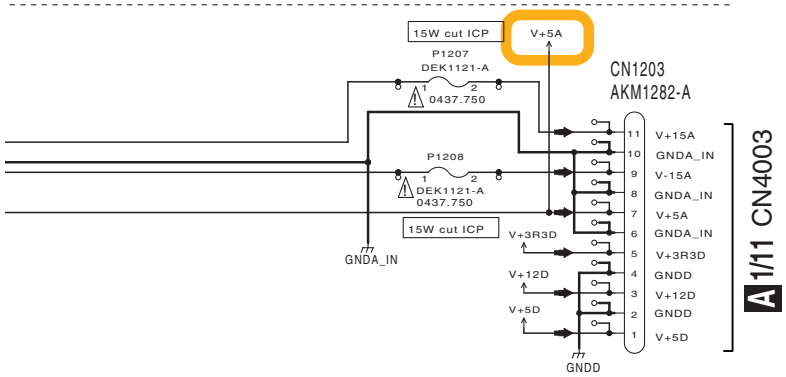


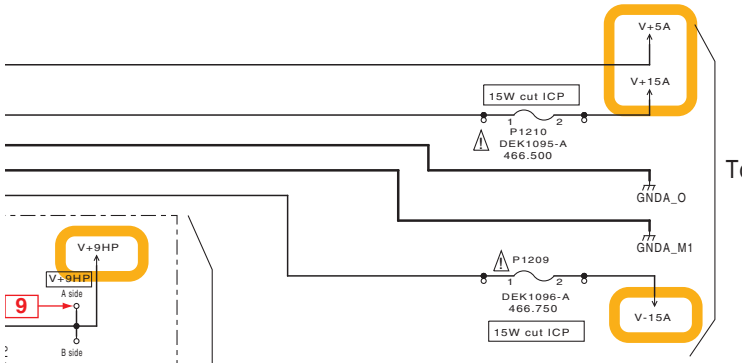
G2/21 MAIN ASSY (DWX3190)



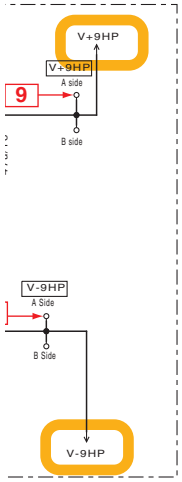
G3/21
To Power Block

	Low value	Hi value
V+5A	4.28V	5.61V
V+9HP	8.23V	9.94V
V-9HP	-5.96V	-11.82V
V+15A	13.38V	16.74V
V-15A	-11.83V	-18.57V





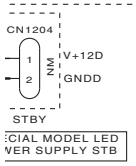
To OUTPUT IF Block



To HP AMP Block

V+18VMUTE

To OUTPUT IF Block



CIAL MODEL LED
VER SUPPLY STB

G12/21
12:2E
P-CON
3:2F;12:2H
PowerReset

From To Main Ucom

G3/21,12/21

CAUTION
FOR CONTINUED PROTECTION
AGAINST RISK OF FIRE.
REPLACE ONLY SAME TYPE NO,

466.250 (DEK1093-A-T 250mA)
MFD. BY LITTELFUSE INC . FOR P1206

0437.750 (DEK1121-A-T 750mA)
MFD. BY LITTELFUSE INC . FOR P1207,P1208

466.750 (DEK1096-A-T 750mA)
MFD. BY LITTELFUSE INC . FOR P1209

466.500 (DEK1095-A-T 500mA)
MFD. BY LITTELFUSE INC . FOR P1210

466003. (DEK1103-A-T 3A)
MFD. BY LITTELFUSE INC . FOR P1204

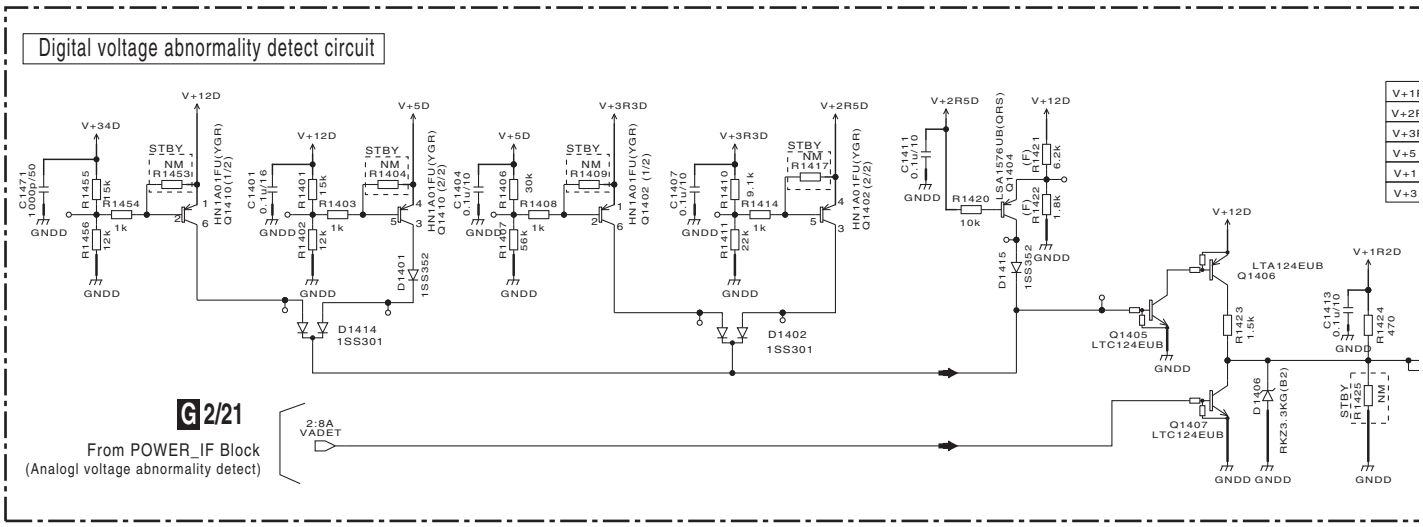
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

⚠ 印の部品は、安全上重要な部品です。
交換するときは、安全および性能維持のため
必ず指定の部品をご使用ください。

: Voltage measuring point
: Waveform measuring point

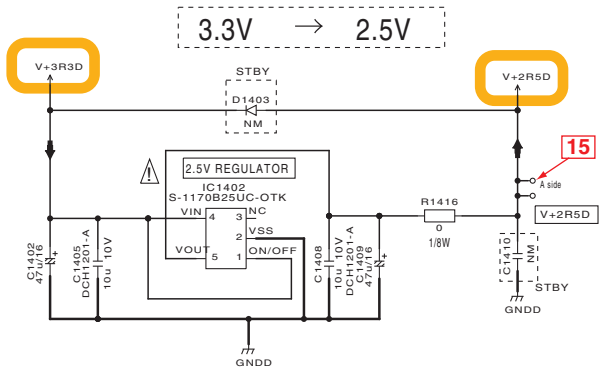
NOTES
is STBY
NM
RS1/16S****J
RS1/10S****J
RN RN1/16S****J
RN1/10S****J
(D) RS1/16S****D
RS1/10S****D
(F) RS1/16S****F
RS1/10S****F
1/8W RS1/8S****J
1/4W RS1/4S****J
2W RS2****J
RAB4CQ****J
CKSRYB****
CKSSYB****
CH CCSRCH****
CCSSCH****
CCSQCH****
CEVW***
HA CEHVAW**
NP CEVWNP***

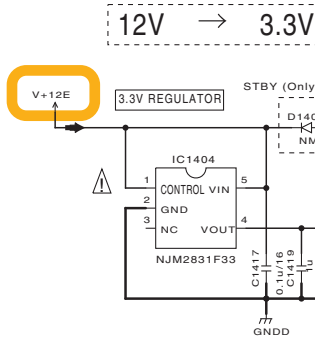
10.15 MAIN ASSY (3/21)



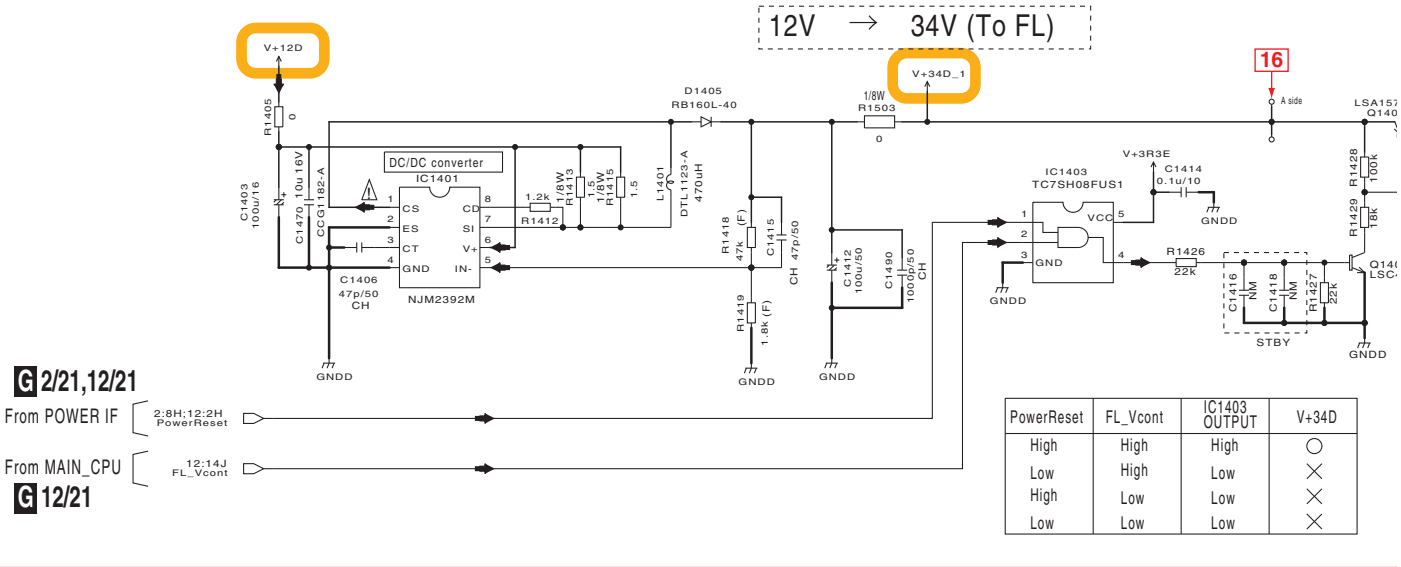
NOTES

NM	is STBY
	RS1/16S****J RS1/10S****J
RN	RN1/16S****J RN1/10S****J
(D)	RS1/16S****D RS1/10S****D
(F)	RS1/16S****F RS1/10S****F
1/8W	RS1/8S****J
1/4W	RS1/4S****J
2W	RS2****J
	RAB4CQ****J
	CKSRYB**** CKSSYB****
CH	CCSRCH**** CCSSCH**** CCSQCH****
	CEVW***
HA	CEHVAW**
NP	CEVWNP***





1-4 V+34D Block



PowerReset	FL_Vcont	IC1403 OUTPUT	V+34D
High	High	High	○
Low	High	Low	×
High	Low	Low	×
Low	Low	Low	×

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

⚠ 印の部品は、安全上重要な部品です。
交換するときは、安全および性能維持のため
必ず指定の部品をご使用ください。

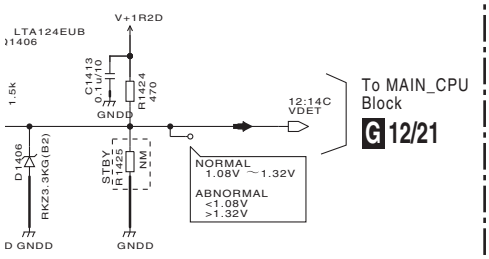
: □
: ▢

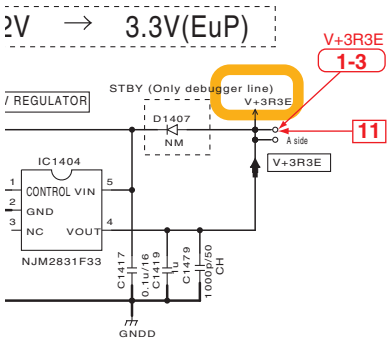
G 3/21

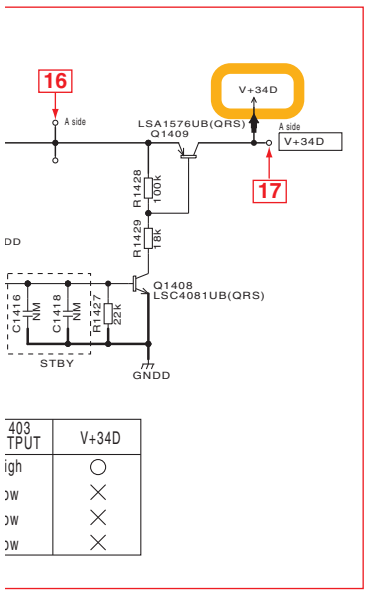
G 3/21 MAIN ASSY (DWX3190)

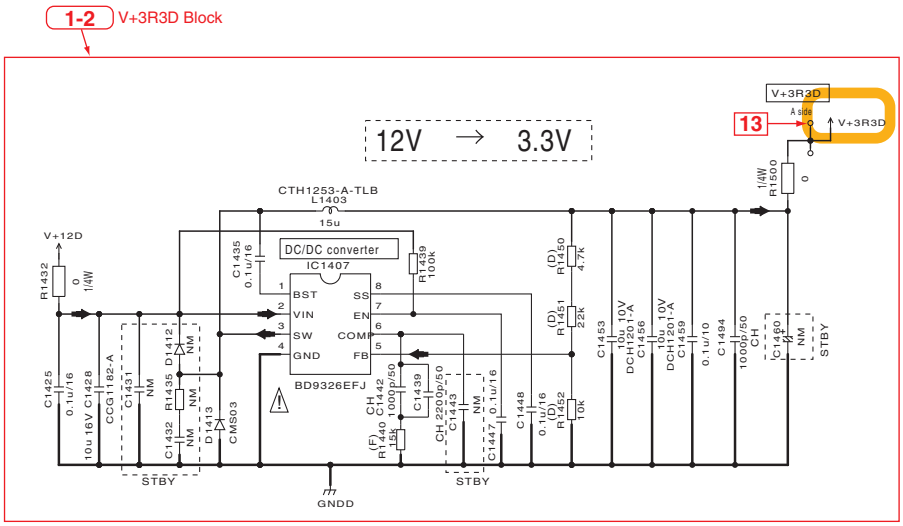
DIGITAL POWER SUPLLY CIRCUIT

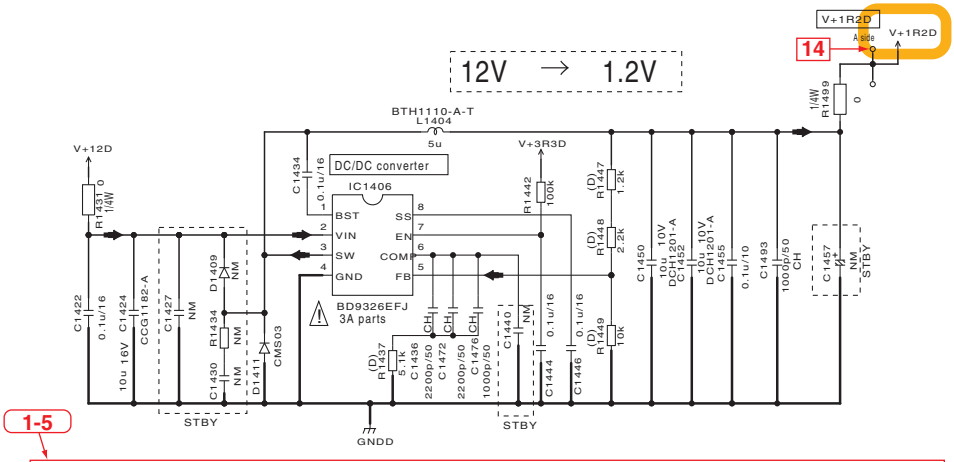
	Low value	Hi value
V+1R2D	1.08V	1.32V
V+2R5	2.22V	2.81V
V+3R3D	2.85V	3.81V
V+5D	4.33V	5.82V
V+12D	10.4V	13.24V
V+34D	25.58V	

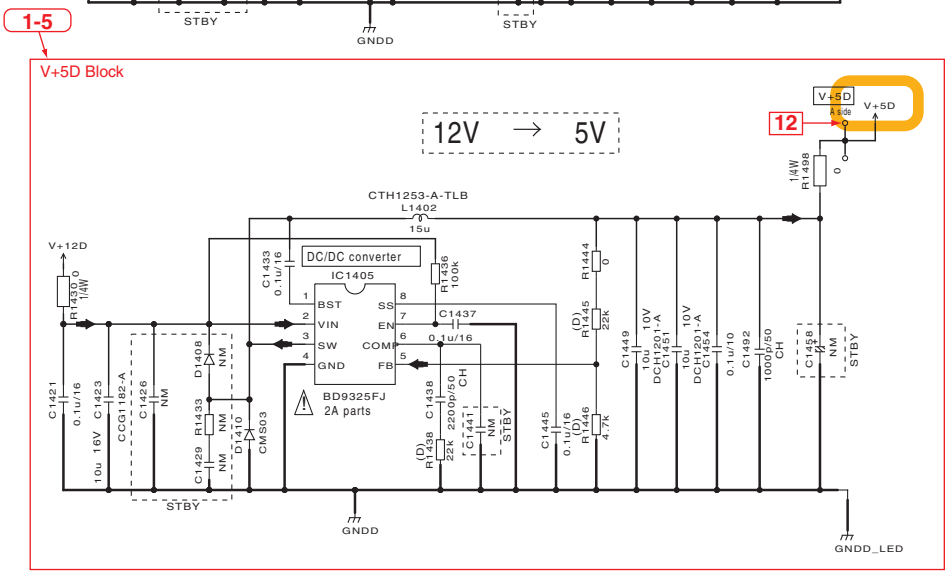






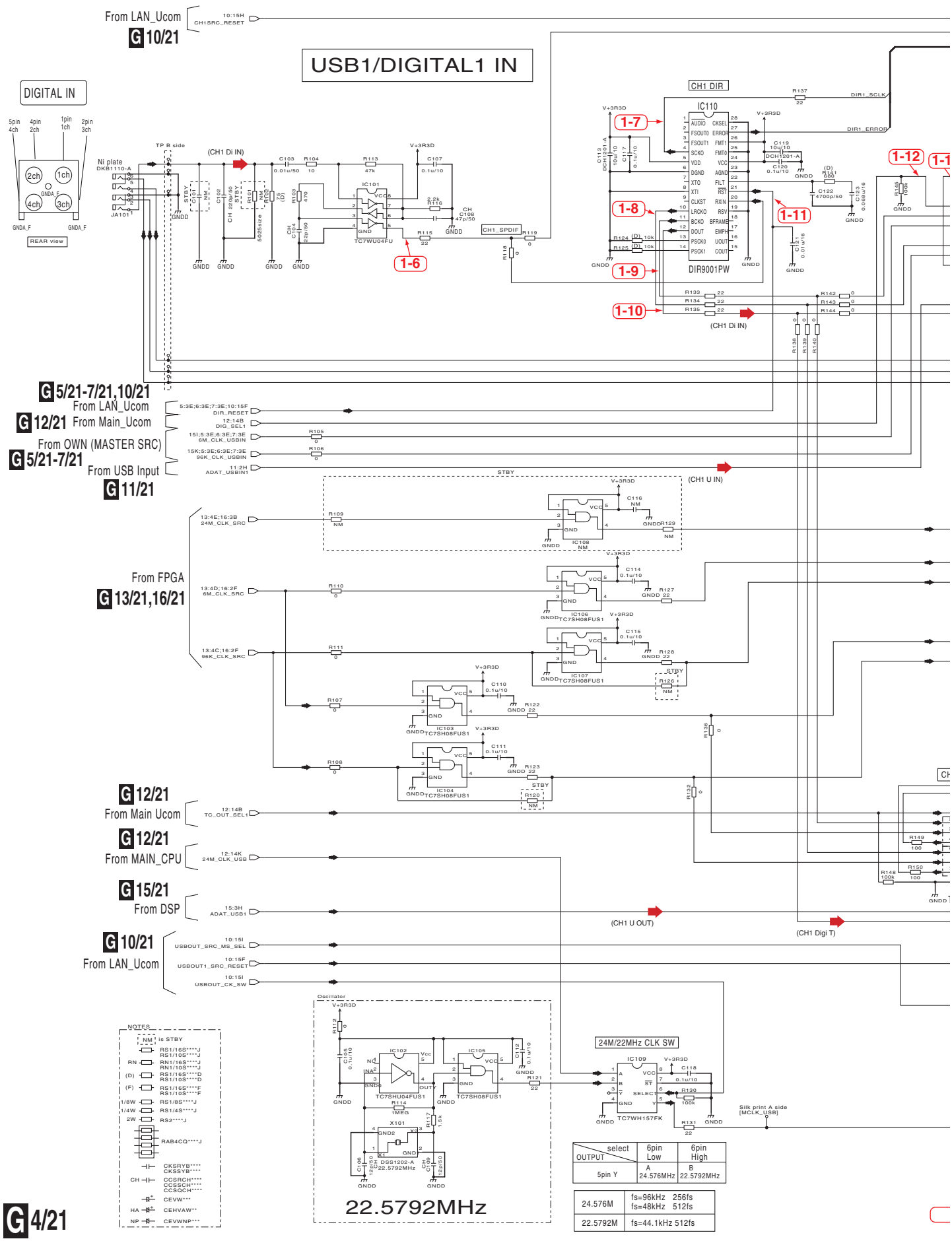






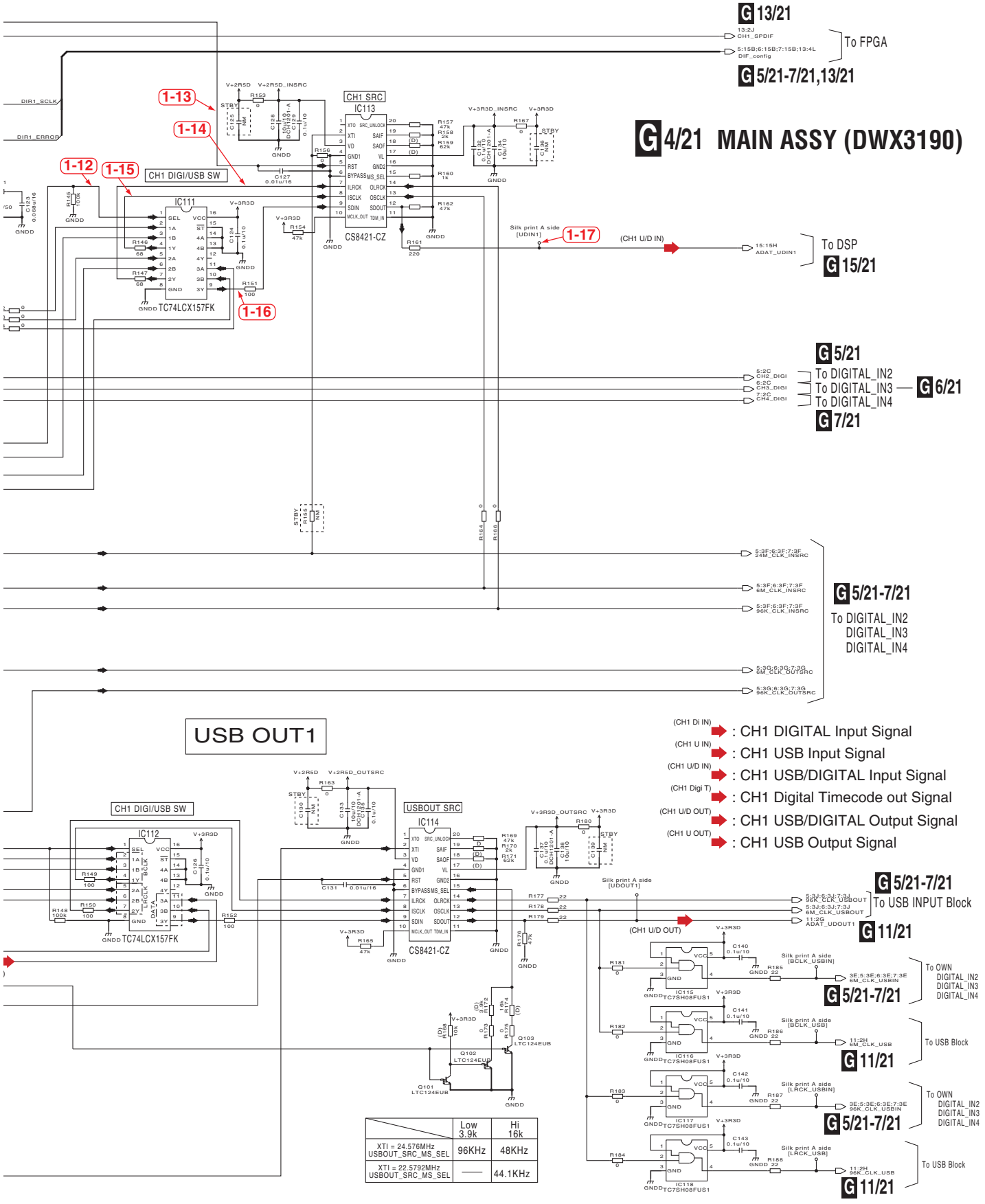
▭ : Voltage measuring point
▭ : Waveform measuring point

10.16 MAIN ASSY (4/21)

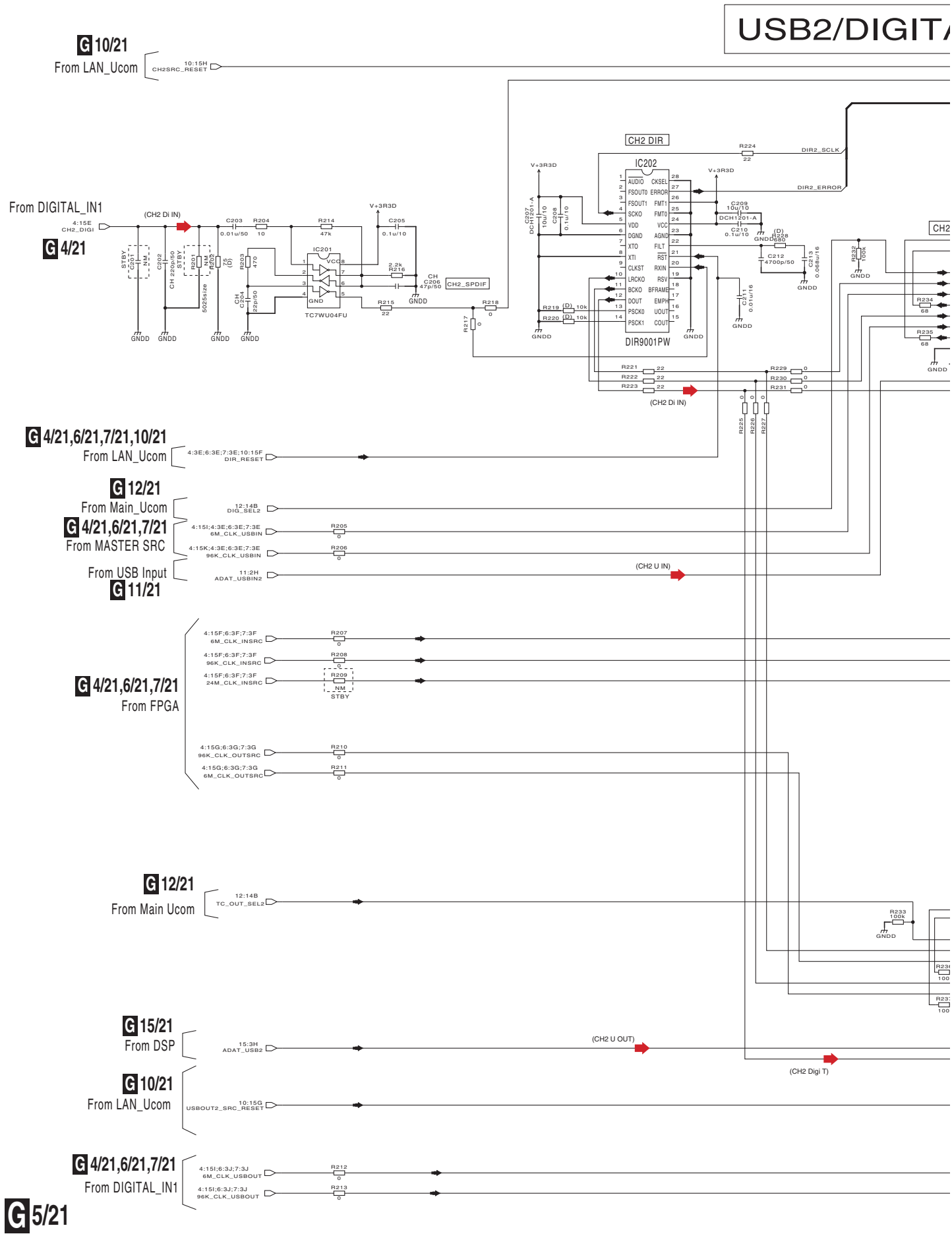


OUTPUT \ select	6pin Low	6pin High
5pin Y	A 24.576MHz	B 22.5792MHz

24.576M	fs=96kHz 256fs fs=48kHz 512fs
22.5792M	fs=44.1kHz 512fs


G 13/21
13:2J CH1_SPDIF
5:15B;6:15B;7:15B;13:4L DIF_config
To FPGA
G 5/21-7/21,13/21
G 4/21 MAIN ASSY (DWX3190)
DIR1_SCLK
DIR1_ERROR
1-13
1-14
1-12
1-15
CH1 DIGI/USB SW
IC111
TC74LCX157FK
CH1 SRC
IC113
CS8421-CZ
Silk print A side [UDIN1]
1-17
(CH1 U/D IN)
15:15H ADAT_UDIN1
To DSP
G 15/21
1-16
G 5/21
6:2C CH2_DIGI
6:2C CH3_DIGI
7:2C CH4_DIGI
To DIGITAL_IN2
To DIGITAL_IN3
To DIGITAL_IN4
G 6/21
G 7/21
5:3F;6:3F;7:3F 24M_CLK_INSRC
5:3F;6:3F;7:3F 6M_CLK_INSRC
5:3F;6:3F;7:3F 96K_CLK_INSRC
5:3G;6:3G;7:3G 6M_CLK_OUTSRC
5:3G;6:3G;7:3G 96K_CLK_OUTSRC
G 5/21-7/21
To DIGITAL_IN2
DIGITAL_IN3
DIGITAL_IN4
USB OUT1
(CH1 Di IN) : CH1 DIGITAL Input Signal
(CH1 U IN) : CH1 USB Input Signal
(CH1 U/D IN) : CH1 USB/DIGITAL Input Signal
(CH1 Digi T) : CH1 Digital Timecode out Signal
(CH1 U/D OUT) : CH1 USB/DIGITAL Output Signal
(CH1 U OUT) : CH1 USB Output Signal
CH1 DIGI/USB SW
IC112
TC74LCX157FK
USBOUT SRC
IC114
CS8421-CZ
Silk print A side [UDOUT1]
(CH1 U/D OUT)
5:3J;6:3J;7:3J 96K_CLK_USBOUT
5:3J;6:3J;7:3J 6M_CLK_USBOUT
11:2G ADAT_UDOUT1
G 5/21-7/21
To USB INPUT Block
G 11/21
IC115 TC7SH08FUS1
IC116 TC7SH08FUS1
IC117 TC7SH08FUS1
IC118 TC7SH08FUS1
Silk print A side [BCLK_USBIN]
Silk print A side [BCLK_USB]
Silk print A side [LRCK_USBIN]
Silk print A side [LRCK_USB]
3E;5:3E;6:3E;7:3E 6M_CLK_USBIN
11:2H 6M_CLK_USB
3E;5:3E;6:3E;7:3E 96K_CLK_USBIN
11:2H 96K_CLK_USB
To OWN DIGITAL_IN2 DIGITAL_IN3 DIGITAL_IN4
To USB Block
G 5/21-7/21
G 11/21
Q101 LTC124EUB
Q102 LTC124EUB
Q103 LTC124EUB
Low 3.9k
Hi 16k
XTI = 24.576MHz USBOUT_SRC_MS_SEL
96KHz
48KHz
XTI = 22.5792MHz USBOUT_SRC_MS_SEL
44.1KHz
DIGITAL IN_1
: Waveform measuring point
G 4/21

10.17 MAIN ASSY (5/21)



/DIGITAL2 IN

G 13/21

13:2K CH2_SPDIF

4:15B;6:15B;7:15B;13:4L DIF_config

To FPGA

G 4/21,6/21,7/21,13/21

CH2 SRC

IC205

CH2 DIGI/USB SW

IC203

TC74LCX157FK

CS8421-CZ

Silk print A side [UDIN2]

(CH2 U/D IN)

15:15H ADAT_UDIN2

G 15/21

To DSP

(CH2 Di IN) : CH2 DIGITAL Input Signal

(CH2 U IN) : CH2 USB Input Signal

(CH2 U/D IN) : CH2 USB/DIGITAL Input Signal

(CH2 Digi T) : CH2 Digital Timecode out Signal

(CH2 U/D OUT) : CH2 USB/DIGITAL Output Signal

(CH2 U OUT) : CH2 USB Output Signal

NOTES

USB OUT2

CH2 DIGI/USB SW

IC204

TC74LCX157FK

USBOUT SRC

IC206

CS8421-CZ

Silk print A side [UDOUT2]

(CH2 U/D OUT)

11:2H ADAT_UDOUT2

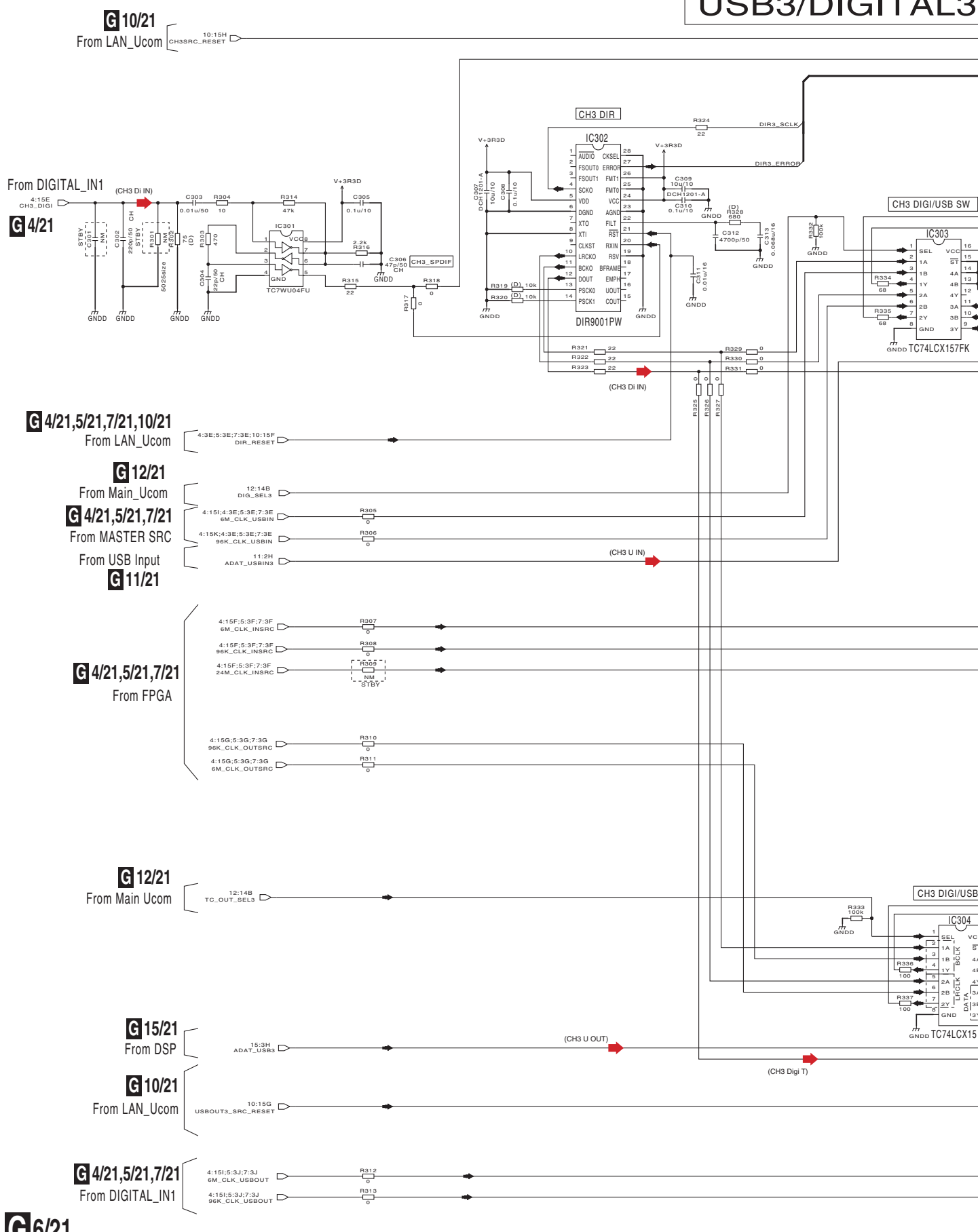
G 11/21

To USB INPUT

G 5/21

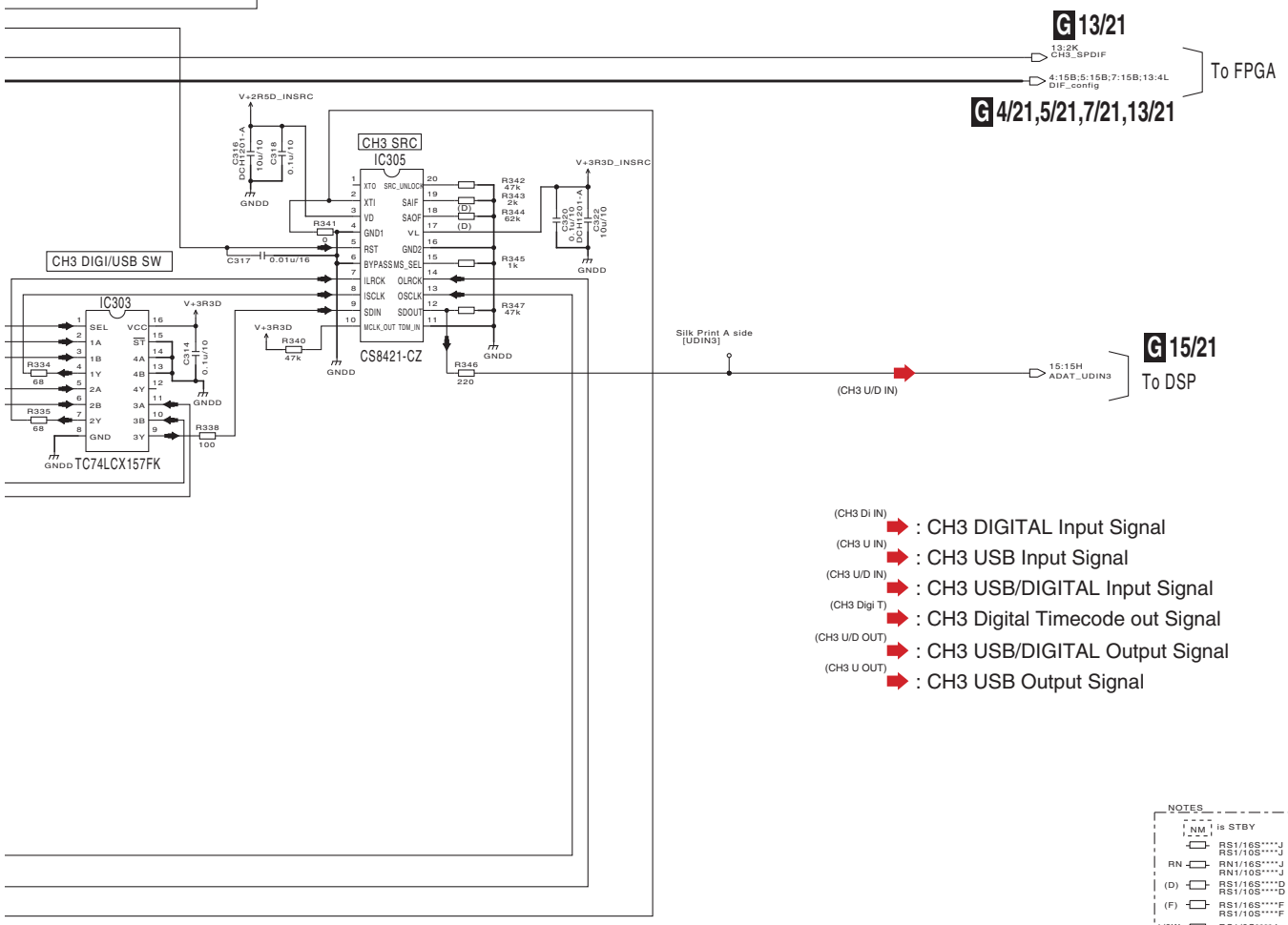
10.18 MAIN ASSY (6/21)

USB3/DIGITAL3

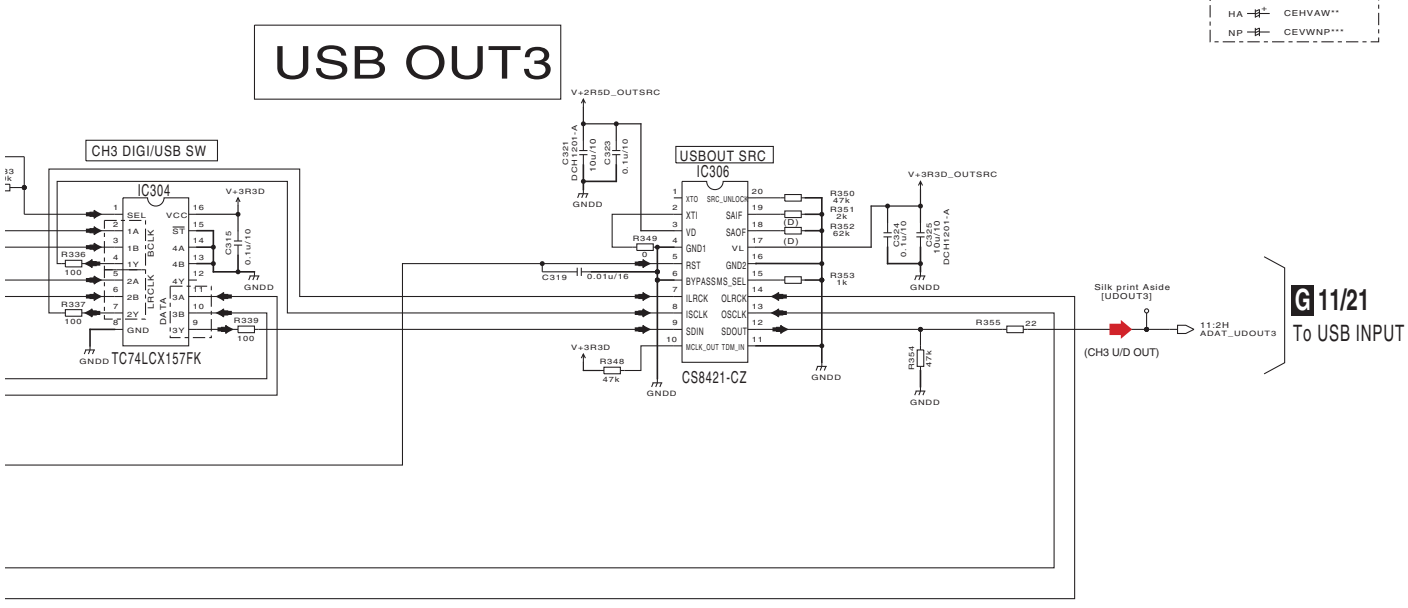


GITAL3 IN

G6/21 MAIN ASSY (DWX3190)

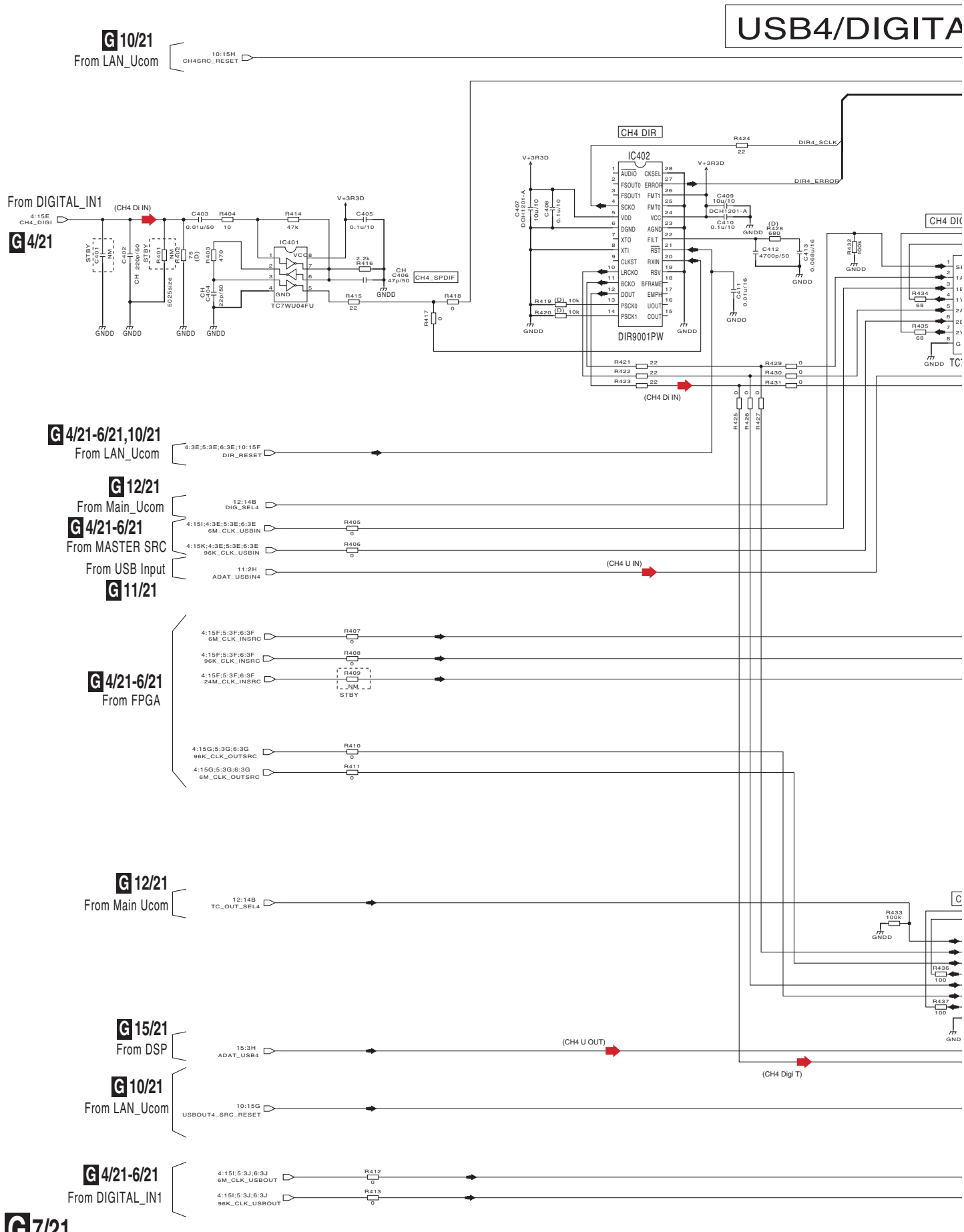


USB OUT3



G6/21

10.19 MAIN ASSY (7/21)



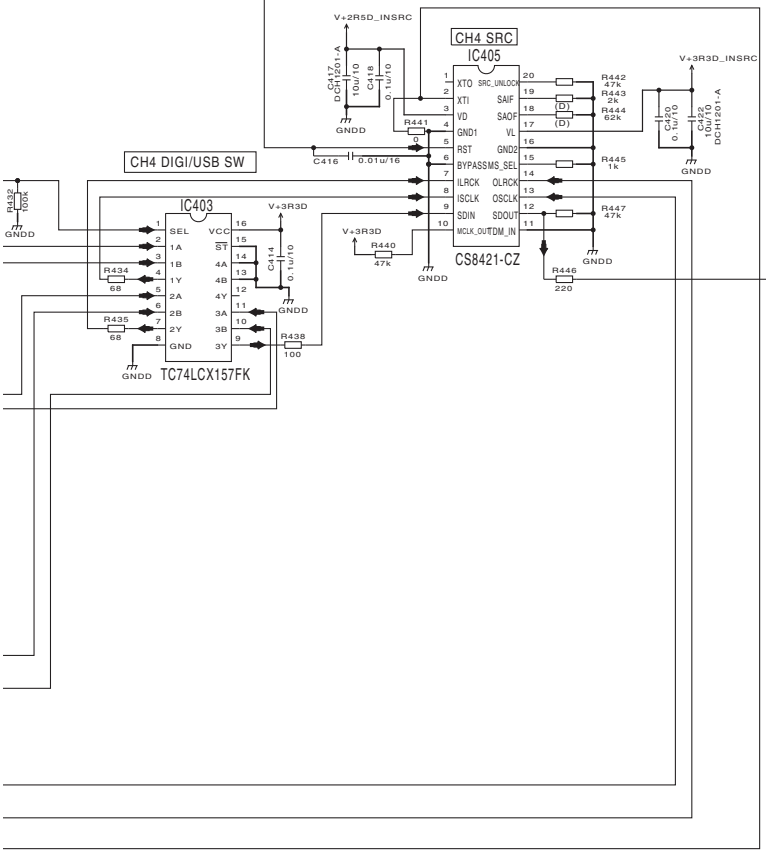
DIGITAL4 IN

G13/21

13:2L CH4_SPDIF
4:15B;5:15B;6:15B;13:4L DIF_config

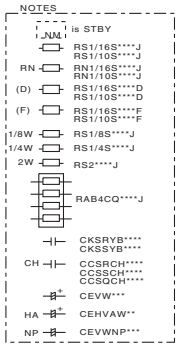
To FPGA

G4/21-6/21,13/21

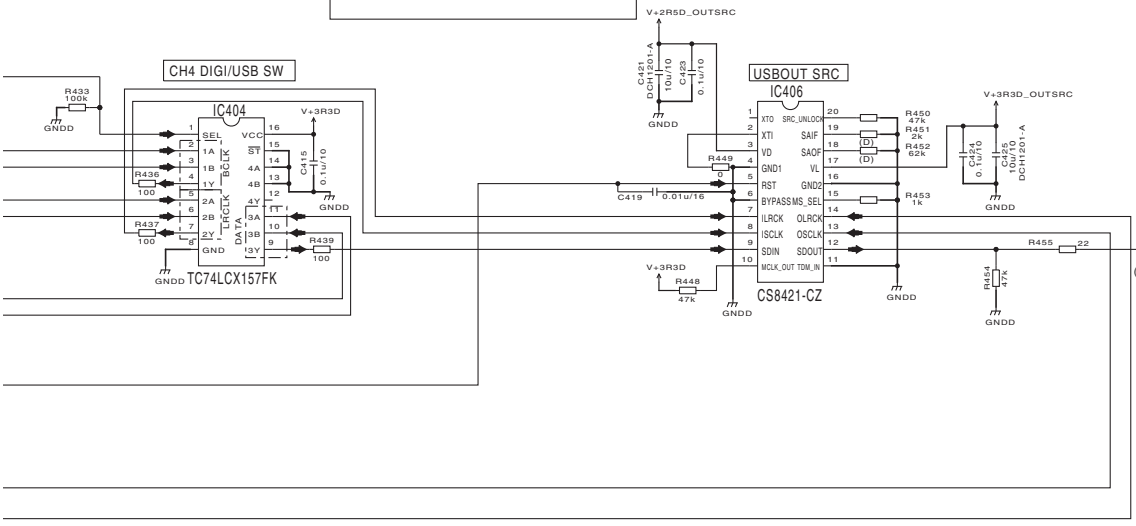


G15/21
To DSP

(CH4 Di IN) : CH4 DIGITAL Input Signal
(CH4 U IN) : CH4 USB Input Signal
(CH4 U/D IN) : CH4 USB/DIGITAL Input Signal
(CH4 Digi T) : CH4 Digital Timecode out Signal
(CH4 U/D OUT) : CH4 USB/DIGITAL Output Signal
(CH4 U OUT) : CH4 USB Output Signal



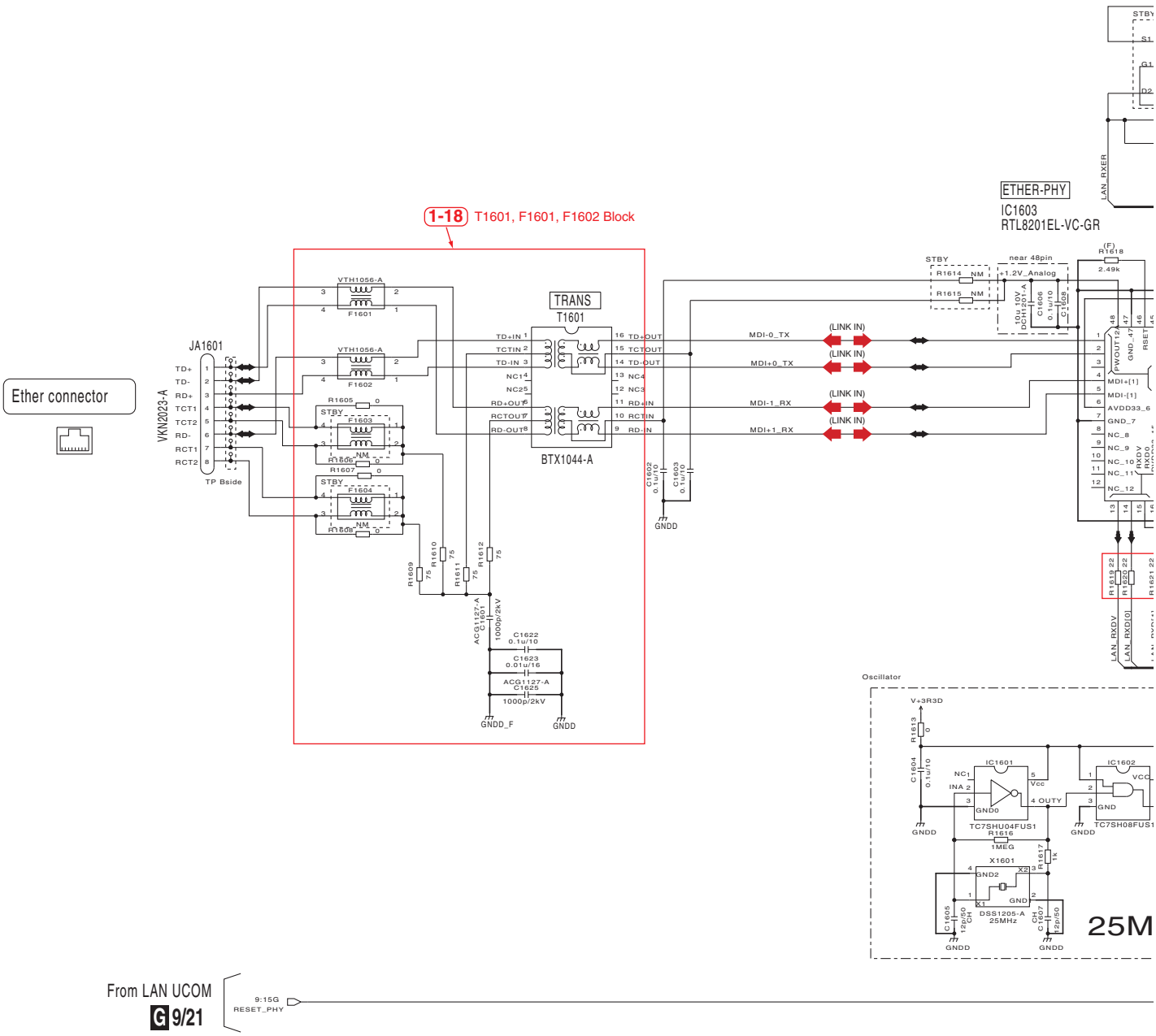
USB OUT4



G11/21
To USB INPUT

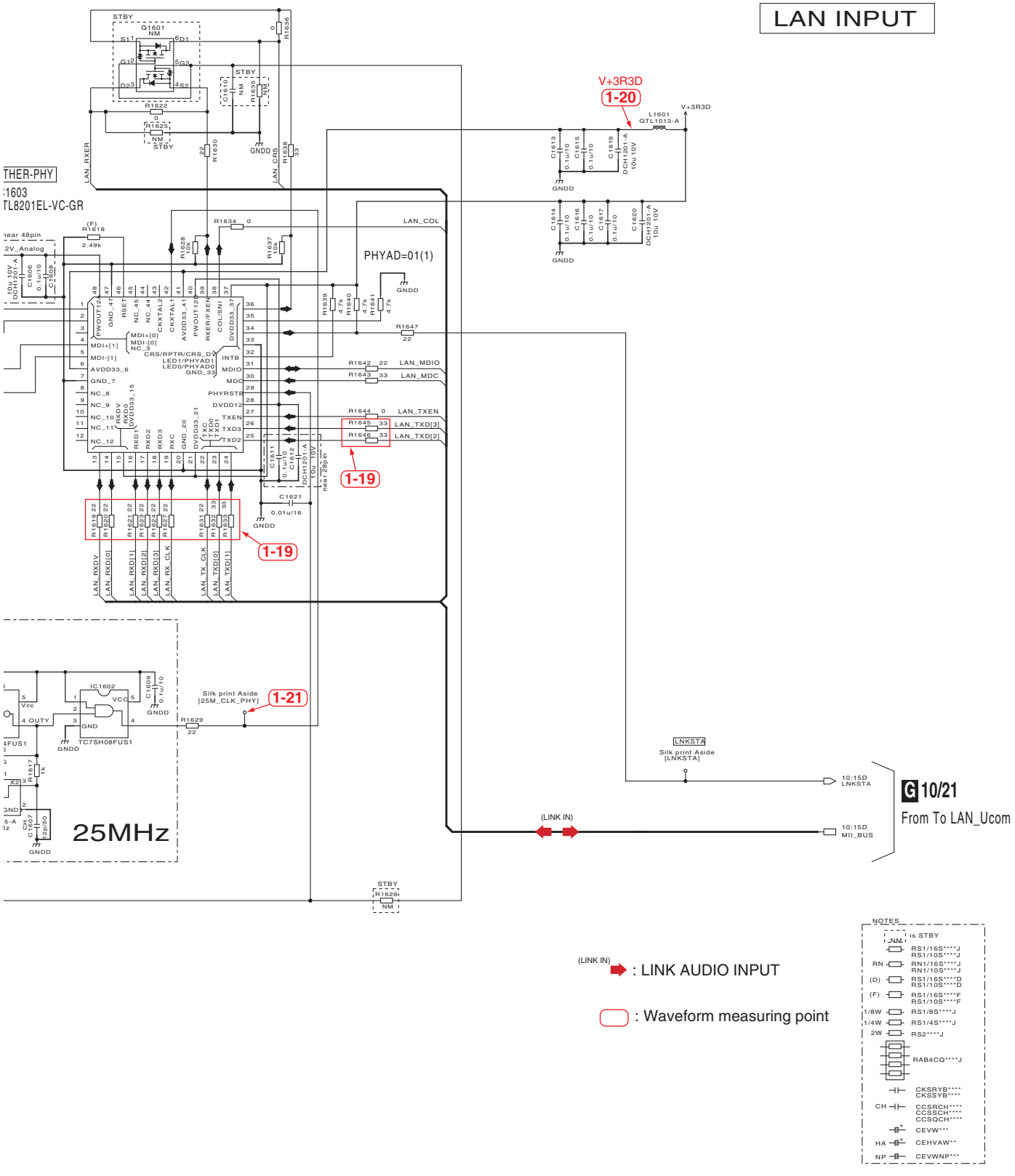
G7/21

10.20 MAIN ASSY (8/21)

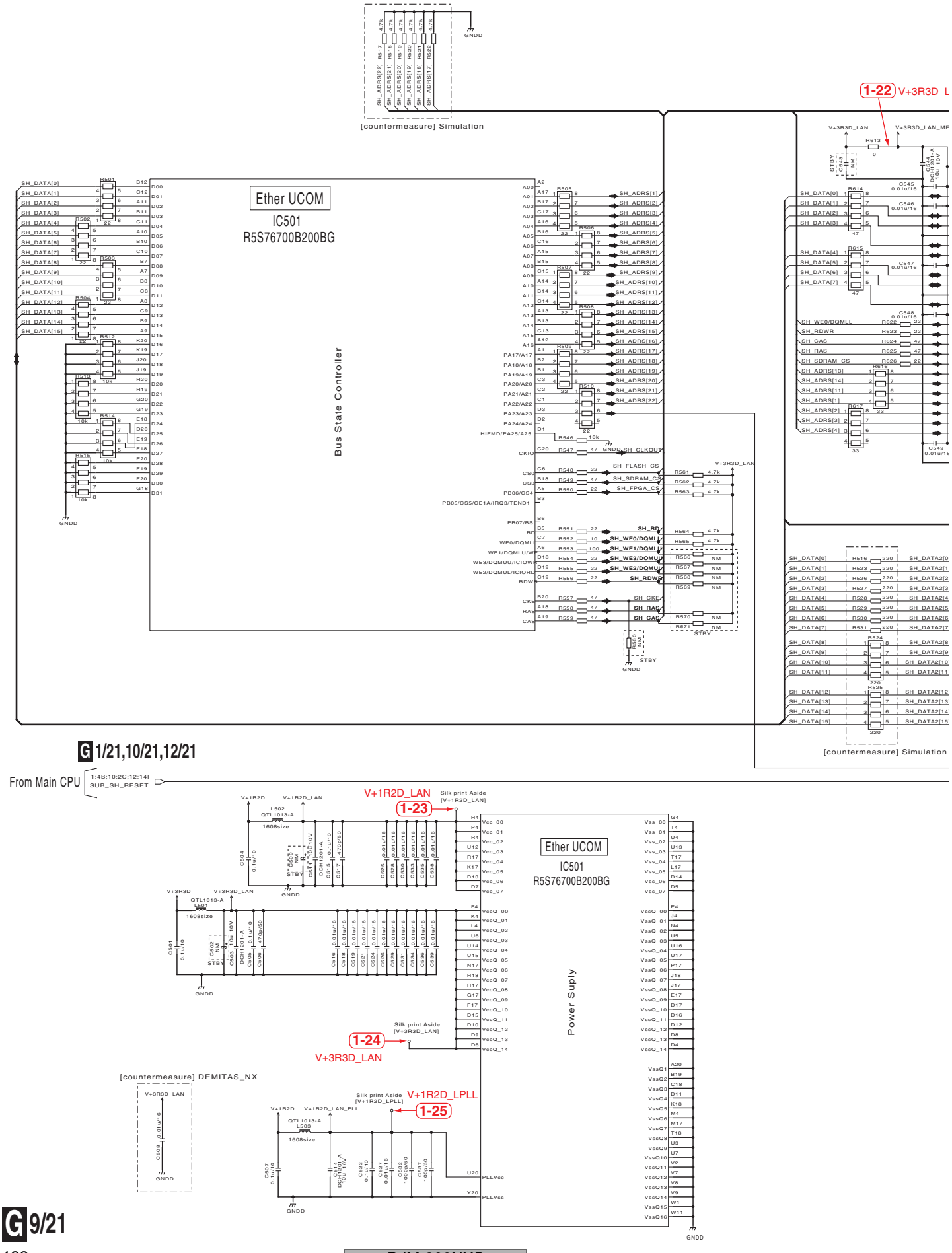


G 8/21 MAIN ASSY (DWX3190)

LAN INPUT

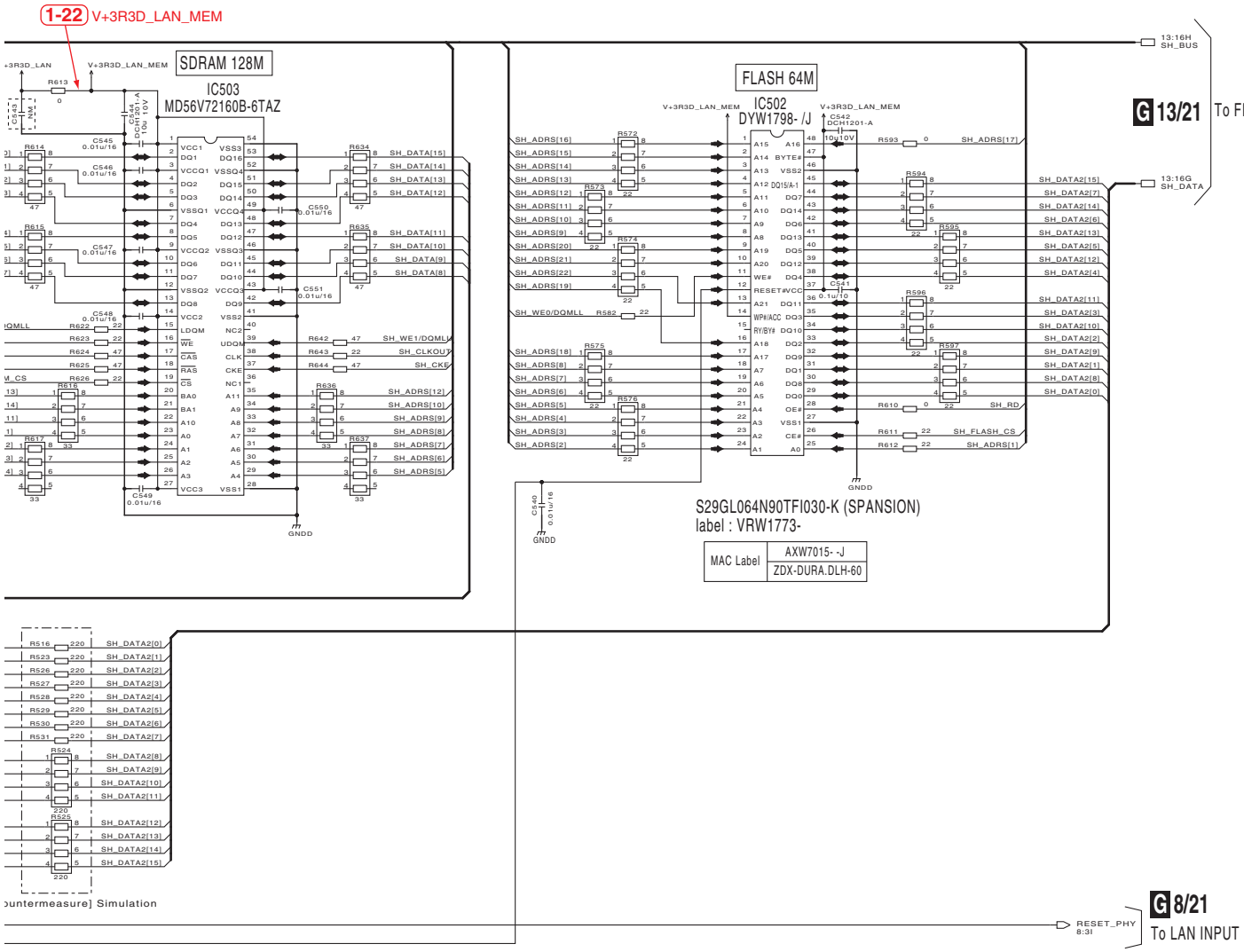


10.21 MAIN ASSY (9/21)

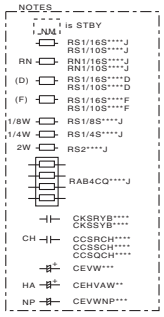


G 9/21 MAIN ASSY (DWX3190)

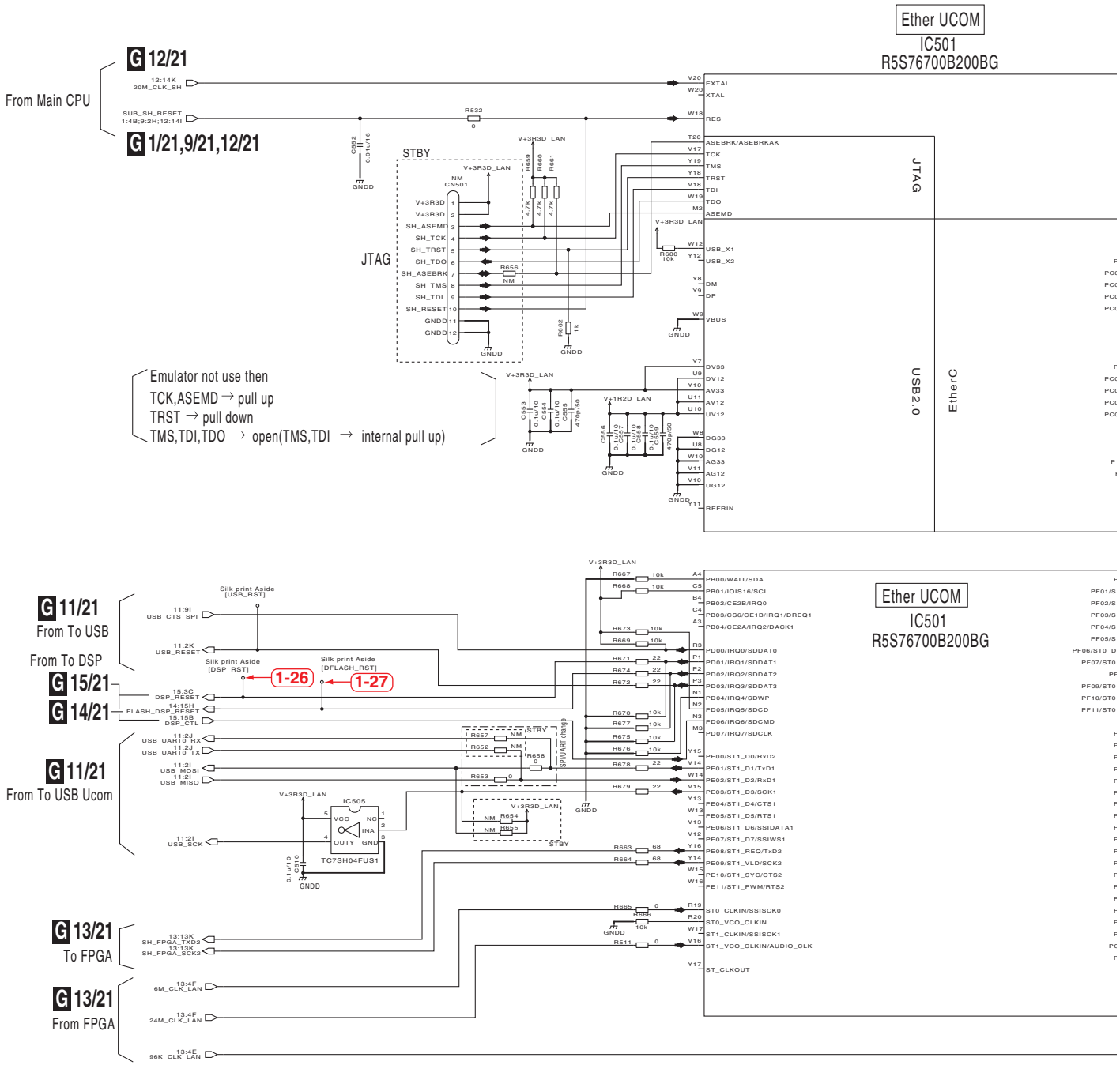
LAN UCOM1



: Waveform measuring point

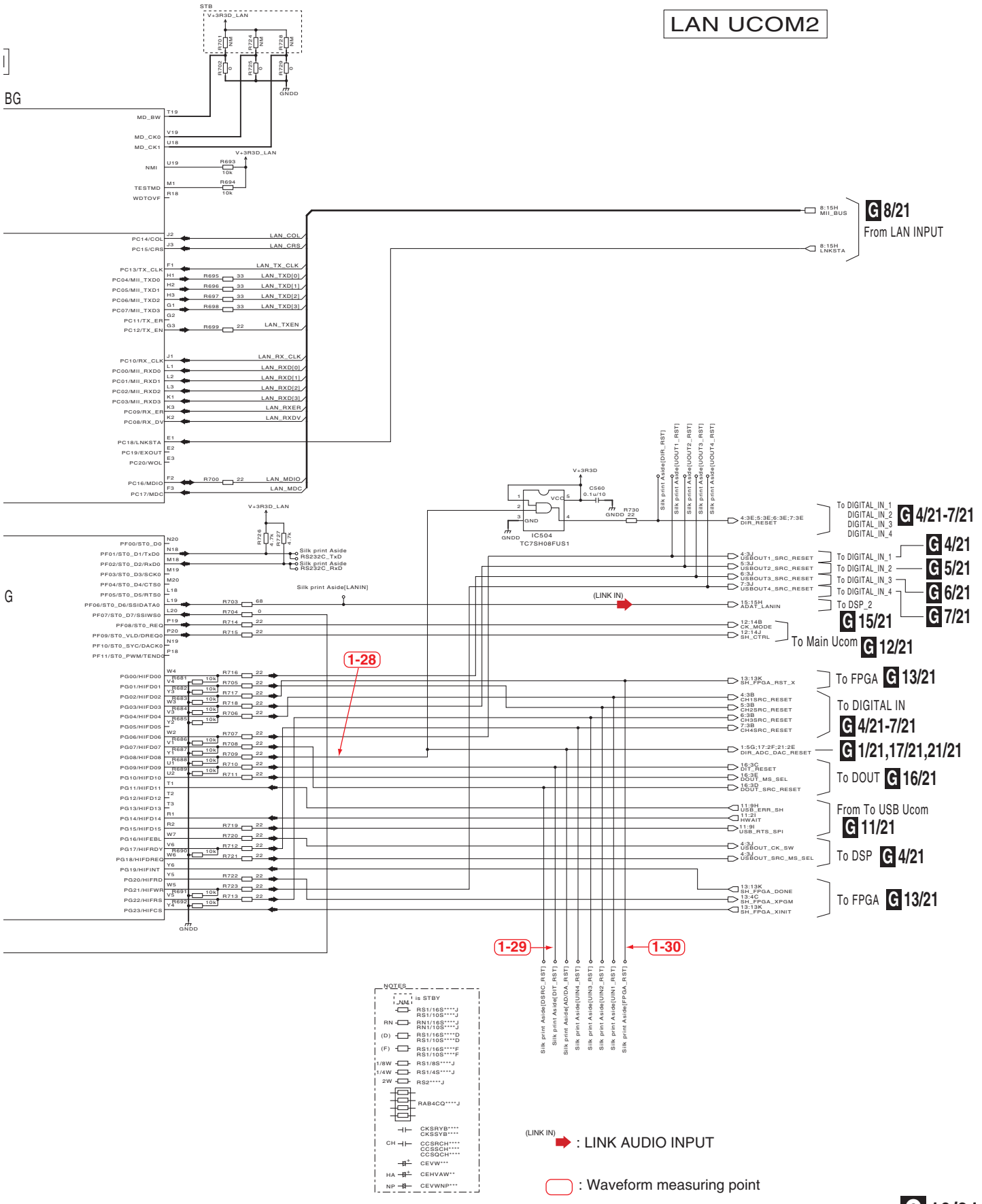


10.22 MAIN ASSY (10/21)



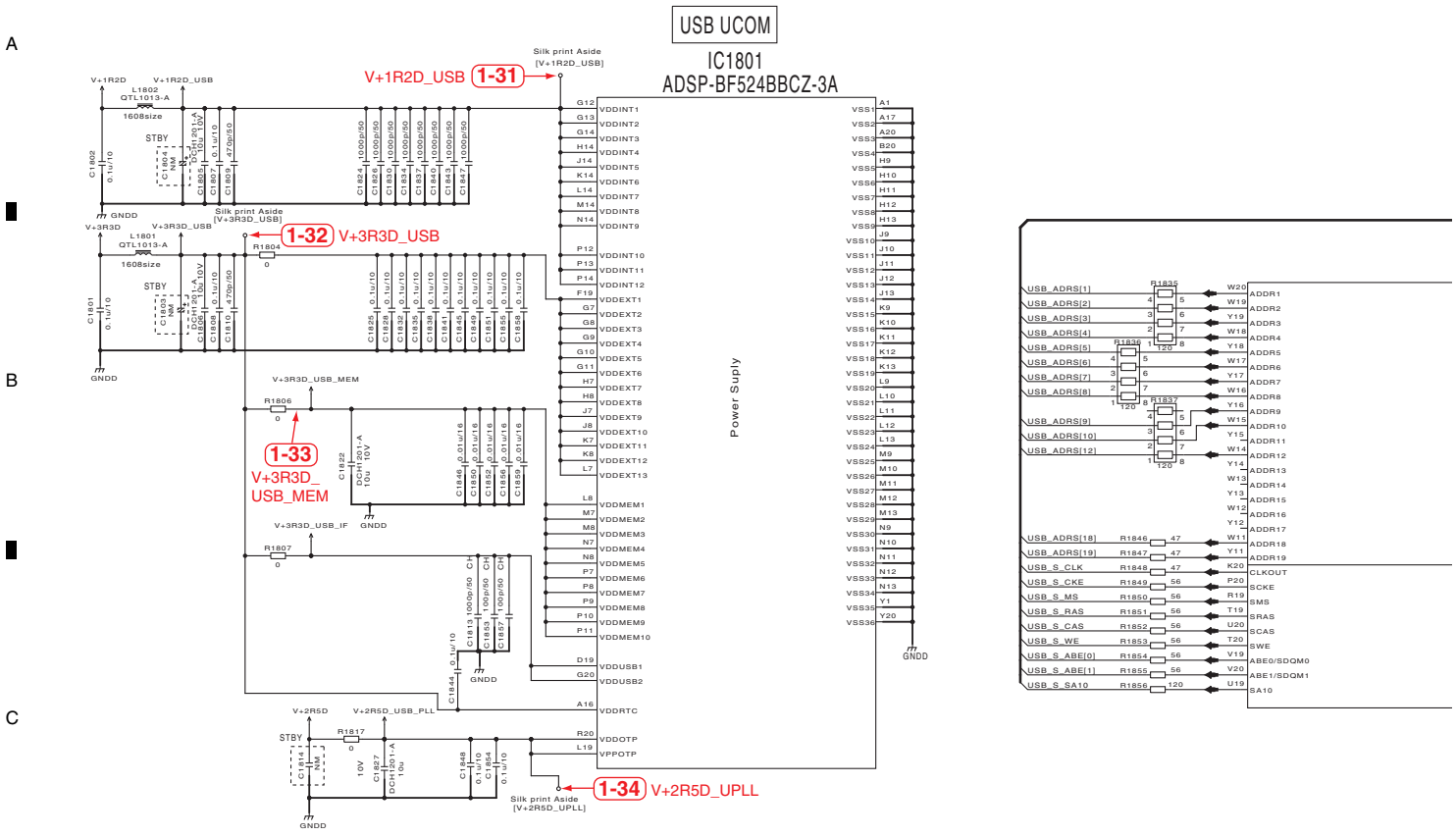
G 10/21 MAIN ASSY (DWX3190)

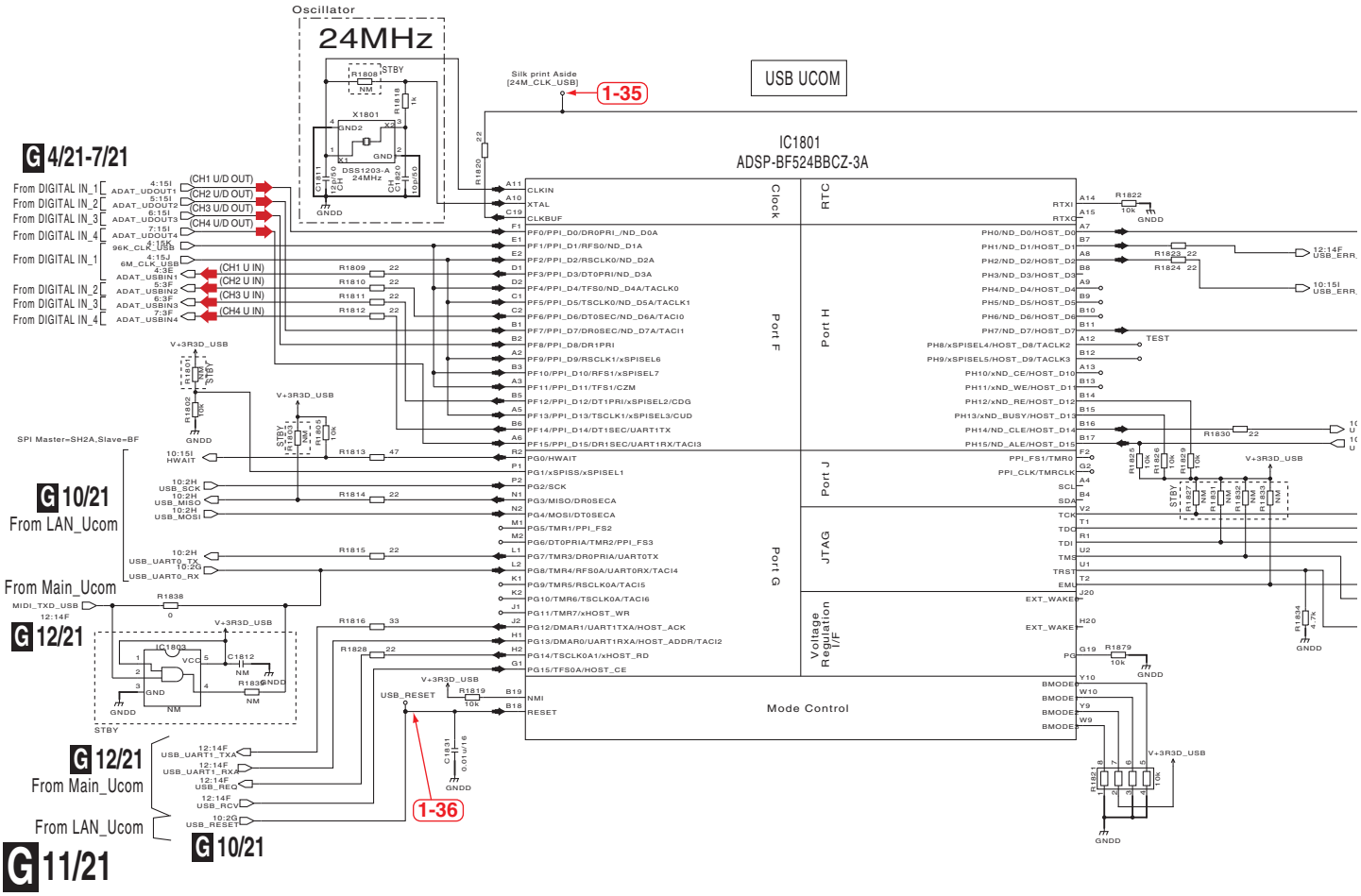
LAN UCOM2



G 10/21

10.23 MAIN ASSY (11/21)



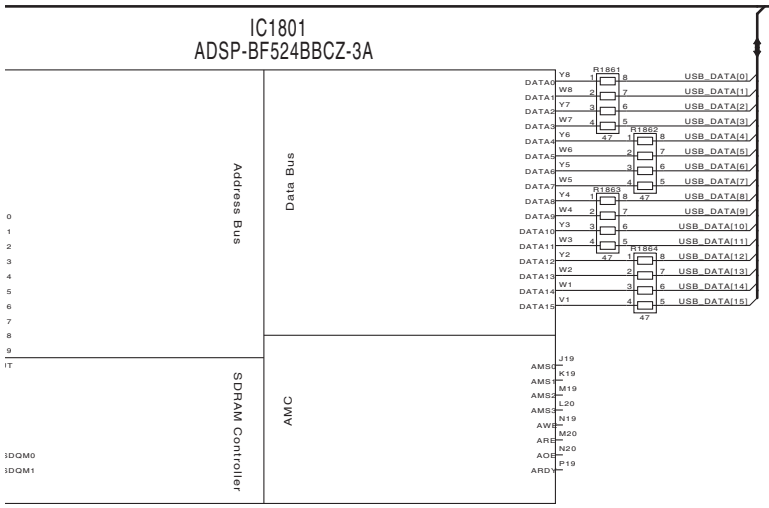


G 11/21 MAIN ASSY (DWX3190)

USB

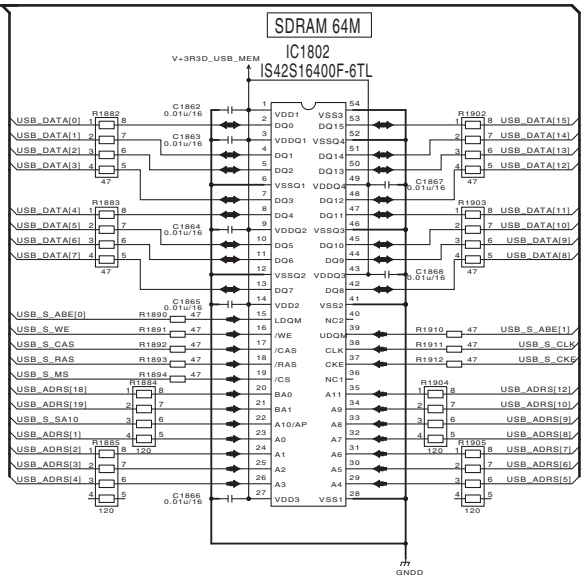
USB UCOM

IC1801
ADSP-BF524BBCZ-3A



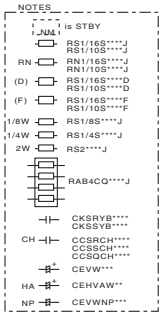
SDRAM 64M

IC1802
IS42S16400F-6TL

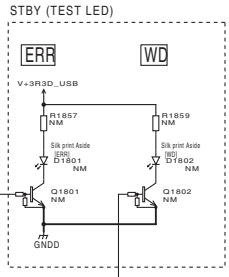


(CH1 U IN) : CH1 USB Input Signal
(CH2 U IN) : CH2 USB Input Signal
(CH3 U IN) : CH3 USB Input Signal
(CH4 U IN) : CH4 USB Input Signal
(CH1 U/D OUT) : CH1 USB/DIGITAL Output Signal
(CH2 U/D OUT) : CH2 USB/DIGITAL Output Signal
(CH3 U/D OUT) : CH3 USB/DIGITAL Output Signal
(CH4 U/D OUT) : CH4 USB/DIGITAL Output Signal
(USB IN/OUT) : USB IN/OUT

NOTES



STBY (TEST LED)



12:14F USB_ERR_MAIN — To MainUCOM G 12/21
10:15I USB_ERR_SH — To LAN_Ucom G 10/21

10:2G USB_CTS_SPI
10:15I USB_RTS_SPI
G 10/21 From LAN_Ucom

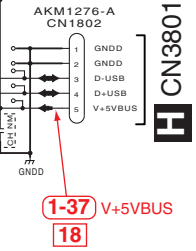
USB UCOM

IC1801
ADSP-BF524BBCZ-3A

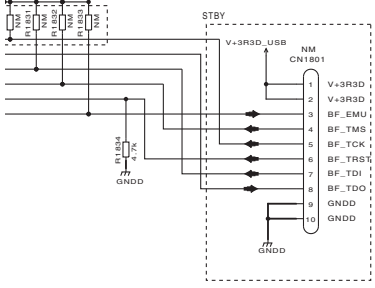
USB_ID use OTG
not use then opne

USB_RSET,USB_VREF use test mode
not use then
USB_RSET → opne
USB_VREF → 0.1uF(GND)

AKM1276-A
CN1802



JTAG



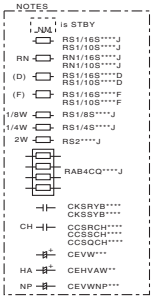
: Voltage measuring point
: Waveform measuring point

10.24 MAIN ASSY (12/21)

G 12/21 MAIN ASSY (DWX3190)

MAIN CPU

: Waveform measuring point



G 1/21
From BOARD IF

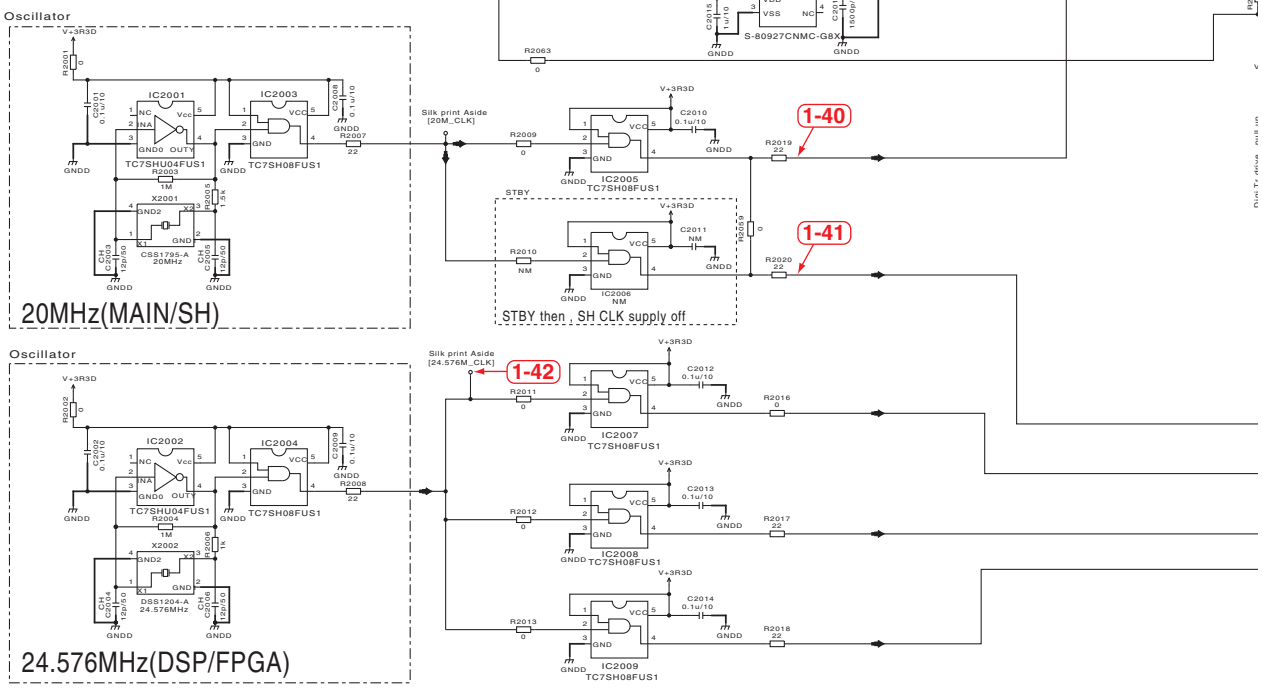
From To DIGITAL OUT
G 16/21

G 2/21
From POWER IF

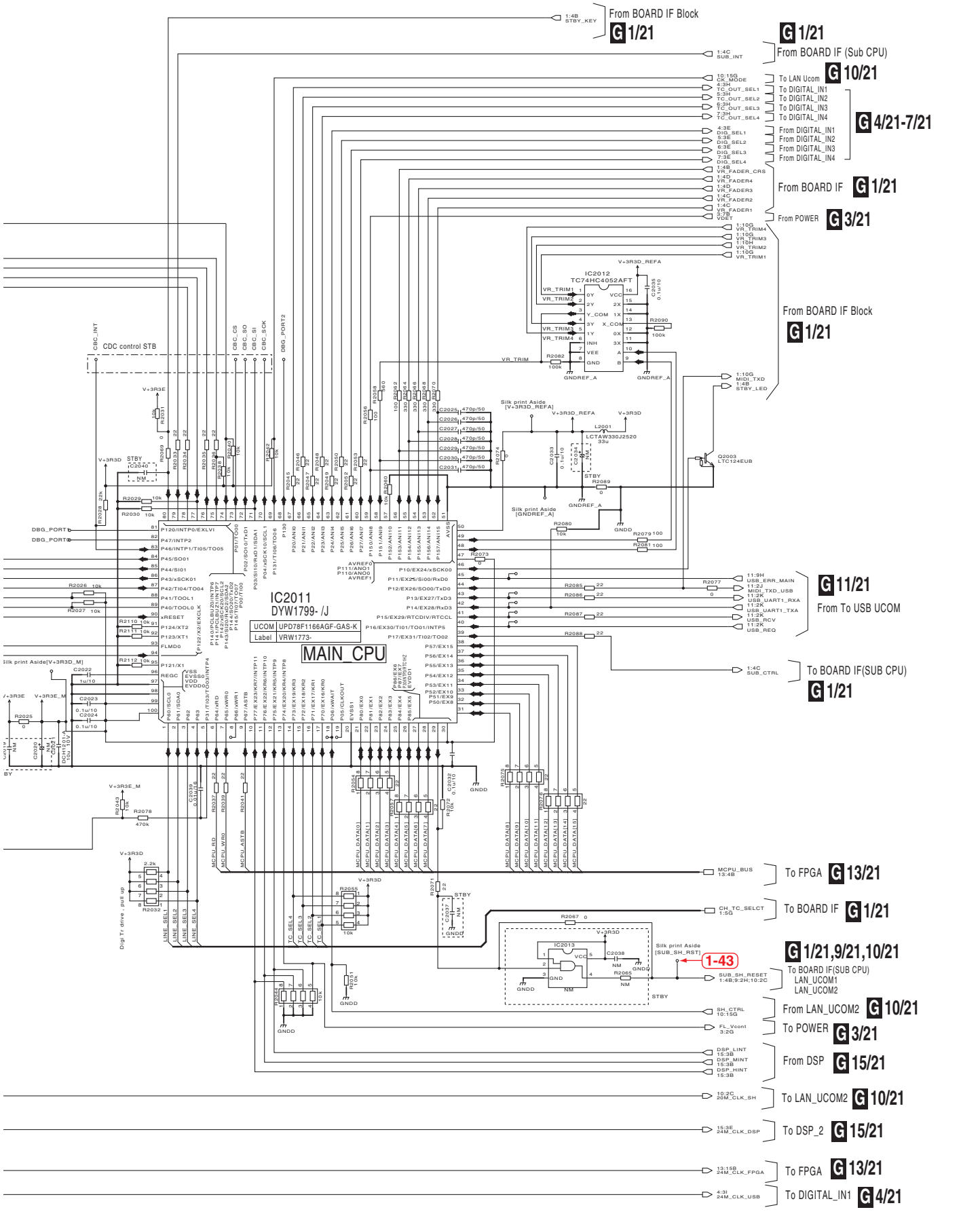
G 17/21,21/21
To OUTPUT IF Block
HP AMP Block

G 1/21
From BOARD IF Block

From POWER _IF
POWER
G 2/21,3/21

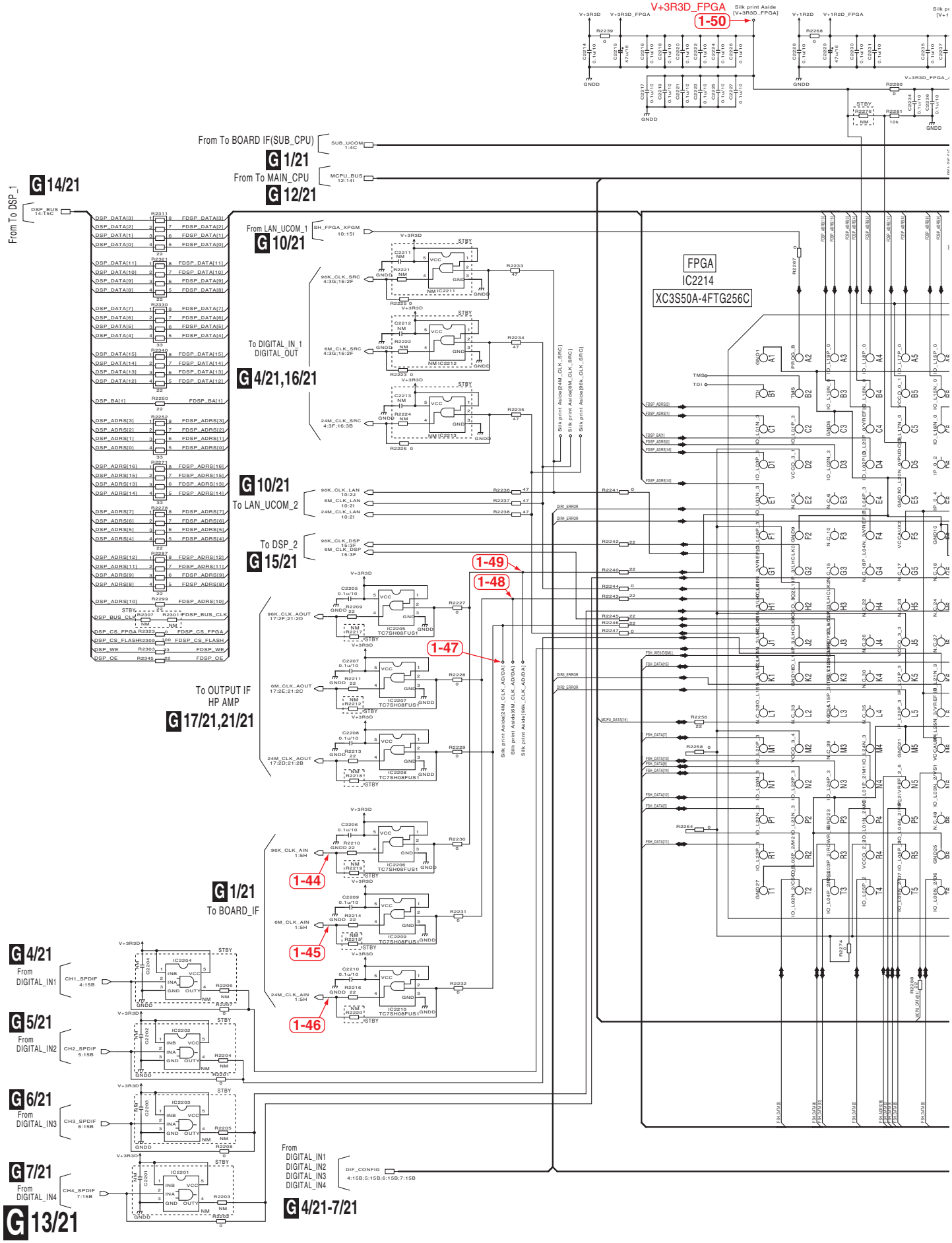


G 12/21


From BOARD IF Block
G 1/21
From BOARD IF (Sub CPU)
To LAN Ucom
To DIGITAL_IN1
To DIGITAL_IN2
To DIGITAL_IN3
To DIGITAL_IN4
From DIGITAL_IN1
From DIGITAL_IN2
From DIGITAL_IN3
From DIGITAL_IN4
From BOARD IF
From POWER
From BOARD IF Block
CDC control STB
IC2012
TC74HC4052AFT
Silk print Aside [V+3R3D_REFA]
Silk print Aside [GNDREF_A]
Q2003
LTC124EUB
IC2011
DYW1799- /J
UCOM UPD78F1166AGF-GAS-K
Label VRW1773-
MAIN_CPU
To USB UCOM
To BOARD IF(SUB CPU)
To FPGA
To BOARD IF
Silk print Aside [SUB_SH_RST]
1-43
To BOARD IF(SUB CPU) LAN_UCOM1 LAN_UCOM2
From LAN_UCOM2
To POWER
From DSP
To LAN_UCOM2
To DSP_2
To FPGA
To DIGITAL_IN1

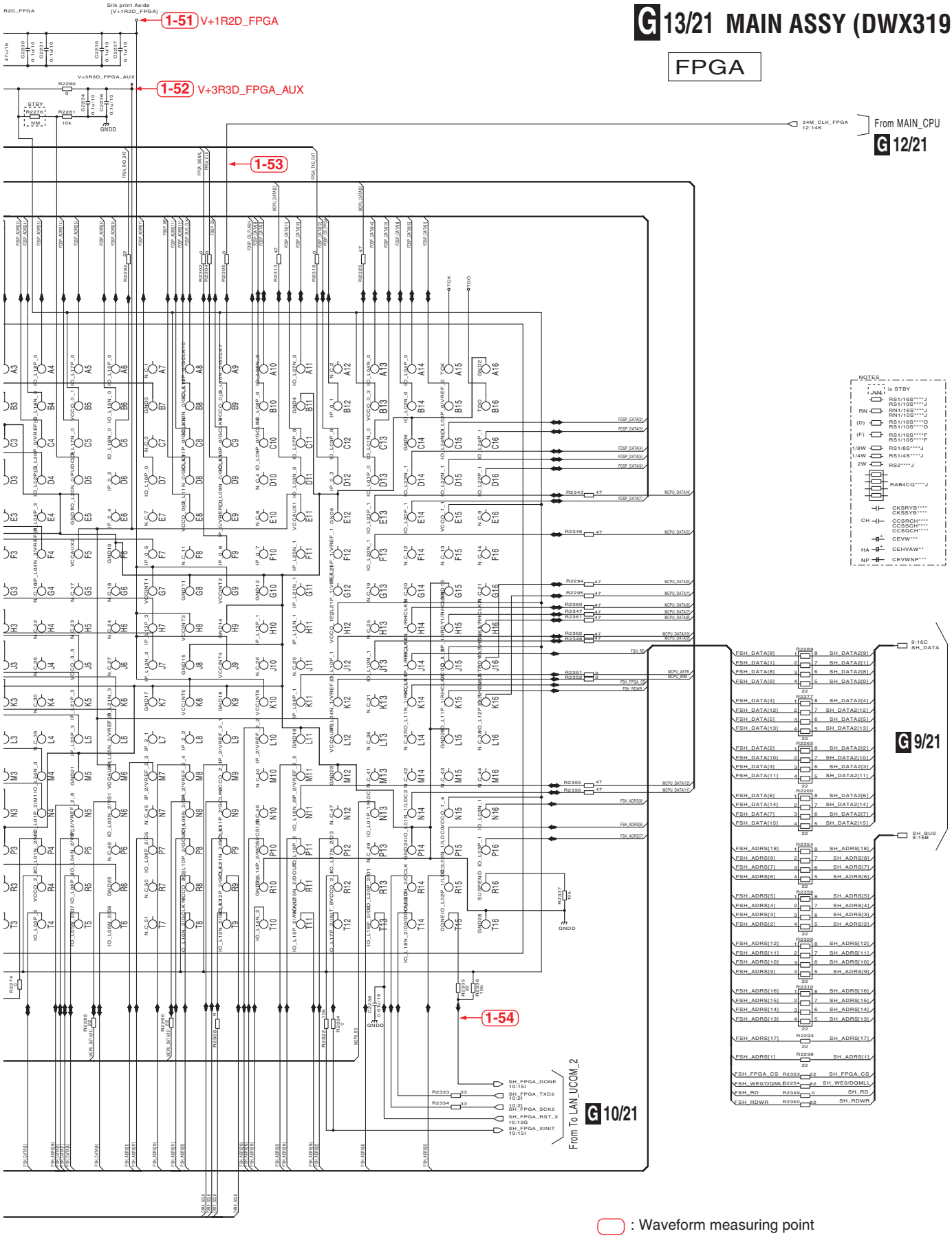
G 12/21

10.25 MAIN ASSY (13/21)

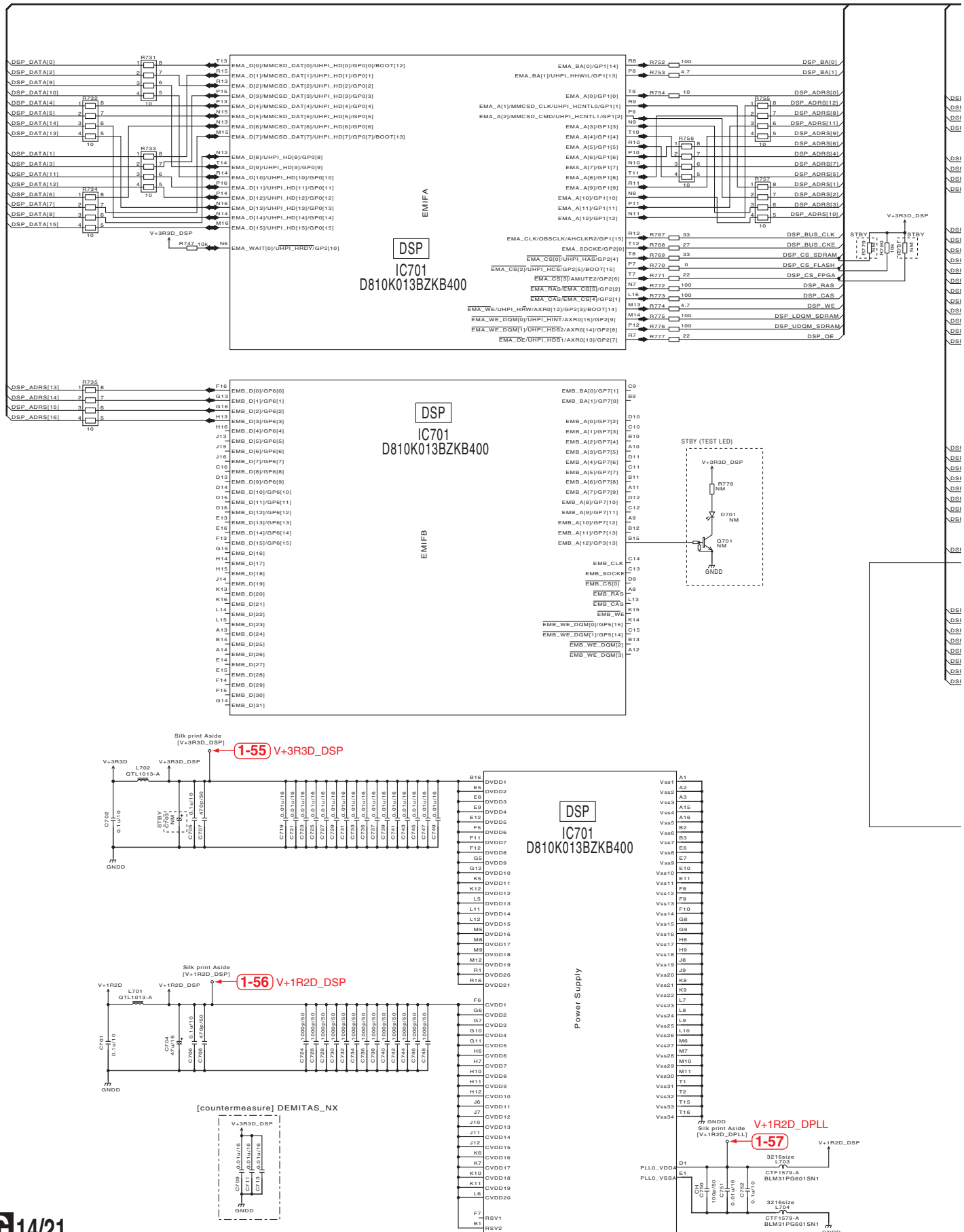


G 13/21 MAIN ASSY (DWX3190)

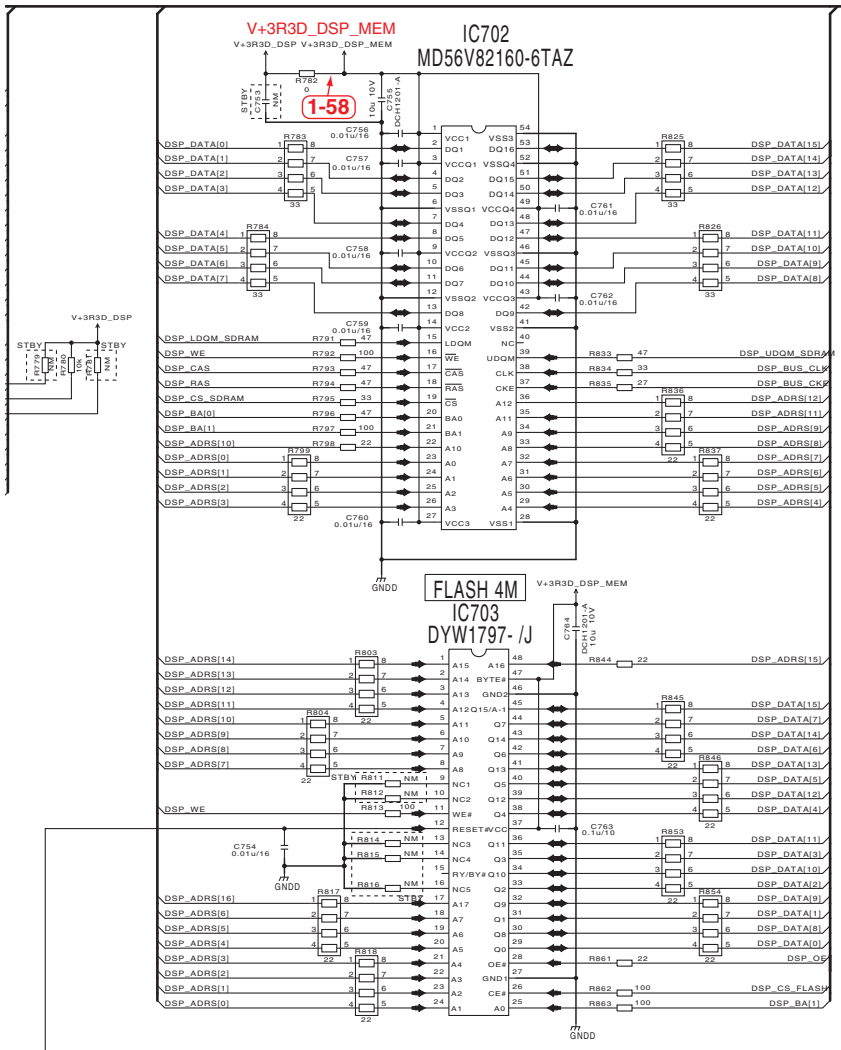
FPGA



10.26 MAIN ASSY (14/21)



SDRAM 256M



MX29LV400CTTI-70G (MACRONIX)
Label : VRW1773-

DSP_BUS
13:1C

G 13/21
From To FPGA

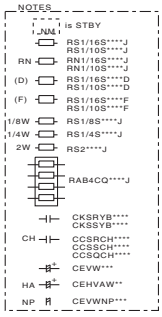
G 14/21 MAIN ASSY (DWX3190)

DSP_1

FLASH_DSP_RESET
10:2G

G 10/21
From LAN_UCOM_2

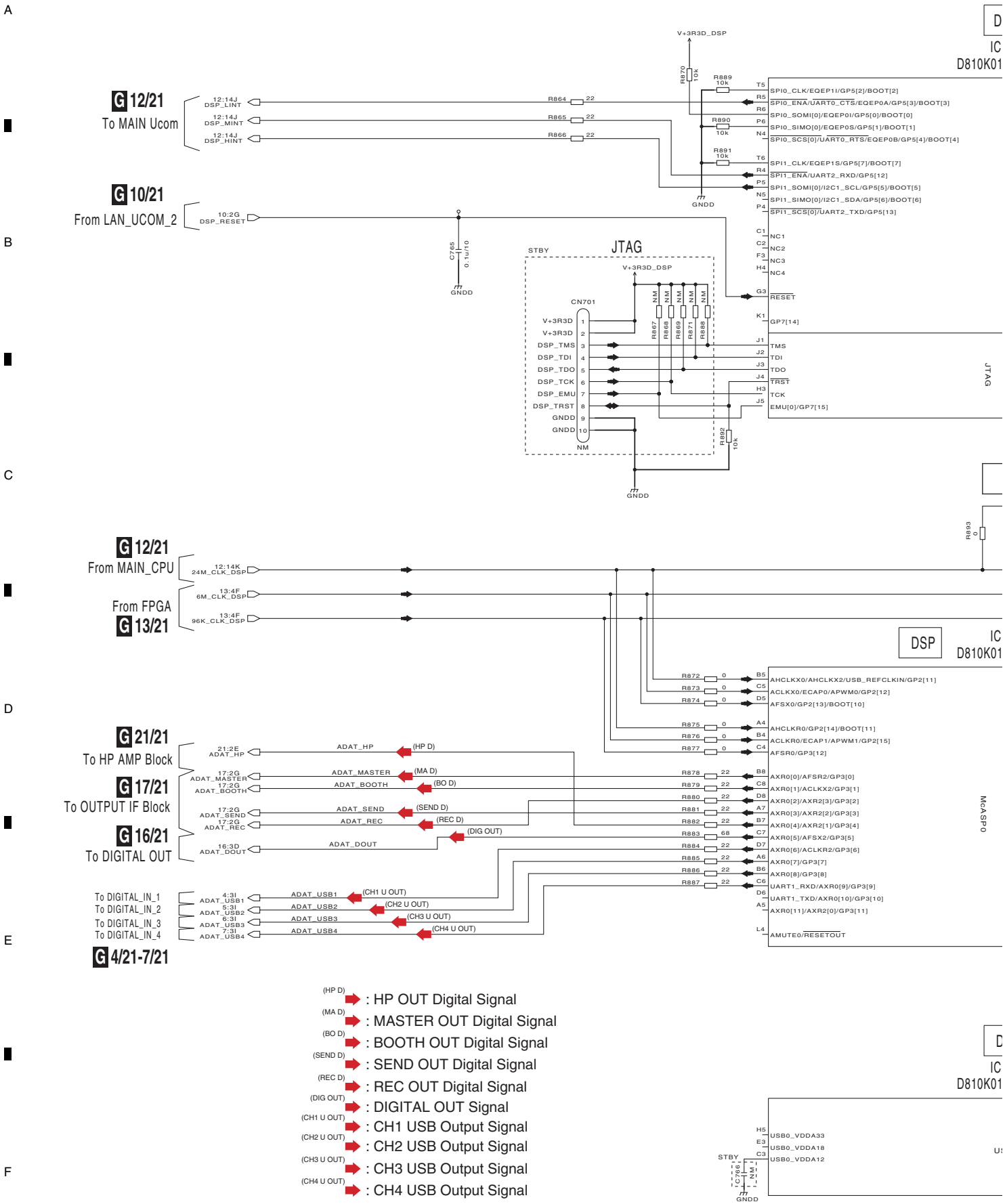
: Waveform measuring point



_DSP

G 14/21

10.27 MAIN ASSY (15/21)



G 15/21 MAIN ASSY (DWX3190)

DSP_2

DSP
IC701
D810K013BZKB400

To LAN_UCOM_2
G 10/21

(CH1 D) : CH1 Digital Signal (from INPUT ASSY)
(CH2 D) : CH2 Digital Signal (from INPUT ASSY)
(CH3 D) : CH3 Digital Signal (from INPUT ASSY)
(CH4 D) : CH4 Digital Signal (from INPUT ASSY)
(MI D) : MIC Digital Signal (from INPUT ASSY)
(RET D) : RETURN Digital Signal (from INPUT ASSY)
(LINK IN) : LINK AUDIO INPUT
(CH1 U/D IN) : CH1 USB/DIGITAL Input Signal
(CH2 U/D IN) : CH2 USB/DIGITAL Input Signal
(CH3 U/D IN) : CH3 USB/DIGITAL Input Signal
(CH4 U/D IN) : CH4 USB/DIGITAL Input Signal

JTAG

IC704
TC7SG08FU

Silk print Aside
[24M_CLK_DSP]
1-59

NOTES
NM : is STBY
RS1/16S****J
RS1/10S****J
RN RN1/16S****J
RN1/10S****J
(D) RS1/16S****D
RS1/10S****D
(F) RS1/16S****F
RS1/10S****F
1/8W RS1/8S****J
1/4W RS1/4S****J
2W RS2****J
RAB4CQ****J
CKSRYB****
CKSSYB****
CH CCSRCH****
CCSSCH****
CCSQCH****
CEVW***
HA CEHVAW**
NP CEVWNP***

DSP
IC701
D810K013BZKB400
McASP0
McASP1

G 1/21
From BOARD IF Block

G 10/21
From LAN_UCOM_2

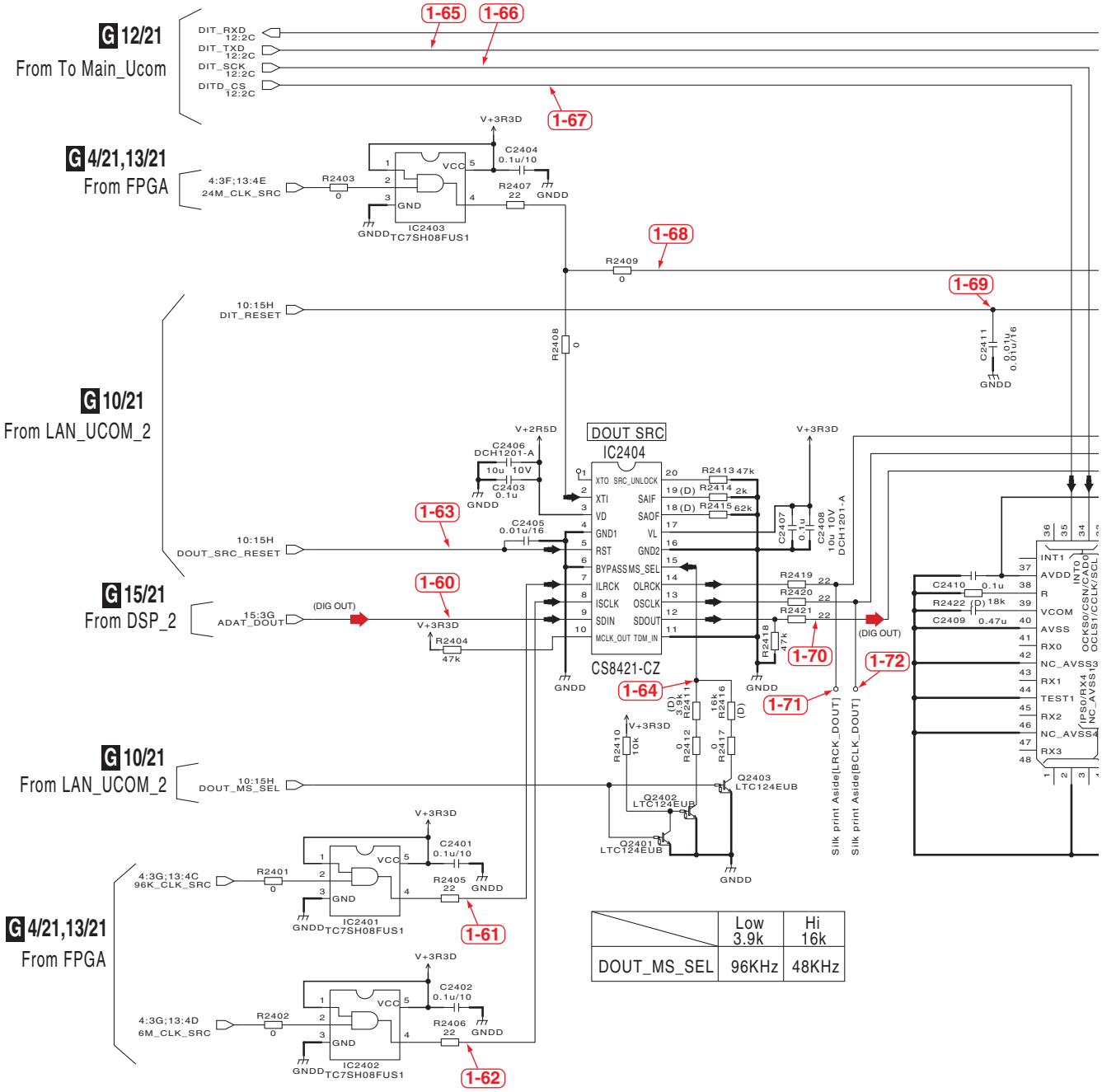
From DIGITAL_IN_1
From DIGITAL_IN_2
From DIGITAL_IN_3
From DIGITAL_IN_4
G 4/21-7/21

DSP
IC701
D810K013BZKB400
USB2.0

: Waveform measuring point

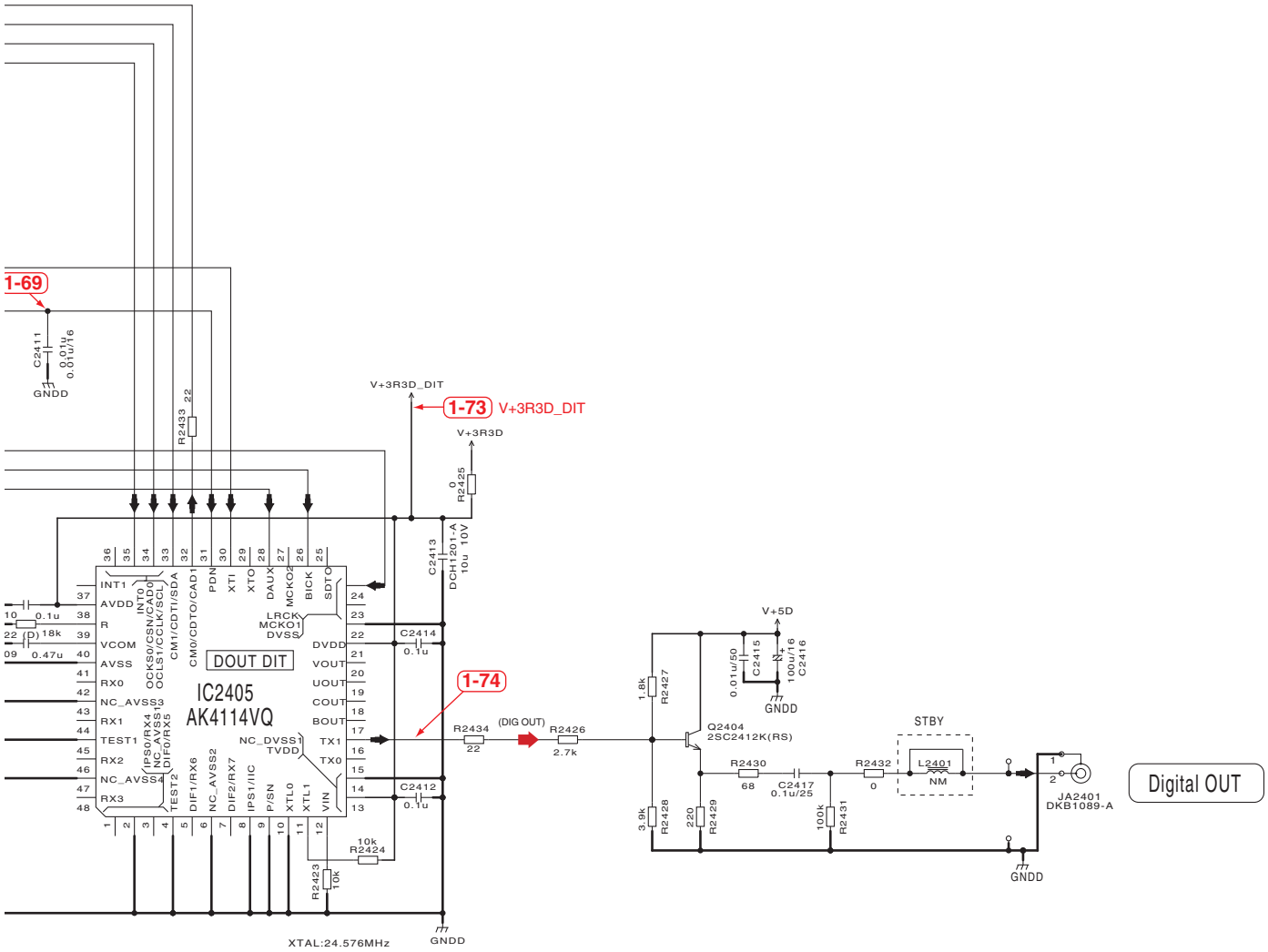
G 15/21

10.28 MAIN ASSY (16/21)



G 16/21 MAIN ASSY (DWX3190)

DIGITAL OUT



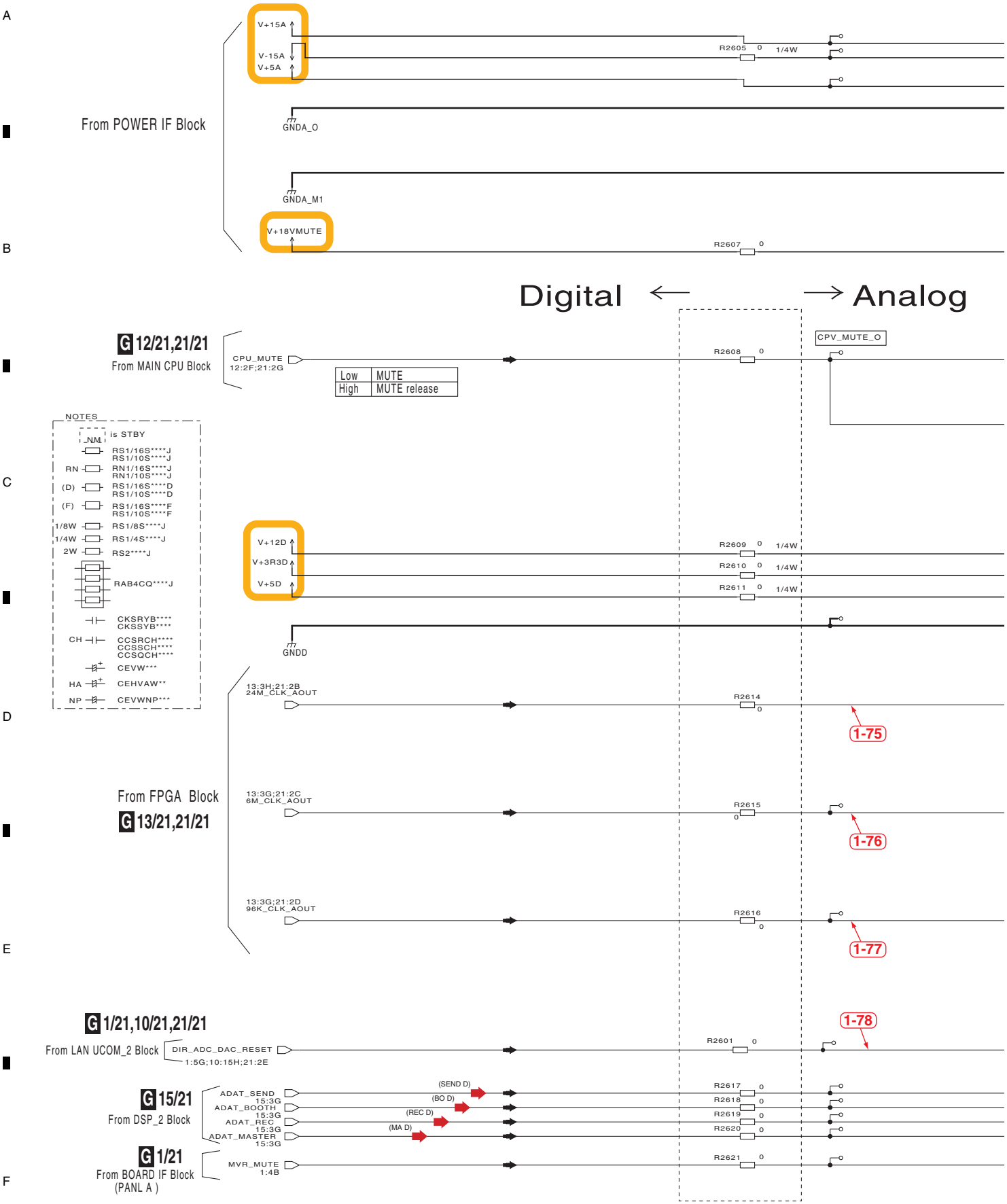
(DIG OUT) : DIGITAL OUT Signal

: Waveform measuring point

NOTES

- NM is STBY
- RS1/16S****J RS1/10S****J
- RN RN1/16S****J RN1/10S****J
- (D) RS1/16S****D RS1/10S****D
- (F) RS1/16S****F RS1/10S****F
- 1/8W RS1/8S****J
- 1/4W RS1/4S****J
- 2W RS2****J
- RAB4CQ****J
- CKSRYB**** CKSSYB****
- CH CCSRCH**** CCSSCH**** CCSQCH****
- CEVW***
- HA CEHVAW**
- NP CEVWNP***

10.29 MAIN ASSY (17/21)



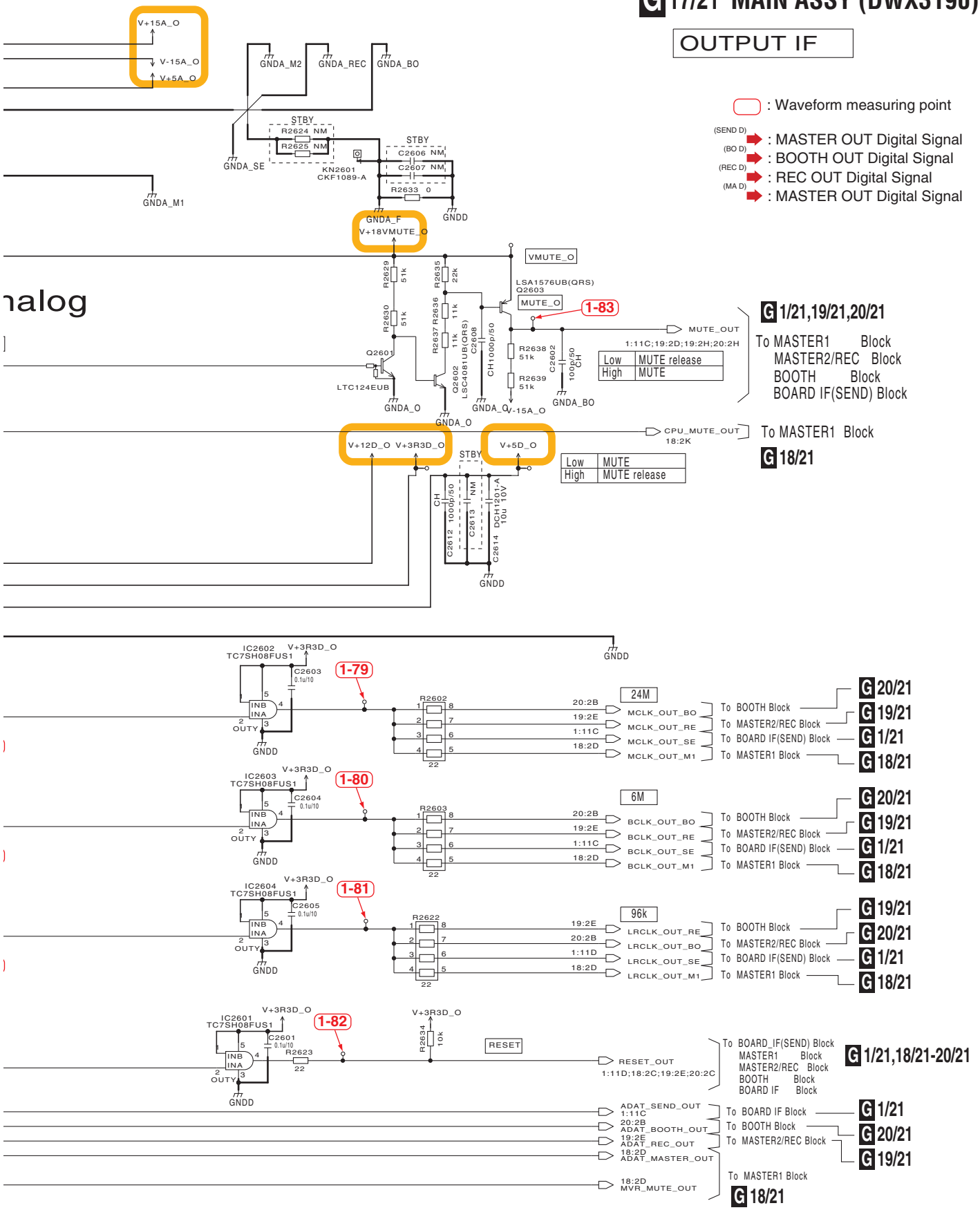
G 17/21

G 17/21 MAIN ASSY (DWX3190)

OUTPUT IF

: Waveform measuring point

(SEND D) : MASTER OUT Digital Signal
(BO D) : BOOTH OUT Digital Signal
(REC D) : REC OUT Digital Signal
(MA D) : MASTER OUT Digital Signal



G 1/21,19/21,20/21
To MASTER1 Block
MASTER2/REC Block
BOOTH Block
BOARD IF(SEND) Block

To MASTER1 Block
G 18/21

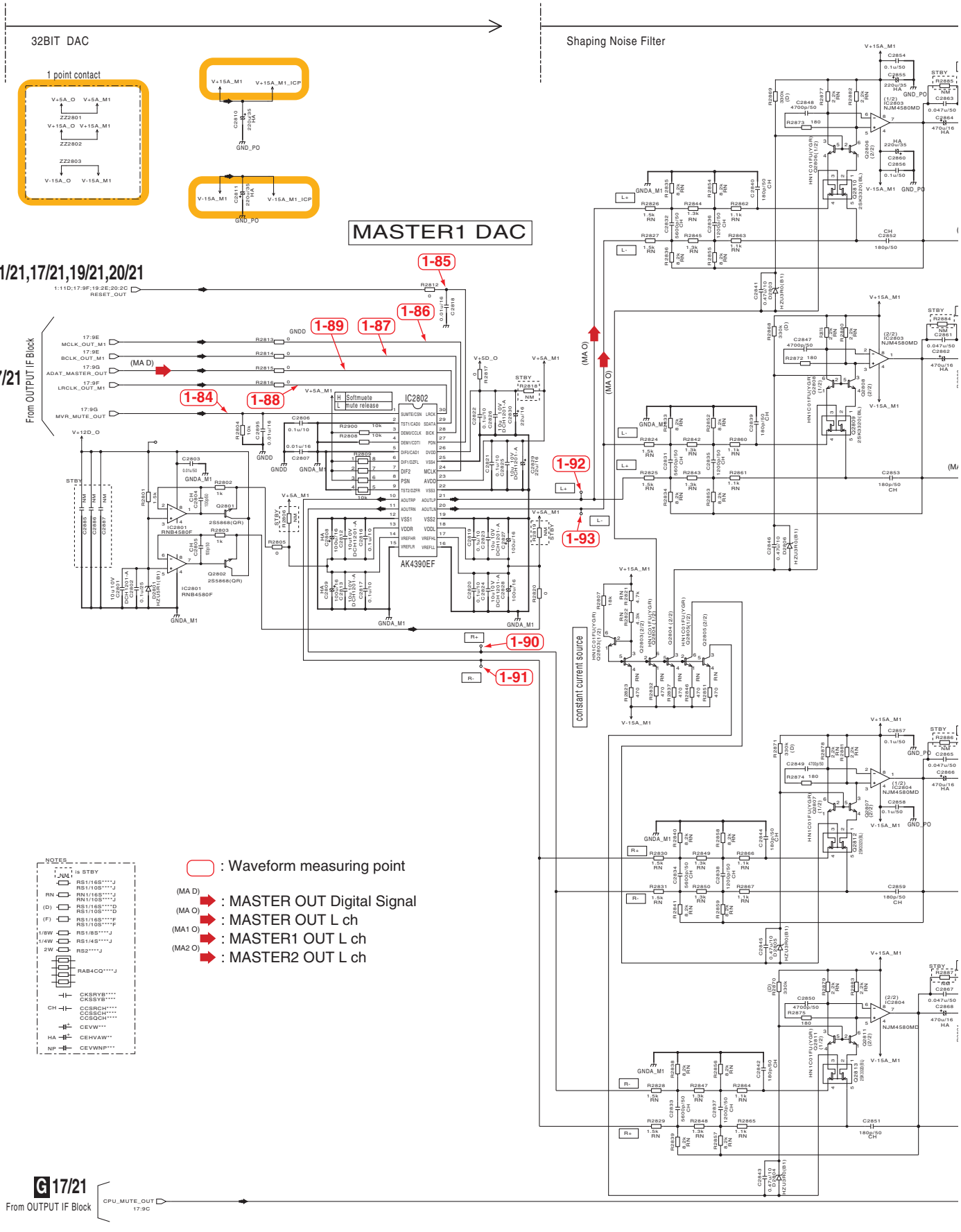
To BOOTH Block — G 20/21
To MASTER2/REC Block — G 19/21
To BOARD IF(SEND) Block — G 1/21
To MASTER1 Block — G 18/21

To BOARD_IF(SEND) Block
MASTER1 Block
MASTER2/REC Block
BOOTH Block
BOARD IF Block
G 1/21,18/21-20/21

To BOARD IF Block — G 1/21
To BOOTH Block — G 20/21
To MASTER2/REC Block — G 19/21
To MASTER1 Block — G 18/21

G 17/21

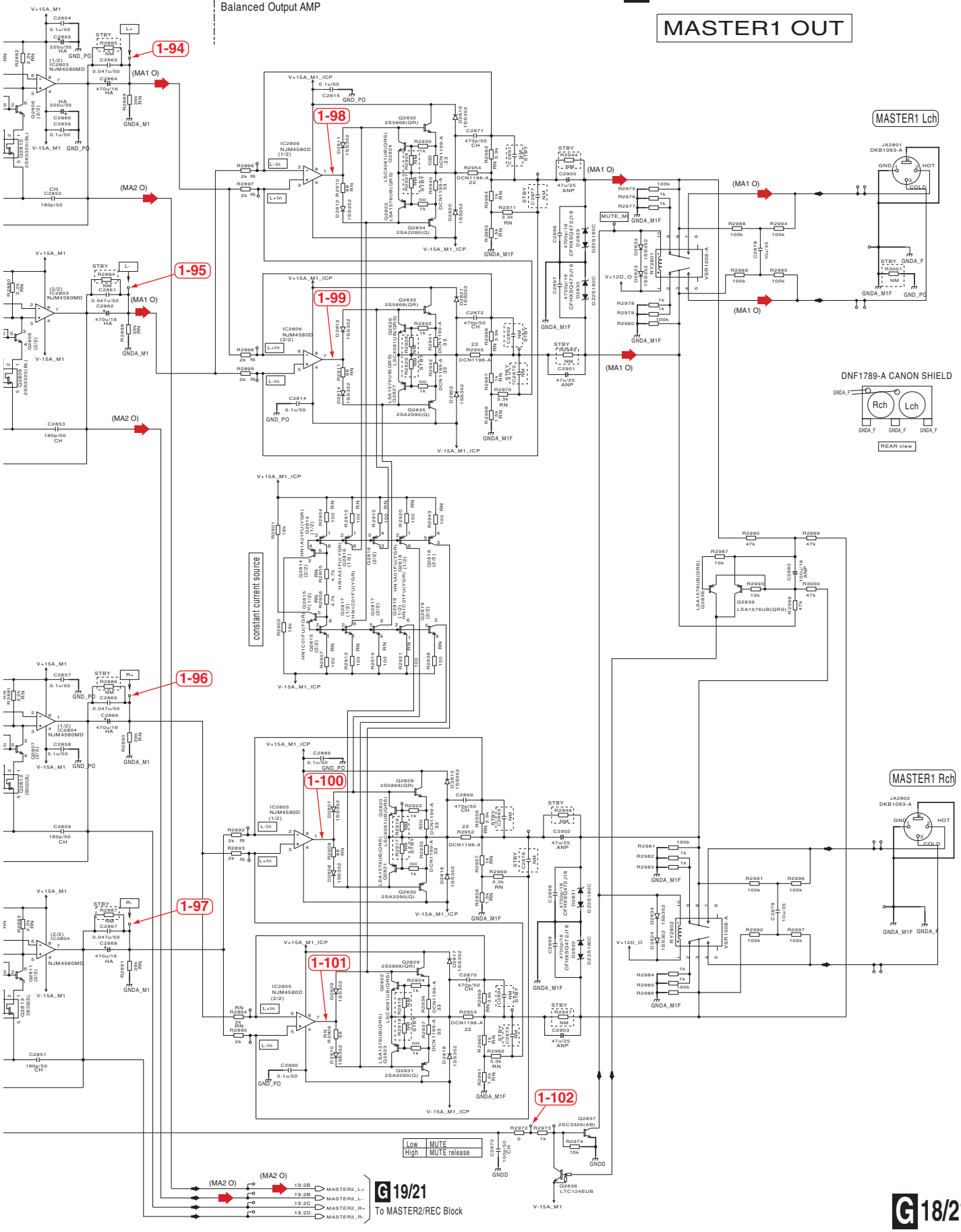
10.30 MAIN ASSY (18/21)



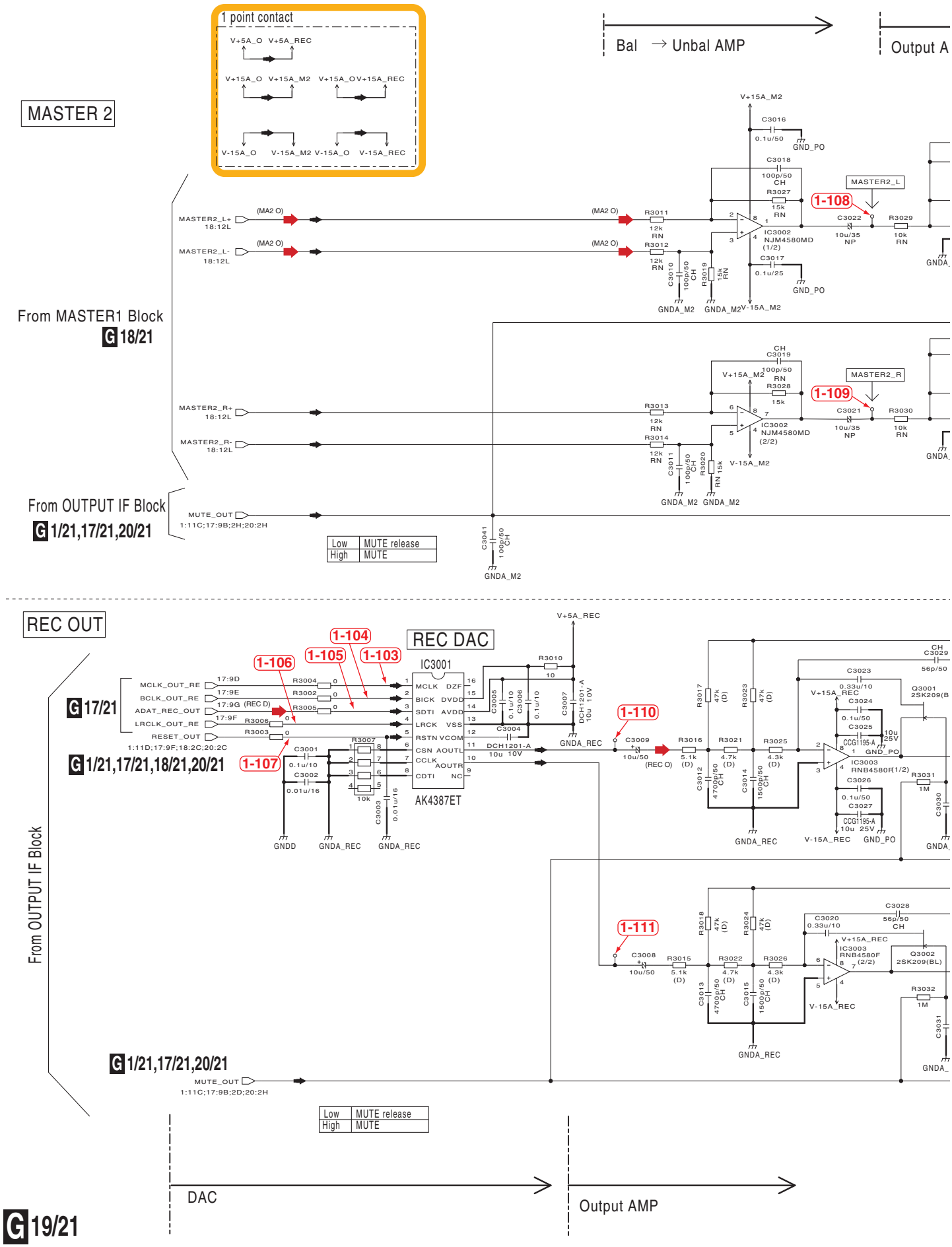
G 18/21 MAIN ASSY (DWX3190)

MASTER1 OUT

Balanced Output AMP



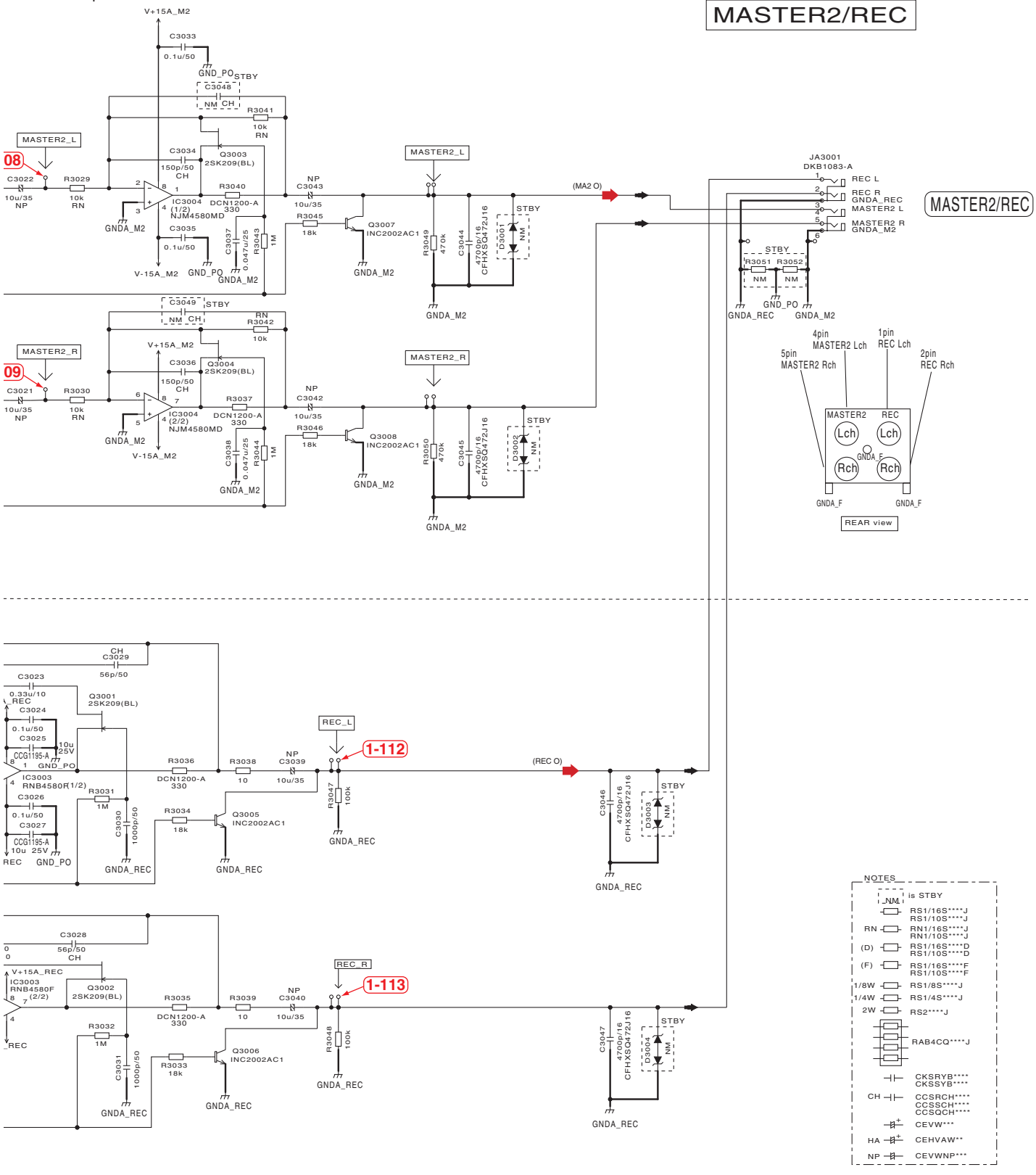
10.31 MAIN ASSY (19/21)



G 19/21 MAIN ASSY (DWX3190)

MASTER2/REC

Output AMP



NOTES

- NM: is STBY
- RS1/16S****J, RS1/10S****J
- RN: RN1/16S****J, RN1/10S****J
- (D): RS1/16S****D, RS1/10S****D
- (F): RS1/16S****F, RS1/10S****F
- 1/8W: RS1/8S****J
- 1/4W: RS1/4S****J
- 2W: RS2****J
- RAB4CQ****J
- CKSRYB****, CKSSYB****
- CH: CCSRCH****, CCSSCH****, CCSQCH****
- CEVW***
- HA: CEHVAW**
- NP: CEVWNP***

: Waveform measuring point

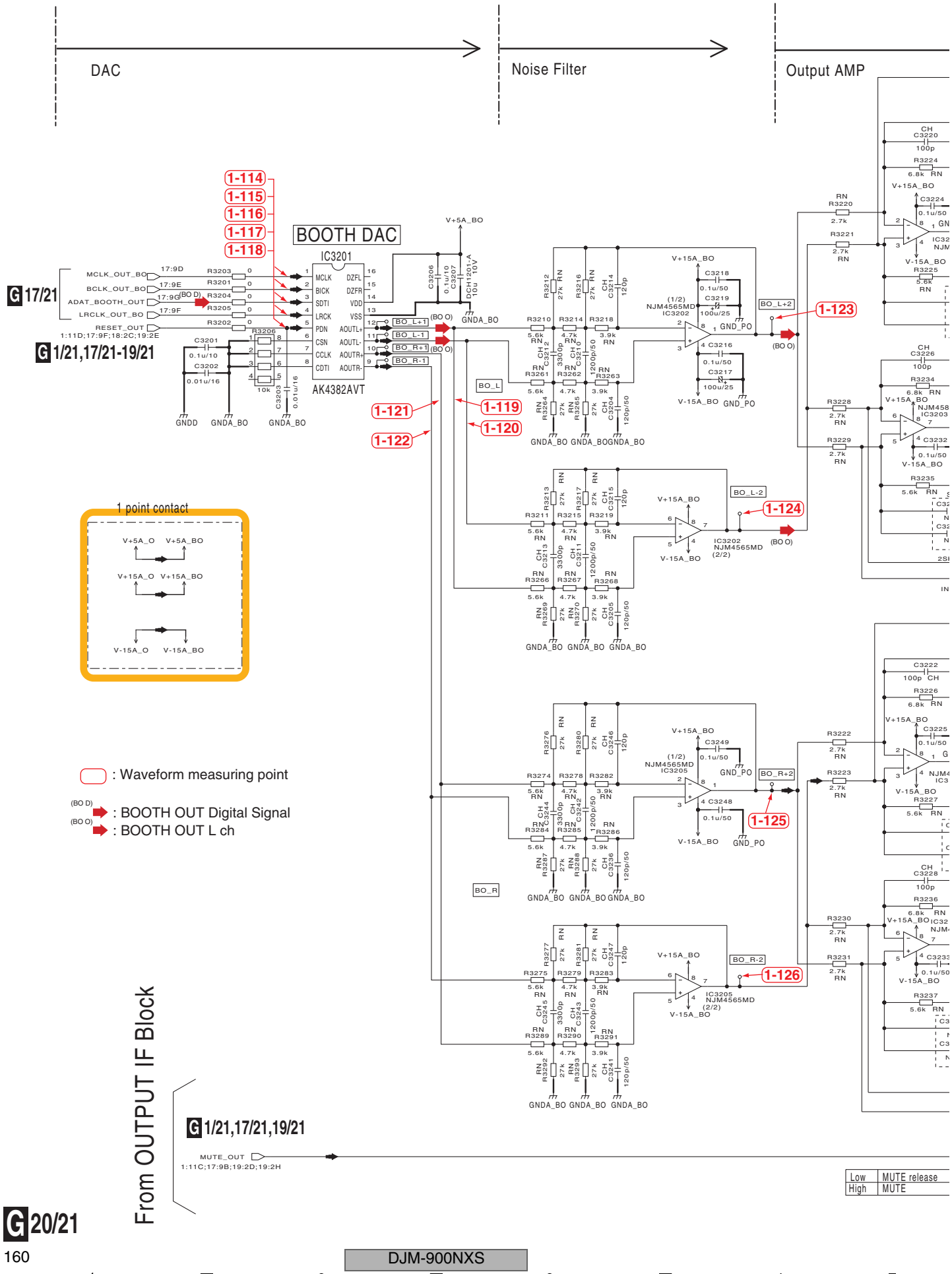
(MA2 O) : MASTER2 OUT L ch

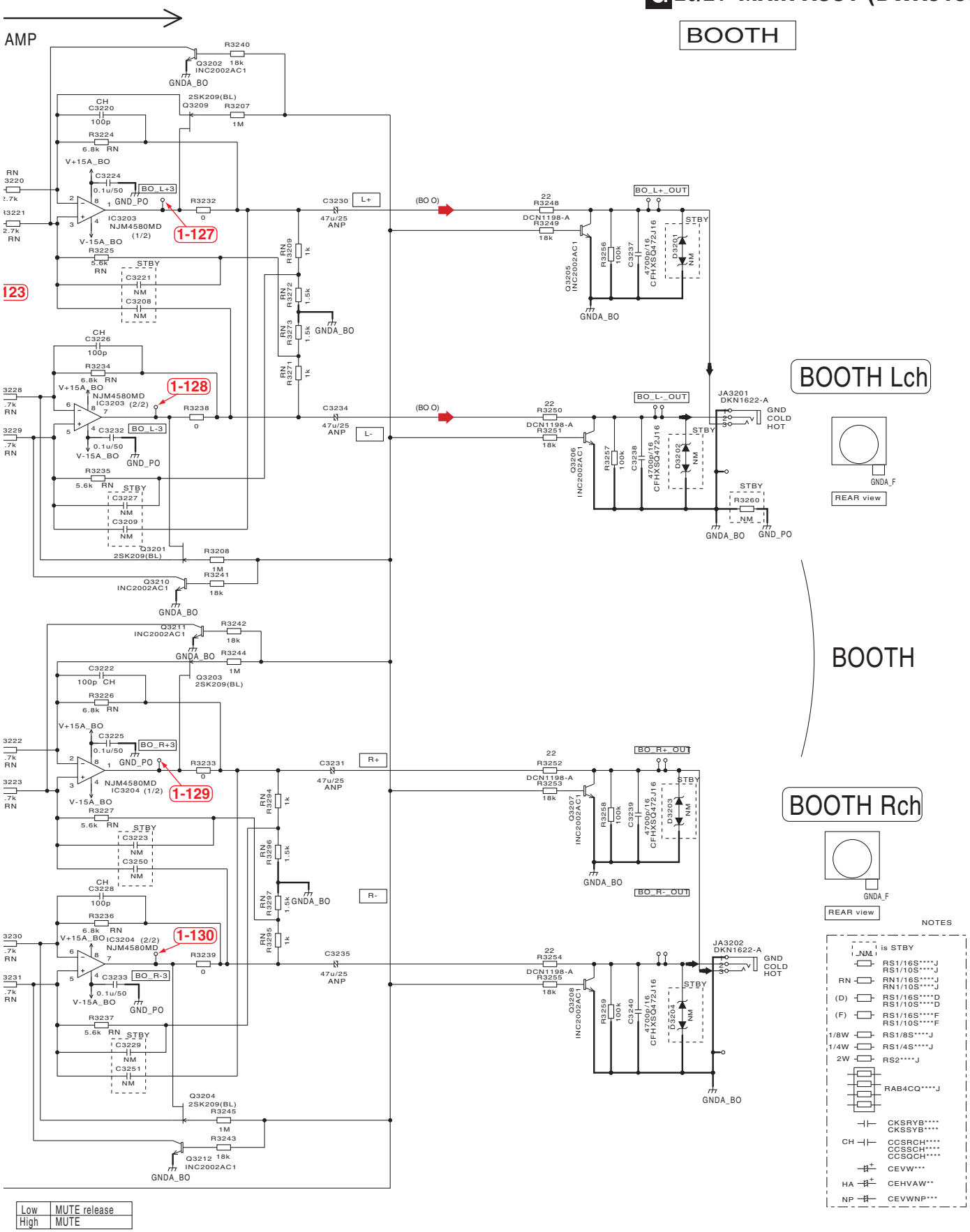
(REC D) : REC OUT Digital Signal

(REC O) : REC OUT L ch

G 19/21

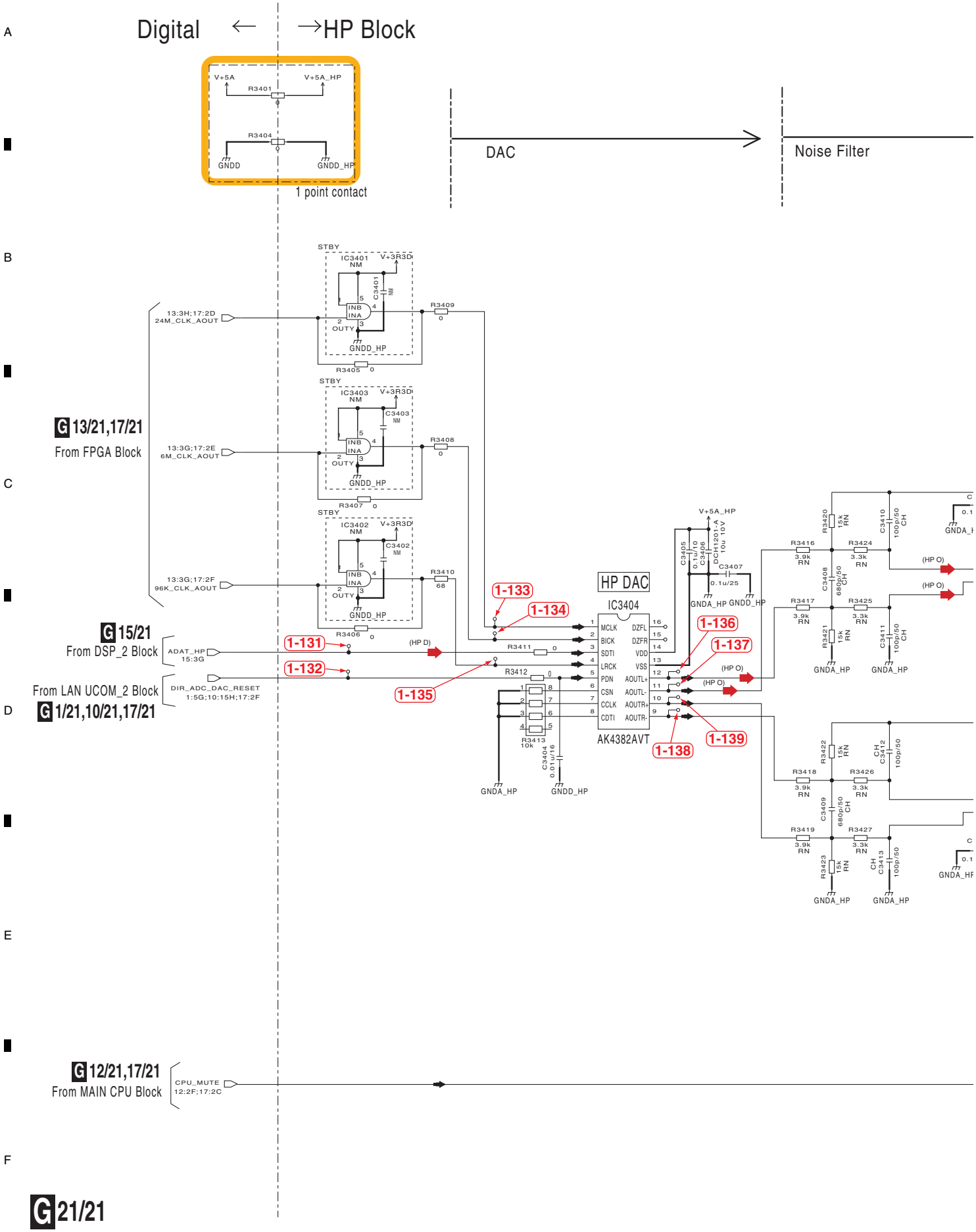
10.32 MAIN ASSY (20/21)





Low	MUTE release
High	MUTE

10.33 MAIN ASSY (21/21)



G 21/21 MAIN ASSY (DWX3190)

HP AMP

er

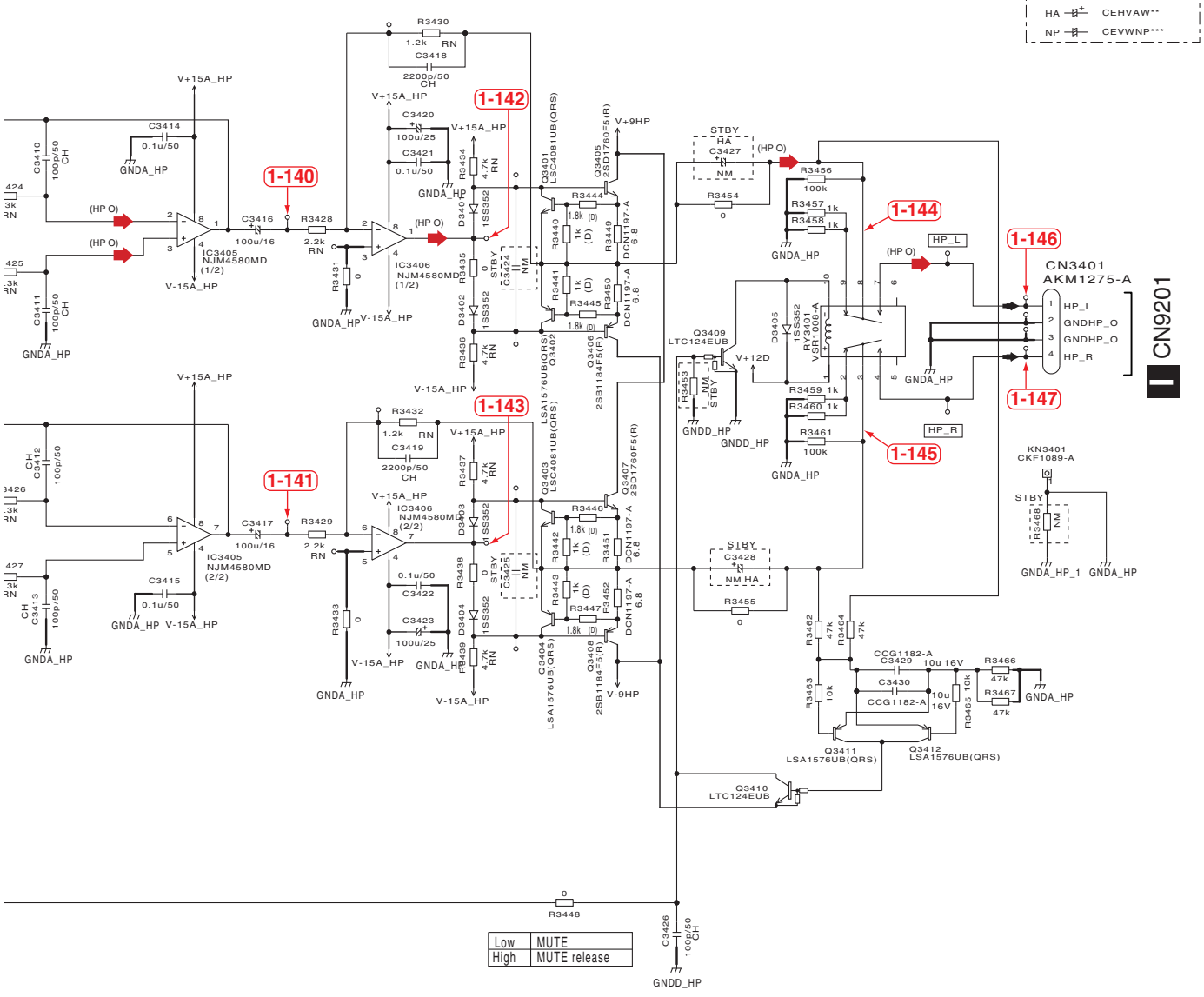
Output AMP

: Waveform measuring point

(HP D) : HP OUT Digital Signal

(HP O) : HP OUT L ch

NOTES
- NM is STBY
- RS1/16S****J RS1/10S****J
- RN RN1/16S****J RN1/10S****J
- (D) RS1/16S****D RS1/10S****D
- (F) RS1/16S****F RS1/10S****F
- 1/8W RS1/8S****J
- 1/4W RS1/4S****J
- 2W RS2****J
- RAB4CQ****J
- CKSRYB**** CKSSYB****
- CH CCSRCH**** CCSSCH**** CCSQCH****
- CEVW***
- HA CEHVAW**
- NP CEVWNP***



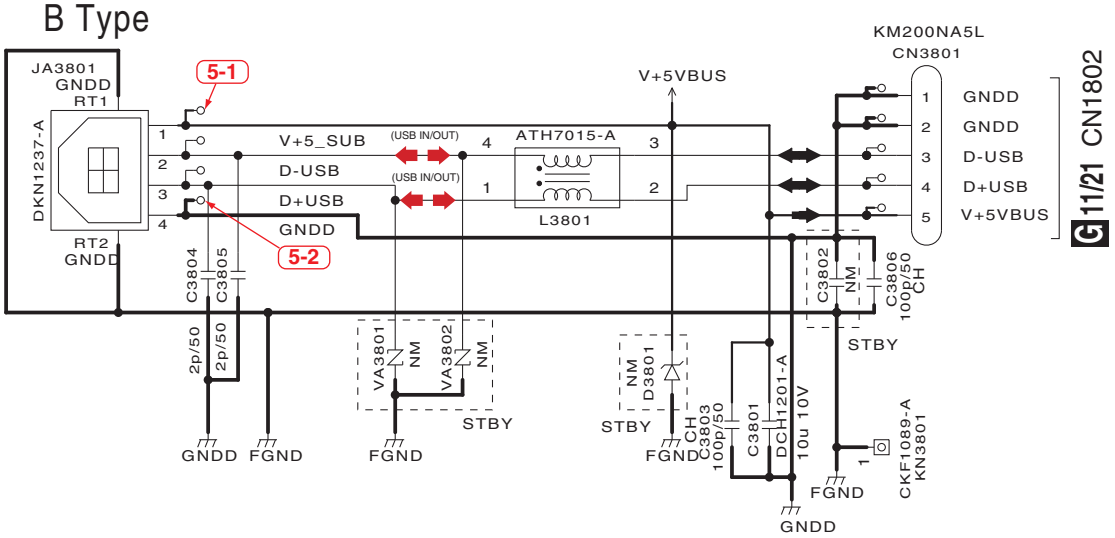
Low	MUTE
High	MUTE release

10.34 USBI and HPJK ASSYS

H USBI ASSY (DWX3192)

USB2.0 High speed

B Type



NOTES

NM is STBY

RS1/16S****J
RS1/10S****J

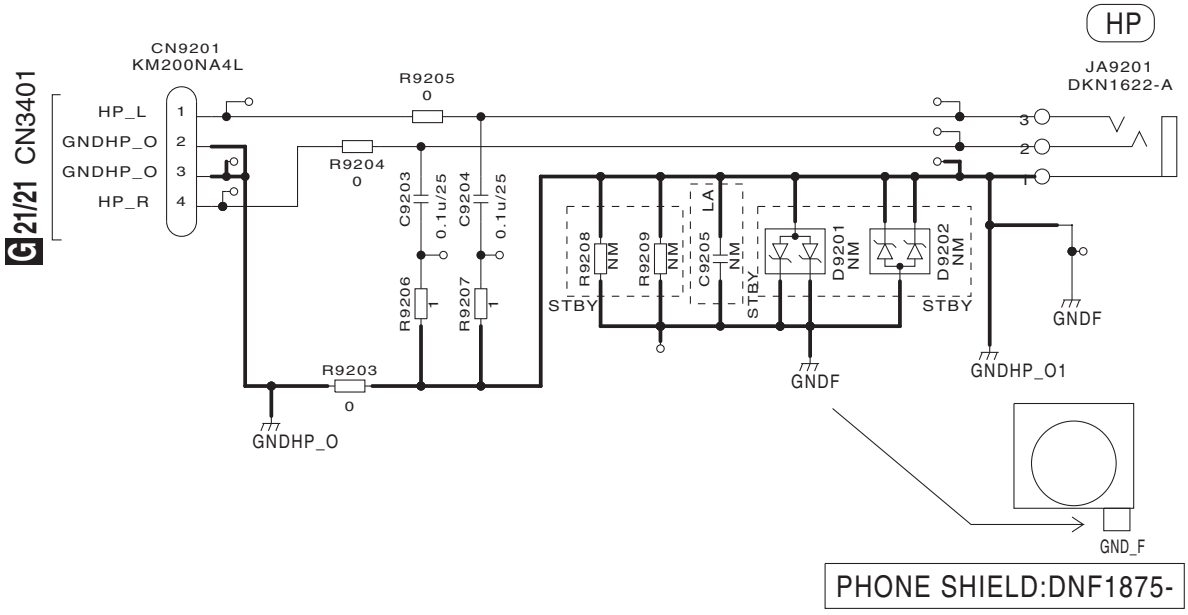
CKSRYB****
CKSSYB****

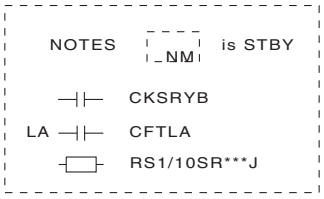
CH CCSRCH****
CCSSCH****
CCSQCH****

: Waveform measuring point

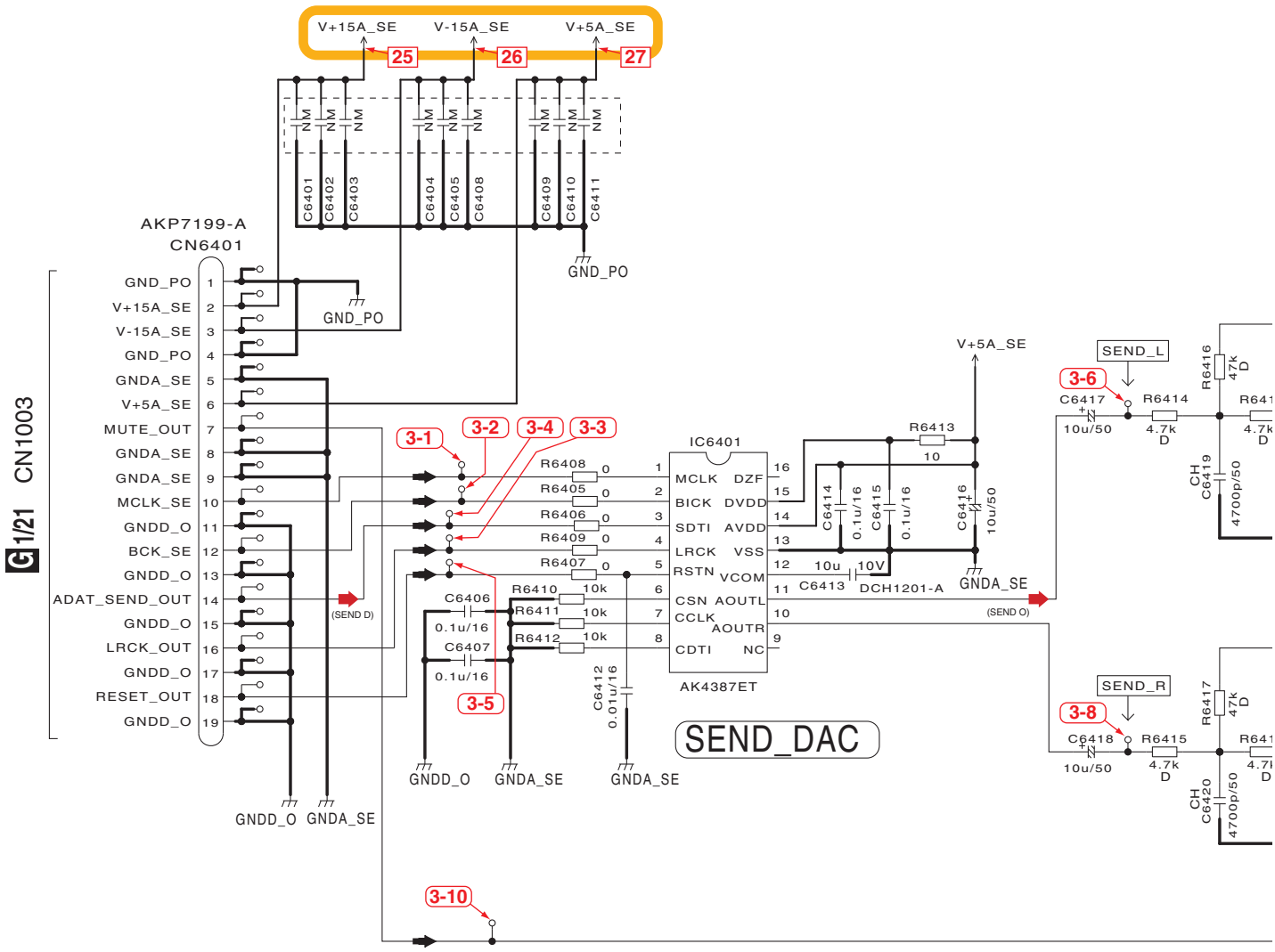
(USB IN/OUT) : USB IN/OUT Signal

I HPJK ASSY (DWX3208)

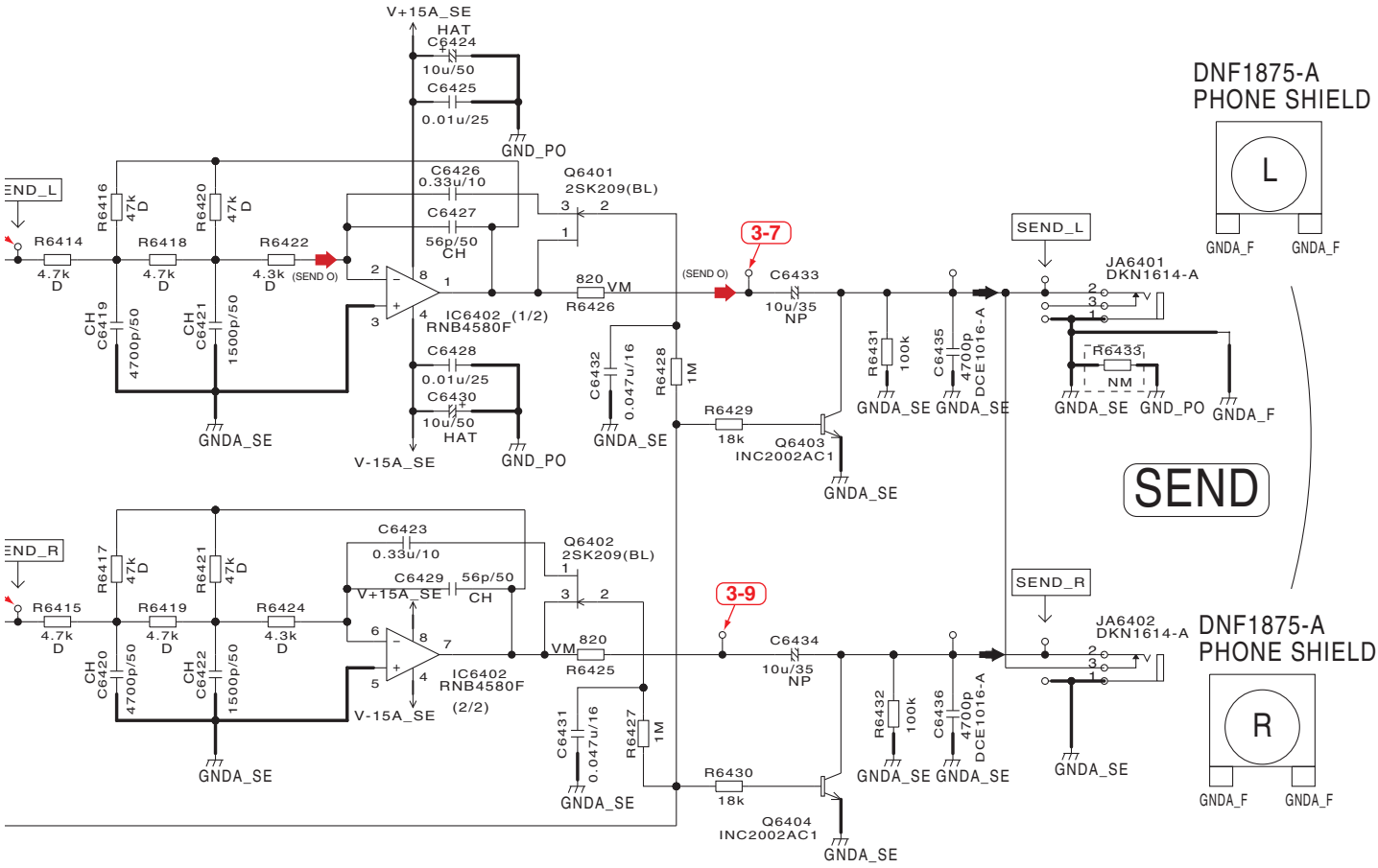




10.35 SEND ASSY



Shaping noise filter



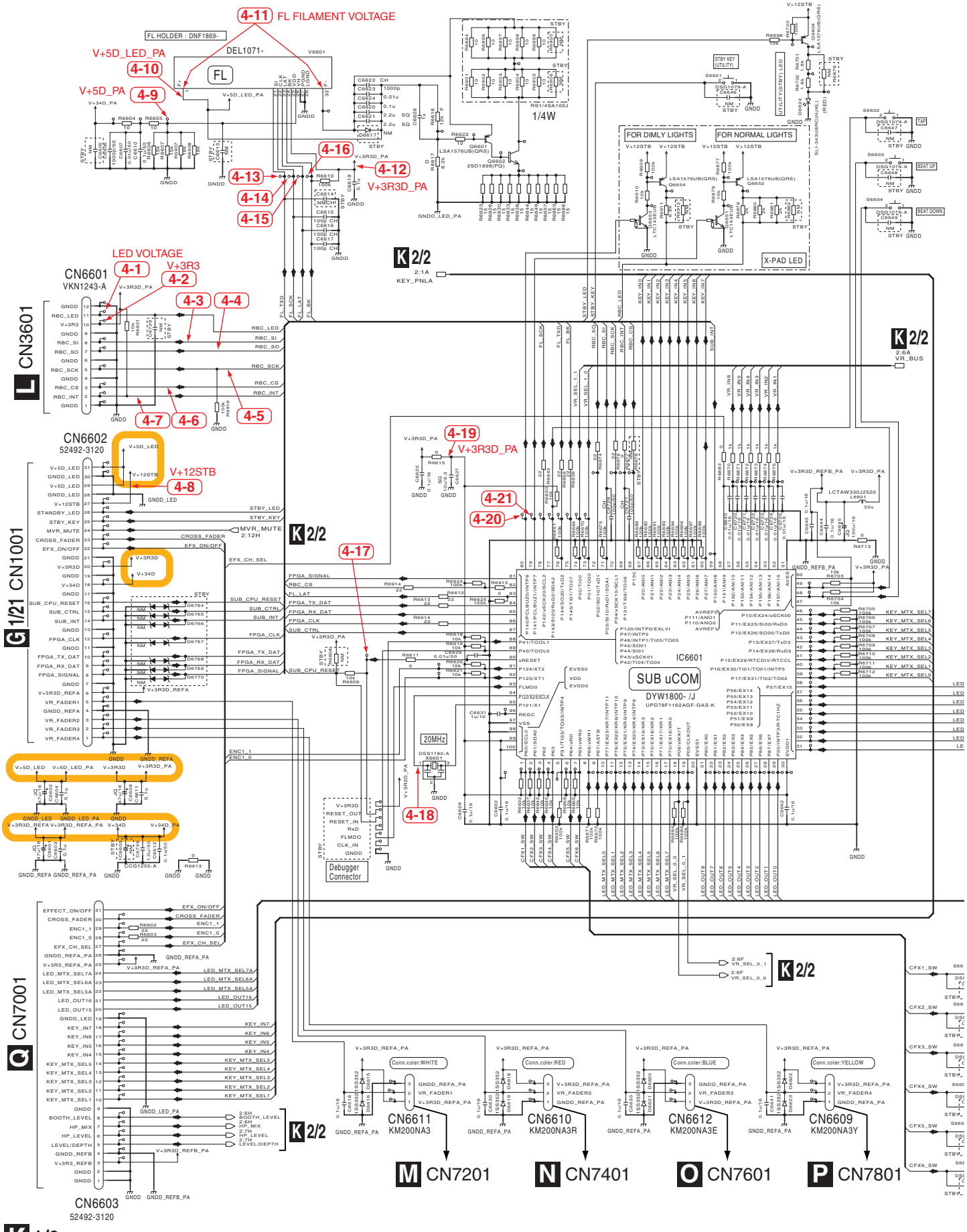
: Voltage measuring point

: Waveform measuring point

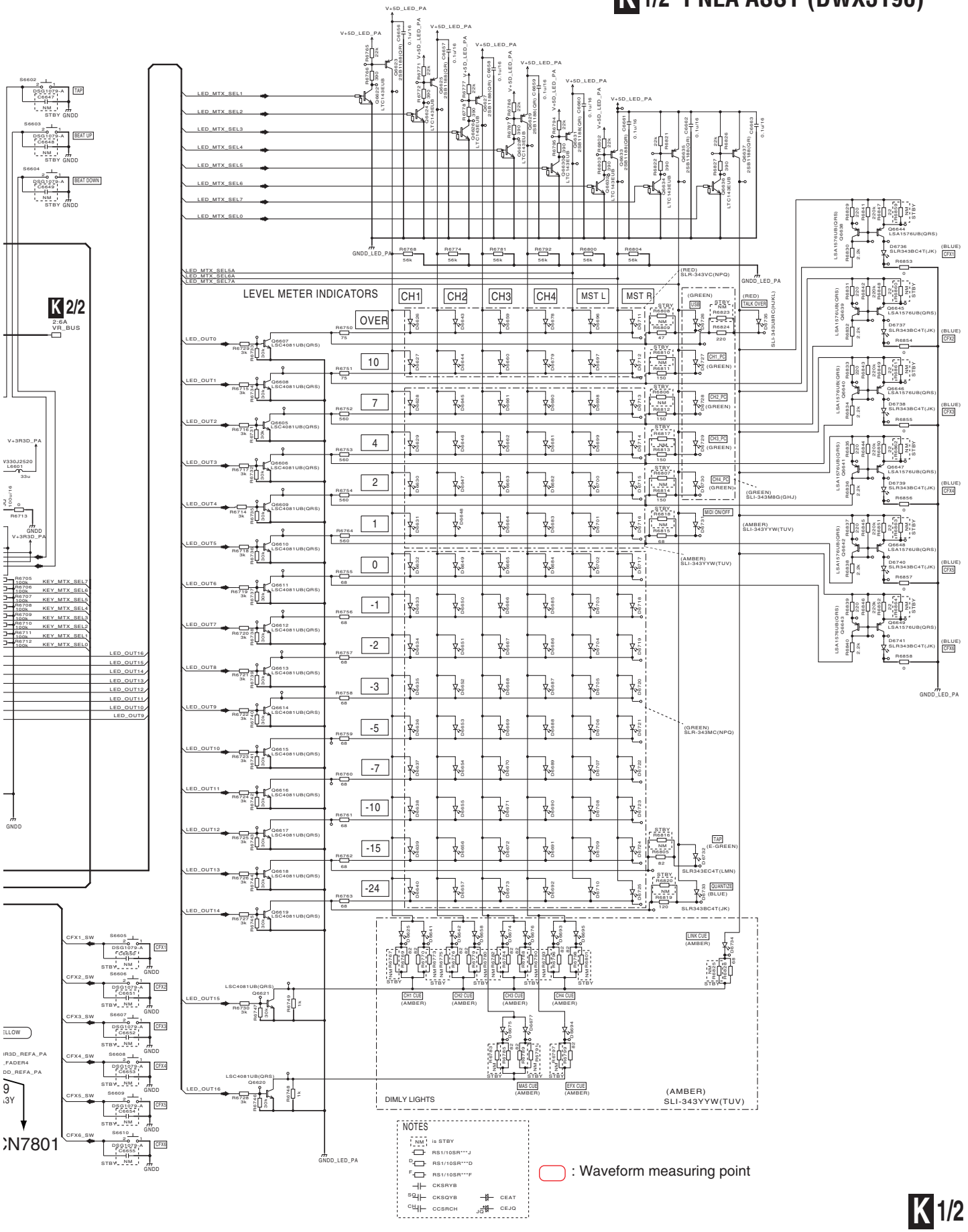
(SEND O) : SEND Output Audio Signal (L CH)

(SEND D) : SEND DIGITAL Signal

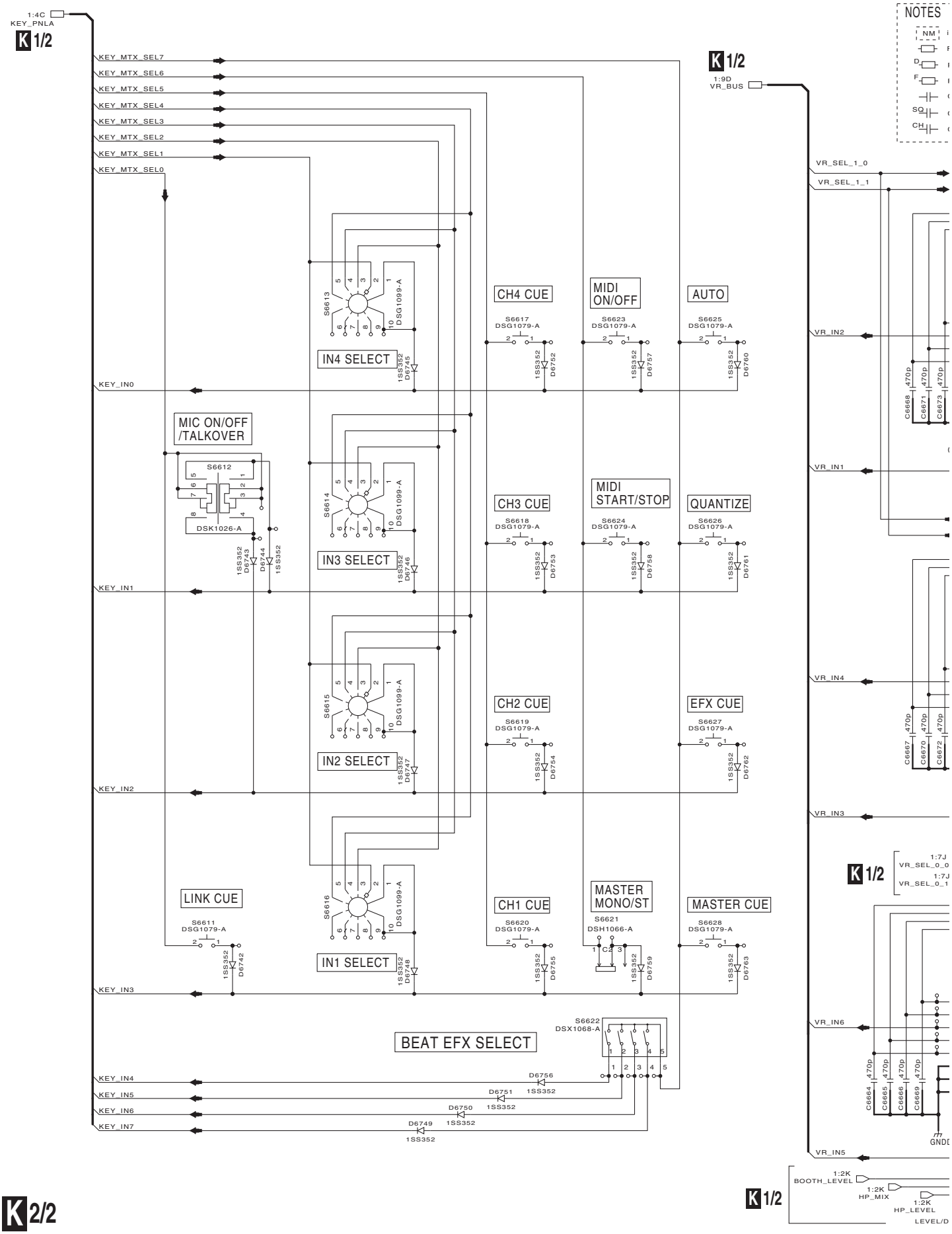
10.36 PNLA ASSY (1/2)



K1/2 PNLA ASSY (DWX3196)



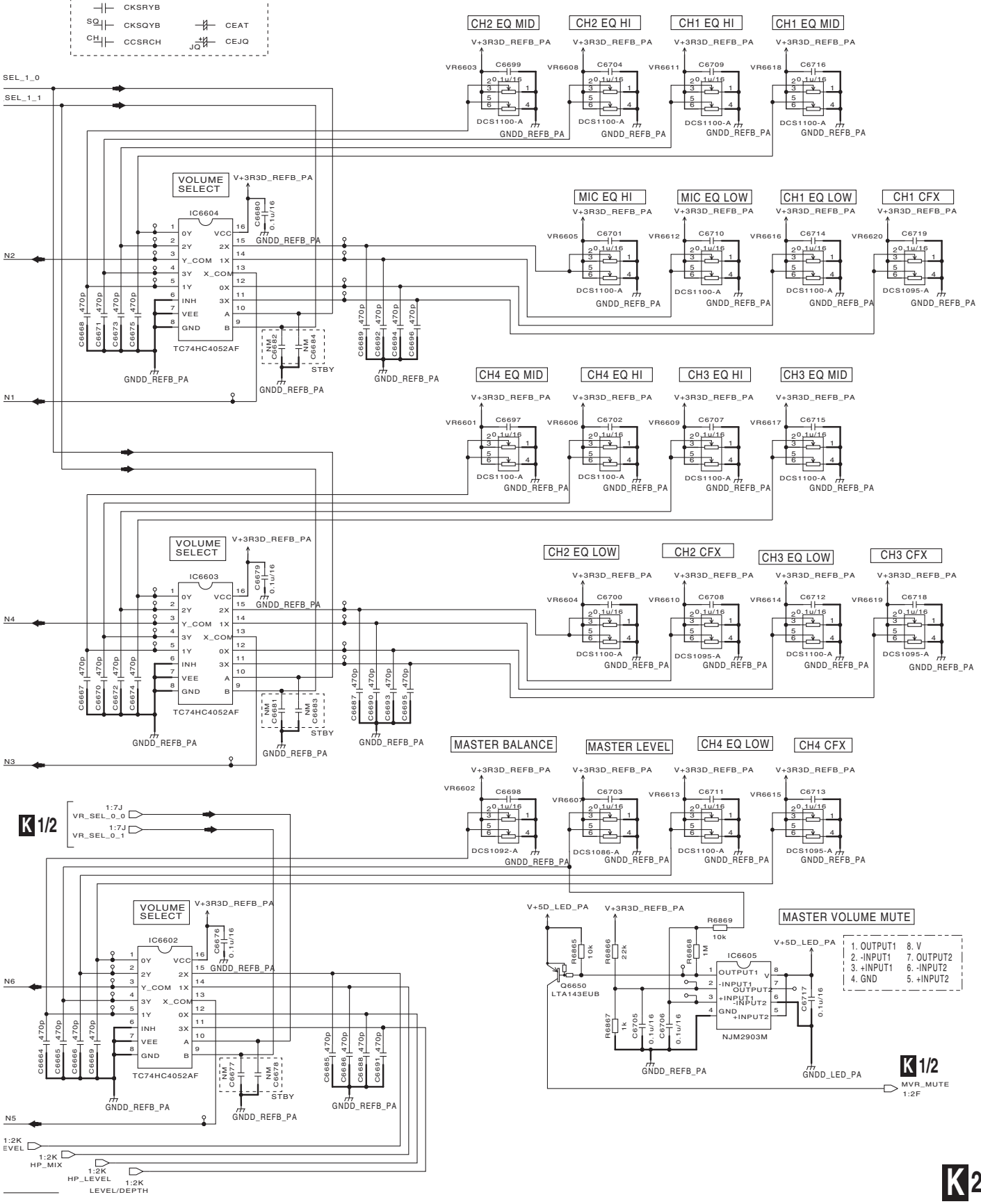
10.37 PNLA ASSY (2/2)



K2/2 PNLA ASSY (DWX3196)

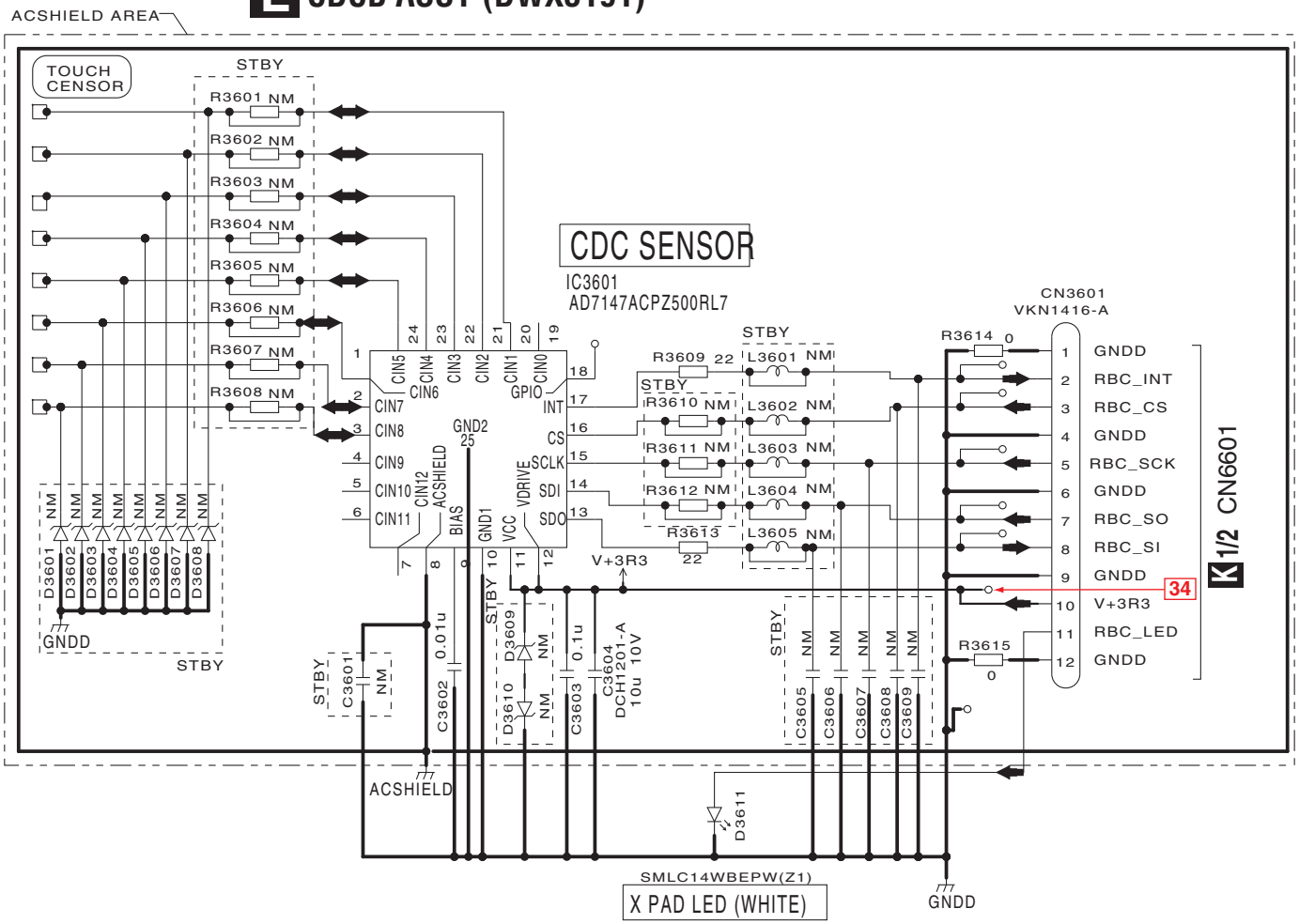
NOTES

- NM is STBY
- RS1/10SR***J
- D RS1/10SR***D
- F RS1/10SR***F
- CKSRYB
- SQ CKSQYB
- CEAT
- CH CCSRCH
- JQ CEJQ



10.38 CDCB and FAD1 to FAD4 ASSYS

L CDCB ASSY (DWX3191)



NOTES

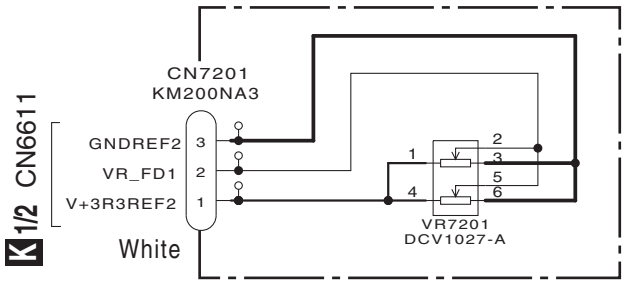
- NM is STBY
- RS1/16S****J
  RS1/10S****J
- CKSRYB****
  CKSSYB****
- CH: CCSRCH****
  CCSSCH****
  CCSQCH****

: Voltage measuring point

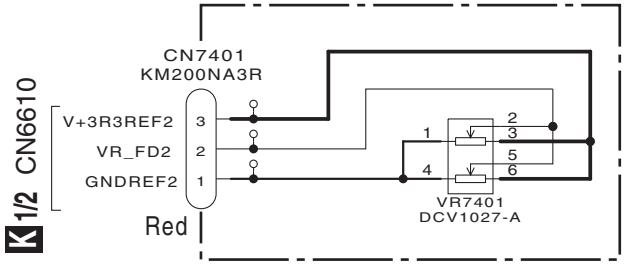
K 1/2 CN6601

34

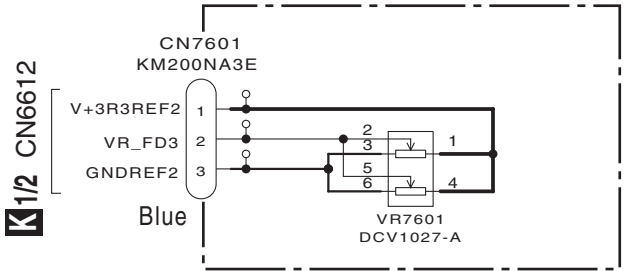
M FAD1 ASSY (DWX3198)



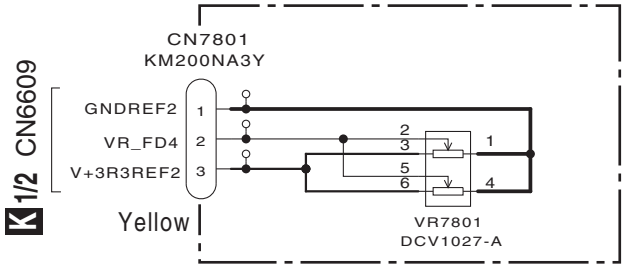
N FAD2 ASSY (DWX3199)



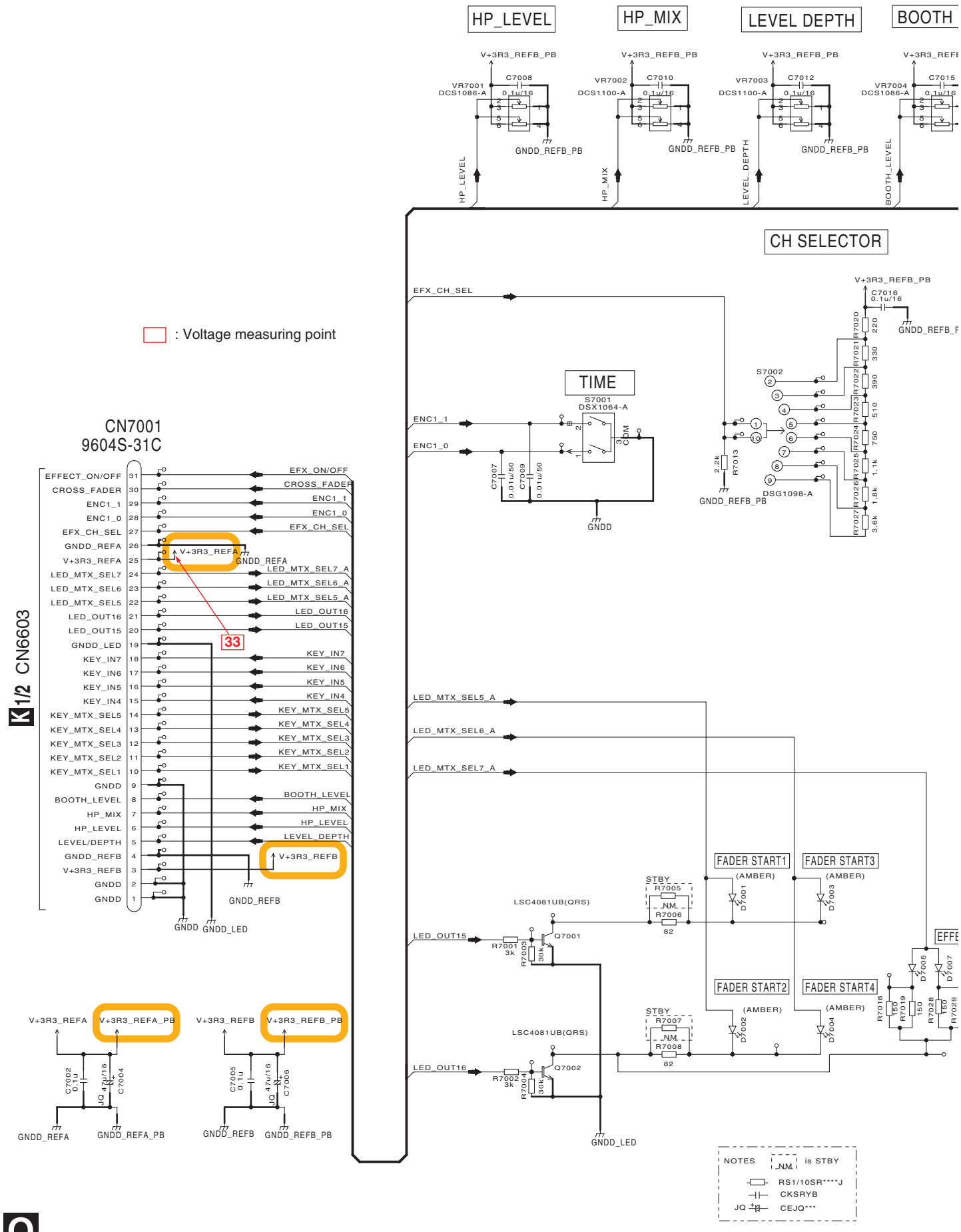
O FAD3 ASSY (DWX3200)

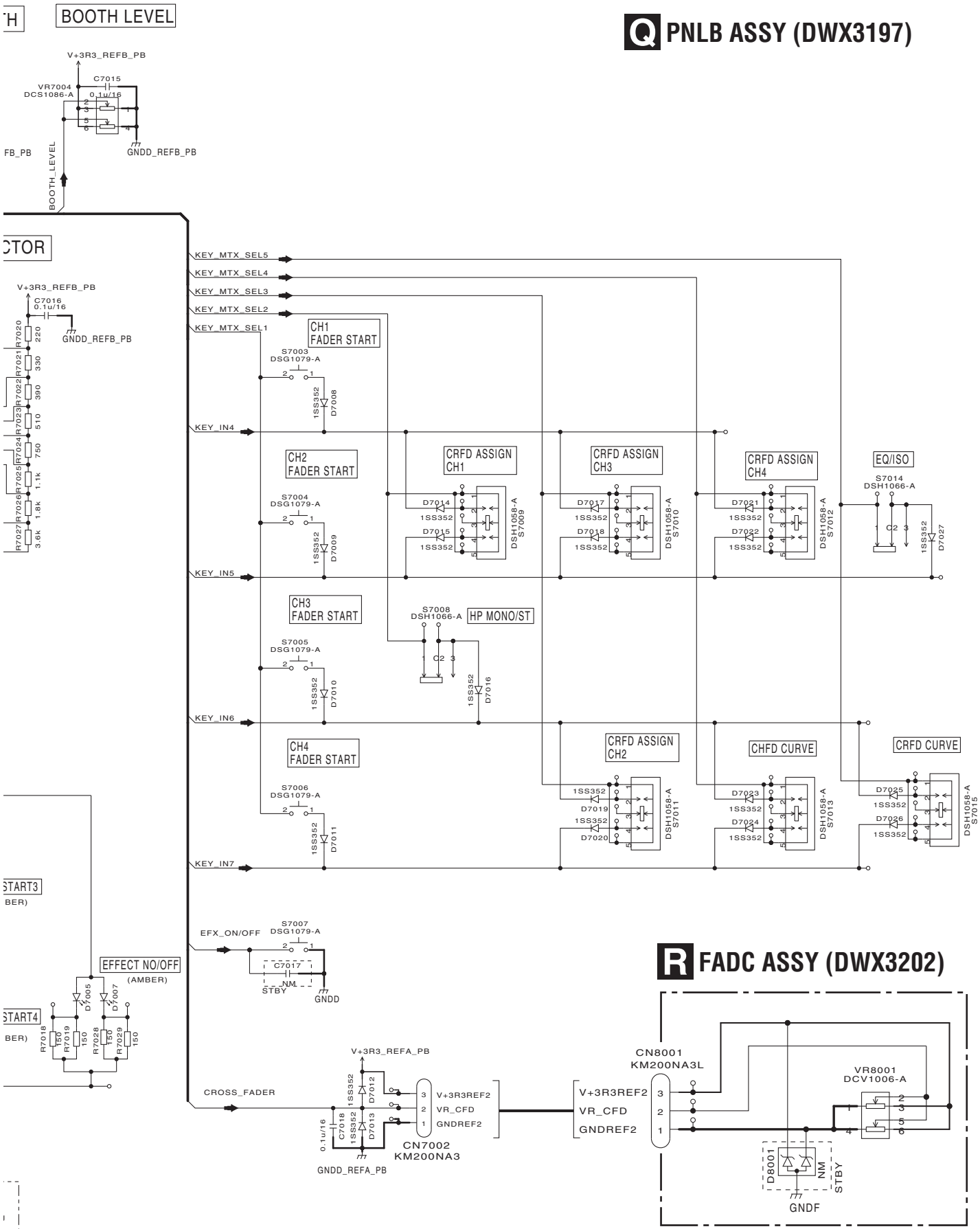


P FAD4 ASSY (DWX3201)



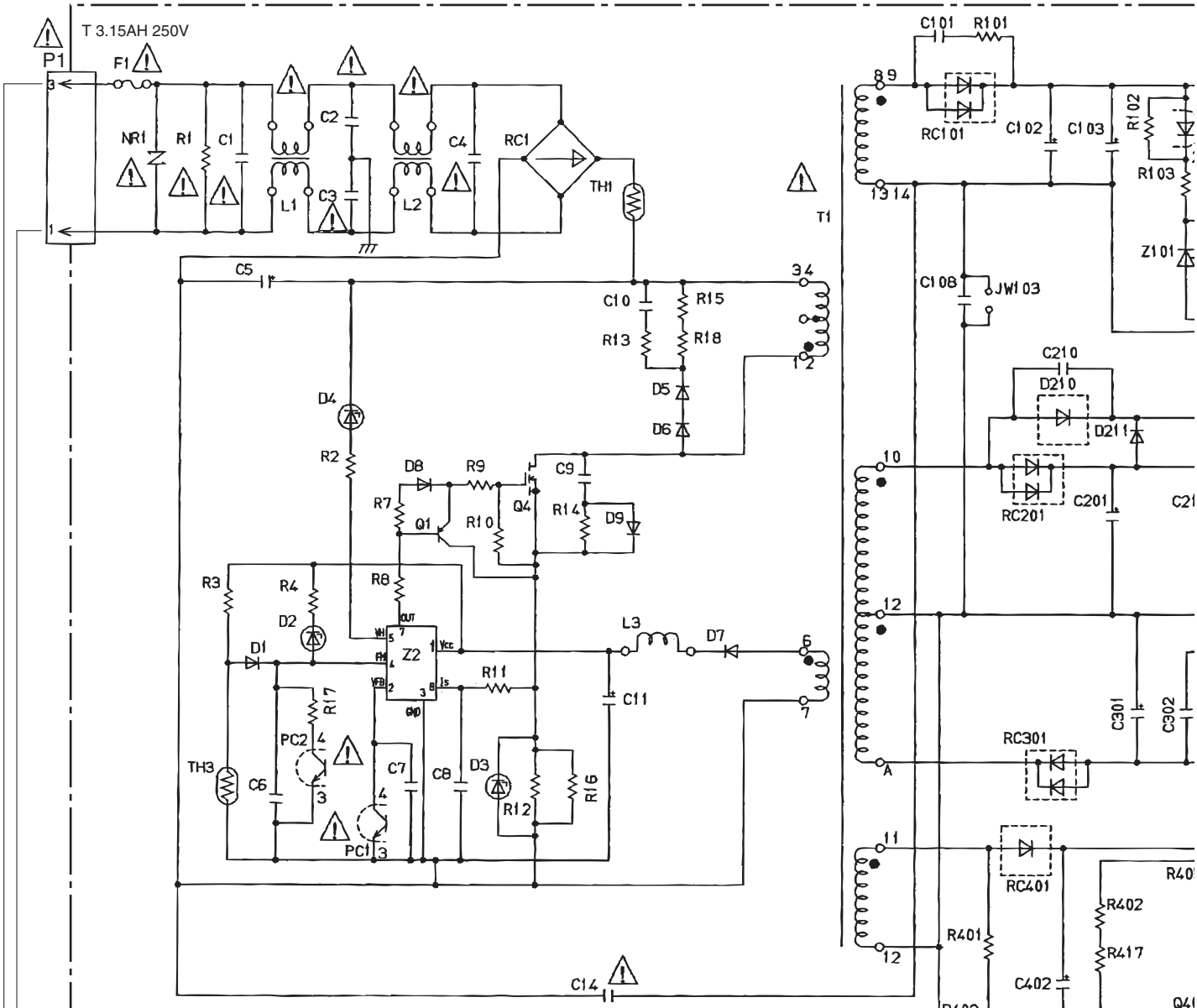
10.39 PNLB and FADC ASSYS



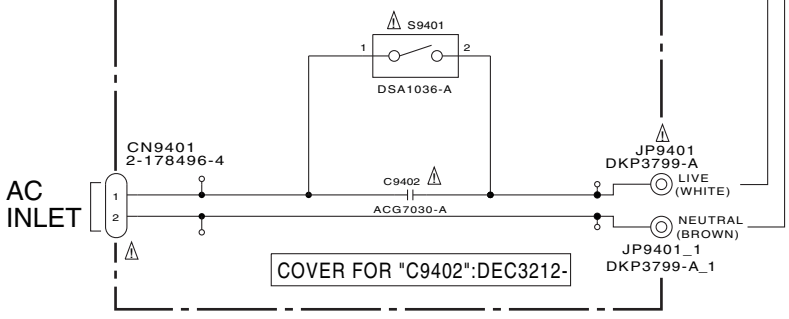

BOOTH LEVEL
Q PNLB ASSY (DWX3197)
V+3R3_REFB_PB
C7015
VR7004
DCS1086-A
0.1u/16
GNDD_REFB_PB
BOOTH_LEVEL
KEY_MTX_SEL5
KEY_MTX_SEL4
KEY_MTX_SEL3
KEY_MTX_SEL2
KEY_MTX_SEL1
CH1 FADER START
CH2 FADER START
CH3 FADER START
CH4 FADER START
S7003 DSG1079-A
S7004 DSG1079-A
S7005 DSG1079-A
S7006 DSG1079-A
S7007 DSG1079-A
S7008 DSH1066-A
S7014 DSH1066-A
HP MONO/ST
EQ/ISO
CRFD ASSIGN CH1
CRFD ASSIGN CH3
CRFD ASSIGN CH4
CRFD ASSIGN CH2
CHFD CURVE
CRFD CURVE
DSH1058-A S7009
DSH1058-A S7010
DSH1058-A S7012
DSH1058-A S7011
DSH1058-A S7013
DSH1058-A S7015
1SS352
KEY_IN4
KEY_IN5
KEY_IN6
KEY_IN7
EFX_ON/OFF
EFFECT NO/OFF
(AMBER)
STBY
NM
GNDD
R7 Q FADC ASSY (DWX3202)
V+3R3_REFA_PB
CROSS_FADER
C7018
CN7002
KM200NA3
V+3R3REF2
VR_CFD
GNDREF2
GNDD_REFA_PB
CN8001
KM200NA3L
VR8001
DCV1006-A
D8001
GNDF
Q R

10.40 POWER SUPPLY and AC SW ASSYS

S POWER SUPPLY ASSY (DWR1492)



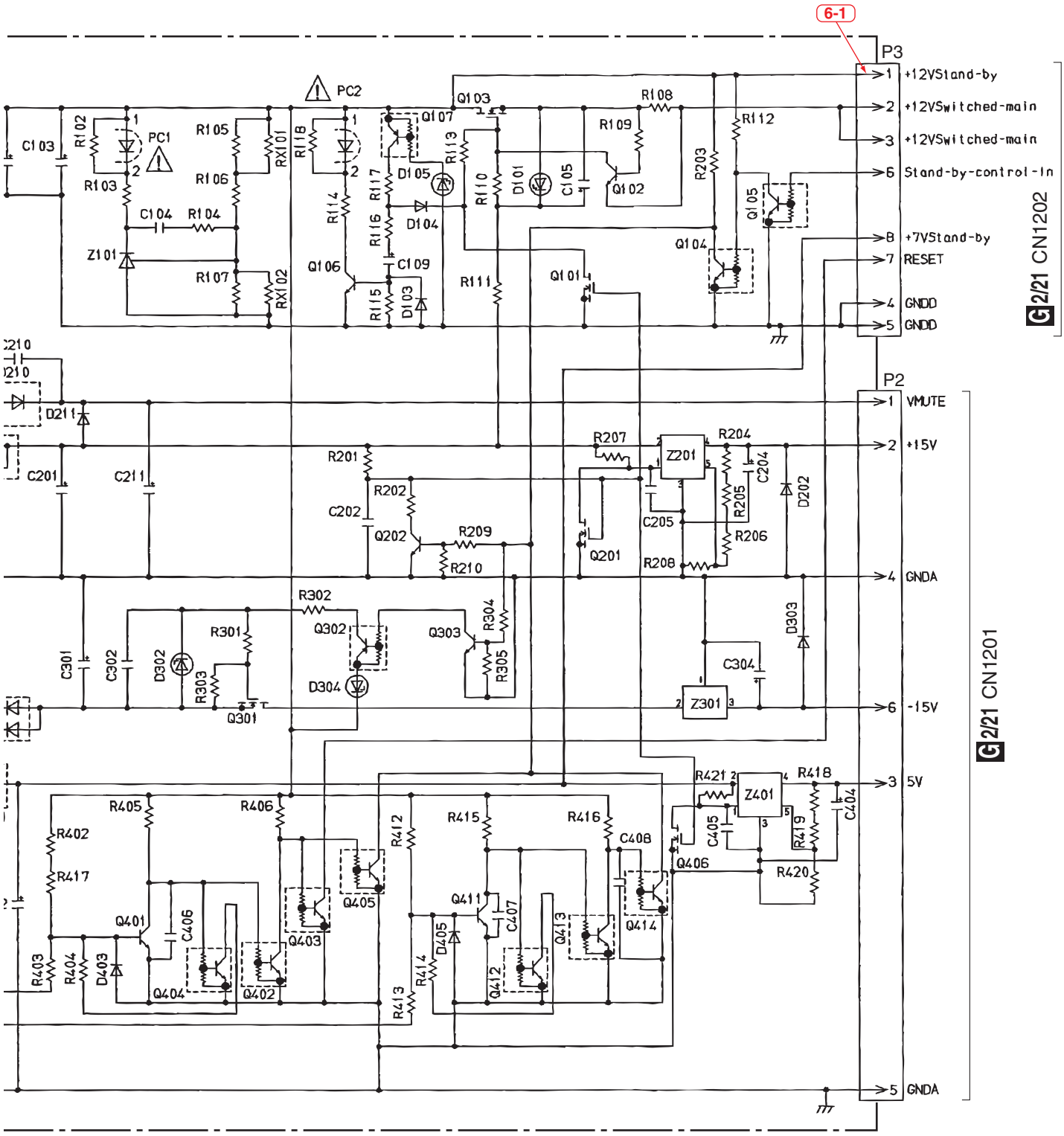
T ACSW ASSY (DWR1490)



• NOTE

CAU

S T



: Waveform measuring point

• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

⚠ 印の部品は、安全上重要な部品です。
交換するときは、安全および性能維持のため
必ず指定の部品をご使用ください。

10.41 WAVEFORMS

■ Measurement Conditoion

IN or OUT	Measure CH	IN CH	IN LEVEL	IN FREQUENCY	RL	Other Settings	Other Settings
IN	CD	CH1/2/3/4	0 dB	1K	-	TRIM LEVEL VR Center	-
IN	LINE	CH2/3	0 dB	1K	-	TRIM LEVEL VR Center	-
IN	PHONO	CH1/4	-40 dB	1K	-	TRIM LEVEL VR Center	-
IN	DIGITAL	CH1/2/3/4	0 dB	1K	-	TRIM LEVEL VR Center	-
IN	MIC	MIC	-40 dB	1K	-	TRIM LEVEL VR MAX	Center all EQs
IN	RETURN	RETURN	0 dB	1K	-	Level/Depth VR Center	-
IN	USB	USB1/2/3/4	0 dB	1K	-	TRIM LEVEL VR Center	-
IN	*LAN	COMPUTER1 /CH4	-	-	-	Connect with CDJ-2000	-
OUT	MASTER1/2	CH1/CD	0 dB	1K	10 kΩ	MASTER LEVEL VR Center	Center all EQs/FADER Max
OUT	BOOTH	CH1/CD	0 dB	1K	10 kΩ	BOOTH LEVEL VR Center	Center all EQs/FADER Max
OUT	REC	CH1/CD	0 dB	1K	10 kΩ		Center all EQs/FADER Max
OUT	SEND	CH1/CD	0 dB	1K	10 kΩ		Center all EQs/FADER Max
OUT	HP	CH1/CD	0 dB	1K	32 Ω	HP LEVEL Center	Center all EQs/FADER Max
OUT	DIG OUT	CH1/CD	0 dB	1K	75 Ω		Center all EQs/FADER Max

* For measurement of LAN AUDIO DATA, input a 1-kHz, 0-dB signal from the PC, using the LINK monitor function, for the INPUT line. For the OUTPUT line, input a 1-kHz, 0-dB signal to MIC, using the LIVE SAMPLER function.

Measure the output waveforms at the CH1 CD input.

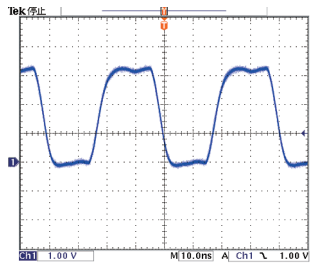
Switch Type Setting

MASTER ATT	: 0 dB
MONO/ST(HP)	: ST
MON/ST(MASTER)	: ST
CH FADER CURVE	: Right side (linear)
CROSS FADER CURVE	: Center
CROSS FADER ASSIGN	: THRU
MIC SW	: ON
MASTER CUE	: ON
FILTER	: MIN
ISOLATOR	: EQ

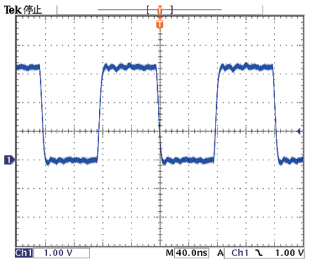
NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram and PCB diagram.

A INPUT ASSY

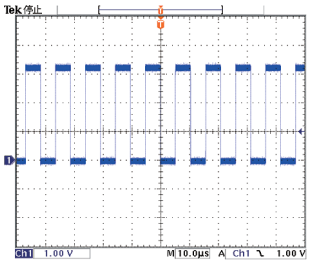
2-1 MCLK_IN_1
V: 1.0 V/div. H: 10.0 nS/div.



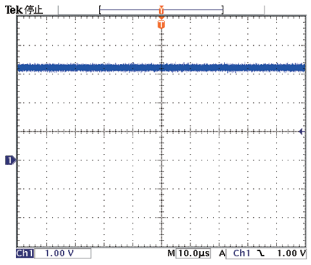
2-3 BCLK_IN_1
V: 1.0 V/div. H: 40.0 nS/div.



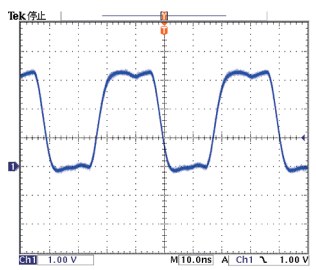
2-5 LRCLK_IN_1
V: 1.0 V/div. H: 10.0 µS/div.



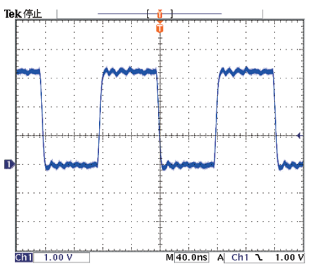
2-7 ADDA_RESET
V: 1.0 V/div. H: 10.0 µS/div.



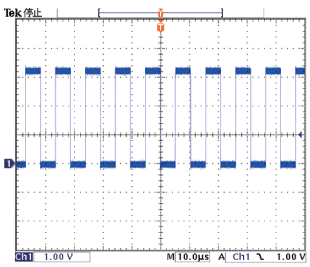
2-2 MCLK_IN_2
V: 1.0 V/div. H: 10.0 nS/div.



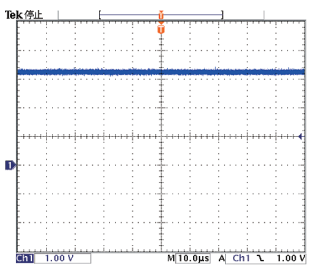
2-4 BCLK_IN_2
V: 1.0 V/div. H: 40.0 nS/div.



2-6 LRCLK_IN_2
V: 1.0 V/div. H: 10.0 µS/div.

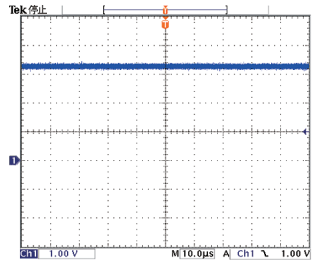


2-8 RESET_IN1
V: 1.0 V/div. H: 10.0 µS/div.

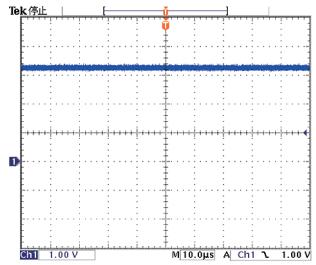


A INPUT ASSY

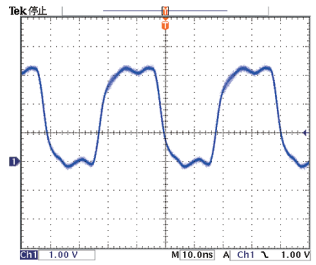
2-9 RESET_IN1
V: 1.0 V/div. H: 10.0 µS/div.



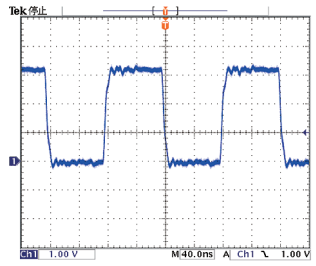
2-10 RESET
V: 1.0 V/div. H: 10.0 µS/div.



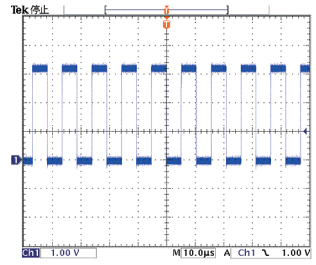
2-11 MCLK
V: 1.0 V/div. H: 40.0 nS/div.



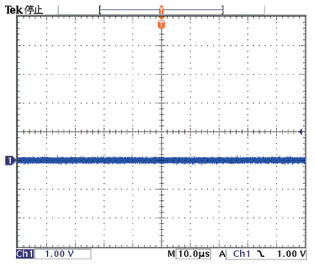
2-12 BCLK
V: 1.0 V/div. H: 40.0 nS/div.



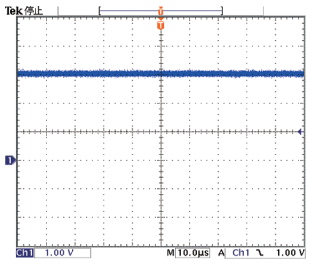
2-13 LRCLK
V: 1.0 V/div. H: 10.0 µS/div.



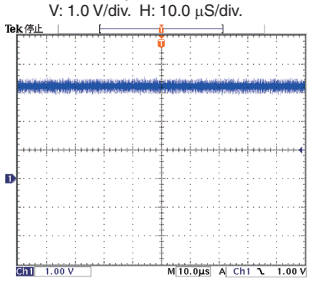
2-14 -1 LINE_SEL1(CD, DIGITAL)
V: 1.0 V/div. H: 10.0 µS/div.



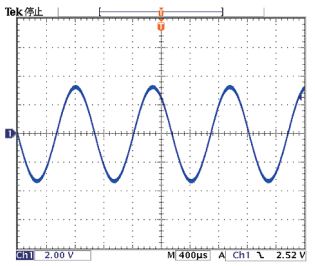
2-14 -2 LINE_SEL1(PHONO, USB)
V: 1.0 V/div. H: 10.0 µS/div.



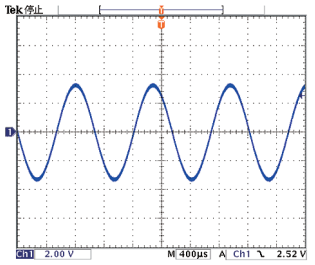
2-15 RETURN_IN (Connect at RETURN L terminal)
V: 1.0 V/div. H: 10.0 µS/div.



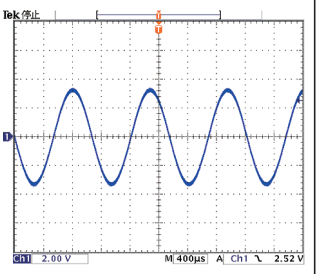
2-16 Input Buffer Block out
V: 2.0 V/div. H: 400 µS/div.



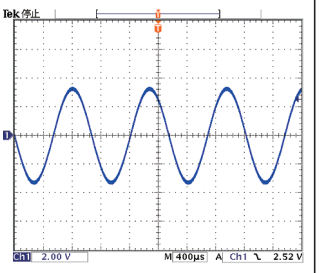
2-17 Before TRIM
V: 2.0 V/div. H: 400 µS/div.



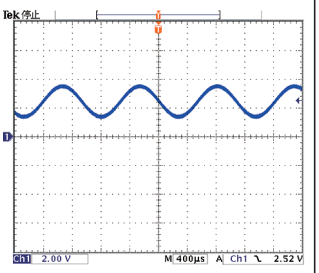
2-18 After TRIM
V: 2.0 V/div. H: 400 µS/div.



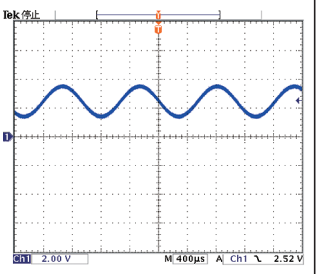
2-19 Intermediate Buffer Block out
V: 2.0 V/div. H: 400 µS/div.



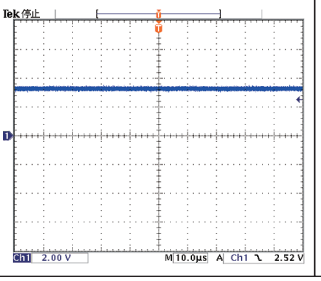
2-20 CH1_R-
V: 2.0 V/div. H: 400 µS/div.



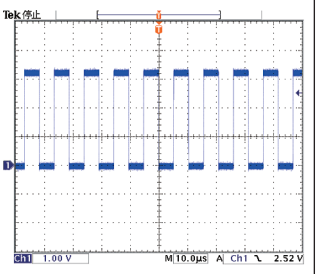
2-21 CH1_R+
V: 2.0 V/div. H: 400 µS/div.



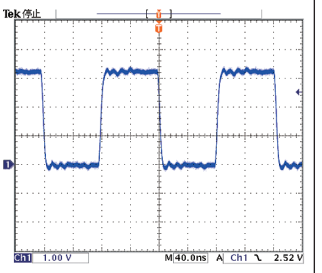
2-22 CH1_RESET
V: 1.0 V/div. H: 10.0 µS/div.



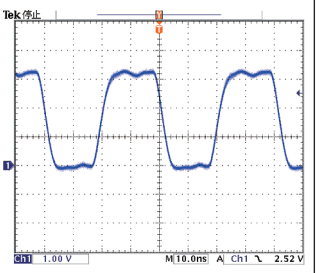
2-23 LRCLK_IN_CH1
V: 1.0 V/div. H: 10.0 µS/div.



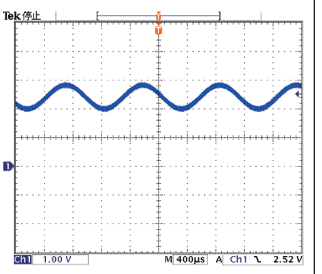
2-24 BCLK_IN_CH1
V: 1.0 V/div. H: 40.0 nS/div.



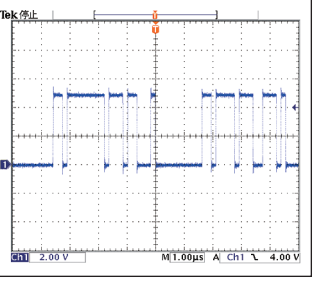
2-25 MCLK_IN_CH1
V: 1.0 V/div. H: 10.0 nS/div.



2-26 CH1_TIME_R
V: 1.0 V/div. H: 400 µS/div.

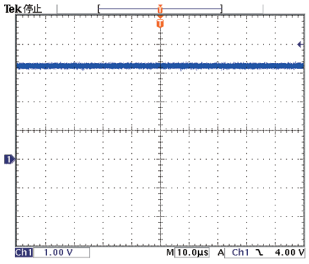


2-27 CH1_ADAT_TIME
V: 2.0 V/div. H: 1.0 µS/div.

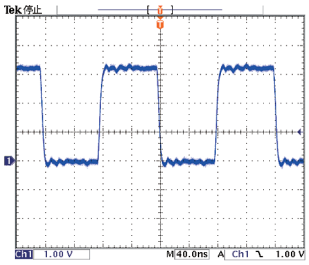


A INPUT ASSY

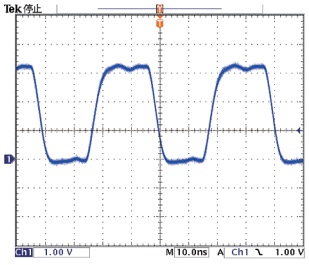
2-28 CH1_RESET
V: 1.0 V/div. H: 10.0 µS/div.



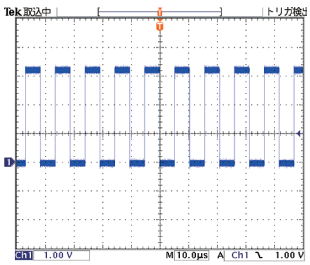
2-29 BCLK_IN_CH1
V: 1.0 V/div. H: 40.0 nS/div.



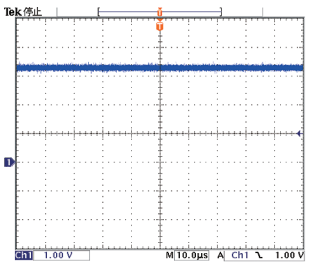
2-30 MCLK_IN_CH1
V: 1.0 V/div. H: 10.0 nS/div.



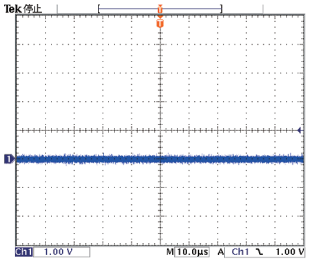
2-31 LRCK_IN_CH1
V: 1.0 V/div. H: 10.0 µS/div.



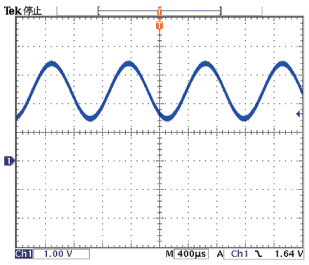
2-32 TC_SEL1 (USB) -1
V: 1.0 V/div. H: 10.0 µS/div.



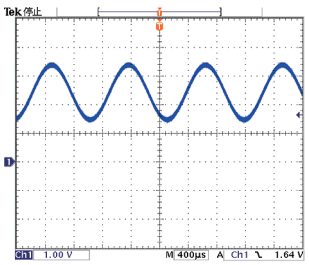
2-32 TC_SEL1(excepting USB) -2
V: 1.0 V/div. H: 10.0 µS/div.



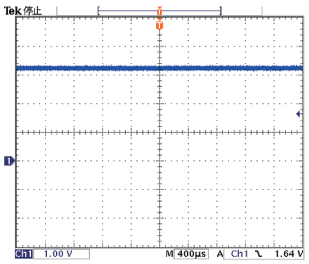
2-33 RETURN_L
V: 1.0 V/div. H: 400 µS/div.



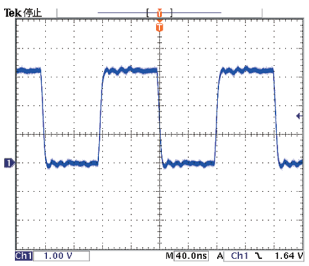
2-34 RETURN_R
V: 1.0 V/div. H: 400 µS/div.



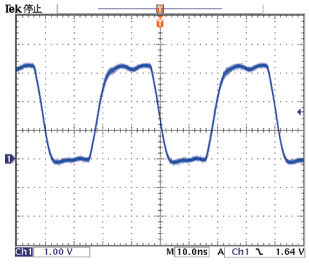
2-35 RESET_IN_RE
V: 1.0 V/div. H: 400 µS/div.



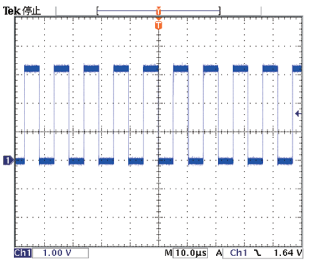
2-36 BCLK_IN_RE
V: 1.0 V/div. H: 40.0 nS/div.



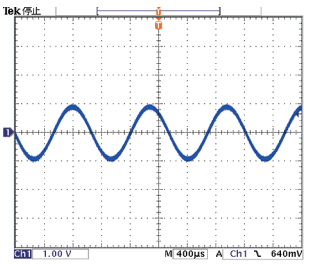
2-37 MCLK_IN_RE
V: 1.0 V/div. H: 10.0 nS/div.



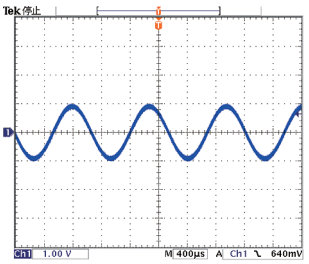
2-38 LRCLK_IN_RE
V: 1.0 V/div. H: 10.0 µS/div.



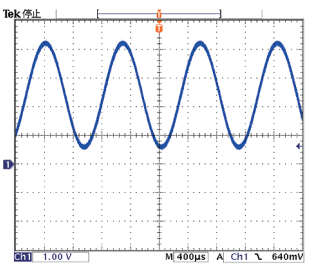
2-39 MIC1_LEVEL (-40 dB signal input)
V: 1.0 V/div. H: 400 µS/div.



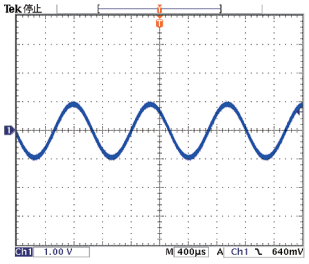
2-40 After MIC1_LEVEL
V: 1.0 V/div. H: 400 µS/div.



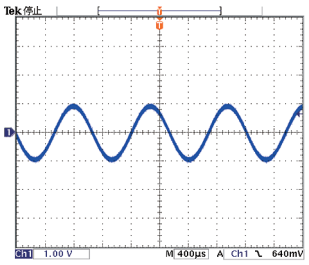
2-41 MIC1_ADC_IN
V: 1.0 V/div. H: 400 µS/div.



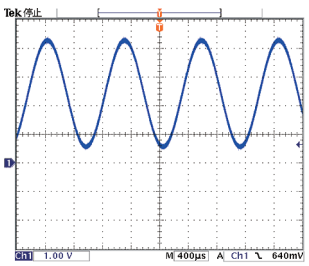
2-42 MIC2_LEVEL
V: 1.0 V/div. H: 400 µS/div.



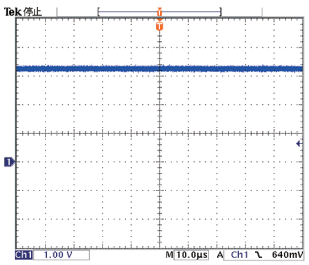
2-43 After MIC2_LEVEL
V: 1.0 V/div. H: 400 µS/div.



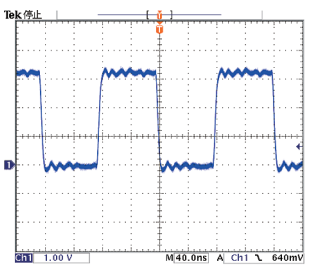
2-44 MIC2_ADC_IN
V: 1.0 V/div. H: 400 µS/div.



2-45 RESET_IN2
V: 1.0 V/div. H: 10.0 µS/div.

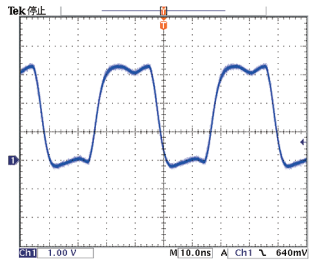


2-46 BCLK_IN_MI
V: 1.0 V/div. H: 40.0 nS/div.

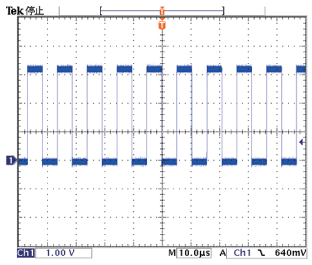


A INPUT ASSY

2-47 MCLK_IN_MI
V: 1.0 V/div. H: 10.0 nS/div.

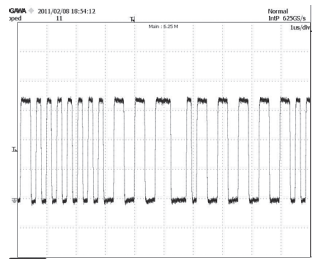


2-48 LRCLK_IN_MI
V: 1.0 V/div. H: 10.0 µS/div.

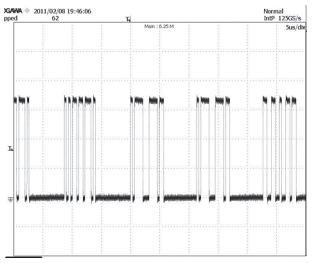


G MAIN ASSY

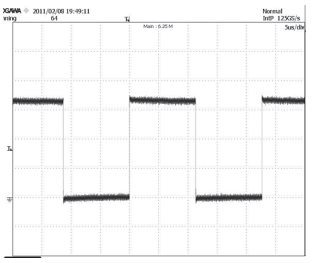
1-6 CH1_SPDIF
V: 1.0 V/div. H: 1 µS/div.



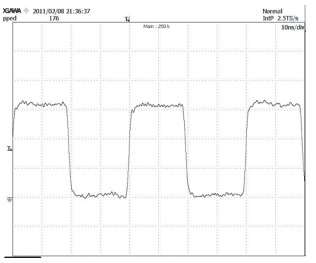
1-10 DOUT
V: 1.0 V/div. H: 5 µS/div.



1-14 ILRCK
V: 1.0 V/div. H: 5 µS/div.

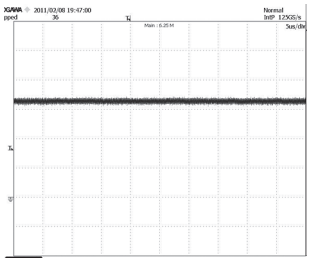


1-19 MII BUS
V: 1.0 V/div. H: 10 nS/div.

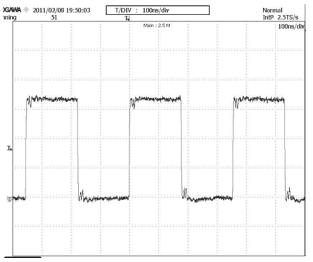


1-7 SCKO
V: 1.0 V/div. H: 50 nS/div.

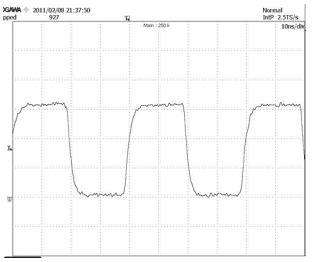
1-11 DIR_RESET
V: 1.0 V/div. H: 5 µS/div.



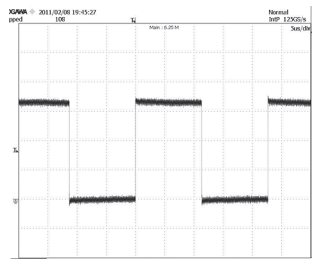
1-15 ISCLK
V: 1.0 V/div. H: 100 nS/div.



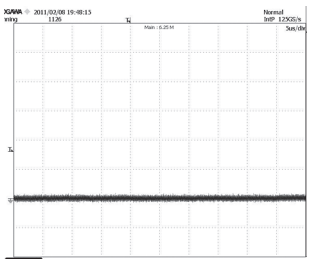
1-21 25M_CLK_PHY
V: 1.0 V/div. H: 10 nS/div.



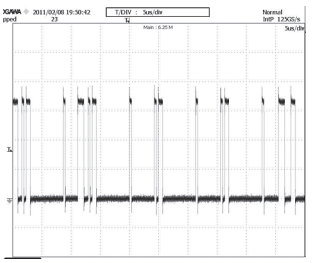
1-8 LRCKO
V: 1.0 V/div. H: 5 µS/div.



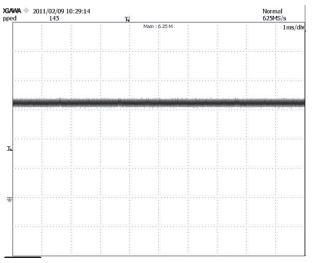
1-12 DIG_SEL1
V: 1.0 V/div. H: 5 µS/div.



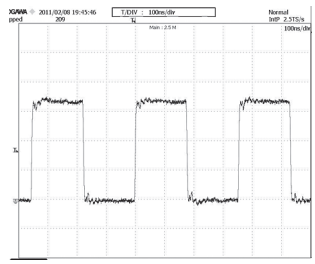
1-16 ADATIN_SRC1
V: 1.0 V/div. H: 5 µS/div.



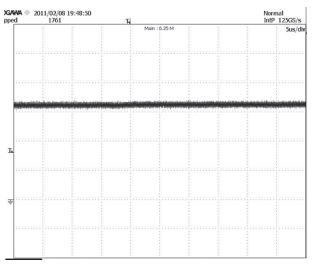
1-26 DSP_RST
V: 1.0 V/div. H: 1 mS/div.



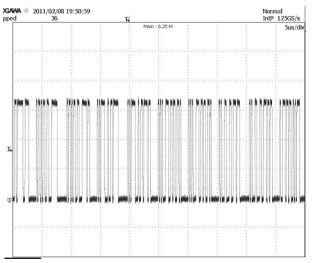
1-9 BCKO
V: 1.0 V/div. H: 100 nS/div.



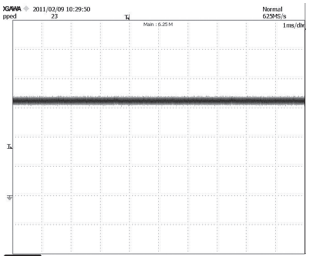
1-13 CH1SRC_RESET
V: 1.0 V/div. H: 5 µS/div.



1-17 UDIN1
V: 1.0 V/div. H: 5 µS/div.

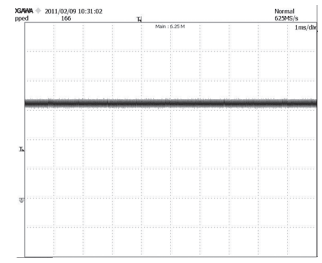


1-27 DFLASH_RST
V: 1.0 V/div. H: 1 mS/div.

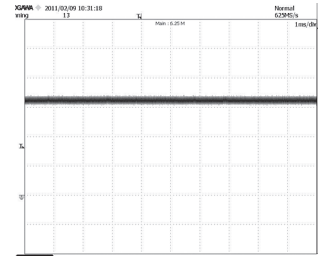


G MAIN ASSY

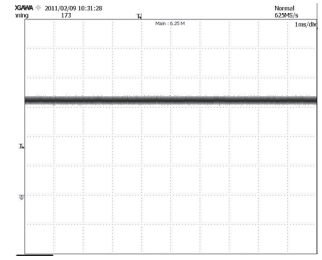
(1-28) DIR_ADC_DAC_RESET
V: 1.0 V/div. H: 1 mS/div.



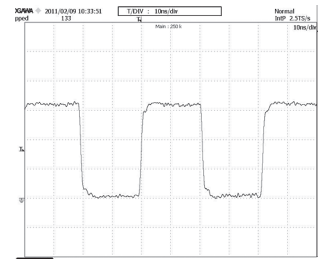
(1-29) DIT_RST
V: 1.0 V/div. H: 1 mS/div.



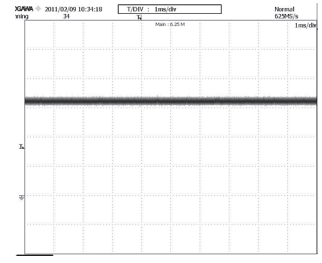
(1-30) FPGA_RST
V: 1.0 V/div. H: 1 mS/div.



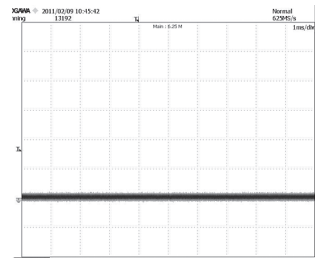
(1-35) 24M_CLK_USB
V: 1.0 V/div. H: 10 nS/div.



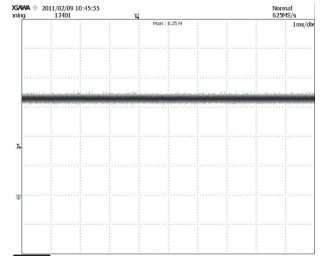
(1-36) USB_RESET
V: 1.0 V/div. H: 1 mS/div.



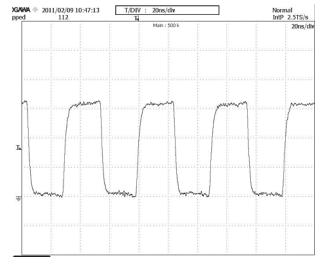
(1-38) CPU_MUTE
V: 1.0 V/div. H: 1 mS/div.



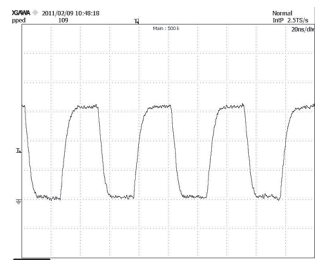
(1-39) CPU_RESET
V: 1.0 V/div. H: 1 mS/div.



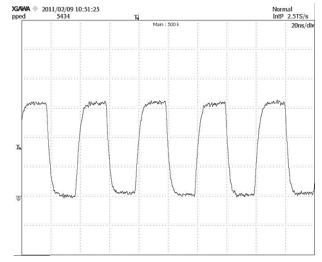
(1-40) 20M_CLK_MAIN
V: 1.0 V/div. H: 20 nS/div.



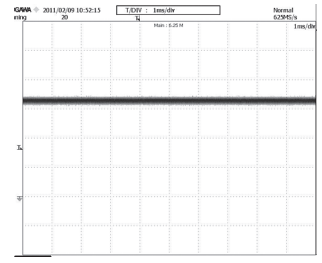
(1-41) 20M_CLK_SH
V: 1.0 V/div. H: 20 nS/div.



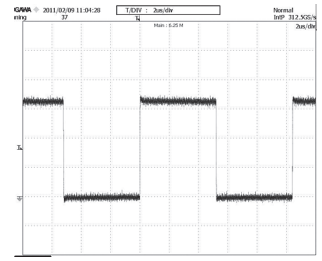
(1-42) 24.5764_CLK
V: 1.0 V/div. H: 20 nS/div.



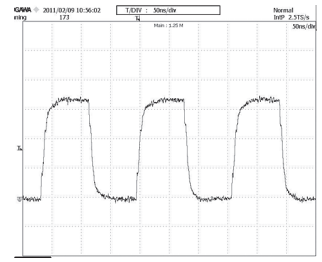
(1-43) SUB_SH_RST
V: 1.0 V/div. H: 1 mS/div.



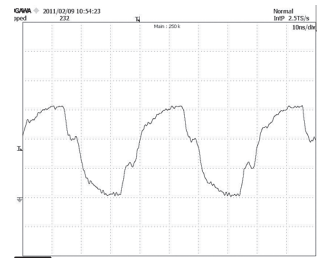
(1-44) 96k_CLK_AIN
V: 1.0 V/div. H: 2 μS/div.



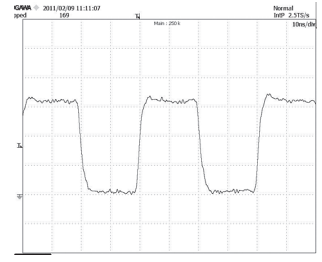
(1-45) 6M_CLK_AIN
V: 1.0 V/div. H: 50 nS/div.



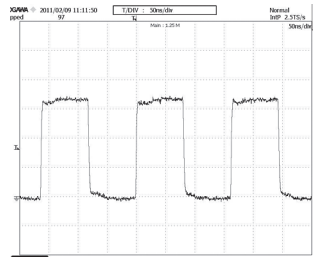
(1-46) 24M_CLK_AIN
V: 1.0 V/div. H: 10 nS/div.



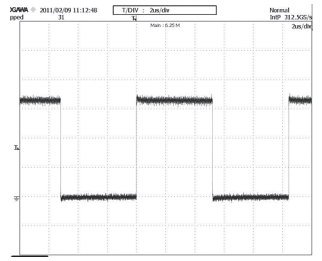
(1-47) 24M_CLK_ADDA
V: 1.0 V/div. H: 10 nS/div.



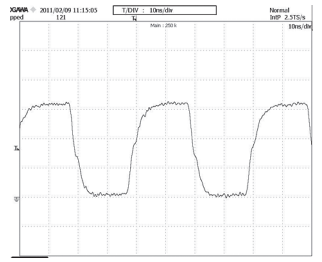
(1-48) 6M_CLK_ADDA
V: 1.0 V/div. H: 50 nS/div.



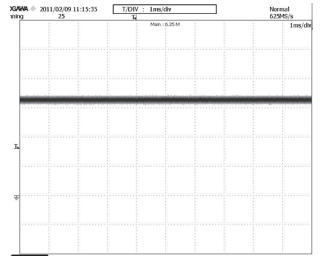
(1-49) 96k_CLK_ADDA
V: 1.0 V/div. H: 2 μ/div.



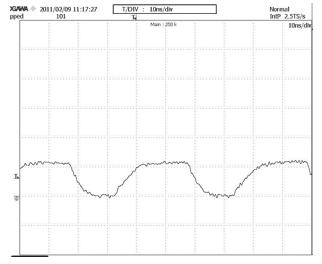
(1-53) 24M_CLK_FPGA
V: 1.0 V/div. H: 10 nS/div.



(1-54) SH_FPGA_DONE
V: 1.0 V/div. H: 1 mS/div.

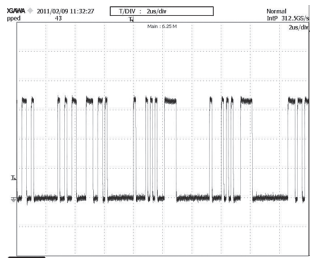


(1-59) 24.5M_CLK_DSP
V: 1.0 V/div. H: 10 nS/div.

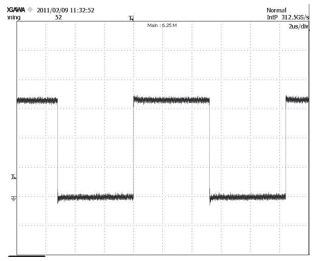


G MAIN ASSY

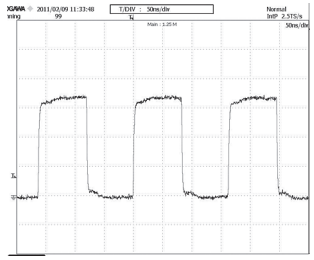
1-60 ADAT_DOUT
V: 1.0 V/div. H: 2 µS/div.



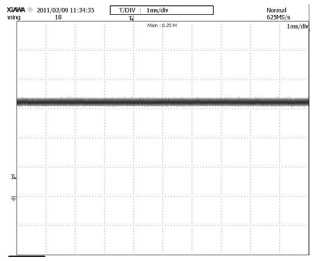
1-61 SRC_LRCK
V: 1.0 V/div. H: 2 µS/div.



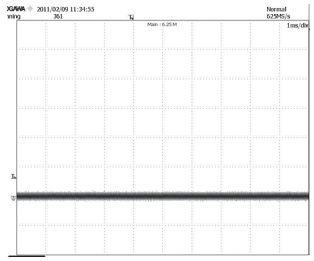
1-62 SRC_BCLK
V: 1.0 V/div. H: 50 nS/div.



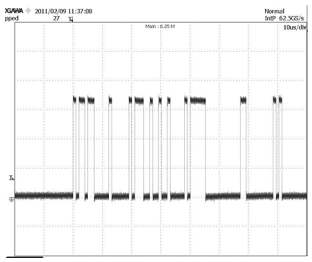
1-63 DOUT_SRC_RESET
V: 1.0 V/div. H: 1 mS/div.



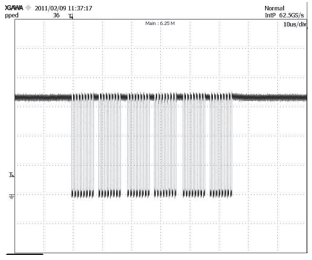
1-64 MS_SEL
V: 1.0 V/div. H: 1 mS/div.



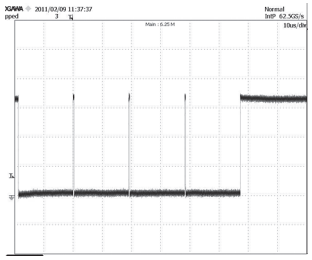
1-65 DIT_TXD
V: 1.0 V/div. H: 10 µS/div.



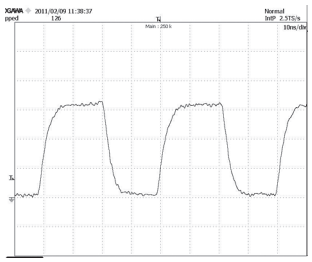
1-66 DIT_SCK
V: 1.0 V/div. H: 10 µS/div.



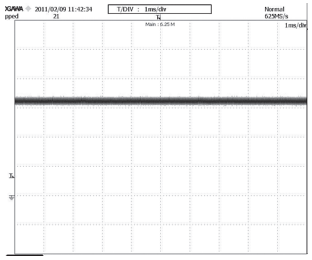
1-67 DIT_CS
V: 1.0 V/div. H: 10 µS/div.



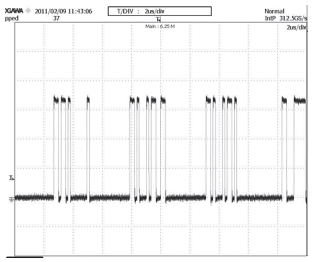
1-68 XTI
V: 1.0 V/div. H: 10 nS/div.



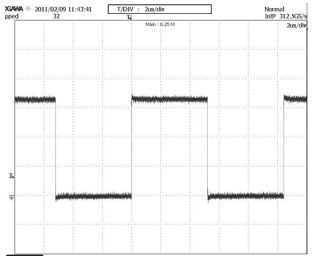
1-69 DIT_RESET
V: 1.0 V/div. H: 1 mS/div.



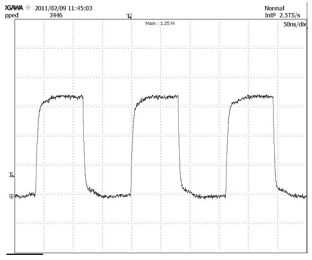
1-70 DAUX
V: 1.0 V/div. H: 2 µS/div.



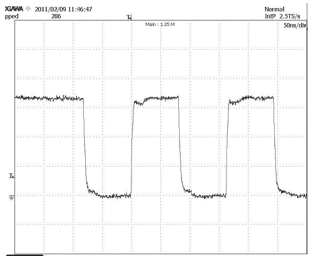
1-71 LRCK_DOUT
V: 1.0 V/div. H: 2 µS/div.



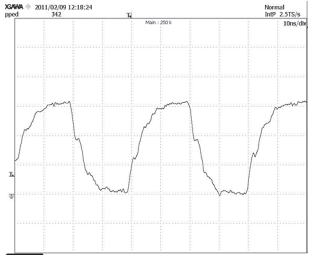
1-72 BCLK_DOUT
V: 1.0 V/div. H: 50 nS/div.



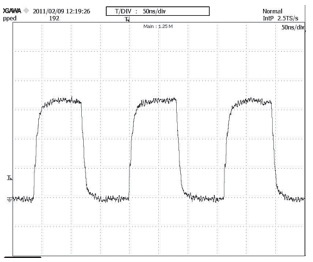
1-74 D_OUT
V: 1.0 V/div. H: 50 nS/div.



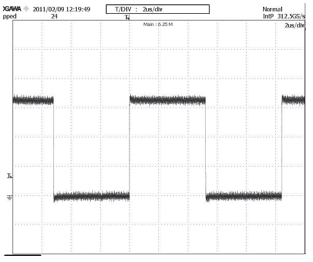
1-75 MCLK_OUT1
V: 1.0 V/div. H: 10 nS/div.



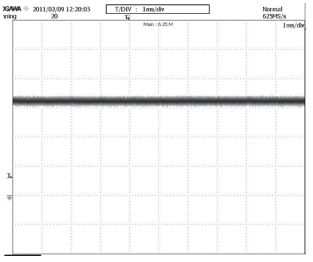
1-76 BCLK_OUT1
V: 1.0 V/div. H: 50 nS/div.



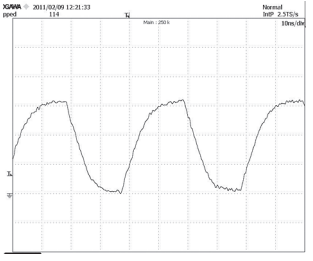
1-77 LRCLK_OUT1
V: 1.0 V/div. H: 2 µS/div.



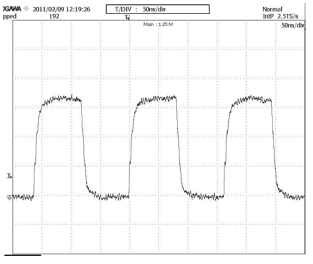
1-78 RESET_OUT1
V: 1.0 V/div. H: 1 mS/div.



1-79 MCLK_OUT2
V: 1.0 V/div. H: 10 nS/div.

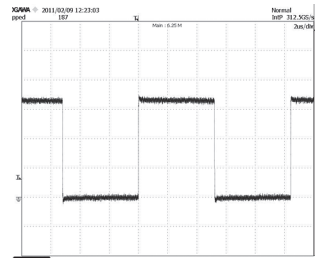


1-80 BCLK_OUT2
V: 1.0 V/div. H: 50 nS/div.

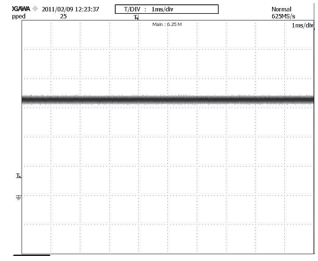


G MAIN ASSY

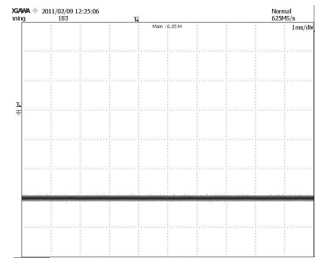
1-81 **LRCLK_OUT2**
V: 1.0 V/div. H: 2 µS/div.



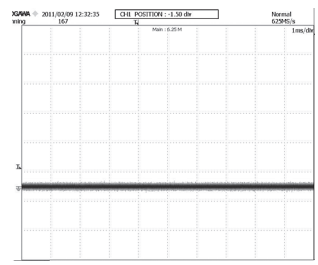
1-82 **RESET_OUT2**
V: 1.0 V/div. H: 1 mS/div.



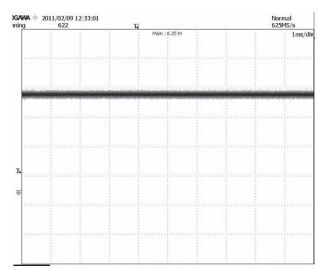
1-83 **MUTE_O**
V: 5.0 V/div. H: 1 mS/div.



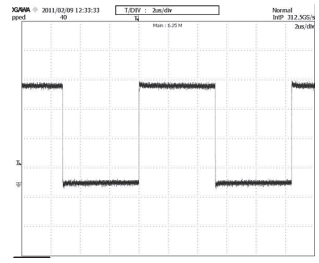
1-84 **MVR_MUTE_OUT**
V: 1.0 V/div. H: 1 mS/div.



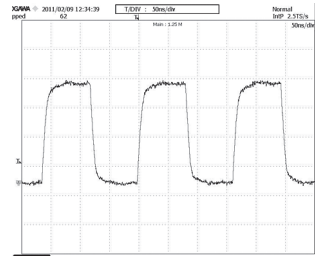
1-85 **RESET_OUT**
V: 1.0 V/div. H: 1 mS/div.



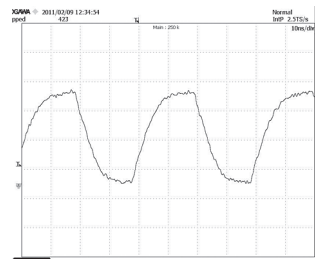
1-86 **MCLK_OUT_M1**
V: 1.0 V/div. H: 2 µS/div.



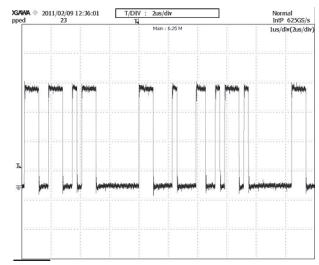
1-87 **BCLK_OUT_M1**
V: 1.0 V/div. H: 50 nS/div.



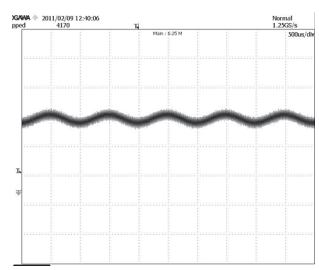
1-88 **LRCLK_OUT_M1**
V: 1.0 V/div. H: 10 nS/div.



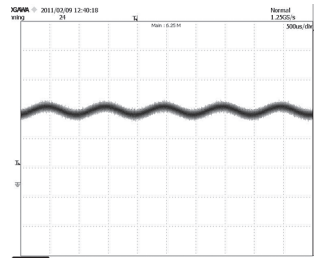
1-89 **ADAT_MASTER_OUT**
V: 1.0 V/div. H: 1 µS/div.



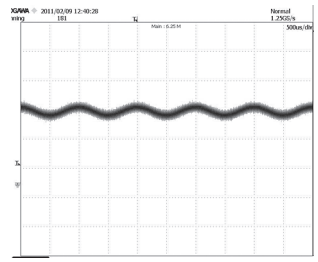
1-90 **AOUTRN**
V: 1.0 V/div. H: 500 µS/div.



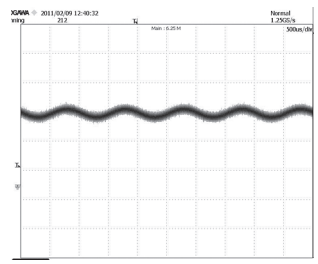
1-91 **AOUTRP**
V: 1.0 V/div. H: 500 µS/div.



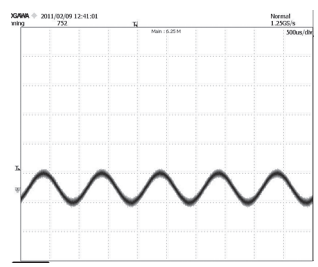
1-92 **AOUTLP**
V: 1.0 V/div. H: 500 µS/div.



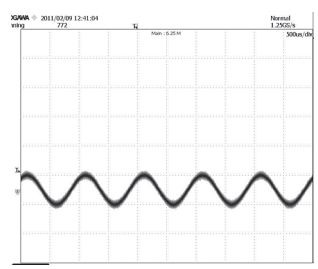
1-93 **AOUTLN**
V: 1.0 V/div. H: 500 µS/div.



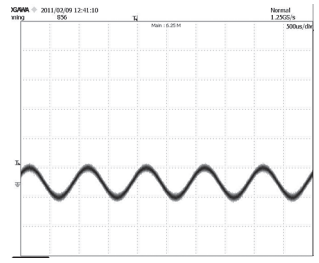
1-94 **AOUTL+1**
V: 1.0 V/div. H: 500 µS/div.



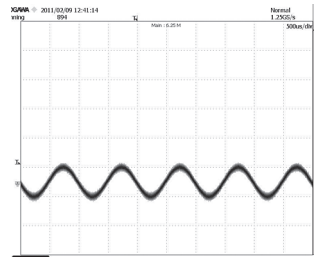
1-95 **AOUTL-1**
V: 1.0 V/div. H: 500 µS/div.



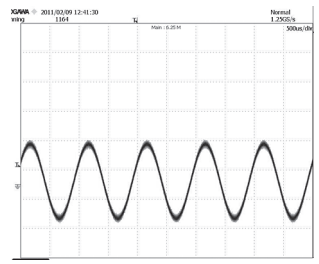
1-96 **AOUTR+1**
V: 1.0 V/div. H: 500 µS/div.



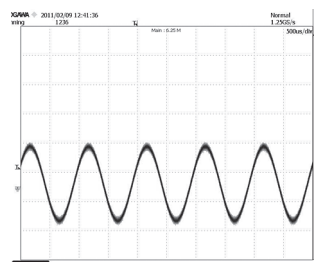
1-97 **AOUTR-1**
V: 1.0 V/div. H: 500 µS/div.



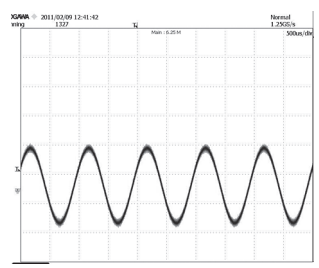
1-98 **AOUTL+2**
V: 1.0 V/div. H: 500 µS/div.



1-99 **AOUTL-2**
V: 1.0 V/div. H: 500 µS/div.



1-100 **AOUTR+2**
V: 1.0 V/div. H: 500 µS/div.



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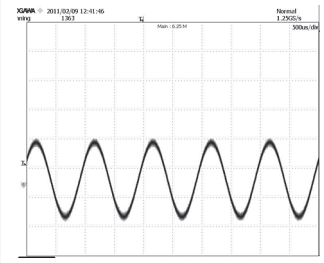
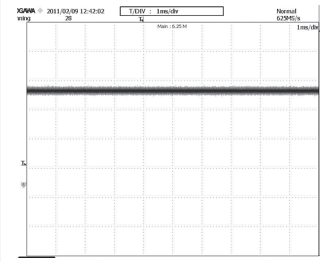
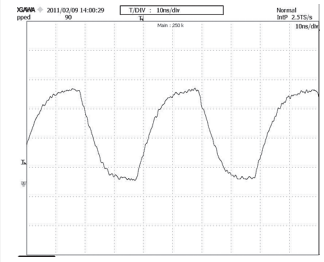
1-101 **AOUTR-2**
V: 1.0 V/div. H: 500 µS/div.



1-102 **MUTE_M1**
V: 1.0 V/div. H: 1 mS/div.

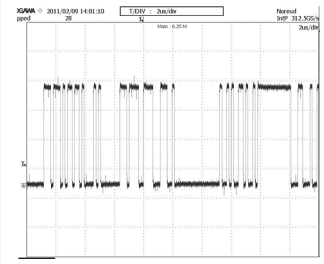


1-103 **MCLK_OUT_RE**
V: 1.0 V/div. H: 10 nS/div.

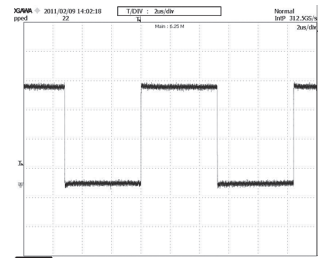


1-104 **BCLK_OUT_RE**
V: 1.0 V/div. H: 50 nS/div.

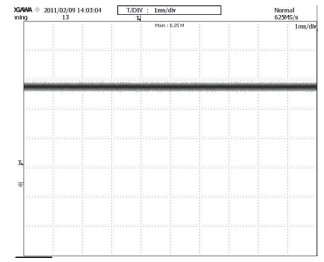
1-105 **ADAT_REC_OUT**
V: 1.0 V/div. H: 2 µS/div.



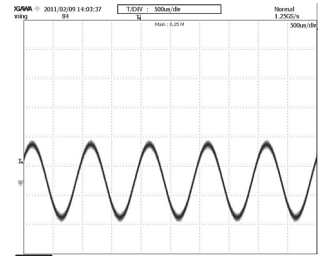
1-106 **LRCLK_OUT_RE**
V: 1.0 V/div. H: 2 µS/div.



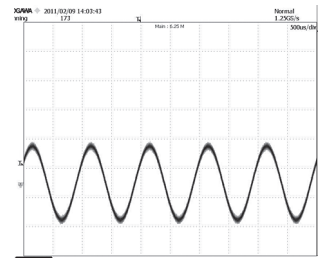
1-107 **RESET_OUT**
V: 1.0 V/div. H: 1 mS/div.



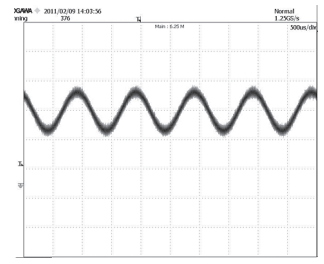
1-108 **MASTER2_L**
V: 1.0 V/div. H: 500 µS/div.



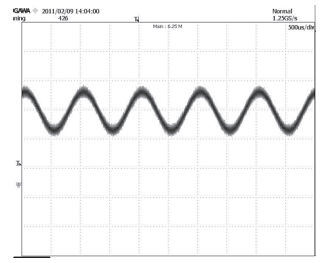
1-109 **MASTER2_R**
V: 1.0 V/div. H: 500 µS/div.



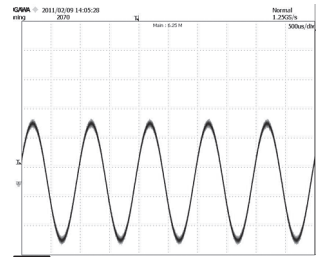
1-110 **AOUTL_REC**
V: 1.0 V/div. H: 500 µS/div.



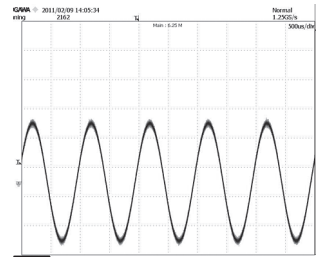
1-111 **AOUTR_REC**
V: 1.0 V/div. H: 500 µS/div.



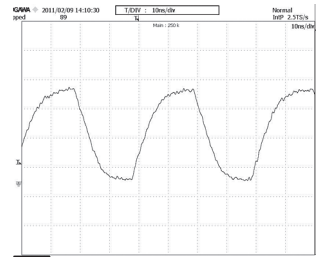
1-112 **REC_L**
V: 1.0 V/div. H: 500 µS/div.



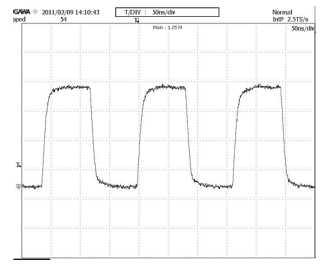
1-113 **REC_R**
V: 1.0 V/div. H: 500 µS/div.



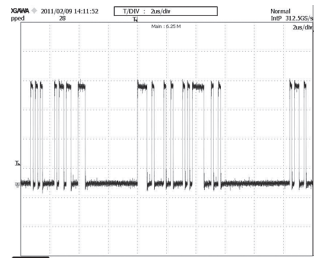
1-114 **MCLK_OUT_BO**
V: 1.0 V/div. H: 10 nS/div.



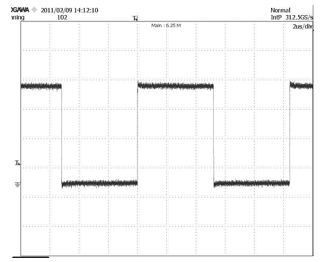
1-115 **BCLK_OUT_BO**
V: 1.0 V/div. H: 50 nS/div.



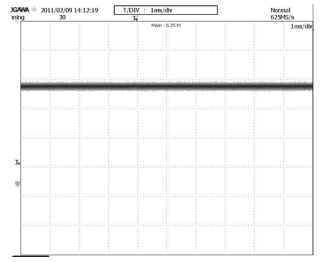
1-116 **ADAT_BOOTH_OUT**
V: 1.0 V/div. H: 2 µS/div.



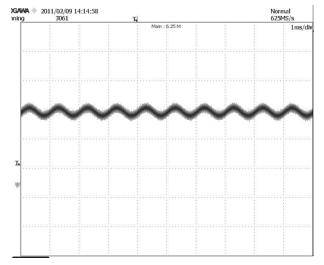
1-117 **LRCLK_OUT_BO**
V: 1.0 V/div. H: 2 µS/div.



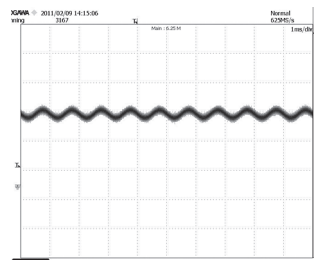
1-118 **RESET_OUT**
V: 1.0 V/div. H: 1 mS/div.



1-119 **BO L+1**
V: 1.0 V/div. H: 1 mS/div.



1-120 **BO L-1**
V: 1.0 V/div. H: 1 mS/div.



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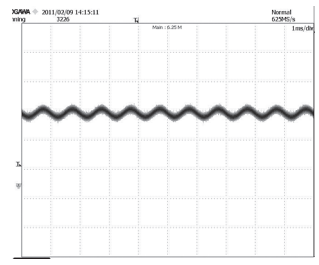
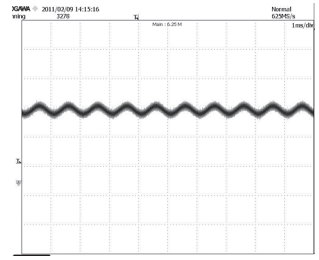
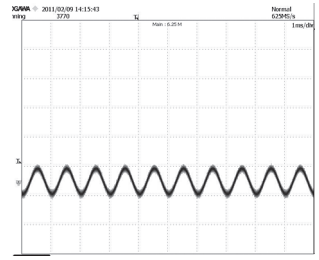
1-121 **BO R+1**
V: 1.0 V/div. H: 1 mS/div.



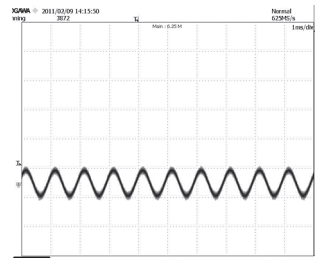
1-122 **BO R-1**
V: 1.0 V/div. H: 1 mS/div.



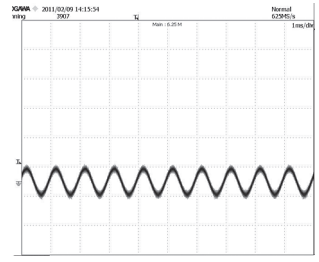
1-123 **BO L+2**
V: 1.0 V/div. H: 1 mS/div.



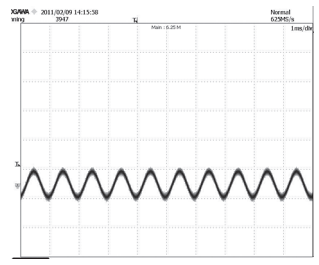
1-124 **BO L-2**
V: 1.0 V/div. H: 1 mS/div.



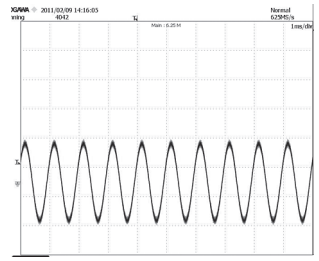
1-125 **BO R+2**
V: 1.0 V/div. H: 1 mS/div.



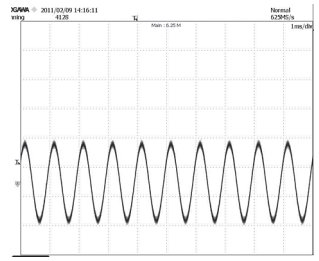
1-126 **BO R-2**
V: 1.0 V/div. H: 1 mS/div.



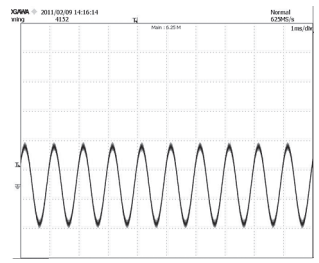
1-127 **BO L+3**
V: 1.0 V/div. H: 1 mS/div.



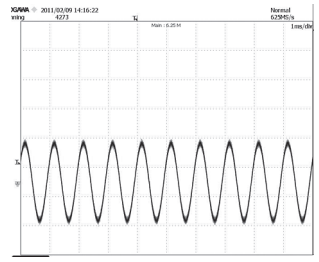
1-128 **BO L-3**
V: 1.0 V/div. H: 1 mS/div.



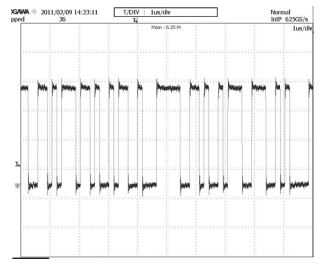
1-129 **BO R+3**
V: 1.0 V/div. H: 1 mS/div.



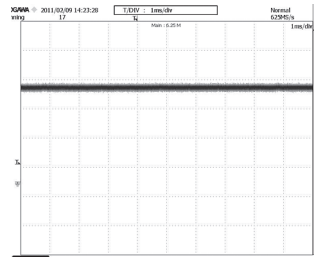
1-130 **BO R-3**
V: 1.0 V/div. H: 1 mS/div.



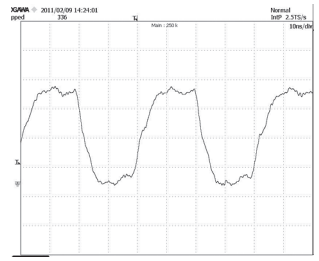
1-131 **ADAT_HP**
V: 1.0 V/div. H: 1 μS/div.



1-132 **DIR_ADC_DAC_RESET**
V: 1.0 V/div. H: 1 mS/div.

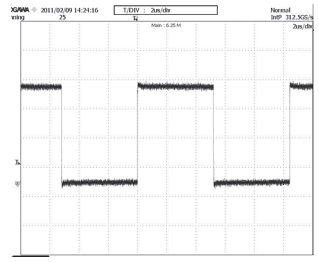


1-133 **HP_MCLK**
V: 1.0 V/div. H: 10 nS/div.

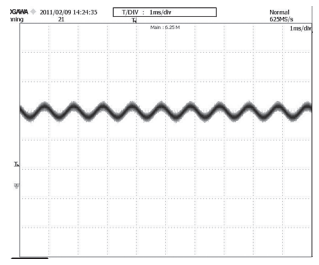


1-134 **HP_BCLK**
V: 1.0 V/div. H: 50 nS/div.

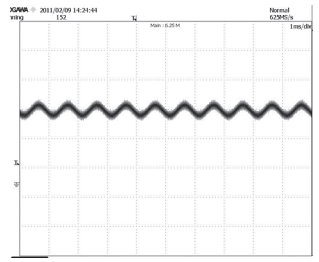
1-135 **HP_LRCK**
V: 1.0 V/div. H: 2 μS/div.



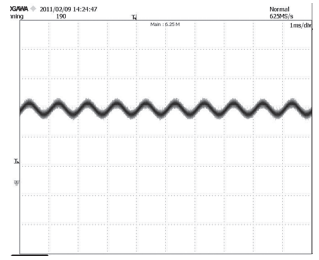
1-136 **HP_L+**
V: 1.0 V/div. H: 1 mS/div.



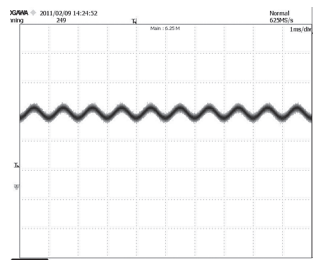
1-137 **HP_L-**
V: 1.0 V/div. H: 1 mS/div.



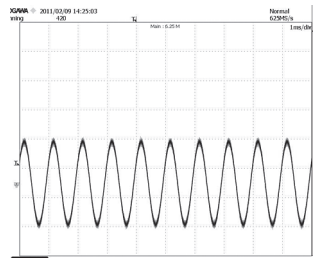
1-138 **HP_R-**
V: 1.0 V/div. H: 1 mS/div.



1-139 **HP_R+**
V: 1.0 V/div. H: 1 mS/div.

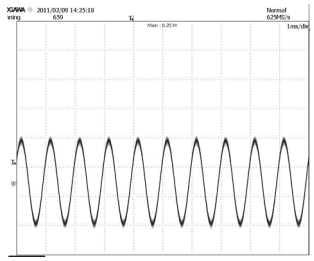


1-140 **HP_L1**
V: 1.0 V/div. H: 1 mS/div.

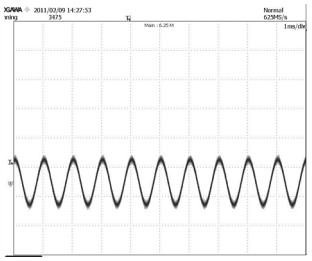


G MAIN ASSY

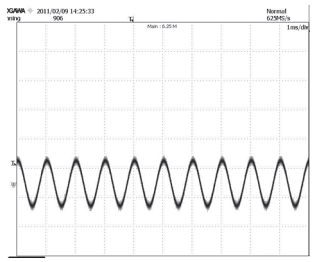
1-141 HP_R1
V: 1.0 V/div. H: 1 mS/div.



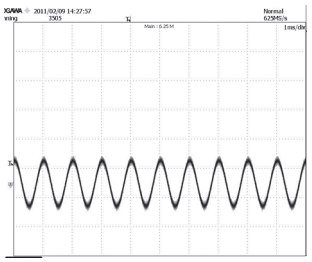
1-146 HP_L
V: 1.0 V/div. H: 1 mS/div.



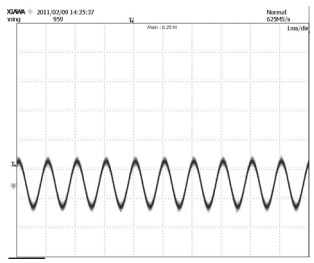
1-142 HP_L2
V: 1.0 V/div. H: 1 mS/div.



1-147 HP_R
V: 1.0 V/div. H: 1 mS/div.

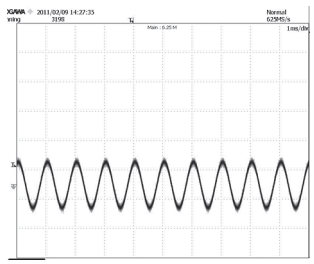


1-143 HP_R2
V: 1.0 V/div. H: 1 mS/div.

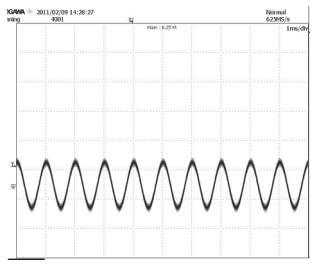


I HPJK ASSY

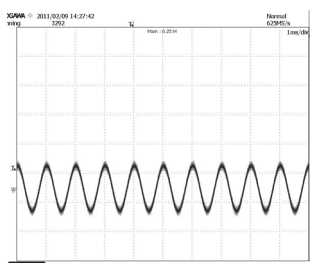
1-144 RY3401-8 pin
V: 1.0 V/div. H: 1 mS/div.



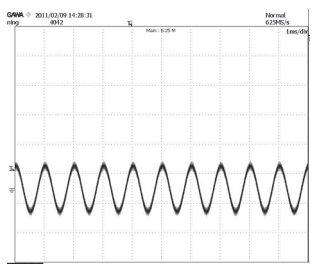
5-1 HP_L
V: 1.0 V/div. H: 1 mS/div.



1-145 RY3401-3 pin
V: 1.0 V/div. H: 1 mS/div.

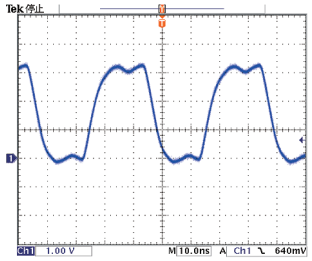


5-2 HP_R
V: 1.0 V/div. H: 1 mS/div.

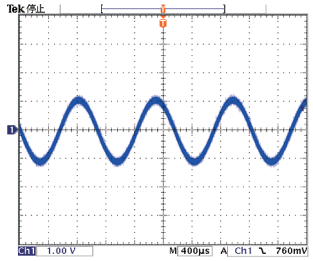


J SEND ASSY

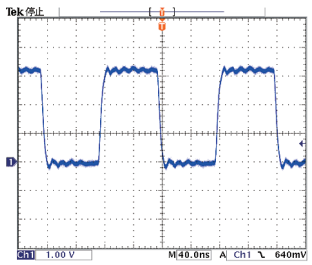
3-1 MCLK_SE
V: 1.0 V/div. H: 10 nS/div.



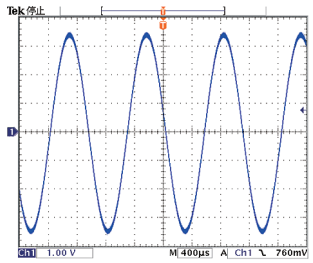
3-6 SEND_L_IN
V: 1.0 V/div. H: 400 µS/div.



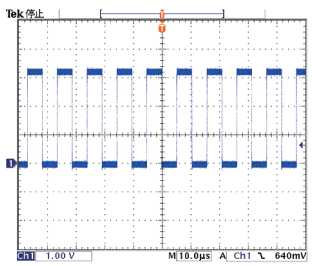
3-2 BCK_SE
V: 1.0 V/div. H: 40 nS/div.



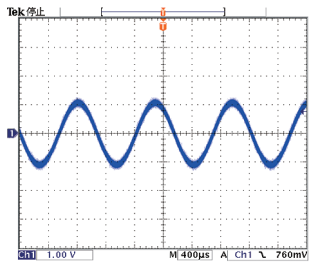
3-7 SEND_L
V: 1.0 V/div. H: 400 µS/div.



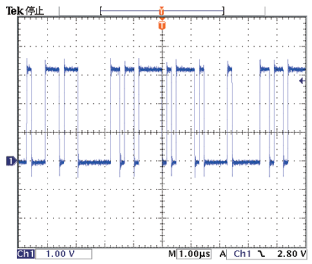
3-3 LRCK_OUT
V: 1.0 V/div. H: 10 µS/div.



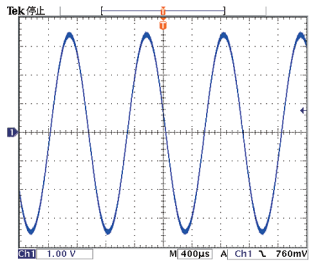
3-8 SEND_R_IN
V: 1.0 V/div. H: 400 µS/div.



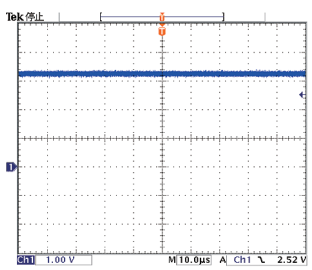
3-4 ADAT_SEND_OUT
V: 1.0 V/div. H: 1 µS/div.



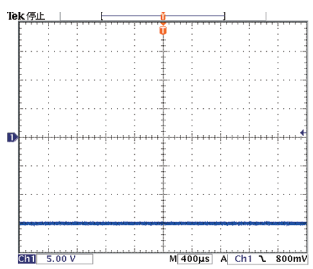
3-9 SEND_L
V: 1.0 V/div. H: 400 µS/div.



3-5 PRESET_OUT
V: 1.0 V/div. H: 10 µS/div.

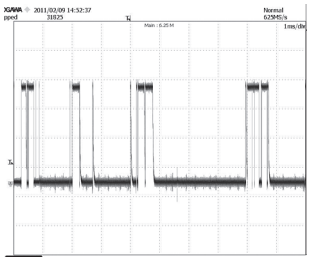


3-10 MUTE_OUT
V: 1.0 V/div. H: 400 µS/div.

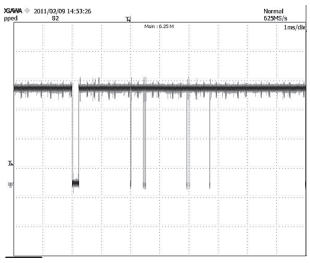


K PNLA ASSY

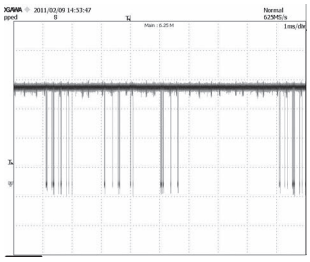
4-3 **RBC_SI**
V: 1.0 V/div. H: 1 mS/div.



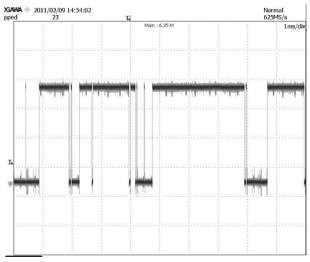
4-4 **RBC_SO**
V: 1.0 V/div. H: 1 mS/div.



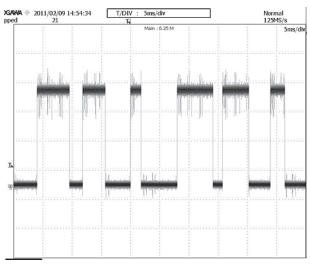
4-5 **RBC_SCK**
V: 1.0 V/div. H: 1 mS/div.



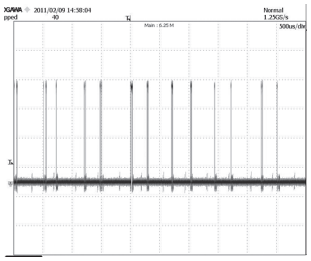
4-6 **RBC_CS**
V: 1.0 V/div. H: 1 mS/div.



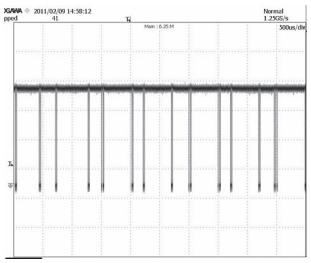
4-7 **RBC_INT**
V: 1.0 V/div. H: 5 mS/div.



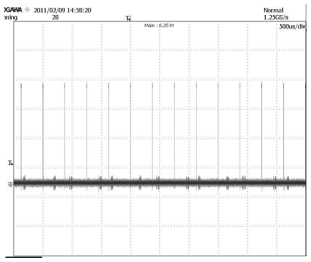
4-13 **FL_TXD**
V: 1.0 V/div. H: 500 µS/div.



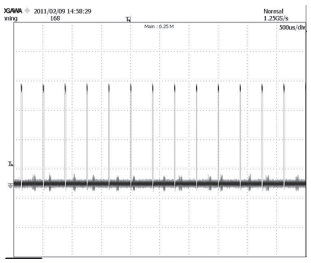
4-14 **FL_SCK**
V: 1.0 V/div. H: 500 µS/div.



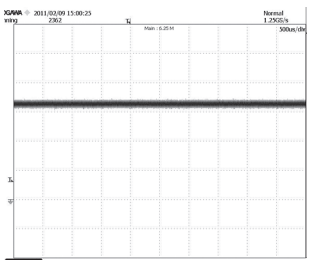
4-15 **FL_LAT**
V: 1.0 V/div. H: 500 µS/div.



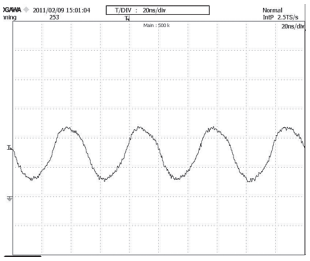
4-16 **FL_BK**
V: 1.0 V/div. H: 500 µS/div.



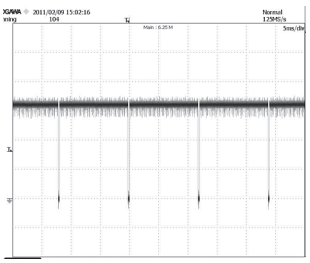
4-17 **SUB_CPU_RESET**
V: 1.0 V/div. H: 500 µS/div.



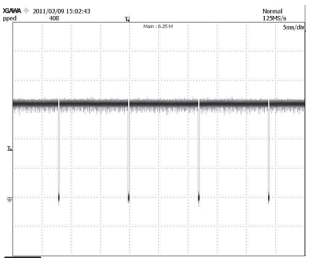
4-18 **20M CLK_SUB**
V: 1.0 V/div. H: 20 nS/div.



4-20 **RBC_LED (always)**
V: 1.0 V/div. H: 5 mS/div.



4-21 **RBC_LED (touch)**
V: 1.0 V/div. H: 5 mS/div.



A

B

C

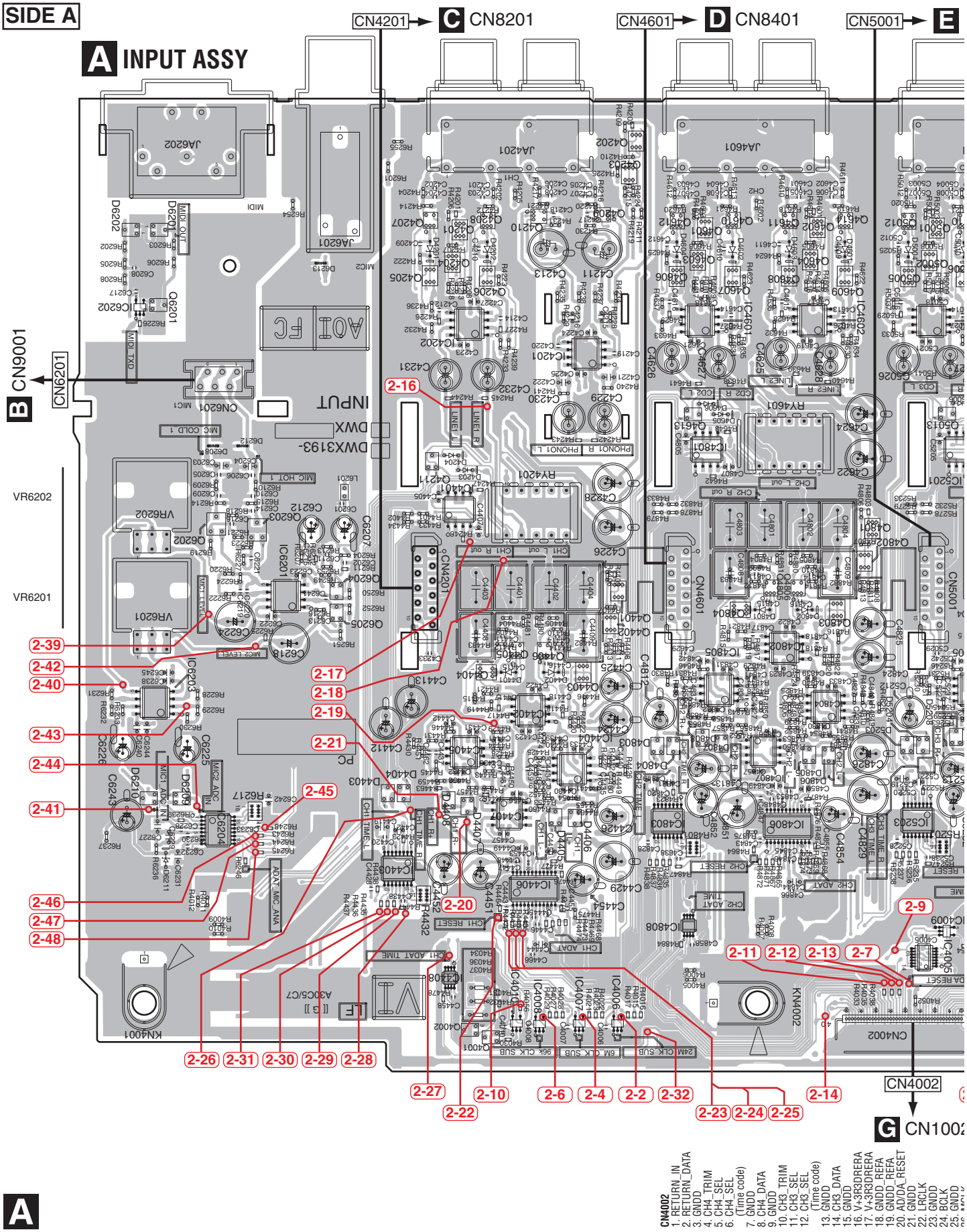
D

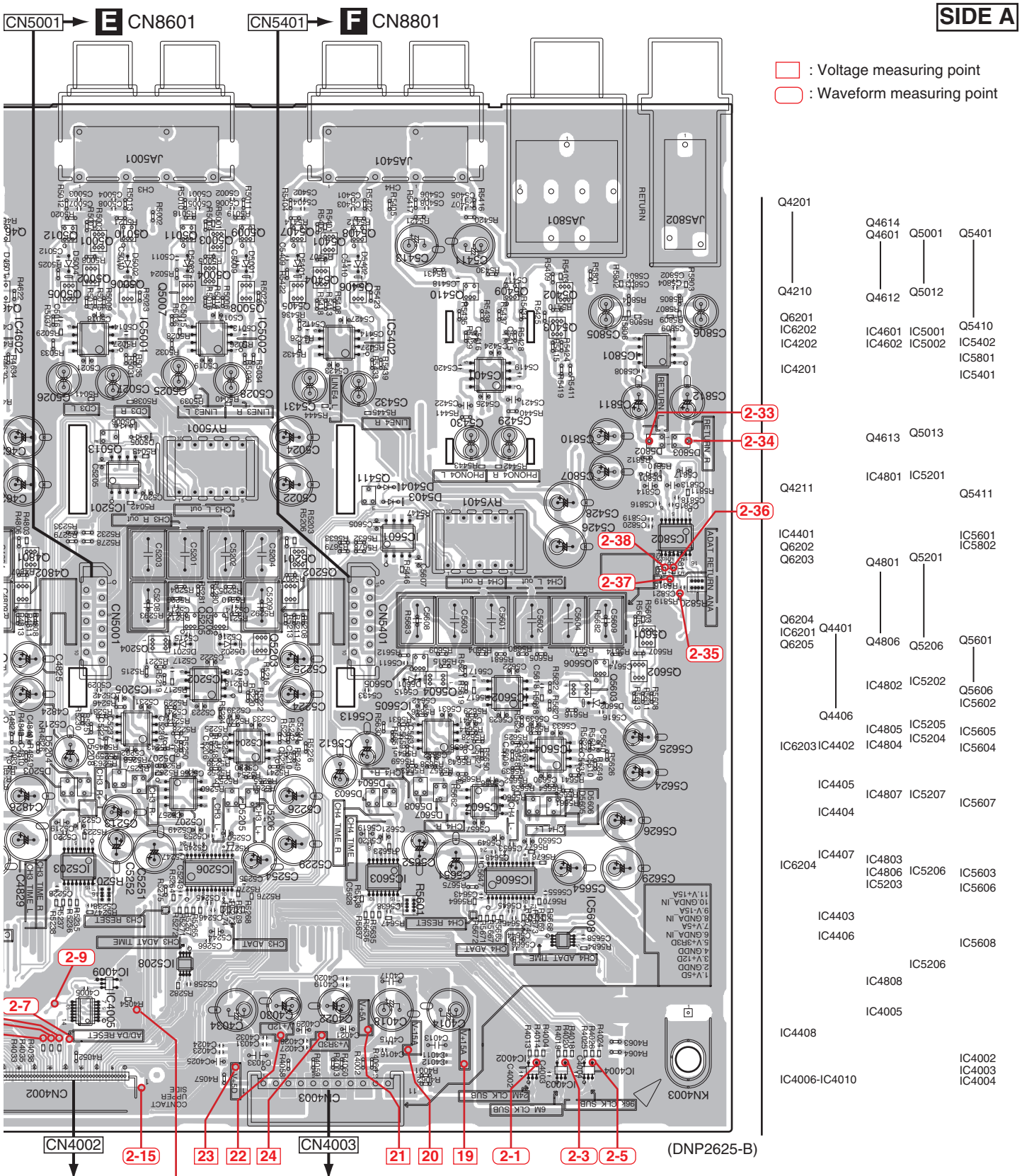
E

F

11. PCB CONNECTION DIAGRAM

11.1 INPUT ASSY



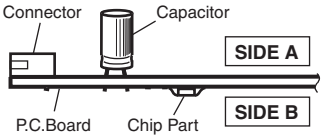


13. GNDD
16. V+3R3DRERA
17. V+3R3DRERA
18. GNDD_REFA
19. GNDD_REFA
20. AD/DA_RESET
21. GNDD
22. LRCLK
23. GNDD
24. BCLK
25. GNDD
26. MCLK
27. GNDD
28. CH2_TRIM
29. CH2_SEL
30. CH2_SEL (Time code)
31. GNDD
32. CH2_DATA
33. GNDD
34. CH1_TRIM
35. CH1_SEL
36. CH1_SEL (Time code)
37. GNDD
38. CH1_DATA
39. MIC_DATA
40. MIDI_TXD

NOTE FOR PCB DIAGRAMS :

1. The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

2. View point of PCB diagrams.



SIDE B

A

B

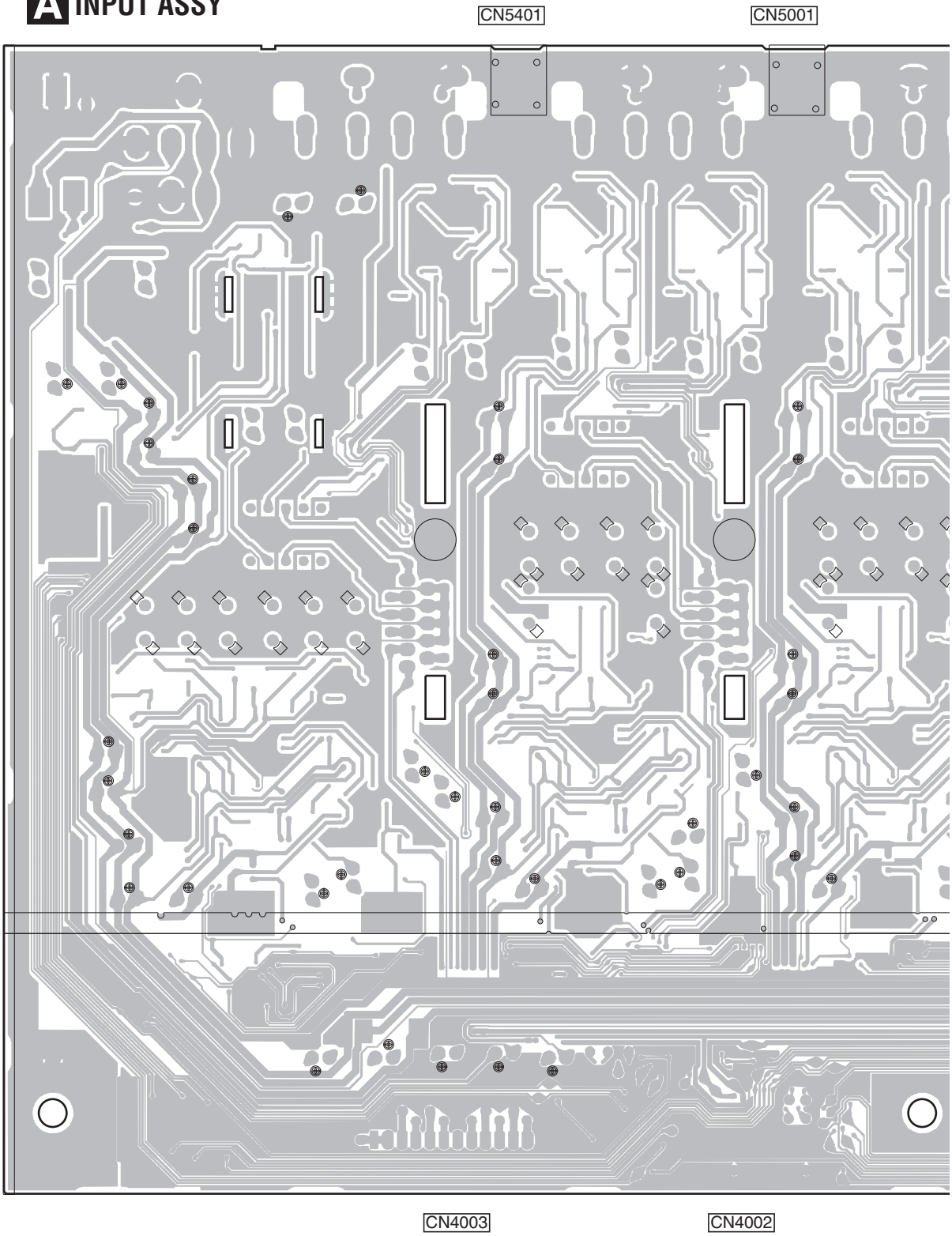
C

D

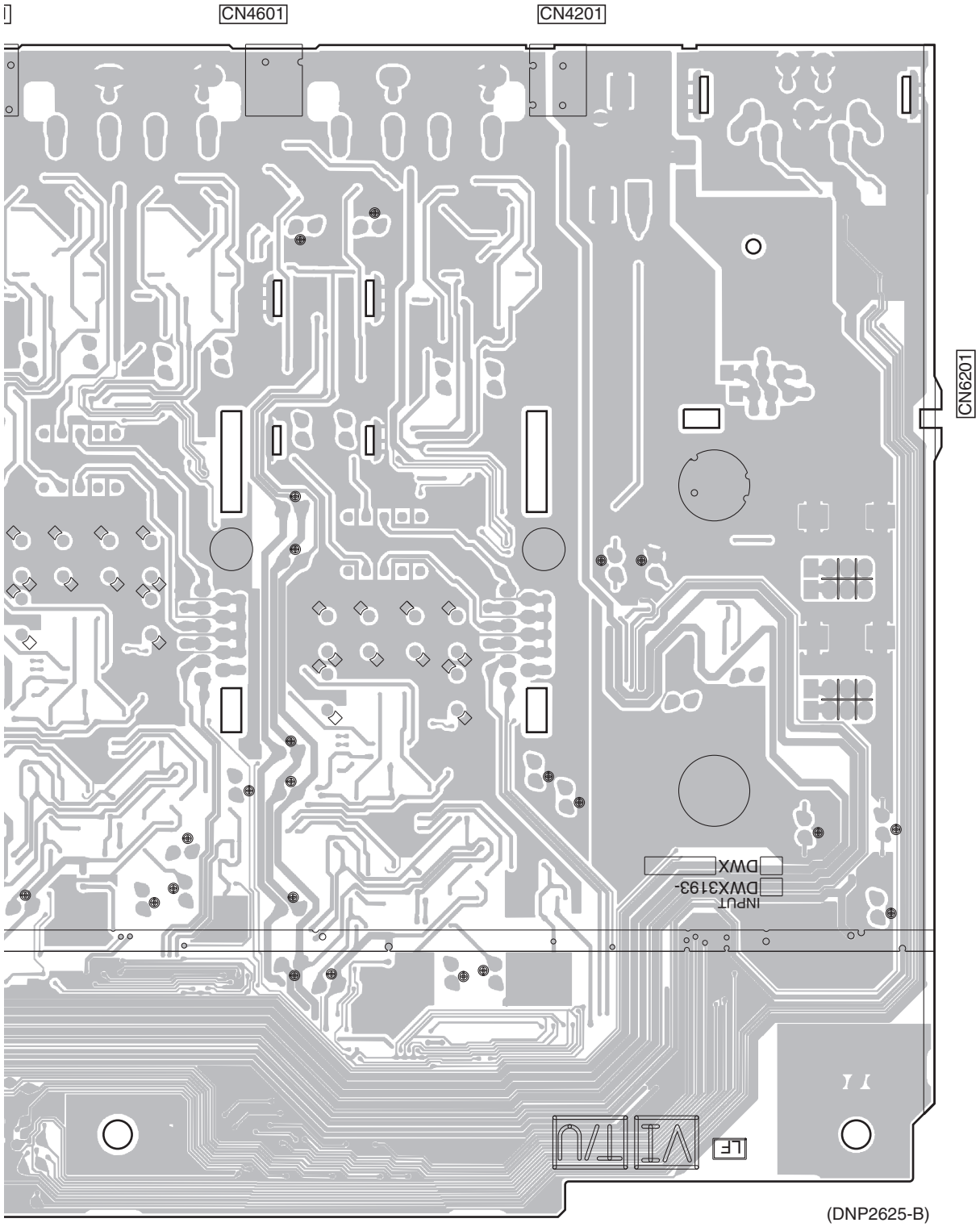
E

F

A INPUT ASSY



SIDE B

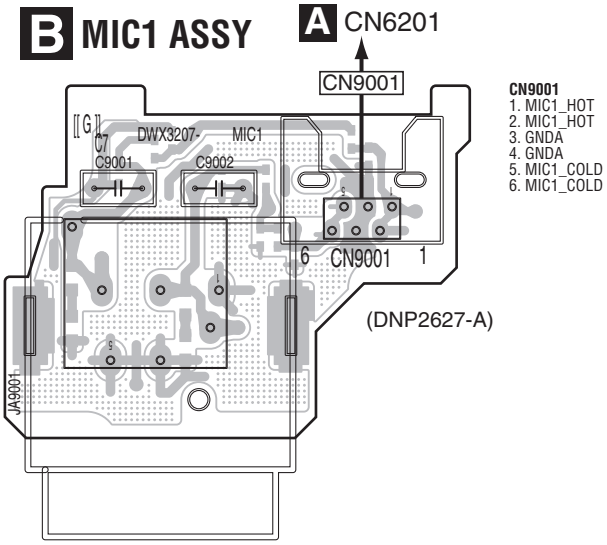


11.2 MIC1 and TRM1 to TRM4 ASSYS

SIDE A

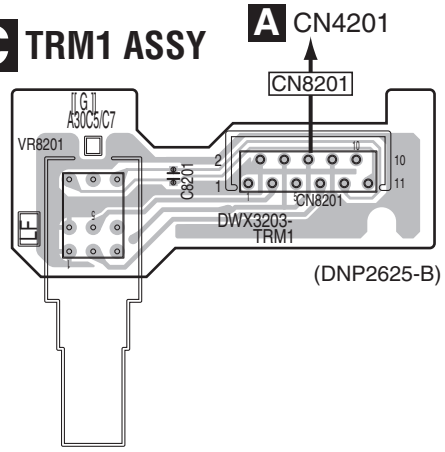
SIDE A

B MIC1 ASSY

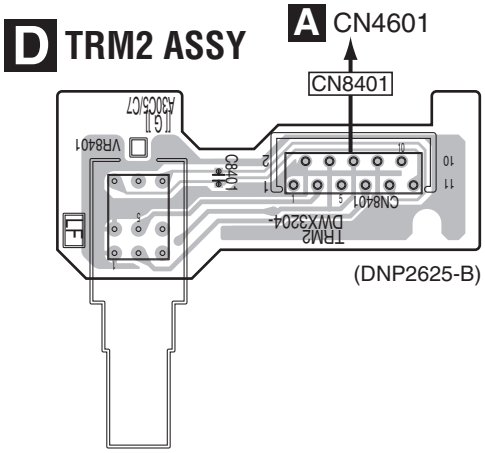


CN9001
1. MIC1_HOT
2. MIC1_HOT
3. GNDA
4. GNDA
5. MIC1_COLD
6. MIC1_COLD

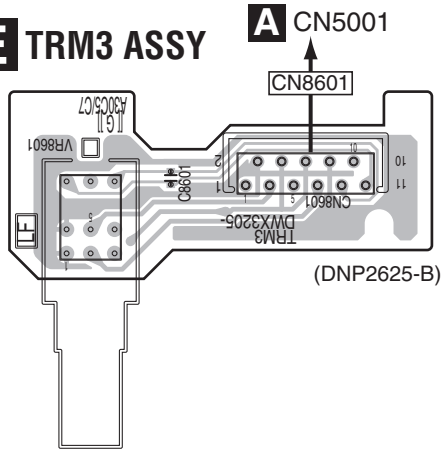
C TRM1 ASSY



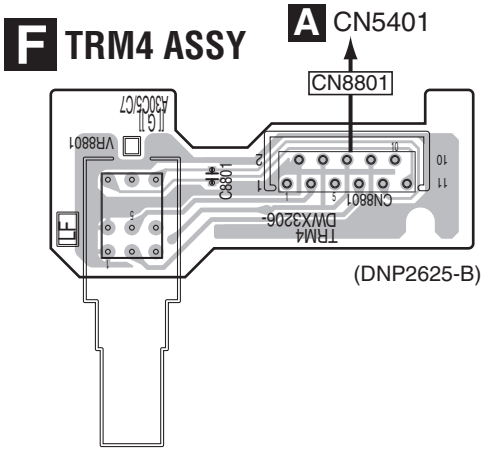
D TRM2 ASSY



E TRM3 ASSY



F TRM4 ASSY

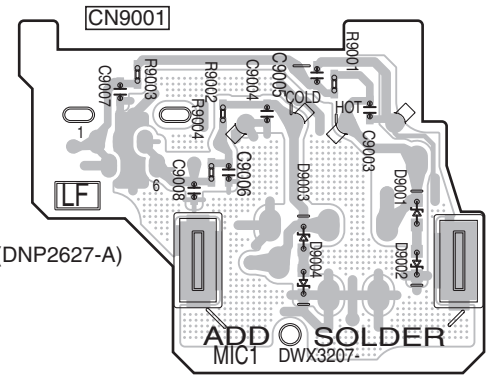


B C D E F

SIDE B

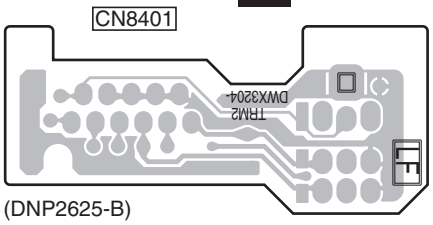
SIDE B

B MIC1 ASSY



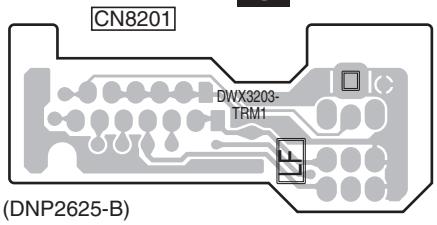
(DNP2627-A)

D TRM2 ASSY



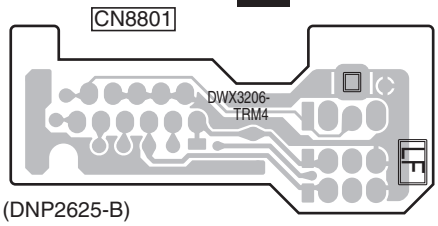
(DNP2625-B)

C TRM1 ASSY



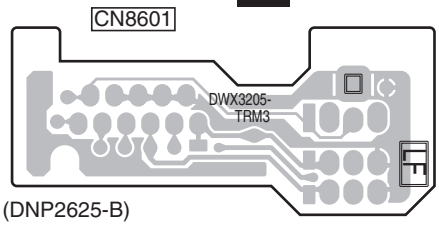
(DNP2625-B)

F TRM4 ASSY



(DNP2625-B)

E TRM3 ASSY



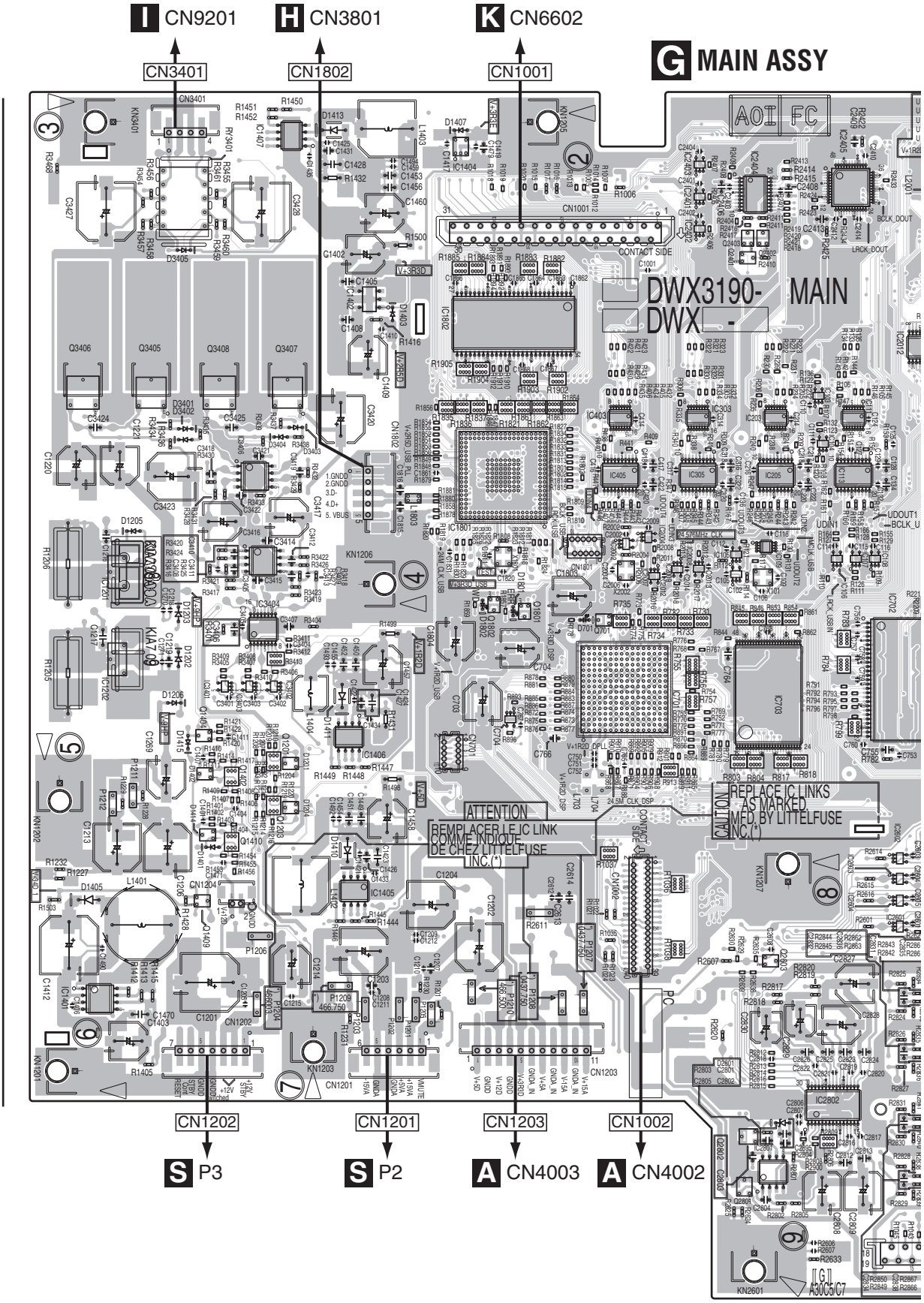
(DNP2625-B)

A B C D E F

B C D E F

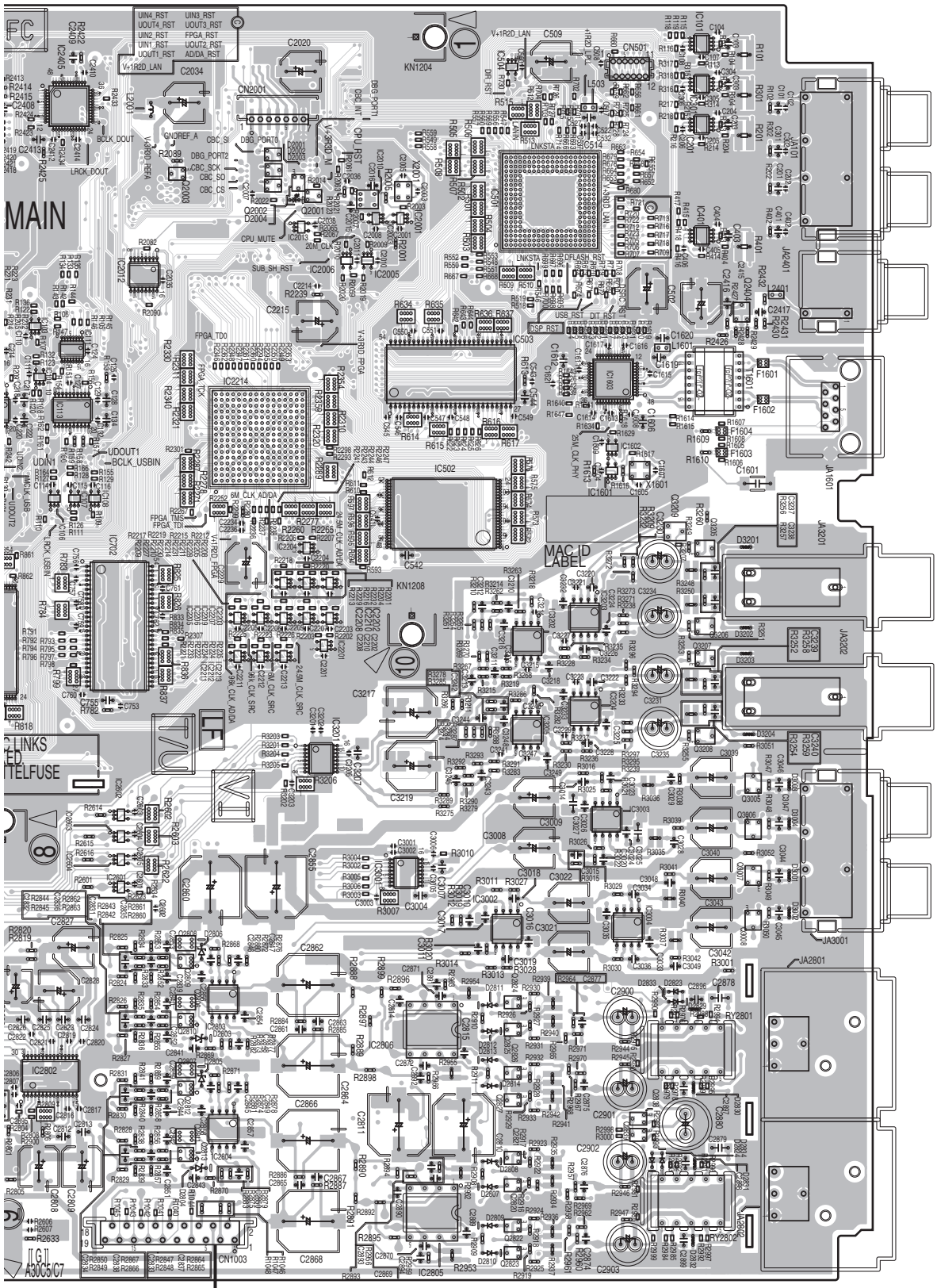
11.3 MAIN ASSY

SIDE A



SIDE A

SSY



IC101
IC504
IC301
IC2404
IC2405
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Q2402
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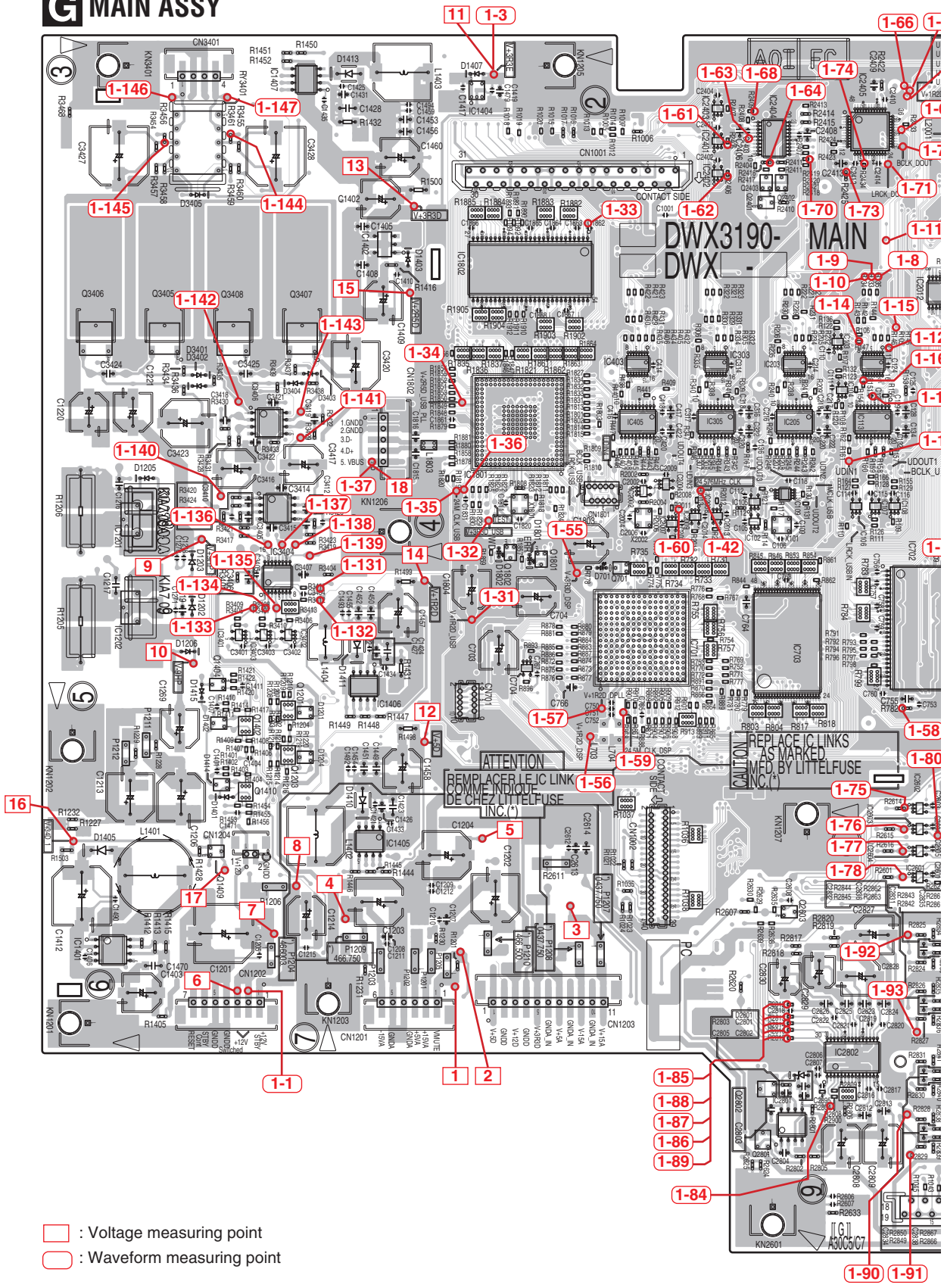
Q2003 IC501
Q2401 Q2002
Q2001 IC2010
IC2001
IC2013 IC2003
IC401
IC2006 IC2005
IC2012
Q2404
IC111
IC203
IC503 IC1603
IC104
IC205
IC113
IC1602
IC1601
IC105
IC109 IC502
IC102
Q3209
IC2201 Q3205
IC702
IC3203
Q3206
IC703 IC3202
IC2213 Q3207
IC3204
IC3205
Q3208
IC3201
Q3005
IC2602 IC3003 Q3006
IC2603
IC2604 IC3001 Q3007
IC2601
Q2603 IC3002 Q3008
Q2808 IC3004
Q2809
Q2806 IC2803
Q2810 Q2824
IC2806
Q2825
Q2807
IC2802
Q2812
Q2802 Q2827
Q2838
Q2811 IC2804 Q2839
IC2801
Q2813 Q2821
Q2801
Q2820
IC2805
Q2822
Q2823

CN1003 → J CN6401

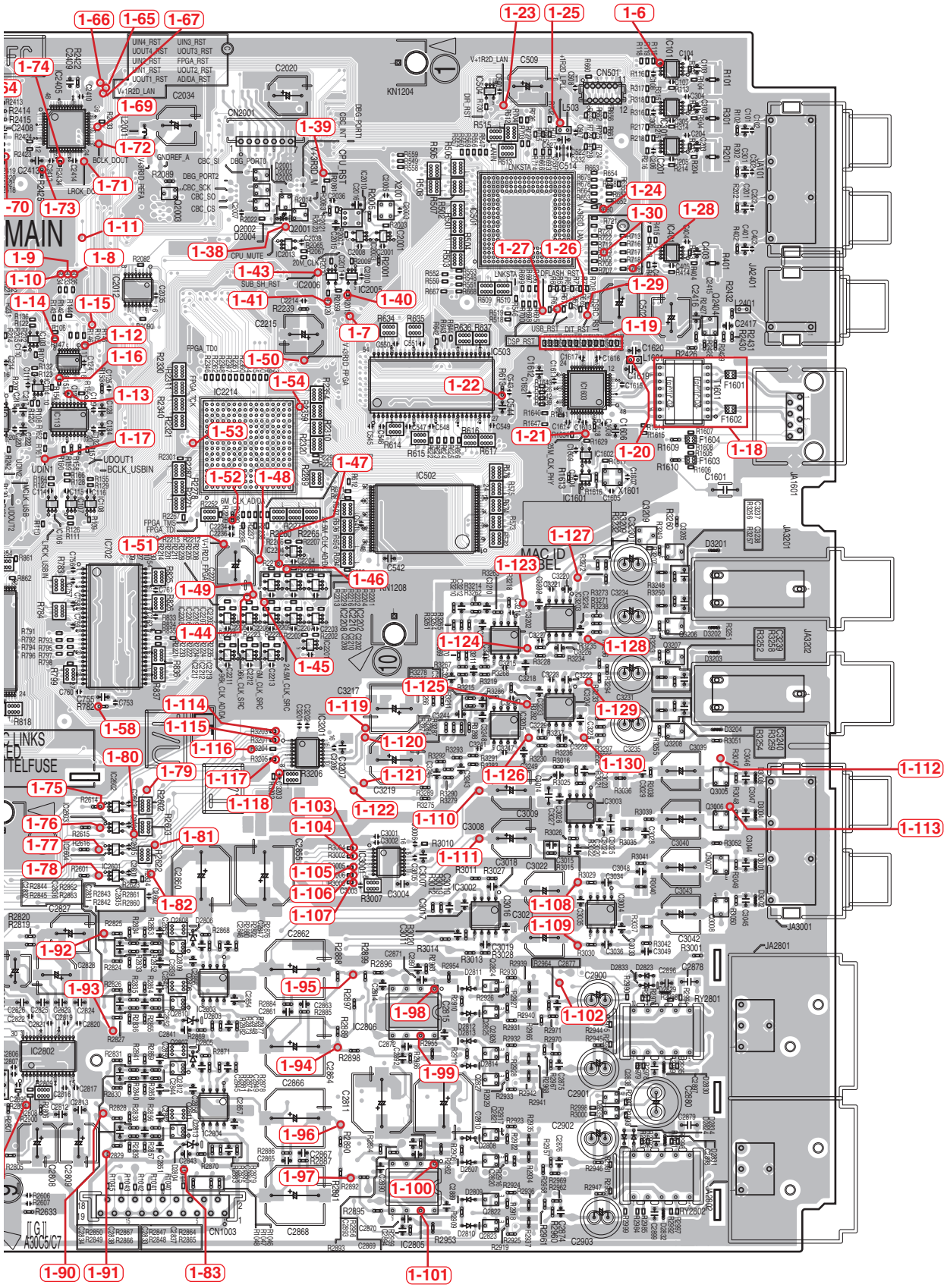
SIDE A

● Measuring points of waveforms and voltages

G MAIN ASSY



SIDE A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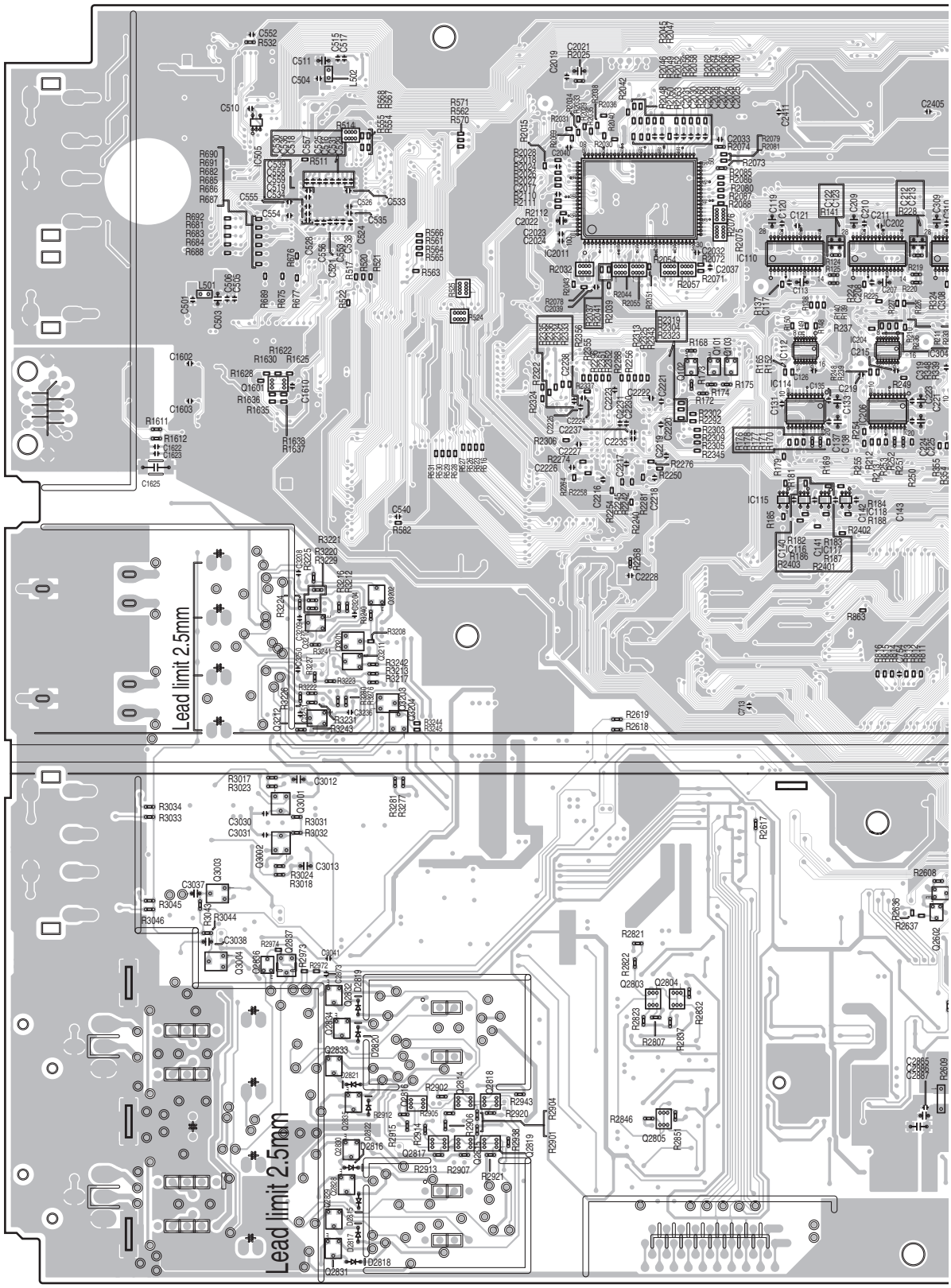
1-109
1-130
1-112
1-113
1-128
MAIN
MAC ID
SEL

SIDE B

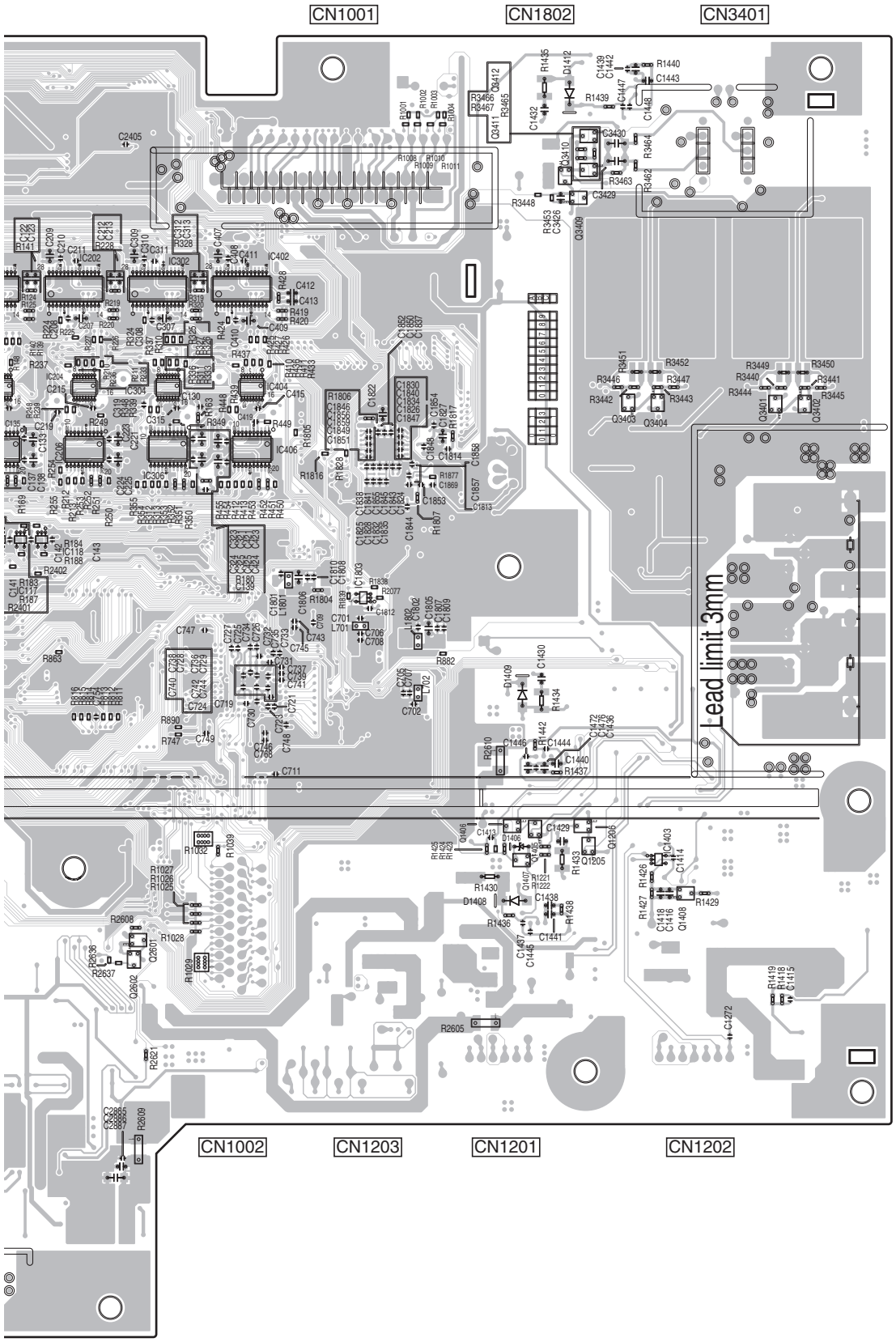
G MAIN ASSY



(DNP2624-B)

CN1003

SIDE B



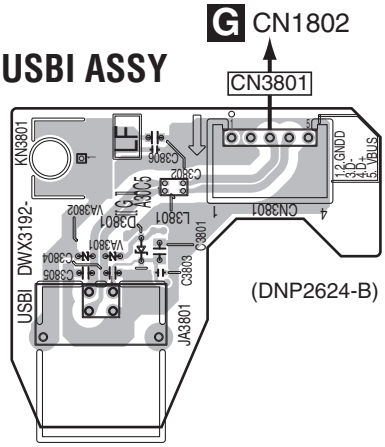
Q3412
IC505
Q3411
Q3410
Q3409
IC2011
IC110 IC302
IC202 IC402
IC112 IC404
Q101 IC204 IC130 Q3401
Q102 | Q3404
Q103
Q1601
IC131 IC306
IC206 IC406
IC115 IC117
IC116 IC118
IC1803
Q3202
Q3210
Q3201
Q3211
Q3203
Q3212
Q3204
Q1405 Q1206
Q3001 Q1205
Q1407 IC1403
Q3002
Q1408
Q3003 Q2601
Q2602
Q3004
Q2836 Q2837
Q2832 Q2803
Q2804
Q2834
Q2833
Q2835 Q2816 Q2818
Q2814 Q2805
Q2830 Q2817 Q2819
Q2815
Q2828
Q2829
Q2831

11.4 USBI, HPJK and SEND ASSYS

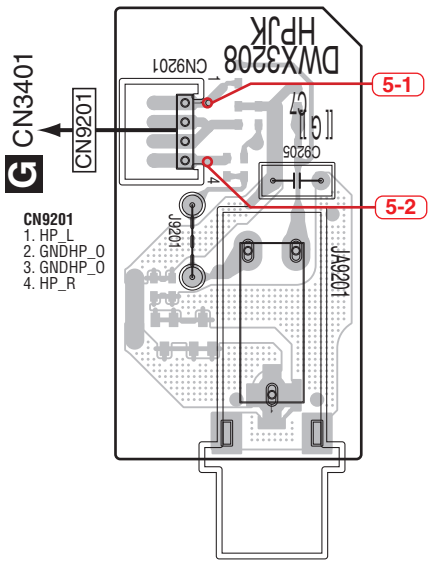
SIDE A

SIDE A

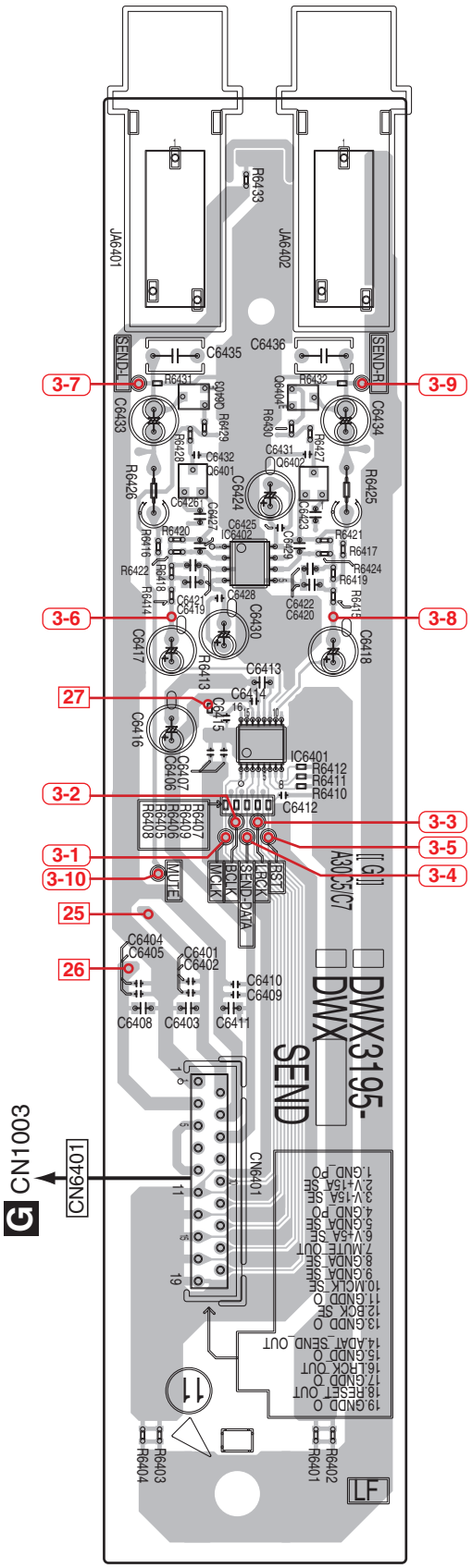
H USBI ASSY



I HPJK ASSY



J SEND ASSY



: Voltage measuring point

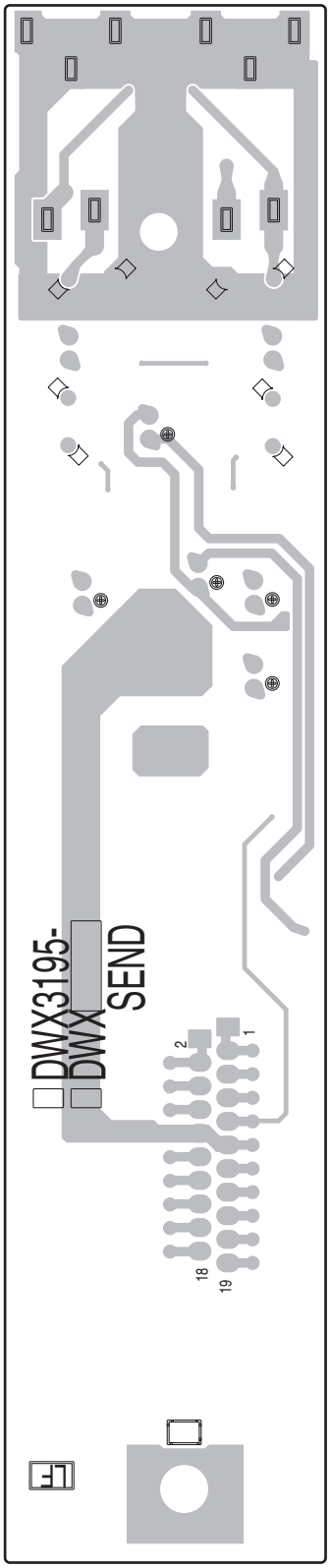
: Waveform measuring point

H I J

SIDE B

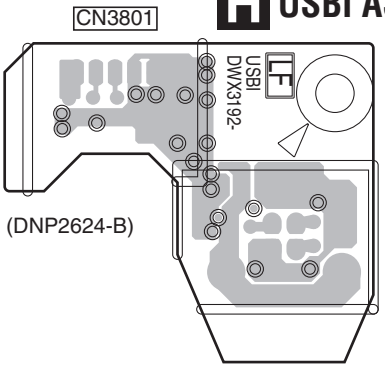
SIDE B

J SEND ASSY



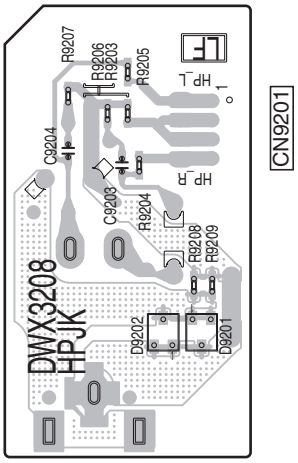
(DNP2625-B)

H USBI ASSY



(DNP2624-B)

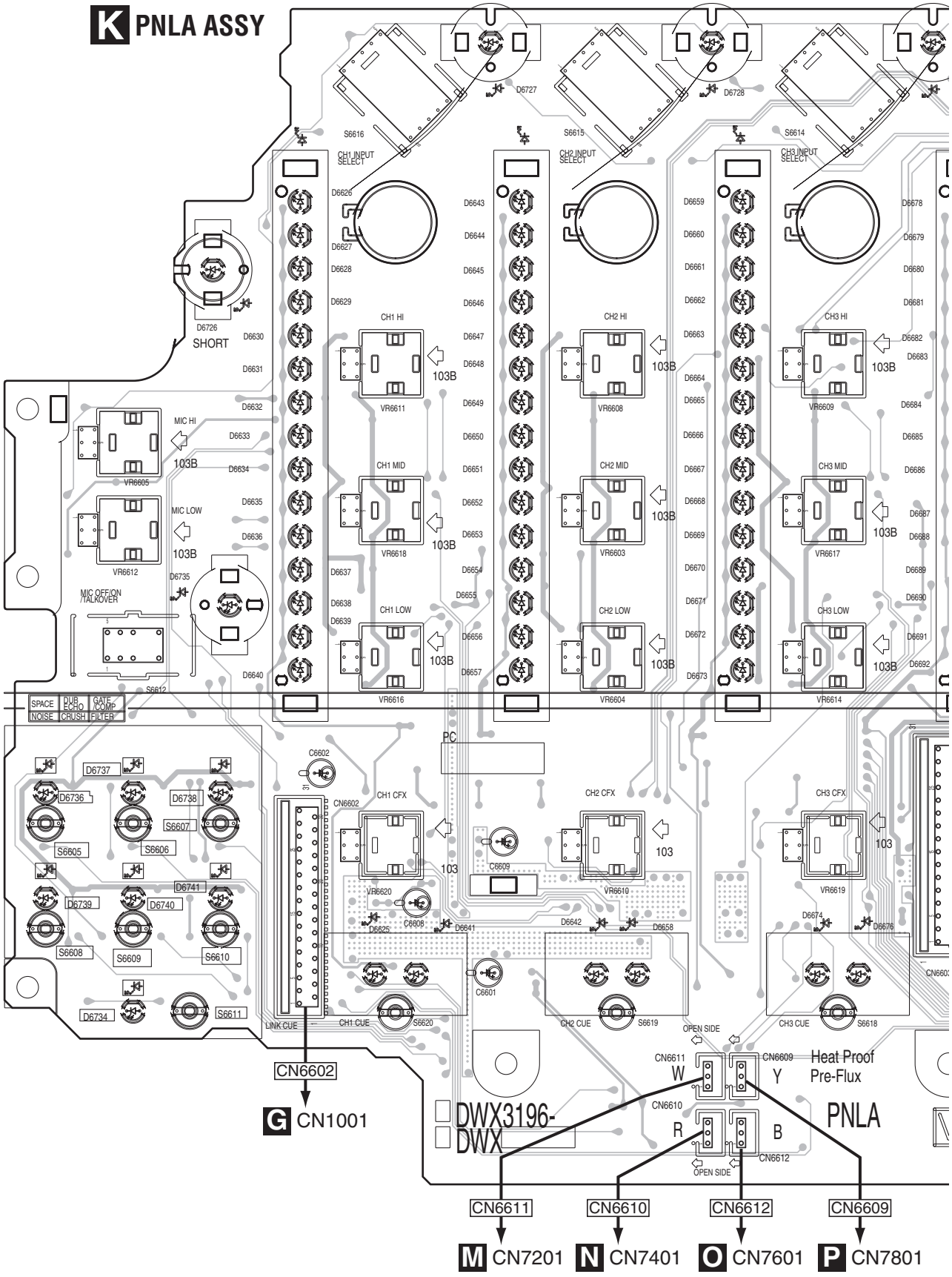
I HPJK ASSY



(DNP2627-A)

11.5 PNLA ASSY

SIDE A



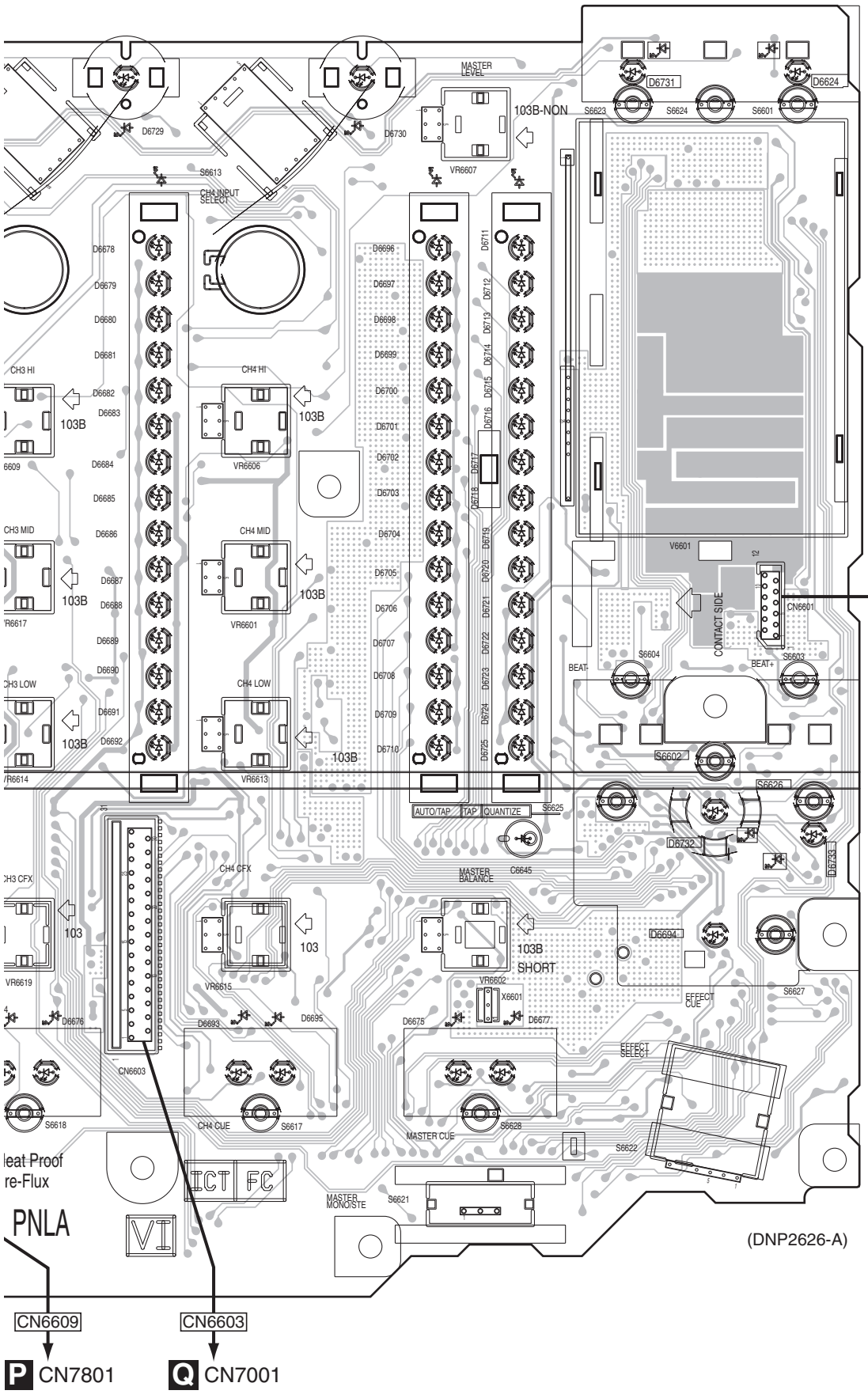
CN6611
3. GNDD_REFA_PA
2. VR_FADER1
1. V+3R3D_REFA_PA

CN6610
3. V+3R3_REFA_PA
2. VR_FADER2
1. GNDD_REFA_PA

CN6612
3. GNDD_REFA_PA
2. VR_FADER3
1. V+3R3D_REFA_PA

CN6609
3. V+3R3D_REFA_PA
2. VR_FADER4
1. GNDD_REFA_PA

SIDE A



CN6601
1. GNDD
2. RBC_INT
3. RBC_CS
4. GNDD
5. RBC_SCK
6. GNDD
7. RBC_SO
8. RBC_SI
9. GNDD
10. V+3R3
11. RBC_LED
12. GNDD

CN6609
3. V+3R3D_REFA_PA
2. VR_FADER4
1. GNDD_REFA_PA

VR6607

VR6611 VR6609
VR6608 VR6606

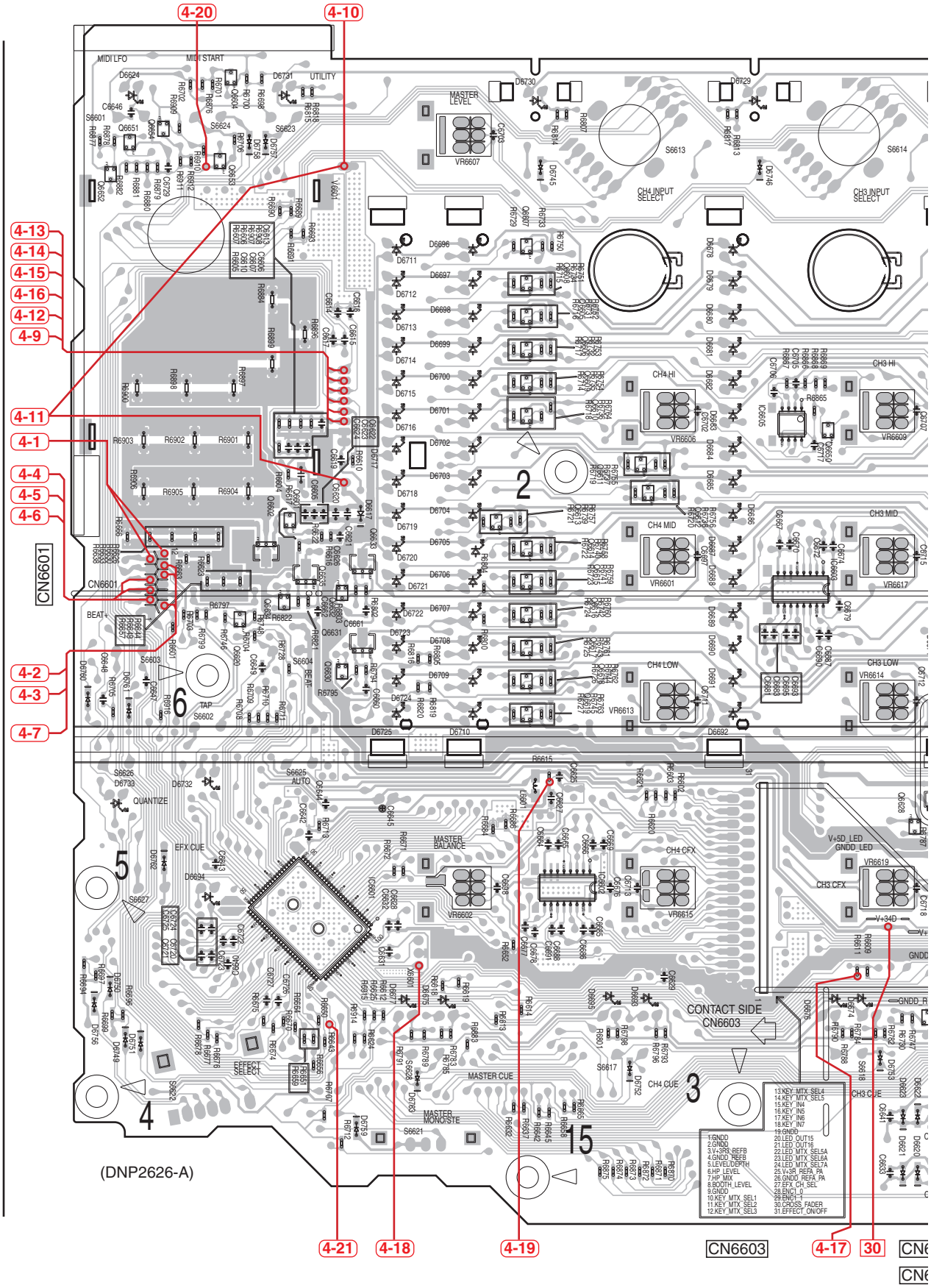
VR6605

VR6618 VR6617
VR6612 VR6601
VR6612

VR6616 VR6614
VR6604 VR6613

VR6620 VR6619
VR6610 VR6615
VR6602

SIDE B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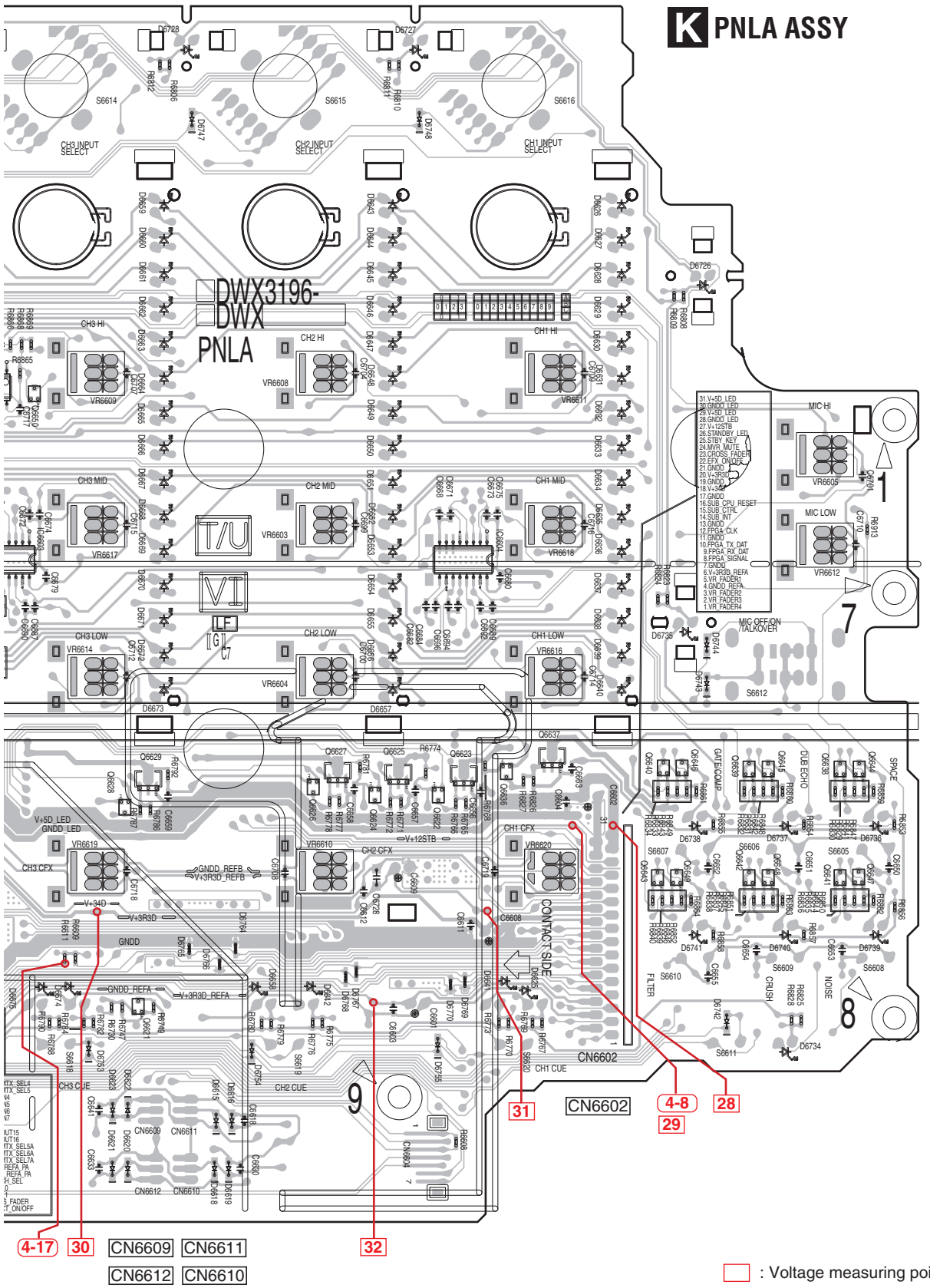
4-3
4-7
VR6607
VR6606 VR6608
VR6609 VR6611
VR6605
VR6603
VR6601 VR6618
VR6617 VR6612
VR6613 VR6604
VR6614 VR6616
VR6602
VR6615 VR6610
VR6619 VR6620
CN6601
CN6603
4-21
4-18
4-19
4-17
30
MIDI LFO
MIDI START
UTILITY
MASTER LEVEL
CH4 INPUT SELECT
CH3 INPUT SELECT
CH4 HI
CH3 HI
CH4 MID
CH3 MID
CH4 LOW
CH3 LOW
BEAT+
BEAT-
TAP
QUANTIZE
EFX CUE
MASTER BALANCE
CH4 CFX
CH3 CFX
MASTER CUE
MASTER MONO/STE
CH4 CUE
CH3 CUE
CONTACT SIDE
(DNP2626-A)

SIDE B



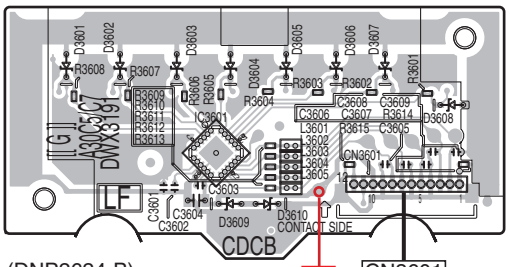
Q6604
Q6654 Q6651
Q6653 Q6652
Q6607
Q6608
Q6605
Q6606
Q6609
Q6610 IC6605 Q6650
Q6611
Q6612
Q6601 Q6613
Q6602 Q6614
Q6633
Q6635 Q6615 IC6603
Q6632 IC6604
Q6620 Q6616
Q6617
Q6618
Q6619
Q6622 Q6637 Q6638
Q6636
Q6629 Q6627
Q6628
IC6602 Q6649
IC6601
Q6621

11.6 CDCB and FAD1 to FAD4 ASSYS

SIDE A

SIDE A

L CDCB ASSY



(DNP2624-B)

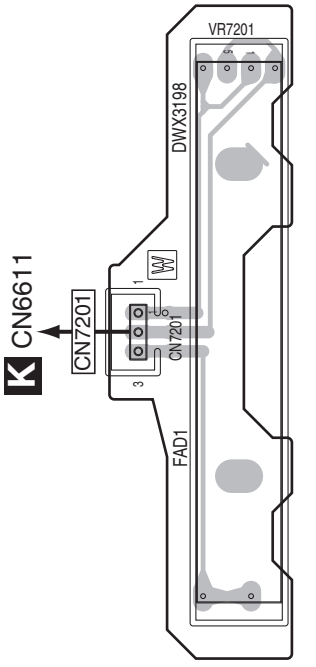
34

CN3601

K CN6601

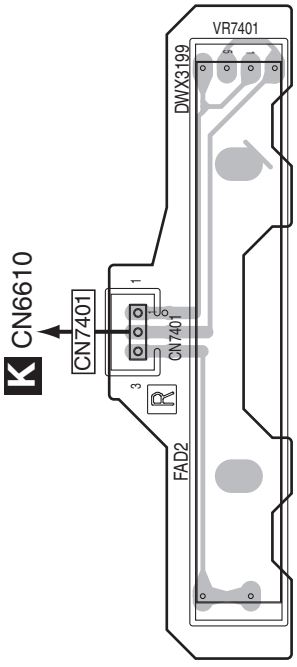
: Voltage measuring point

M FAD1 ASSY



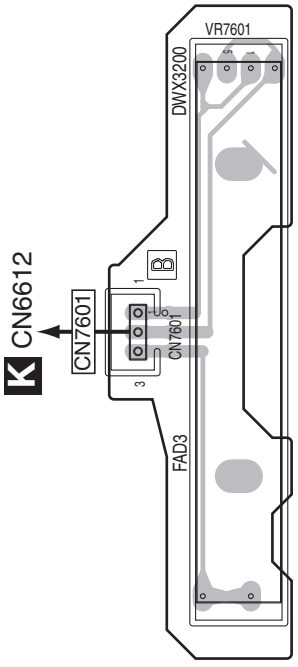
(DNP2627-A)

N FAD2 ASSY



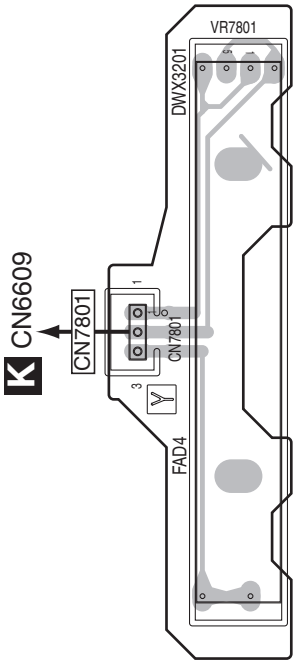
(DNP2627-A)

O FAD3 ASSY



(DNP2627-A)

P FAD4 ASSY

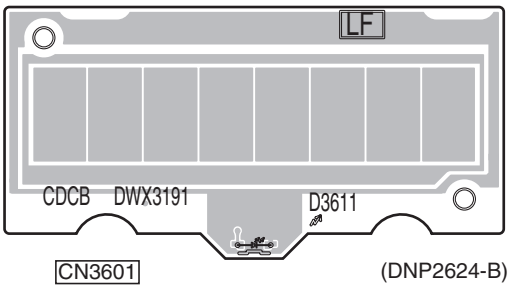


(DNP2627-A)

SIDE B

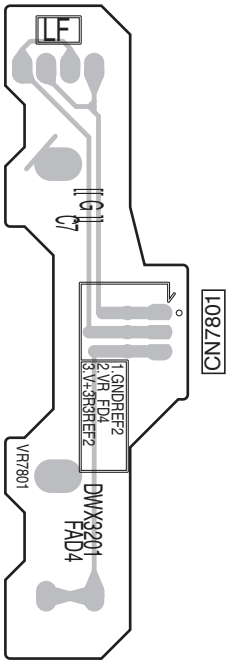
SIDE B

L CDCB ASSY



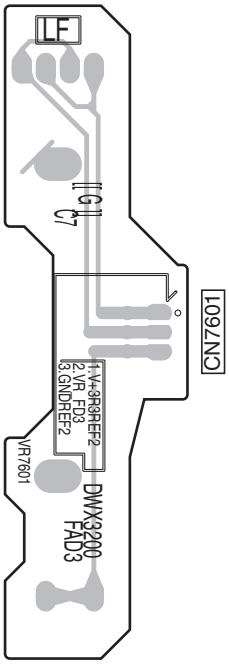
(DNP2624-B)

P FAD4 ASSY



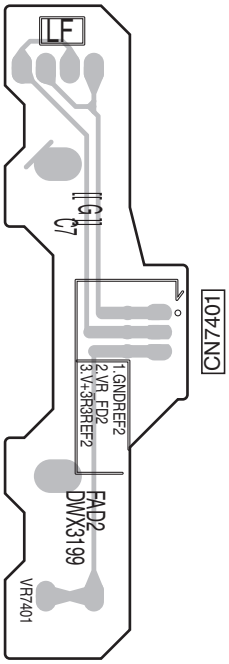
(DNP2627-A)

O FAD3 ASSY



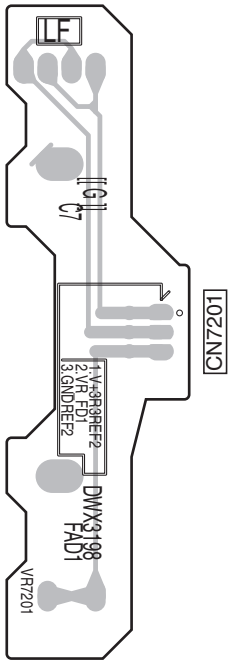
(DNP2627-A)

N FAD2 ASSY



(DNP2627-A)

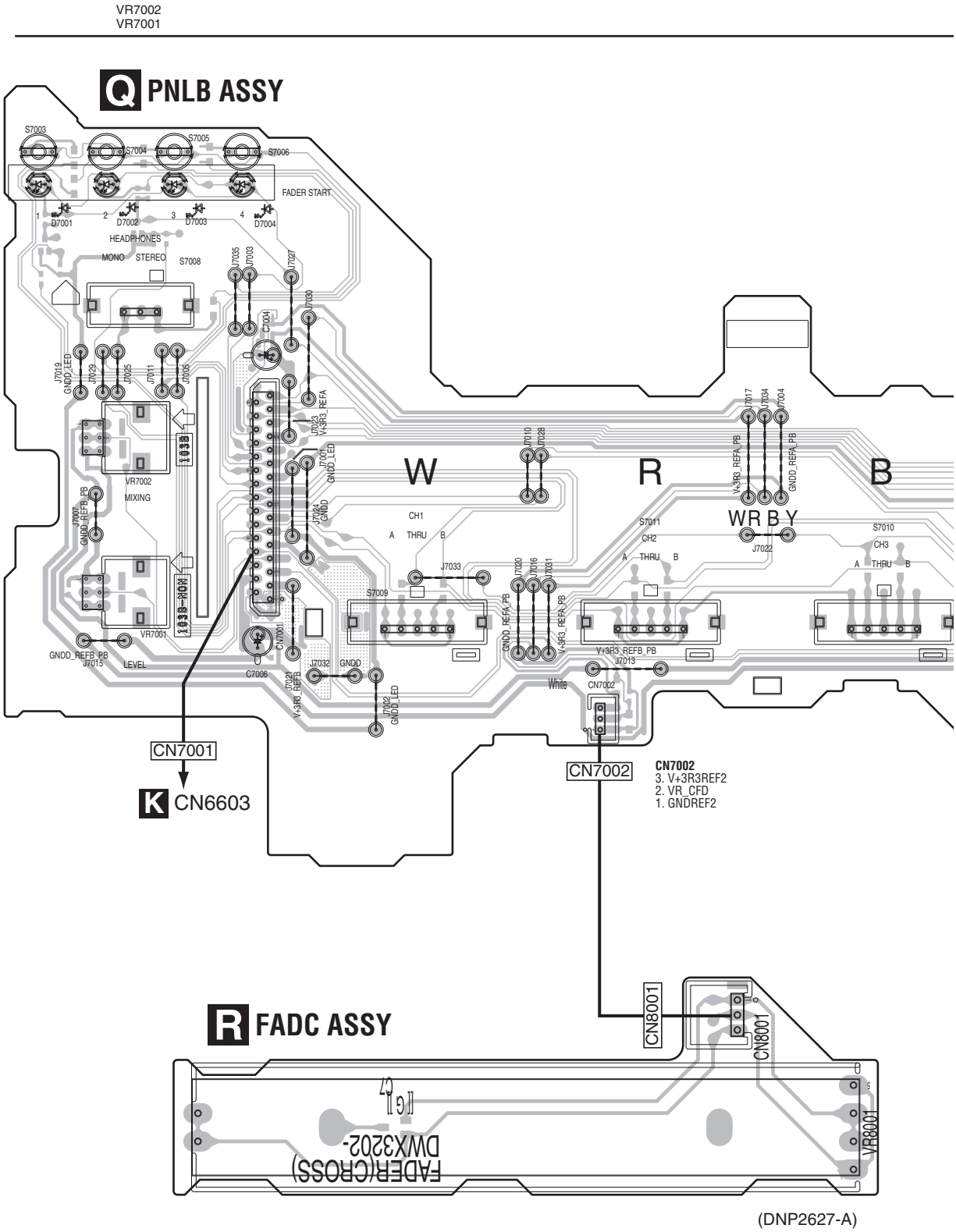
M FAD1 ASSY



(DNP2627-A)

11.7 PNLB and FADC ASSYS

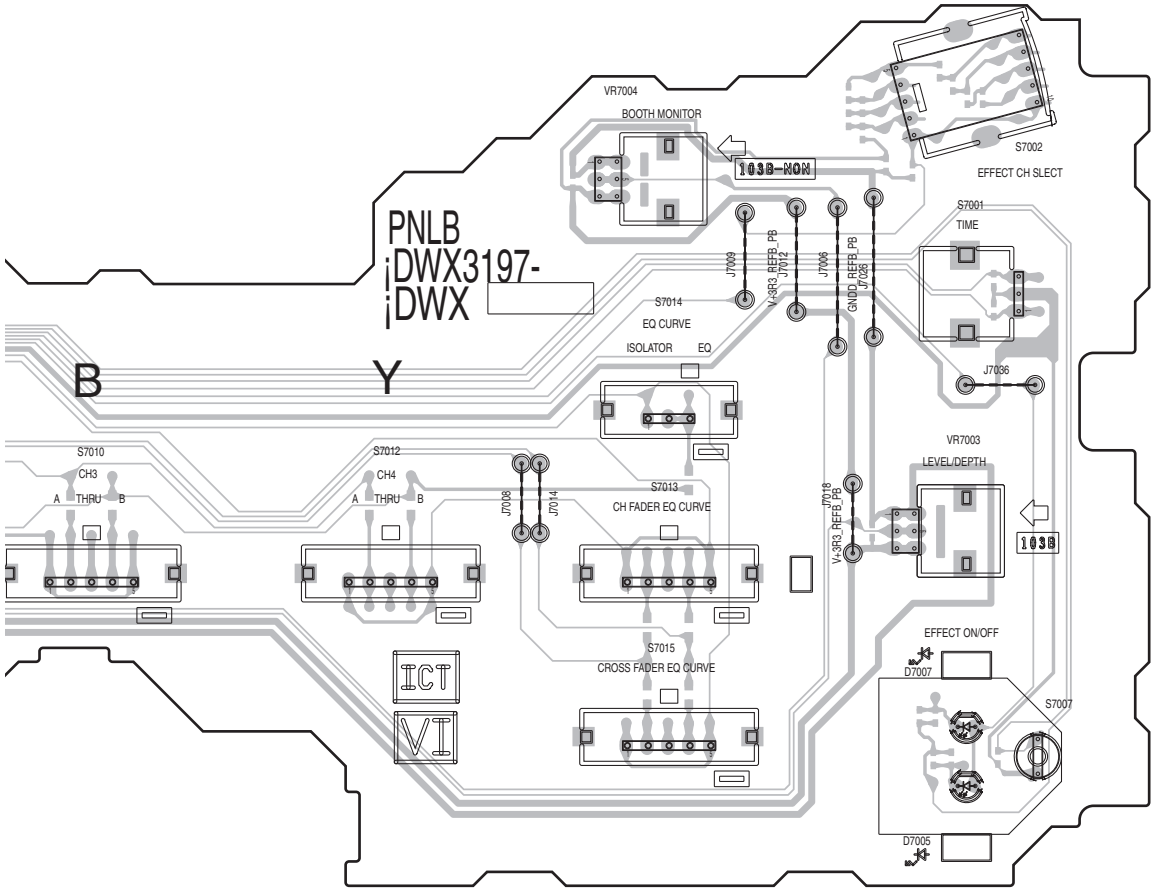
SIDE A



(DNP2627-A)

SIDE A

VR7004 VR7003

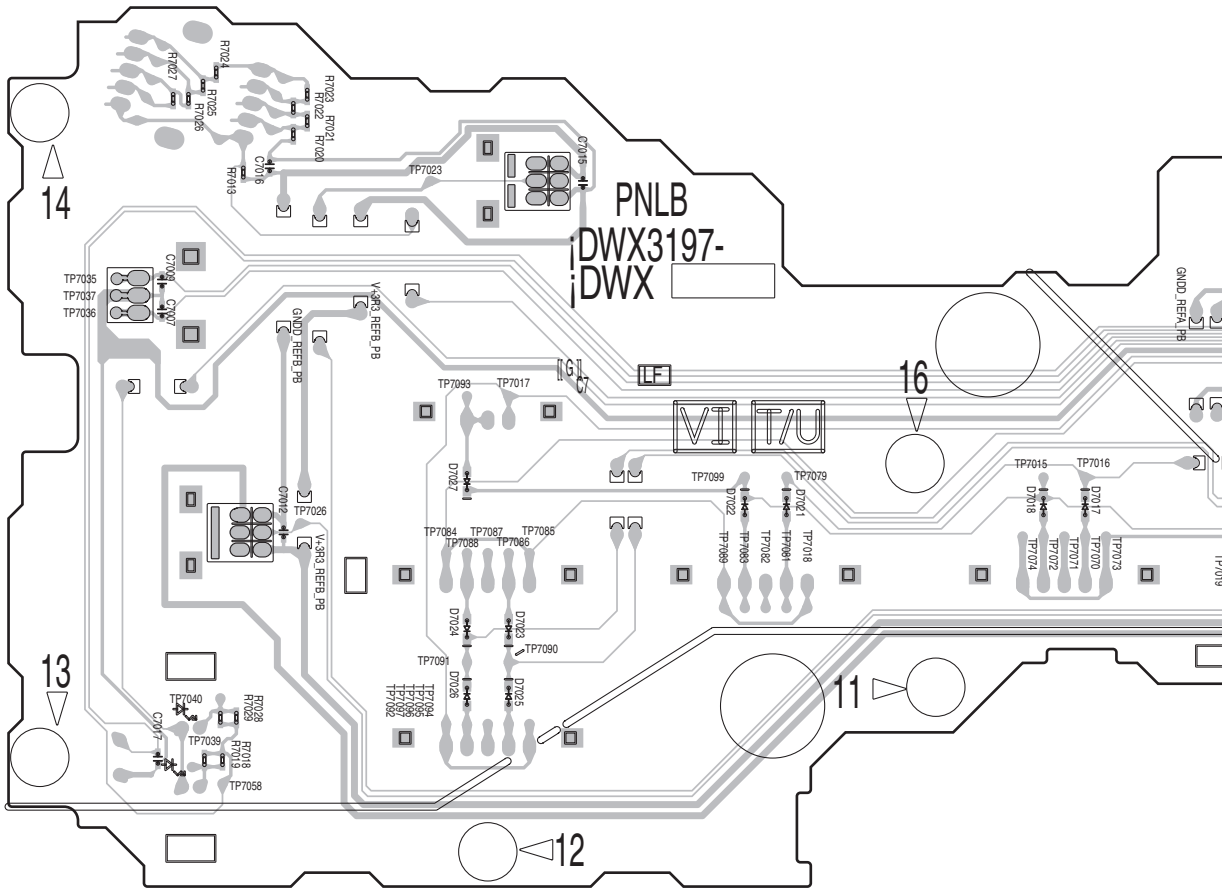


(DNP2627-A)

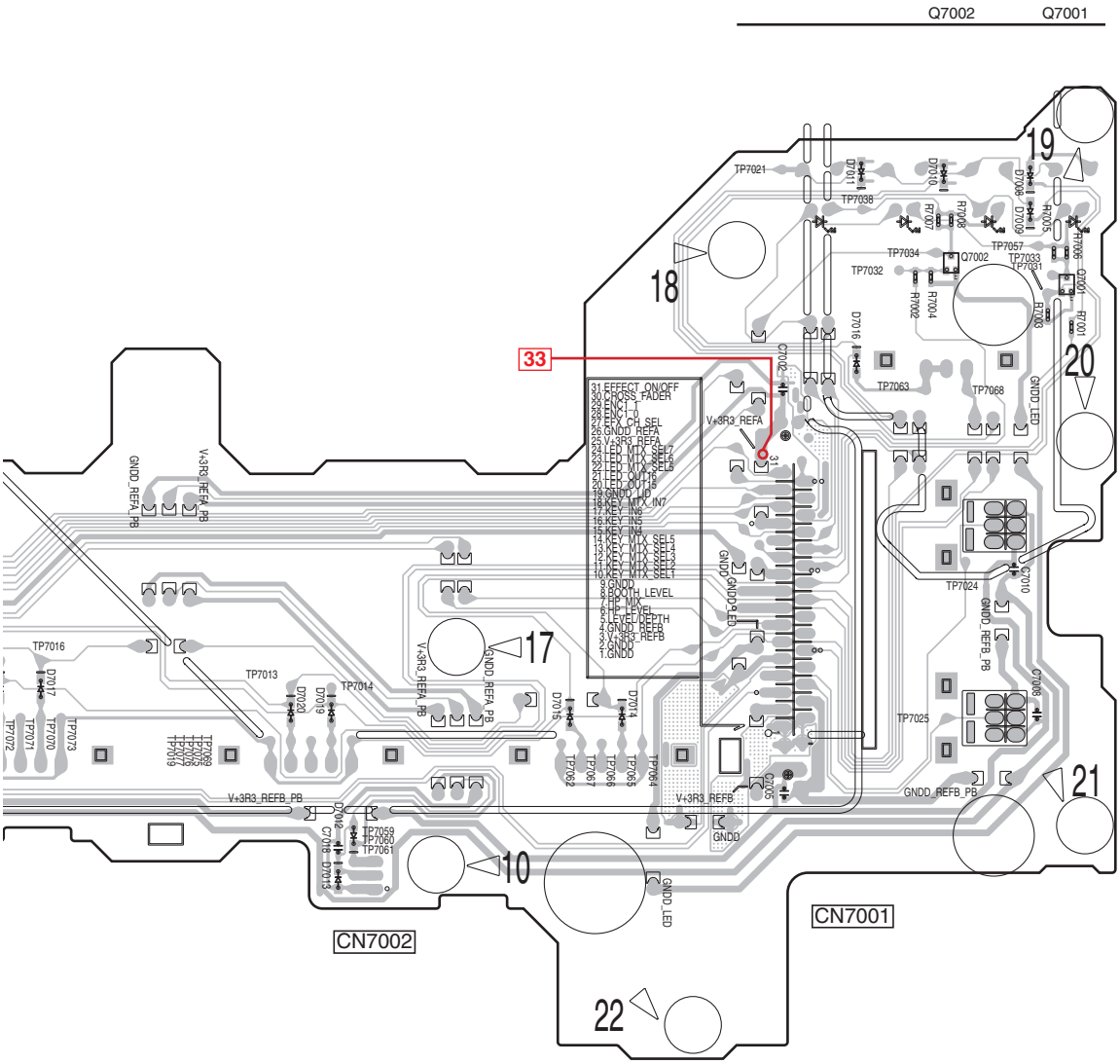
27-A)

SIDE B

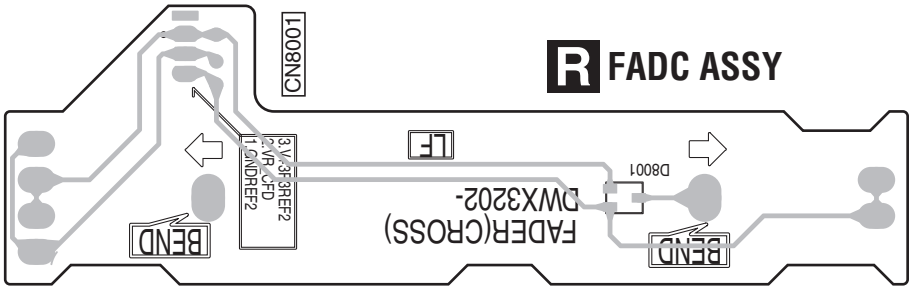
Q PNLB ASSY



(DNP2627-A)



: Voltage measuring point



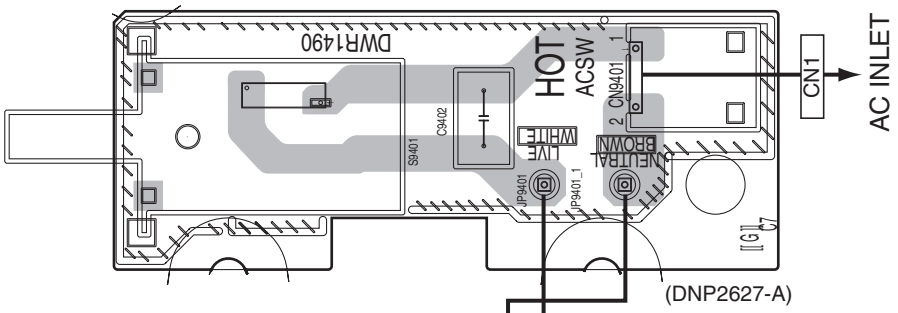
(DNP2627-A)

11.8 POWER SUPPLY and AC SW ASSYS

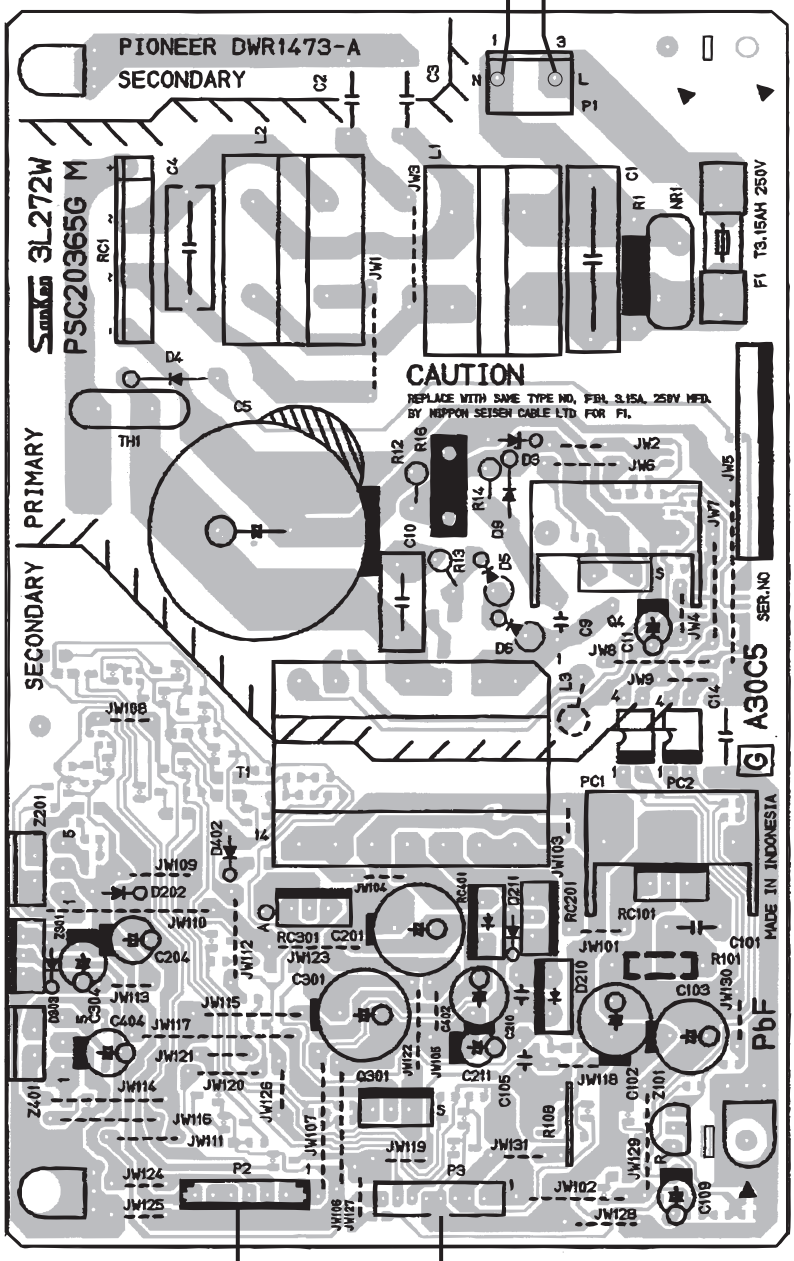
SIDE A

SIDE A

T ACSW ASSY



S POWER SUPPLY ASSY



P2 → G CN1201

P3 → G CN1202

S T

12. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*

● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47 k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω → 56 × 10¹ → 561 ····· RD1/4PU 5 6 1 J
47 kΩ → 47 × 10³ → 473 ····· RD1/4PU 4 7 3 J
0.5 Ω → R50 ····· RN2H R 5 0 K
1 Ω → 1R0 ····· RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62 kΩ → 562 × 10¹ → 5621 ····· RN1/4PC 5 6 2 1 F

● *Meaning of the figures and others in the parentheses in the parts list.*

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.
IC 301 (A, 91, 111) IC NJM2068V

LIST OF ASSEMBLIES

Mark	No.	Description	Part No.
NSP	1	..MOTHER ASSY	DWM2418
	2	..MAIN ASSY	DWX3190
	2	..CDCB ASSY	DWX3191
	2	..USBI ASSY	DWX3192
NSP	1	..AUDIO ASSY	DWM2419
	2	..INPUT ASSY	DWX3193
	2	..SEND ASSY	DWX3195
	2	..TRM1 ASSY	DWX3203
	2	..TRM2 ASSY	DWX3204
	2	..TRM3 ASSY	DWX3205
	2	..TRM4 ASSY	DWX3206
NSP	1	..SUB ASSY	DWM2420
	2	..ACSW ASSY	DWR1490
	2	..PNLB ASSY	DWX3197
	2	..FAD1 ASSY	DWX3198
	2	..FAD2 ASSY	DWX3199
	2	..FAD3 ASSY	DWX3200
	2	..FAD4 ASSY	DWX3201
	2	..FADC ASSY	DWX3202
	2	..MIC1 ASSY	DWX3207
	2	..HPJK ASSY	DWX3208
	1	..PNLA ASSY	DWX3196
⚠	1	..POWER SUPPLY ASSY	DWR1492

A INPUT ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC	4002-4004,4006-4010	TC7SH08FUS1
	IC	4005	TC74VHC74FK
	IC	4201,4202,4402,4404	NJM4580MD
	IC	4401,4407,4801,4807	RNB4580F
	IC	4403,4803,5203,5603	AK5358AET
	IC	4405,4601,4602,4802	NJM4580MD
	IC	4406,4806,5206,5606	CS5381-KZ
	IC	4408,4808,5208,5608	TC7WH157FK
	IC	4804,4805,5001,5002	NJM4580MD
	IC	5201,5207,5601,5607	RNB4580F
	IC	5202,5204,5205,5401	NJM4580MD
	IC	5402,5602,5604,5605	NJM4580MD
	IC	5801	RNB4580F
	IC	5802,6204	AK5358AET
	IC	6201,6203	NJM4580MD
	IC	6202	TC7S04FU
	Q	4001,4002	LSC4081UB
	Q	4201-4206,4401-4404	HN1C01FU
	Q	4207-4210,4405,4406	2SK3320
	Q	4211,4613,5013,5411	LTC124EUB
	Q	4601-4604,4606-4609	HN1C01FU
	Q	4610-4612,4614,4805	2SK3320
	Q	4801-4804,5001-5008	HN1C01FU
	Q	4806,5009-5012,5205	2SK3320
	Q	5201-5204,5401-5406	HN1C01FU
	Q	5206,5407-5410,5605	2SK3320
	Q	5601-5604	HN1C01FU
	Q	5606	2SK3320
	Q	6201	LTC124EUB
	Q	6202,6203	2SK209
	Q	6204,6205	LSC4081UB
	D	4201,4202,4401,4402	HZU3R0(B1)
	D	4203,4204,4605,4606	1SS352
	D	4403,4404,4803,4804	RB706F-40
	D	4405-4408,4805-4808	1SS302
	D	4601-4604,4801,4802	HZU3R0(B1)
	D	5001-5004,5201,5202	HZU3R0(B1)
	D	5005,5006,5403,5404	1SS352
	D	5203, 5204,5603,5604	RB706F-40
	D	5205-5208,5605-5608	1SS302
	D	5401,5402,5601,5602	HZU3R0(B1)
	D	5802,5803	RB706F-40
	D	6201,6202	1SS302
	D	6209,6210	RB706F-40

MISCELLANEOUS

Mark	No.	Description	Part No.
	L	6201 FERRITE CORE	VTF1093
	JA	4201,4601,5001,5401 JACK	DKB1083
	JA	5801 HEADPHONE JACK	XKB3066
	JA	5802,6201 MIC JACK	DKN1614
	JA	6202 CONNECTOR	DKN1188

Mark	No.	Description	Part No.
	KN	4001-4003 EARTH TERMINAL	AKF7002
	VR	6201,6202 ROTARY VR	DCS1072
	RY	4201,4601,5001,5401 RELAY	VSR1008
	CN	4002 FFC CONNECT0R	VKN1811
	CN	4003 L-PLUG (11P)	KM200NA11L
	CN	4201,4601,5001,5401 11P PLUG	XKP3065
	CN	6201 CONNECTOR	CKS3561
	0	SHIELD CASE (MIDI)	DNH2736

RESISTORS

	R	4001-4003,4052	RS1/10SR0R0J
	R	4034,4036,4037	RS1/4SA130J
	R	4057-4062,4480-4483	RS1/10SR0R0J
	R	4202,4204,4216,4217	RN1/16SE1000D
	R	4206,4406,4604,4607	RN1/16SE4701D
	R	4207,4407,4605,4608	RN1/16SE4301D
	R	4208,4211,4213,4215	RN1/16SE4700D
	R	4209,4210,5409,5410	RN1/16SE2201D
	R	4212,4214,4220,4221	RN1/16SE4702D
	R	4218,4219,4408,4411	RN1/16SE4700D
	R	4222,4223,4622-4625	RS1/10SR1803D
	R	4224,4225,4424-4431	RN1/16SE1201D
	R	4228,4229,5428,5429	RS1/10SR470J
	R	4230,4231,5430,5431	RS1/10SR75R0D
	R	4232,4233,4236,4239	RN1/16SE1001D
	R	4234,4235,4237,4238	RN1/16SE2001D
	R	4240,4241,5440,5441	RS1/10SR7501D
	R	4401,4433,4832,4878	RN1/16SE1202D
	R	4402,4419-4422,4434	RN1/16SE2001D
	R	4409,4410,4809,4810	RN1/16SE2002D
	R	4412,4414,4812,4814	RN1/16SE1303D
	R	4413,4606,4609	RN1/16SE4700D
	R	4415,4416,4815,4816	RS1/10SR3303D
	R	4432,4801,5201,5601	RAB4CQ103J
	R	4439,4441,4443,4445	RN1/16SE2200D
	R	4440,4442,4444,4446	RN1/16SE4300D
	R	4448-4451,4848-4851	RN1/16SE6800D
	R	4452,4455,4456,4459	RN1/16SE3300D
	R	4453,4454,4457,4458	RN1/16SE1001D
	R	4475,4875,5275,5675	RS1/10SR5R1J
	R	4610-4613,5010-5013	RN1/16SE1000D
	R	4614-4617,4808,4811	RN1/16SE4700D
	R	4618-4621,5018-5021	RN1/16SE4702D
	R	4630-4637,4853,4854	RN1/16SE1001D
	R	4806,5004,5007,5206	RN1/16SE4701D
	R	4807,5005,5008,5207	RN1/16SE4301D
	R	4813,5006,5009	RN1/16SE4700D
	R	4819-4822,4833,4879	RN1/16SE2001D
	R	4824-4831,5224-5231	RN1/16SE1201D
	R	4839,4841,4843,4845	RN1/16SE2200D
	R	4840,4842,4844,4846	RN1/16SE4300D
	R	4852,4855,4856,4859	RN1/16SE3300D
	R	4857,4858,5030-5037	RN1/16SE1001D
	R	4880-4883,5280,5281	RS1/10SR0R0J
	R	5014-5017,5208,5211	RN1/16SE4700D
	R	5022-5025,5422,5423	RS1/10SR1803D
	R	5209,5210,5609,5610	RN1/16SE2002D
	R	5212,5214,5612,5614	RN1/16SE1303D
	R	5213,5408,5411,5413	RN1/16SE4700D
	R	5215,5216,5615,5616	RS1/10SR3303D

Mark	No.	Description	Part No.
	R	5219-5222,5233,5279	RN1/16SE2001D
	R	5232,5278,5632,5678	RN1/16SE1202D
	R	5239,5241,5243,5245	RN1/16SE2200D
	R	5240,5242,5244,5246	RN1/16SE4300D
	R	5248-5251,5648-5651	RN1/16SE6800D
	R	5252,5255,5256,5259	RN1/16SE3300D
	R	5253,5254,5257,5258	RN1/16SE1001D
	R	5292,5293,5680-5683	RS1/10SR0R0J
	R	5402,5404,5416,5417	RN1/16SE1000D
	R	5406,5606,6216,6218	RN1/16SE4701D
	R	5407,5607	RN1/16SE4301D
	R	5412,5414,5420,5421	RN1/16SE4702D
	R	5415,5418,5419,5608	RN1/16SE4700D
	R	5424,5425,5624-5631	RN1/16SE1201D
	R	5432,5433,5436,5439	RN1/16SE1001D
	R	5434,5435,5437,5438	RN1/16SE2001D
	R	5611,5613	RN1/16SE4700D
	R	5619-5622,5633,5679	RN1/16SE2001D
	R	5639,5641,5643,5645	RN1/16SE2200D
	R	5640,5642,5644,5646	RN1/16SE4300D
	R	5652,5655,5656,5659	RN1/16SE3300D
	R	5653,5654,5657,5658	RN1/16SE1001D
	R	5804,5805	RN1/16SE3602D
	R	5812,6202,6203	RS1/10SR0R0J
	R	5820,6217	RAB4CQ103J
	R	6204,6207	RN1/16SE1000D
	R	6205,6206	RS1/10SR221J
	R	6208-6210,6237,6255	RS1/10SR0R0J
	R	6213	RN1/16SE3901D
	R	6214,6215	RN1/16SE1002D
	R	6219,6223,6227,6249	RN1/16SE4701D
	R	6220,6222,6250,6252	RN1/16SE1501D
	R	6221,6253	RN1/16SE3300D
	R	6224	RN1/16SE1500D
	R	6228,6229,6231,6232	RN1/16SE3900D
	R	6230,6233	RN1/16SE2200D
	R	6251	RN1/16SE4701D
		Other Resistors	RS1/16SS###J

CAPACITORS

	C	4002-4008,4010,4020	CKSSYB104K16
	C	4011,4015,4019,4023	CCSSCH102J50
	C	4013,4017	CKSYB104K25
	C	4014,4018	CEHAT101M25
	C	4022,4030,6243	CEHAT101M10
	C	4024,4028,4032,4233	CKSSYB104K16
	C	4027,4031,4434-4437	CCSSCH102J50
	C	4201-4204,4411,4414	CCSSCH101J50
	C	4205,4206,5405,5406	CCSSCH221J50
	C	4207,4208,4219,4220	CCSSCH331J50
	C	4209,4210,4415,4416	CKSSYB474K6R3
	C	4211,4213,5411,5413	CEHAT471M6R3
	C	4212,4214,4417,4418	CKSSYB472K50
	C	4215,4216,5415,5416	CKSRYB223K50
	C	4217,4218,5417,5418	CKSSYB471K50
	C	4221,4222,5421,5422	CFHXSQ103J16
	C	4223-4225,4227,4405	CKSRYB104K25
	C	4226,4228,4426,4429	CEHAZL101M25
	C	4229-4232,4625-4628	CEANP330M16
	C	4407,4422,4423	CKSRYB104K25

Mark	No.	Description	Part No.
C	4412,4413,4812,4813		CEHAT100M50
C	4419,4444,4819,4844		DCH1201
C	4420,4428,4445,4446		CKSSYB104K16
C	4421,4821,5221,5621		CCG1205
C	4424,4425,4824,4825		CEHAZL220M50
C	4430-4433,4456,4457		CKSRYB104K25
C	4438,4838,5238,5638		CKSSYB103K25
C	4447,4448,4847,4848		CKSSYB103K16
C	4449,4450,4849,4850		CCSRCH222J50
C	4451,4851,5251,5651		CEHAZL331M6R3
C	4452,4454,4852,4854		CEHAZL101M10
C	4453,4455,4458,4466		CKSSYB104K16
C	4601-4608,4811,4814		CCSSCH101J50
C	4609-4612,4815,4816		CKSSYB474K6R3
C	4613-4616,4817,4818		CKSSYB472K50
C	4617-4619,4621,4805		CKSRYB104K25
C	4622,4624,4826,4829		CEHAZL101M25
C	4629,4820,4828,4845		CKSSYB104K16
C	4807,4822,4823		CKSRYB104K25
C	4830-4833,4856,4857		CKSRYB104K25
C	4834-4837,5234-5237		CCSSCH102J50
C	4846,4853,4855,4858		CKSSYB104K16
C	4866,5029,5220,5228		CKSSYB104K16
C	5001-5008,5211,5214		CCSSCH101J50
C	5009-5012,5215,5216		CKSSYB474K6R3
C	5013-5016,5217,5218		CKSSYB472K50
C	5017-5019,5021,5205		CKSRYB104K25
C	5022,5024,5226,5229		CEHAZL101M25
C	5025-5028,5429-5432		CEANP330M16
C	5207,5222,5223		CKSRYB104K25
C	5212,5213,5612,5613		CEHAT100M50
C	5219,5244,5619,5644		DCH1201
C	5224,5225,5624,5625		CEHAZL220M50
C	5230-5233,5256,5257		CKSRYB104K25
C	5245,5246,5253,5255		CKSSYB104K16
C	5247,5248,5647,5648		CKSSYB103K16
C	5249,5250,5649,5650		CCSRCH222J50
C	5252,5254,5652,5654		CEHAZL101M10
C	5258,5266,5433,5620		CKSSYB104K16
C	5401-5404,5611,5614		CCSSCH101J50
C	5407,5408,5419,5420		CCSSCH331J50
C	5409,5410,5615,5616		CKSSYB474K6R3
C	5412,5414,5617,5618		CKSSYB472K50
C	5423-5425,5427,5605		CKSRYB104K25
C	5426,5428,5626,5629		CEHAZL101M25
C	5607,5622,5623		CKSRYB104K25
C	5628,5645,5646,5653		CKSSYB104K16
C	5630-5633,5656,5657		CKSRYB104K25
C	5634-5637,5803,5804		CCSSCH102J50
C	5655,5658,5666,5815		CKSSYB104K16
C	5801,5802,6211,6213		CCSSCH101J50
C	5807,5810		CEAT470M25
C	5808,5809,6208,6219		CKSSYB103K25
C	5811,5812		CEHAT100M50
C	5813,5814,5817,6227		DCH1201
C	5816,5818,5820,6217		CKSSYB104K16
C	5821		CKSSYB103K16
C	6201,6202,6215		CCSSCH102J50
C	6207,6212,6225,6226		CEJQ100M35
C	6214		CKSSYB471K50
C	6216,6221		CCSSCH471J50
C	6218,6224		CEJQNP100M35
C	6220		CKSSYB331K50
C	6222,6223,6238,6240		CKSRYB104K25
C	6228,6230,6232		CKSSYB104K16
C	6229,6231		DCH1201
C	6233		CKSSYB103K25
C	6241		CCSSCH331J50
C	6242		CKSRYB104K25

B MIC1 ASSY

SEMICONDUCTORS

D	9001-9004		UDZS15(B)

MISCELLANEOUS

JA	9001	CANON CONNECTOR	DKB1108
CN	9001	PLUG	CKS3533
	0	MIC SHIELD	DNF1849

RESISTORS

R	9001-9004		RN1/16SE1000D

CAPACITORS

C	9001,9002		CFTLA103J50
C	9003-9008		CCSRCH102J50

C TRM1 ASSY

MISCELLANEOUS

VR	8201	ROTARY VR	DCS1119
CN	8201	11P SOCKET	XKP3076

CAPACITORS

C	8201		CKSRYB104K25

D TRM2 ASSY

MISCELLANEOUS

VR	8401	ROTARY VR	DCS1119
CN	8401	11P SOCKET	XKP3076

CAPACITORS

C	8401		CKSRYB104K25

E TRM3 ASSY

MISCELLANEOUS

VR	8601	ROTARY VR	DCS1119
CN	8601	11P SOCKET	XKP3076

CAPACITORS

C	8601		CKSRYB104K25

F TRM4 ASSY

MISCELLANEOUS

VR	8801	ROTARY VR	DCS1119
CN	8801	11P SOCKET	XKP3076

CAPACITORS

C	8801		CKSRYB104K25

G MAIN ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC	101,201,301,401	TC7WU04FU
	IC	102,1601,2001,2002	TC7SHU04FUS1
	IC	103-107,115-118	TC7SH08FUS1
	IC	109	TC7WH157FK
	IC	110,202,302,402	DIR9001PW
	IC	111,112,203,204	TC74LCX157FK
	IC	113,114,205,206	CS8421-CZ
	IC	303,304,403,404	TC74LCX157FK
	IC	305,306,405,406	CS8421-CZ
	IC	501	R5S76700B200BG
NSP	IC	502	DYW1798
	IC	503	MD56V72160B-6TAZ
	IC	504,1403,1602	TC7SH08FUS1
	IC	505	TC7SH04FUS1
	IC	701	D810K013BZKB400
	IC	702	MD56V82160-6TAZ
	IC	703	DYW1797
	IC	704	TC7SG08FU
⚠	IC	1201	KIA7809API
⚠	IC	1202	KIA7909PI
⚠	IC	1401	NJM2392M
⚠	IC	1402	S-1170B25UC-OTK
⚠	IC	1404	NJM2831F33
⚠	IC	1405	BD9325FJ
⚠	IC	1406,1407	BD9326EFJ
	IC	1603	RTL8201EL-VC-GR
	IC	1801	ADSP-BF524BBCZ-3A
	IC	1802	IS42S16400F-6TL
	IC	2003-2005,2007-2009	TC7SH08FUS1
	IC	2010	S-80927CNMC-G8X
	IC	2011	DYW1799
	IC	2012	TC74HC4052AFT
	IC	2205-2210,2401-2403	TC7SH08FUS1
	IC	2214	XC3S50A-4FTG256C
	IC	2404	CS8421-CZ
	IC	2405	AK4114VQ
	IC	2601-2604	TC7SH08FUS1
	IC	2801,3003	RNB4580F
	IC	2802	AK4390EF
	IC	2803,2804,3002,3004	NJM4580MD
	IC	2805,2806	NJM4580D
	IC	3001	AK4387ET
	IC	3201,3404	AK4382AVT
	IC	3202,3205	NJM4565MD
	IC	3203,3204,3405,3406	NJM4580MD
	Q	101-103,1205,1405	LTC124EUB
	Q	1201,1402,1410	HN1A01FU
	Q	1206,1406,2001	LTA124EUB
	Q	1404,1409,2603,2821	LSA1576UB
	Q	1407,2003,2401-2403	LTC124EUB
	Q	1408,2602,2820,2822	LSC4081UB
	Q	2404	2SC2412K
	Q	2601,2836,3409,3410	LTC124EUB
	Q	2801,2802,2828,2829	2SC5868
	Q	2803-2808,2811,2815	HN1C01FU
	Q	2809,2810,2812,2813	2SK3320
	Q	2814,2816,2818	HN1A01FU
	Q	2817,2819	HN1C01FU
	Q	2823,2825,2827,2838	LSA1576UB
	Q	2824,2826,3401,3403	LSC4081UB
	Q	2830,2831,2834,2835	2SA2090
	Q	2832,2833	2SC5868
	Q	2837	2SC3326
	Q	2839,3402,3404,3411	LSA1576UB
	Q	3001-3004,3201,3203	2SK209
	Q	3005-3008,3202	INC2002AC1
	Q	3204,3209	2SK209
	Q	3205-3208,3210-3212	INC2002AC1
	Q	3405,3407	2SD1760F5
	Q	3406,3408	2SB1184F5
	Q	3412	LSA1576UB
	D	1201,1402,1414	1SS301
	D	1202,1203	RB501V-40
	D	1401,1415,2807-2824	1SS352
	D	1405	RB160L-40
	D	1406	RKZ3.3KG(B2)
	D	1410,1411,1413	CMS03
	D	2801	HZU5R1(B1)
	D	2803-2806	HZU3R0(B1)
	D	2829-2832	DZ2S180C
	D	2833,2834,3401-3405	1SS352

MISCELLANEOUS

	L	501-503 CHIP SOLID INDUCTOR	QTL1013
	L	701,702 CHIP SOLID INDUCTOR	QTL1013
	L	703,704 INDUCTOR	CTF1579
	L	1401 INDUCTOR(470 uH)	DTL1123
	L	1402,1403 INDUCTOR	CTH1253
	L	1404 INDUCTOR	BTH1110
	L	1601,1801 CHIP SOLID INDUCTOR	QTL1013
	L	1802 CHIP SOLID INDUCTOR	QTL1013
	L	2001 CHIP COIL	LCTAW330J2520
	F	1601,1602 COIL	VTH1056
	JA	101 4P PIN JACK (ORANGE)	DKB1110
	JA	1601 RJ45 CONNECTOR	VKN2023
	JA	2401 1P JACK	DKB1089
	JA	2801,2802 CANON CONNECTOR	DKB1093
	JA	3001 JACK	DKB1083
	JA	3201,3202 HEADPHONE JACK	DKN1622
	KN	1201-1208 WRAPPING TERMINAL	CKF1089
	KN	2601,3401 WRAPPING TERMINAL	CKF1089
	RY	2801,2802,3401 RELAY	VSR1008
	T	1601 10/100BASE-T TRANS	BTX1044
	X	101 CRYSTAL (22.5792 MHz)	DSS1202
	X	1601 CRYSTAL (25 MHz)	DSS1205
	X	1801 CRYSTAL (24 MHz)	DSS1203
	X	2001 RESONATOR (20 MHz)	CSS1795
	X	2002 CRYSTAL (24.576 MHz)	DSS1204
	CN	1001 CONNECTOR	9604S-31C
	CN	1002 CONNECTOR	VKN2050
	CN	1003 19P PLUG	AKM7077
	CN	1201 CONNECTOR	AKM1277
	CN	1202 CONNECTOR	AKM1278
	CN	1203 CONNECTOR	AKM1282
	CN	1802 CONNECTOR	AKM1276
	CN	3401 CONNECTOR	AKM1275

Mark	No.	Description	Part No.
	0	CANON SHIELD	DNF1789
NSP	0	ID LABEL ASSY	AXW7015
⚠	P 1204	PROTECTOR (3.000 A)	DEK1103
⚠	P 1207,1208	PROTECTOR (0.750 A)	DEK1121
⚠	P 1209	PROTECTOR (0.750 A)	DEK1096
⚠	P 1210	PROTECTOR (0.500 A)	DEK1095
	JP 1205,1206	JUMPER	DDC1022-A

RESISTORS

R 102,202,302,402	RS1/10SR75R0D
R 112,153,163,167	RS1/10SR0R0J
R 114,1616,2004,3031	RS1/10SR105J
R 124,125,168,219	RS1/10SR1002D
R 141,228,328,428	RS1/10SR6800D
R 158,170,243,251	RN1/16SE2001D
R 159,171,244,252	RN1/16SE6202D
R 172,2411,2956,2959	RN1/16SE3901D
R 173,175,180,532	RS1/10SR0R0J
R 174,2416	RN1/16SE1602D
R 220,319,320,419	RS1/10SR1002D
R 343,351,443,451	RN1/16SE2001D
R 344,352,444,452	RN1/16SE6202D
R 420,1449,1452,2410	RS1/10SR1002D
R 501-510,572-576	RAB4CQ220J
R 512-515,1821,2044	RAB4CQ103J
R 524,525	RAB4CQ221J
R 594-597,799,803	RAB4CQ220J
R 613,782,1006,1016	RS1/10SR0R0J
R 614,615,634,635	RAB4CQ470J
R 616,617,636,637	RAB4CQ330J
R 731-735,755-757	RAB4CQ100J
R 783,784,825,826	RAB4CQ330J
R 804,817,818,836	RAB4CQ220J
R 837,845,846,853	RAB4CQ220J
R 854,913,2054,2057	RAB4CQ220J
R 1017,1021-1028,1035	RS1/10SR0R0J
R 1029,1032,1037	RAB4CQ0R0J
R 1036,1038	RAB4CQ100J
R 1039,1046-1048,1201	RS1/10SR0R0J
R 1202	RS1/16SS1102F
R 1203	RS1/16SS2002F
R 1207	RS1/16SS1002F
R 1208	RS1/16SS2202F
R 1221,3463,3465	RS1/10SR103J
R 1222,1228-1231,1405	RS1/10SR0R0J
R 1412	RS1/10SR122J
R 1413,1415	RS1/8SQ1R5J
R 1416,1503	RS1/8SQ0R0J
R 1418	RS1/10SR4702F
R 1419	RS1/10SR1801F
R 1421	RS1/16SS6201F
R 1422	RS1/16SS1801F
R 1423,2005,2801	RS1/10SR152J
R 1426,1427	RS1/10SR223J
R 1428,1436,1439,1442	RS1/10SR104J
R 1429,2807,2901,2902	RS1/10SR183J
R 1430-1432,1498-1500	RS1/4SA0R0J
R 1437,3015,3016	RS1/10SR5101D
R 1438,1445,1451	RS1/10SR2202D
R 1440	RS1/10SR1502F

Mark	No.	Description	Part No.
R 1444,1613,1804,1806	RS1/10SR0R0J
R 1446,1450,3021,3022	RS1/10SR4701D
R 1447	RS1/10SR1201D
R 1448	RS1/10SR2201D
R 1609-1612	RS1/10SR750J
R 1618	RS1/10SR2491F
R 1807,1817,2001,2002	RS1/10SR0R0J
R 1835-1837,1884,1885	RAB4CQ121J
R 1861-1864,1882,1883	RAB4CQ470J
R 1902,1903	RAB4CQ470J
R 1904,1905	RAB4CQ121J
R 2023,3049,3050	RS1/10SR474J
R 2025,2073,2074,2089	RS1/10SR0R0J
R 2032	RAB4CQ222J
R 2055,2809,3007,3206	RAB4CQ103J
R 2075,2076,2260,2265	RAB4CQ220J
R 2239,2268,2280,2425	RS1/10SR0R0J
R 2252,2271,2330	RAB4CQ330J
R 2277,2278,2287,2289	RAB4CQ220J
R 2310,2311,2320,2321	RAB4CQ220J
R 2340,2354,2359,2602	RAB4CQ220J
R 2414,2892-2899	RN1/16SE2001D
R 2415	RN1/16SE6202D
R 2422	RN1/16SE1802D
R 2426	RS1/10SR272J
R 2427	RS1/10SR182J
R 2428	RS1/10SR392J
R 2429	RS1/10SR221J
R 2430	RS1/10SR680J
R 2431,3047,3048	RS1/10SR104J
R 2432,2601,2607,2608	RS1/10SR0R0J
R 2603,2622	RAB4CQ220J
R 2605,2609-2611	RS1/4S0R0J
R 2614-2621,2633,2805	RS1/10SR0R0J
R 2802,2803,2922-2925	RS1/10SR102J
R 2817,2820,3232,3233	RS1/10SR0R0J
R 2821,2905,2906,3214	RN1/16SE4701D
R 2822	RN1/16SE4301D
R 2823,2832,2837,2846	RN1/16SE4700D
R 2824-2831,2958,2961	RN1/16SE1501D
R 2833-2836,2838-2841	RN1/16SE8201D
R 2842-2845,2847-2850	RN1/16SE1301D
R 2851	RN1/16SE4700D
R 2852-2859	RN1/16SE8201D
R 2860-2867	RN1/16SE1101D
R 2868-2871	RS1/10SR3303D
R 2872-2875	RS1/10SR181J
R 2876-2883,3428,3429	RN1/16SE2201D
R 2888-2891	RN1/16SE3902D
R 2904,2907,2912-2915	RN1/16SE1000D
R 2908-2911	RN1/16SC68R0D
R 2920,2921,2938,2943	RN1/16SE1000D
R 2930-2933,3457-3460	RS1/10SR102J
R 2934-2937,2939-2942	DCN1199
R 2952-2955,3248,3250	DCN1198
R 2957,2960,2964,2967	RN1/16SE1001D
R 2962,2969-2971	RN1/16SE3301D
R 2963,2966,3218,3219	RN1/16SE3901D
R 2965,2968,3272,3273	RN1/16SE1501D

Mark	No.	Description	Part No.
	R	3011-3014	RN1/16SE1202D
	R	3017,3018,3023,3024	RS1/10SR4702D
	R	3019,3020,3027,3028	RN1/16SE1502D
	R	3025,3026	RS1/10SR4301D
	R	3029,3030,3041,3042	RN1/16SE1002D
	R	3032,3043,3044	RS1/10SR105J
	R	3033,3034,3045,3046	RS1/10SR183J
	R	3035-3037,3040	DCN1200
	R	3038,3039	RS1/10SR100J
	R	3209,3271,3294,3295	RN1/16SE1001D
	R	3210,3211,3225,3227	RN1/16SE5601D
	R	3212,3213,3216,3217	RN1/16SE2702D
	R	3215,3262,3267,3278	RN1/16SE4701D
	R	3220-3223,3228-3231	RN1/16SE2701D
	R	3224,3226,3234,3236	RN1/16SE6801D
	R	3235,3237,3261,3266	RN1/16SE5601D
	R	3238,3239,3401,3404	RS1/10SR0R0J
	R	3240-3243,3249,3251	RS1/10SR183J
	R	3252,3254	DCN1198
	R	3253,3255	RS1/10SR183J
	R	3256-3259,3456,3461	RS1/10SR104J
	R	3263,3268,3282,3283	RN1/16SE3901D
	R	3264,3265,3269,3270	RN1/16SE2702D
	R	3274,3275,3284,3289	RN1/16SE5601D
	R	3276,3277,3280,3281	RN1/16SE2702D
	R	3279,3285,3290,3434	RN1/16SE4701D
	R	3286,3291,3416-3419	RN1/16SE3901D
	R	3287,3288,3292,3293	RN1/16SE2702D
	R	3296,3297	RN1/16SE1501D
	R	3413	RAB4CQ103J
	R	3420-3423	RN1/16SE1502D
	R	3424-3427	RN1/16SE3301D
	R	3430,3432	RN1/16SE1201D
	R	3431,3433,3435,3438	RS1/10SR0R0J
	R	3436,3437,3439	RN1/16SE4701D
	R	3440-3443	RS1/10SR1001D
	R	3444-3447	RS1/10SR1801D
	R	3449-3452	DCN1197
	R	3454,3455	RS1/10SR0R0J
	R	3462,3464,3466,3467	RS1/10SR473J
		Other Resistors	RS1/16SS###J

CAPACITORS

Mark	No.	Description	Part No.
	C	102,202,302,402	CCSSCH221J50
	C	103,203,303,403	CKSRYB103K50
	C	104,204,304,404	CCSSCH220J50
	C	105,107,110-112	CKSSYB104K10
	C	106,109,1605,1607	CCSSCH120J50
	C	108,206,306,406	CCSSCH470J50
	C	113,119,128,133	DCH1201
	C	114,115,117,118	CKSSYB104K10
	C	120,124,126,129	CKSSYB104K10
	C	121,127,131,211	CKSSYB103K16
	C	122,212,312,412	CKSRYB472K50
	C	123,213,313,413	CKSRYB683K16
	C	132,135,137	CKSSYB104K10
	C	134,138,207,209	DCH1201
	C	140-143,205,208	CKSSYB104K10
	C	210,214,215,218	CKSSYB104K10
	C	216,219,311,317	CKSSYB103K16
	C	217,221,222,225	DCH1201
	C	220,223,224,305	CKSSYB104K10
	C	307,309,316,321	DCH1201
	C	308,310,314,315	CKSSYB104K10
	C	318,320,323,324	CKSSYB104K10
	C	319,411,416,419	CKSSYB103K16
	C	322,325,407,409	DCH1201
	C	405,408,410,414	CKSSYB104K10
	C	415,418,420,423	CKSSYB104K10
	C	417,421,422,425	DCH1201
	C	424,501,504,505	CKSSYB104K10
	C	503,511,514,542	DCH1201
	C	506,517,555,559	CKSSYB471K50
	C	507,510,515,522	CKSSYB104K10
	C	508,516,518,519	CKSSYB103K16
	C	521,524-531	CKSSYB103K16
	C	532,724,726,728	CKSSYB102K50
	C	533-536,538-540	CKSSYB103K16
	C	537,750,1853,1857	CCSSCH101J50
	C	541,553,554	CKSSYB104K10
	C	544,755,764,1405	DCH1201
	C	545-552,709,711	CKSSYB103K16
	C	556-558,560,701	CKSSYB104K10
	C	702,705,706,752	CKSSYB104K10
	C	704,1214,1220,1221	CEVW470M16
	C	707,708,1809,1810	CKSSYB471K50
	C	713,719,721,723	CKSSYB103K16
	C	725,727,729,731	CKSSYB103K16
	C	730,732,734,736	CKSSYB102K50
	C	733,735,737,739	CKSSYB103K16
	C	738,740,742,744	CKSSYB102K50
	C	741,743,745,747	CKSSYB103K16
	C	746,748,1471,1824	CKSSYB102K50
	C	749,751,754	CKSSYB103K16
	C	756-762,1621,1623	CKSSYB103K16
	C	763,765,767,768	CKSSYB104K10
	C	1001,1209,1404,1407	CKSSYB104K10
	C	1201	CEVW471M16
	C	1202-1204,1206,1213	CEVW101M25
	C	1205,1215,1218,1401	CKSSYB104K16
	C	1207,1208,2814,2815	CKSRYB104K50
	C	1210-1212,1270-1272	CCSSCH102J50
	C	1216	CKSQYB334K50
	C	1217	CCG1254
	C	1219	CKSRYB105K16
	C	1402,1409,2215,2229	CEVW470M16
	C	1403,2416,2827,2828	CEVW101M16
	C	1406,1415	CCSSCH470J50
	C	1408,1449-1453,1456	DCH1201
	C	1411,1413,1414,1454	CKSSYB104K10
	C	1412	CEVW101M50
	C	1417,1421,1422,1425	CKSSYB104K16
	C	1419,2015,2022	CKSRYB105K10
	C	1423,1424,1428,1470	CCG1182
	C	1433-1435,1437	CKSSYB104K16
	C	1436,1438,1442,1472	CCSRCH222J50
	C	1439,1476,1479,1490	CCSSCH102J50
	C	1444-1448	CKSSYB104K16
	C	1455,1459,1602-1604	CKSSYB104K10

Mark	No.	Description	Part No.
C	1492-1494,1813,2608		CCSSCH102J50
C	1601,1625		ACG1127
C	1606,1612,1619,1620		DCH1201
C	1608,1609,1611		CKSSYB104K10
C	1613-1617,1622,1801		CKSSYB104K10
C	1802,1807,1808,1825		CKSSYB104K10
C	1805,1806,1822,1827		DCH1201
C	1811,2003-2006		CCSSCH120J50
C	1815,1816		CCSRCK2R0C50
C	1820		CCSSCH100D50
C	1826,1830,1834,1837		CKSSYB102K50
C	1828,1832,1835,1838		CKSSYB104K10
C	1831,1846,1850,1852		CKSSYB103K16
C	1840,1843,1847,3030		CKSSYB102K50
C	1841,1844,1845,1848		CKSSYB104K10
C	1849,1851,1854,1855		CKSSYB104K10
C	1856,1859,1862-1868		CKSSYB103K16
C	1858,1861,2001,2002		CKSSYB104K10
C	2008-2010,2012-2014		CKSSYB104K10
C	2016		CKSRYB152K50
C	2017,2018,2036,2039		CKSSYB103K16
C	2021,2406,2408,2413		DCH1201
C	2023,2024,2032,2033		CKSSYB104K10
C	2025-2031		CKSSYB471K50
C	2035,2205-2210,2214		CKSSYB104K10
C	2216-2228,2230,2231		CKSSYB104K10
C	2234-2237,2401-2404		CKSSYB104K10
C	2238,2405,2411,2807		CKSSYB103K16
C	2407,2410,2412,2414		CKSSYB104K10
C	2409,2841,2843,2845		CKSRYB474K10
C	2415,2803		CKSRYB103K50
C	2417,2802,3017,3407		CKSRYB104K25
C	2601,2603-2605,2806		CKSSYB104K10
C	2602,2873,3041		CCSSCH101J50
C	2612		CCSSCH102J50
C	2614,2801,2812,2813		DCH1201
C	2804,2805,3010,3011		CCSRCH101J50
C	2808,2809		CEHVAW101M16
C	2810,2811,2855,2860		CEHVAW221M35
C	2816,2817,2819-2822		CKSSYB104K10
C	2818,2895,3002,3003		CKSSYB103K16
C	2823-2826,3004,3007		DCH1201
C	2829,2830		CEVW220M16
C	2831-2834		CCSQCH562J50
C	2835-2838,3210,3211		CCSRCH122J50
C	2839,2840,2842,2844		CCSRCH181J50
C	2846		CKSRYB474K10
C	2847-2850		CKSRYB472K50
C	2851-2853,2859		CCSRCH181J50
C	2854,2856-2858,2889		CKSRYB104K50
C	2861,2863,2865,2867		CKSRYB473K50
C	2862,2864,2866,2868		CEHVAW471M16
C	2869-2872		CCSRCH471J50
C	2878,2879		CCG1236
C	2880		CEHANP101M16
C	2890,3016,3024,3026		CKSRYB104K50
C	2896-2899,3044-3047		CFHXSQ472J16
C	2900-2903,3230,3231		CEANP470M25
C	3001,3005,3006,3201		CKSSYB104K10

Mark	No.	Description	Part No.
C	3008,3009		CEVW100M50
C	3012,3013		CCSQCH472J50
C	3014,3015		CCSRCH152J50
C	3018,3019,3220,3222		CCSRCH101J50
C	3020,3023		CKSRYB334K10
C	3021,3022,3039,3040		CEVWNP100M35
C	3025,3027		CCG1195
C	3028,3029		CCSRCH560J50
C	3031		CKSSYB102K50
C	3033,3035,3216,3218		CKSRYB104K50
C	3034,3036		CCSRCH151J50
C	3037,3038		CKSRYB473K25
C	3042,3043		CEVWNP100M35
C	3202,3203,3404		CKSSYB103K16
C	3204,3205,3214,3215		CCSSCH121J50
C	3206,3405		CKSSYB104K10
C	3207,3406		DCH1201
C	3212,3213,3244,3245		CCSRCH332J50
C	3217,3219,3420,3423		CEVW101M25
C	3224,3225,3232,3233		CKSRYB104K50
C	3226,3228,3410-3413		CCSRCH101J50
C	3234,3235		CEANP470M25
C	3236,3241,3246,3247		CCSSCH121J50
C	3237-3240		CFHXSQ472J16
C	3242,3243		CCSRCH122J50
C	3248,3249,3414,3415		CKSRYB104K50
C	3408,3409		CCSSCH681J50
C	3416,3417		CEVW101M16
C	3418,3419		CCSRCH222J50
C	3421,3422		CKSRYB104K50
C	3426		CCSRCH101J50
C	3429,3430		CCG1182

H USBI ASSY

MISCELLANEOUS

L	3801	COIL	ATH7015
JA	3801	USB CONNECTOR	DKN1237
KN	3801	WRAPPING TERMINAL	CKF1089
CN	3801	L-PLUG (5P)	KM200NA5L

CAPACITORS

C	3801		DCH1201
C	3803,3806		CCSSCH101J50
C	3804,3805		CCSRCK2R0C50

I HPJK ASSY

MISCELLANEOUS

JA	9201	HEADPHONE JACK	DKN1622
CN	9201	L-PLUG (4P)	KM200NA4L
	0	PHONE SHIELD	DNF1875

RESISTORS

	All Resistors		RS1/10SR###J

CAPACITORS

C	9203,9204		CKSRYB104K25

Mark	No.	Description	Part No.

J SEND ASSY

SEMICONDUCTORS

	IC	6401	AK4387ET
	IC	6402	RNB4580F
	Q	6401,6402	2SK209
	Q	6403,6404	INC2002AC1

MISCELLANEOUS

	JA	6401,6402	MIC JACK DKN1614
	CN	6401	19P RECEPTACLE AKP7199
		0	PHONE SHIELD DNF1875

RESISTORS

	R	6401-6404	RS1/10SR0R0J
	R	6414,6415,6418,6419	RS1/10SR4701D
	R	6416,6417,6420,6421	RS1/10SR4702D
	R	6422,6424	RS1/10SR4301D
	R	6425,6426	RD1/2VM821J
	R	6427,6428	RS1/10SR105J
	R	6429,6430	RS1/10SR183J
	Other Resistors		RS1/16SS###J

CAPACITORS

	C	6406,6407,6414,6415	CKSSYB104K16
	C	6412	CKSSYB103K16
	C	6413	DCH1201
	C	6416-6418	CEAT100M50
	C	6419,6420	CCSQCH472J50
	C	6421,6422	CCSRCH152J50
	C	6423,6426	CKSRYB334K10
	C	6424,6430	CEHAT100M50
	C	6425,6428	CKSSYB103K25
	C	6427,6429	CCSRCH560J50
	C	6431,6432	CKSSYB473K16
	C	6433,6434	CEANP100M35
	C	6435,6436	DCE1016

K PNLA ASSY

SEMICONDUCTORS

	IC	6601	DYW1800
	IC	6602-6604	TC74HC4052AF
	IC	6605	NJM2903M
	Q	6601,6604,6638-6649	LSA1576UB
	Q	6602	2SD1898
	Q	6605-6621	LSC4081UB
	Q	6622,6624,6626,6628	LTC143EUB
	Q	6623,6625,6627,6629	2SB1188
	Q	6630,6632,6634,6636	LTC143EUB
	Q	6631,6633,6635,6637	2SB1188
	Q	6650	LTA143EUB
	Q	6651,6653	LTC143EUB
	Q	6652,6654	LSA1576UB
	D	6615,6616,6618-6623	1SS352
	D	6624,6735	SLI-343U8RC(HJKL)
	D	6625,6628-6631,6641	SLI-343YYW(TUV)
	D	6626,6627,6643,6644	SLR-343VC(NPQ)
	D	6632-6640,6649-6657	SLR-343MC(NPQ)
	D	6642,6645-6648,6658	SLI-343YYW(TUV)
	D	6659,6660,6678,6679	SLR-343VC(NPQ)
	D	6661-6664,6674-6677	SLI-343YYW(TUV)
	D	6665-6673,6684-6692	SLR-343MC(NPQ)
	D	6680-6683,6693-6695	SLI-343YYW(TUV)
	D	6696,6697,6711,6712	SLR-343VC(NPQ)
	D	6698-6701,6713-6716	SLI-343YYW(TUV)
	D	6702-6710,6717-6725	SLR-343MC(NPQ)
	D	6726-6730	SLI-343M8G(GHJ)
	D	6731,6734	SLI-343YYW(TUV)
	D	6732	SLR343EC4T(LMN)
	D	6733,6736-6741	SLR343BC4T(JK)
	D	6742-6763	1SS352

MISCELLANEOUS

	L	6601	CHIP COIL LCTAW330J2520
	V	6601	VFD DEL1071
	VR	6601	VARIABLE RESISTOR DCS1100
	VR	6602	POTENTIOMETER DCS1092
	VR	6603-6606	VARIABLE RESISTOR DCS1100
	VR	6607	ROTARY VR DCS1086
	VR	6608,6609	VARIABLE RESISTOR DCS1100
	VR	6610,6615,6619	POTENTIONETER DCS1095
	VR	6611-6614	VARIABLE RESISTOR DCS1100
	VR	6616-6618	VARIABLE RESISTOR DCS1100
	VR	6620	POTENTIONETER DCS1095
	S	6601-6611,6617-6620	TACT SWITCH DSG1079
	S	6612	LEVER SWITCH DSK1026
	S	6613-6616	ROTARY SWITCH DSG1099
	S	6621	SLIDE SWITCH DSH1066
	S	6622	ROTARY ENCODER DSX1068
	S	6623-6628	TACT SWITCH DSG1079
	X	6601	CERAMIC RESONATOR (20 MHz) DSS1180
	CN	6601	12P CONNECTOR VKN1243
	CN	6602,6603	CONNECTOR 31P 52492-3120
	CN	6609	PLUG (3P) KM200NA3Y
	CN	6610	PLUG (3P) KM200NA3R
	CN	6611	PLUG (3P) KM200NA3
	CN	6612	PLUG (3P) KM200NA3E
		0	FL HOLDER DNF1869

RESISTORS

	R	6616	RS1/10SR1202F
	R	6617	RS1/10SR8201D
	R	6884,6896-6899	RS1/4SA100J
	R	6901-6905	RS1/4SA100J
	Other Resistors		RS1/10SR###J

CAPACITORS

	C	6601,6602,6608	CEJQ470M16
	C	6603,6604,6611,6618	CKSRYB104K16
	C	6606,6622	CCSRCH102J50
	C	6607,6623,6629	CKSRYB103K50
	C	6610,6612	CKSRYB104K50
	C	6615-6617,6726,6727	CCSRCH101J50
	C	6619,6624,6625,6628	CKSRYB104K16
	C	6620,6621	CKSQYB225K10
	C	6626,6631	CKSRYB105K10
	C	6627	CKSQYB106K6R3
	C	6630,6632,6633	CKSRYB104K16
	C	6640,6720-6725	CKSRYB103K16
	C	6641-6644,6656-6663	CKSRYB104K16
	C	6645	CEJQ101M16
	C	6664-6675,6685-6696	CKSRYB471K50
	C	6676,6679,6680	CKSRYB104K16
	C	6697-6719	CKSRYB104K16

Mark	No.	Description	Part No.
	C	6728	CCG1255

L CDCB ASSY

SEMICONDUCTORS

	IC	3601	AD7147ACPZ500RL7
	D	3611	SMLC14WBEPW(Z1)

MISCELLANEOUS

	CN	3601 12P CONNECTOR	VKN1416

RESISTORS

	All Resistors		RS1/16SS###J

CAPACITORS

	C	3602	CKSSYB103K25
	C	3603	CKSSYB104K16
	C	3604	DCH1201

M FAD1 ASSY

MISCELLANEOUS

	VR	7201 SLIDE VR	DCV1027
	CN	7201 PLUG (3P)	KM200NA3

N FAD2 ASSY

MISCELLANEOUS

	VR	7401 SLIDE VR	DCV1027
	CN	7401 PLUG (3P)	KM200NA3R

O FAD3 ASSY

MISCELLANEOUS

	VR	7601 SLIDE VR	DCV1027
	CN	7601 PLUG (3P)	KM200NA3E

P FAD4 ASSY

MISCELLANEOUS

	VR	7801 SLIDE VR	DCV1027
	CN	7801 PLUG (3P)	KM200NA3Y

Q PNLB ASSY

SEMICONDUCTORS

	Q	7001,7002	LSC4081UB
	D	7001-7005,7007	SLI-343YYW(TUV)
	D	7008-7027	1SS352

MISCELLANEOUS

	VR	7001,7004 ROTARY VR	DCS1086
	VR	7002,7003 VARIABLE RESISTOR	DCS1100
	S	7001 12MM GS ENCODER	DSX1064
	S	7002 ROTARY SWITCH	DSG1098
	S	7003-7007 TACT SWITCH	DSG1079
	S	7008,7014 SLIDE SWITCH	DSH1066
	S	7009-7013,7015 SLIDE SWITCH	DSH1058
	CN	7001 CONNECTOR	9604S-31C
	CN	7002 PLUG (3P)	KM200NA3

RESISTORS

	All Resistors		RS1/10SR###J

CAPACITORS

	C	7002,7005,7008,7010	CKSRYB104K16
	C	7004,7006	CEJQ470M16
	C	7007,7009	CKSRYB103K50
	C	7012,7015,7016,7018	CKSRYB104K16

R FADC ASSY

MISCELLANEOUS

	VR	8001 VARIABLE RESISTOR	DCV1006
	CN	8001 L-PLUG (3P)	KM200NA3L

S POWER SUPPLY ASSY

There is no service parts.

T ACSW ASSY

MISCELLANEOUS

⚠	S	9401	SWITCH	DSA1036
⚠	CN	9401	CONNECTOR2P	2-178496-4
⚠		0	MASK	DEC3212
⚠	JP	9401	CONNECTOR ASS'Y	DKP3799

CAPACITORS

⚠	C	9402		ACG7030