

# DENON

For U.S.A. & Canada model

## SERVICE MANUAL

Ver. 1

### MODEL DRA-697CI

AM-FM STEREO RECEIVER

#### 注 意

サービスをおこなう前に、このサービスマニュアルを必ずお読みください。本機は、火災、感電、けがなどに対する安全性を確保するために、さまざまな配慮をおこなっており、また法的には「電気用品安全法」にもとづき、所定の許可を得て製造されています。従ってサービスをおこなう際は、これらの安全性が維持されるよう、このサービスマニュアルに記載されている注意事項を必ずお守りください。

- For purposes of improvement, specifications and design are subject to change without notice.

- 本機の仕様は性能改良のため、予告なく変更することがあります。
- 補修用性能部品の保有期間は、製造打切後8年です。

- Please use this service manual with referring to the operating instructions without fail.

- 修理の際は、必ず取扱説明書を参照の上、作業を行ってください。

- Some illustrations using in this service manual are slightly different from the actual set.

- 本文中に使用しているイラストは、説明の都合上現物と多少異なる場合があります。

DENON

TOKYO, JAPAN  
Denon Brand Company, D&M Holdings Inc.

## SAFETY PRECAUTIONS

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

### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 millamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### CAUTION Please heed the points listed below during servicing and inspection.

#### ◎ Heed the cautions!

Spots requiring particular attention when servicing, such as the cabinet, parts, chassis, etc., have cautions indicated on labels or seals. Be sure to heed these cautions and the cautions indicated in the handling instructions.

#### ◎ Caution concerning electric shock!

- (1) An AC voltage is impressed on this set, so touching internal metal parts when the set is energized could cause electric shock. Take care to avoid electric shock, by for example using an isolating transformer and gloves when servicing while the set is energized, unplugging the power cord when replacing parts, etc.
- (2) There are high voltage parts inside. Handle with extra care when the set is energized.

#### ◎ Caution concerning disassembly and assembly!

Though great care is taken when manufacturing parts from sheet metal, there may in some rare cases be burrs on the edges of parts which could cause injury if fingers are moved across them. Use gloves to protect your hands.

#### ◎ Only use designated parts!

The set's parts have specific safety properties (fire resistance, voltage resistance, etc.). For replacement parts, be sure to use parts which have the same properties. In particular, for the important safety parts that are marked  $\triangle$  on wiring diagrams and parts lists, be sure to use the designated parts.

#### ◎ Be sure to mount parts and arrange the wires as they were originally!

For safety reasons, some parts use tape, tubes or other insulating materials, and some parts are mounted away from the surface of printed circuit boards. Care is also taken with the positions of the wires inside and clamps are used to keep wires away from heating and high voltage parts, so be sure to set everything back as it was originally.

#### ◎ Inspect for safety after servicing!

Check that all screws, parts and wires removed or disconnected for servicing have been put back in their original positions, inspect that no parts around the area that has been serviced have been negatively affected, conduct an insulation check on the external metal connectors and between the blades of the power plug, and otherwise check that safety is ensured.

##### (Insulation check procedure)

Unplug the power cord from the power outlet, disconnect the antenna, plugs, etc., and turn the power switch on. Using a 500V insulation resistance tester, check that the insulation resistance between the terminals of the power plug and the externally exposed metal parts (antenna terminal, headphones terminal, microphone terminal, input terminal, etc.) is  $1M\Omega$  or greater. If it is less, the set must be inspected and repaired.

### CAUTION Concerning important safety parts

Many of the electric and structural parts used in the set have special safety properties. In most cases these properties are difficult to distinguish by sight, and using replacement parts with higher ratings (rated power and withstand voltage) does not necessarily guarantee that safety performance will be preserved. Parts with safety properties are indicated as shown below on the wiring diagrams and parts lists in this service manual. Be sure to replace them with parts with the designated part number.

(1) Schematic diagrams ... Indicated by the  $\triangle$  mark.

(2) Parts lists ... Indicated by the  $\triangle$  mark.

Using parts other than the designated parts could result in electric shock, fires or other dangerous situations.

### 注 意 サービス、点検時にはつぎのことご注意願います。

#### ◎ 注意事項をお守りください！

サービスのとき特に注意を必要とする個所についてはキャビネット、部品、シャーシなどにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書などの注意事項を必ずお守りください。

#### ◎ 感電に注意！

- (1) このセットは、交流電圧が印加されていますので通電時に内部金属部に触れると感電することがあります。従って通電サービス時には、絶縁トランクの使用や手袋の着用、部品交換には、電源プラグを抜くなどして感電にご注意ください。
- (2) 内部には高電圧の部分がありますので、通電時の取扱には十分ご注意ください。

#### ◎ 分解、組み立て作業時のご注意！

板金部品の端面の『バリ』は、部品製造時に充分管理をしておりますが、板金端面は鋭利となっている箇所が有りますので、部品端面に触れたまま指を動かすとまれに怪我をする場合がありますので十分注意して作業して下さい。手の保護のために手袋を着用してください。

#### ◎ 指定部品の使用！

セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に配線図、部品表に  $\triangle$  印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

#### ◎ 部品の取付けや配線の引きまわしは、元どおりに！

安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパーによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

#### ◎ サービス後は安全点検を！

サービスのために取り外したねじ、部品、配線などが元どおりになっているか、またサービスした個所の周辺を劣化させてしまったところがないなどを点検し、外部金属端子部と、電源プラグの刃の間の絶縁チェックをおこなうなど、安全性が確保されていることを確認してください。

##### (絶縁チェックの方法)

電源コンセントから電源プラグを抜き、アンテナやプラグなどを外し、電源スイッチを入れます。500V 絶縁抵抗計を用いて、電源プラグのそれぞれの端子と外部露出金属部 [アンテナ端子、ヘッドホン端子マイク端子、入力端子など]との間で、絶縁抵抗値が  $1 M\Omega$  以上であること、この値以下のときはセットの点検修理が必要です。

### 注 意 安全上重要な部品について

本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、またもとの部品より高い定格(定格電力、耐圧)を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につきのように表示していますので必ず指定されている部品番号のものを使用願います。

(1) 配線図… $\triangle$ マークで表示しています。

(2) 部品表… $\triangle$ マークで表示しています。

指定された部品と異なるものを使用した場合には、感電、火災などの危険を生じる恐れがあります。

# ADJUSTMENT

## Idling Current

Required measurement equipment: DC Voltmeter

### 1. Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 15 °C ~ 30 °C (59 °F ~ 86 °F).
- (2) Presetting
  - POWER (Power source switch) OFF
  - SPEAKER (Speaker terminal) No load  
(Do not connect speaker, dummy resistor, etc.)

### 2. Adjustment

- (1) Remove top cover and set VR501FL, VR501FR on MAIN Unit at fully counterclockwise (○) position.
- (2) Connect DC Voltmeter to test points (FRONT-Lch: TP501, FRONT-Rch: TP502).
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.
 

MASTER VOLUME : "—" counterclockwise (○ min.)  
MODE : TONE DEFEAT  
FUNCTION : CD
- (5) Within 2 minutes after the power on, turn VR501FL clockwise (○) to adjust the TEST POINT voltage to 1.5 mV ± 0.5 mV DC.
- (6) After 10 minutes from the preset above, turn VR501FL to set the voltage to 2.0 mV ± 0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.

## 調整

### アイドリング電流の調整

調整に必要な測定器: DC Voltmeter

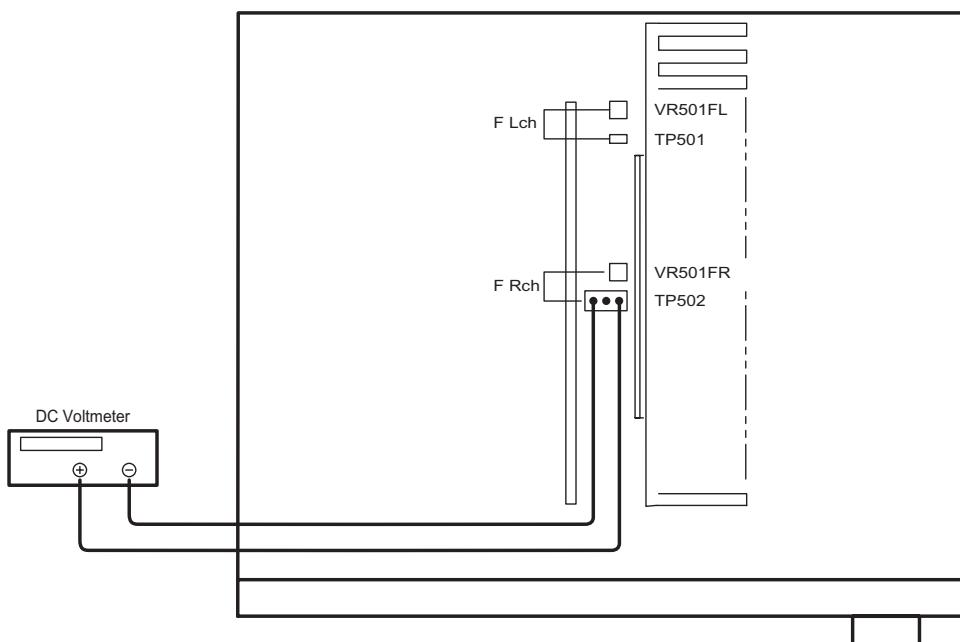
### 1. 準備

- (1) セットをクーラ、扇風機のそばなど風通しの良い場所を避け、通常の使用状態に置きます。セットの周囲温度は 15 ~ 30 °C、湿度は常温とします。
- (2) プリセット
  - ・電源スイッチ OFF
  - ・スピーカ端子 無負荷  
(スピーカ・ダミー抵抗器などを接続しない。)

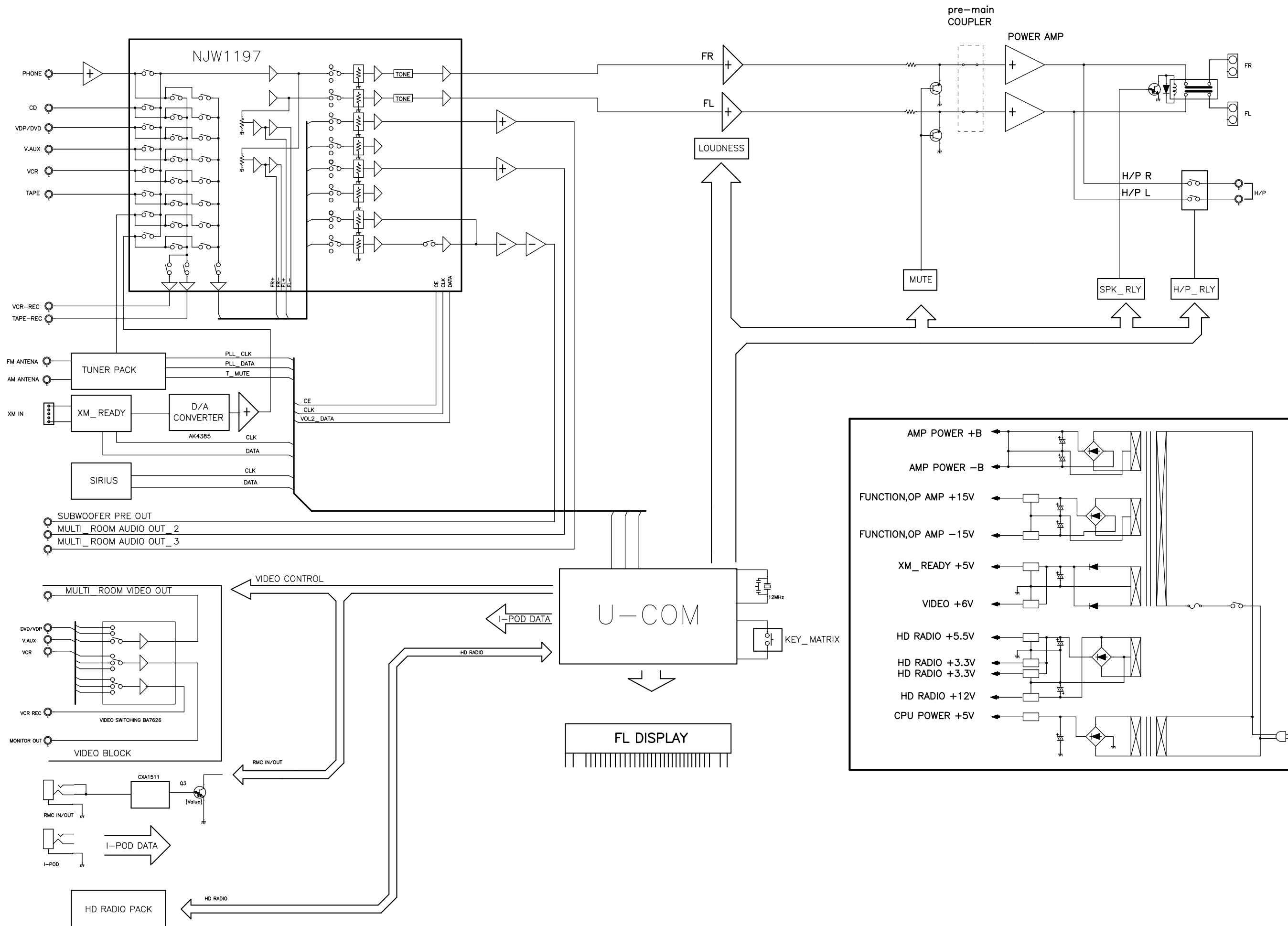
### 2. 調整

- (1) 上カバーをはずし、メイン基板の VR501FL, VR501FR を反時計方向 (○) に回し切った状態にセットします。
- (2) テストポイント (FRONT-Lch: TP501, FRONT-Rch: TP502) に DC Voltmeter を接続します。
- (3) 電源コードを AC100V (95 ~ 105V の範囲でも可) に接続し、電源スイッチを "ON" にします。
- (4) ON 後、次のようにセットします。
  - MASTER VOLUME (音量調節つまみ) → 反時計方向 (○) に回す、最小の状態にする。
  - SPEAKER (スピーカ端子) → 無負荷 (スピーカ、ダミー抵抗器などを接続しない。)

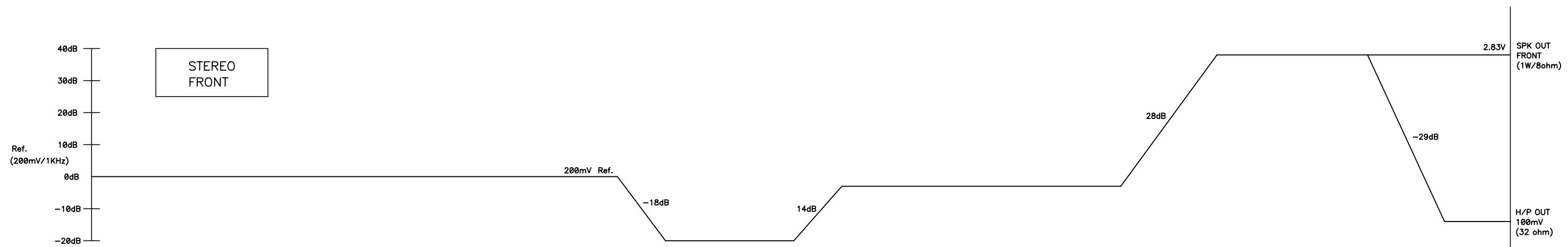
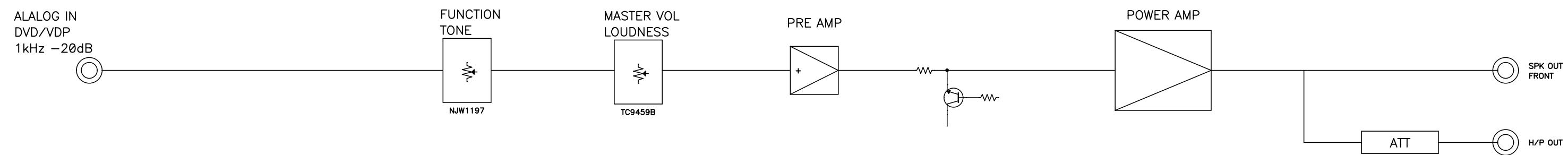
MODE : TONE DEFEAT  
FUNCTION : CD
- (5) 2 分以内に VR501FL を時計方向 (○) に回しテストポイントの電圧を次のように調整します。  
1.5mV ± 0.5mV DC
- (6) 予備調整から 10 分後 VR501FL を回し、次のように電圧を設定します。  
2.0mV ± 0.5mV DC
- (7) 同じ方法で各チャネルの可変抵抗を調整します。



## BLOCK DIAGRAM



## LEVEL DIAGRAM

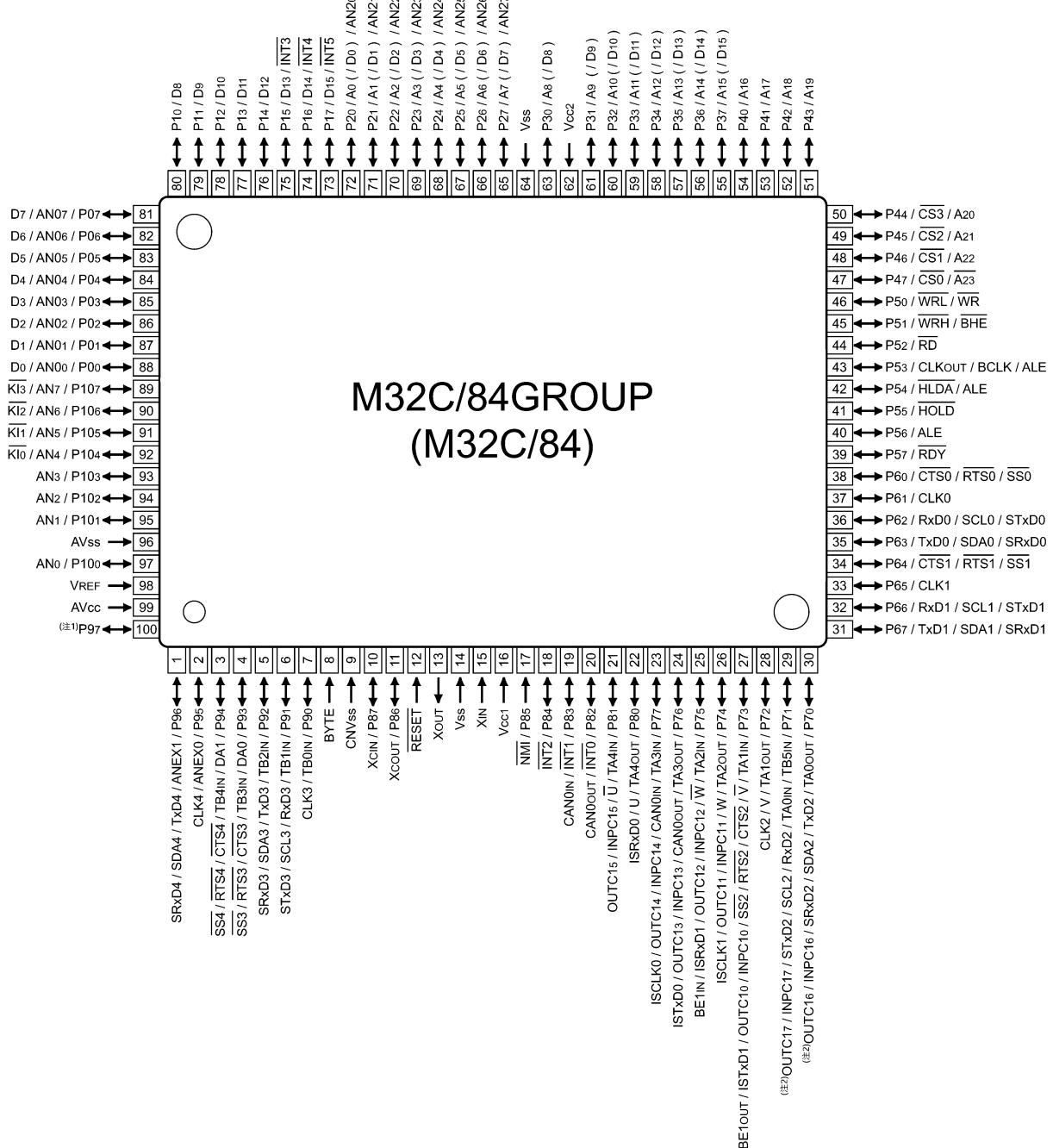


# SEMICONDUCTORS

Only major semiconductors are shown, general semiconductors etc. are omitted to list.  
主な半導体を記載しています。汎用の半導体は記載を省略しています。

## 1. IC's

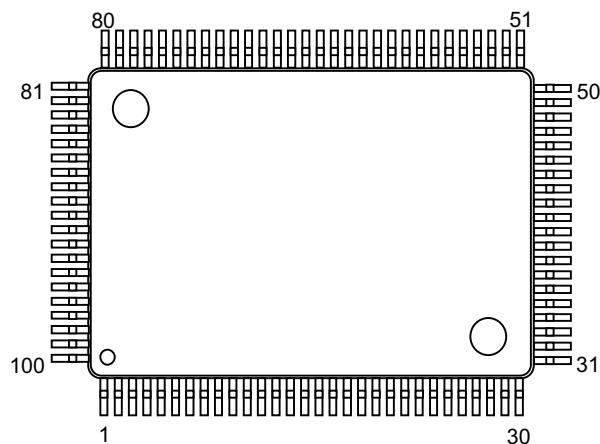
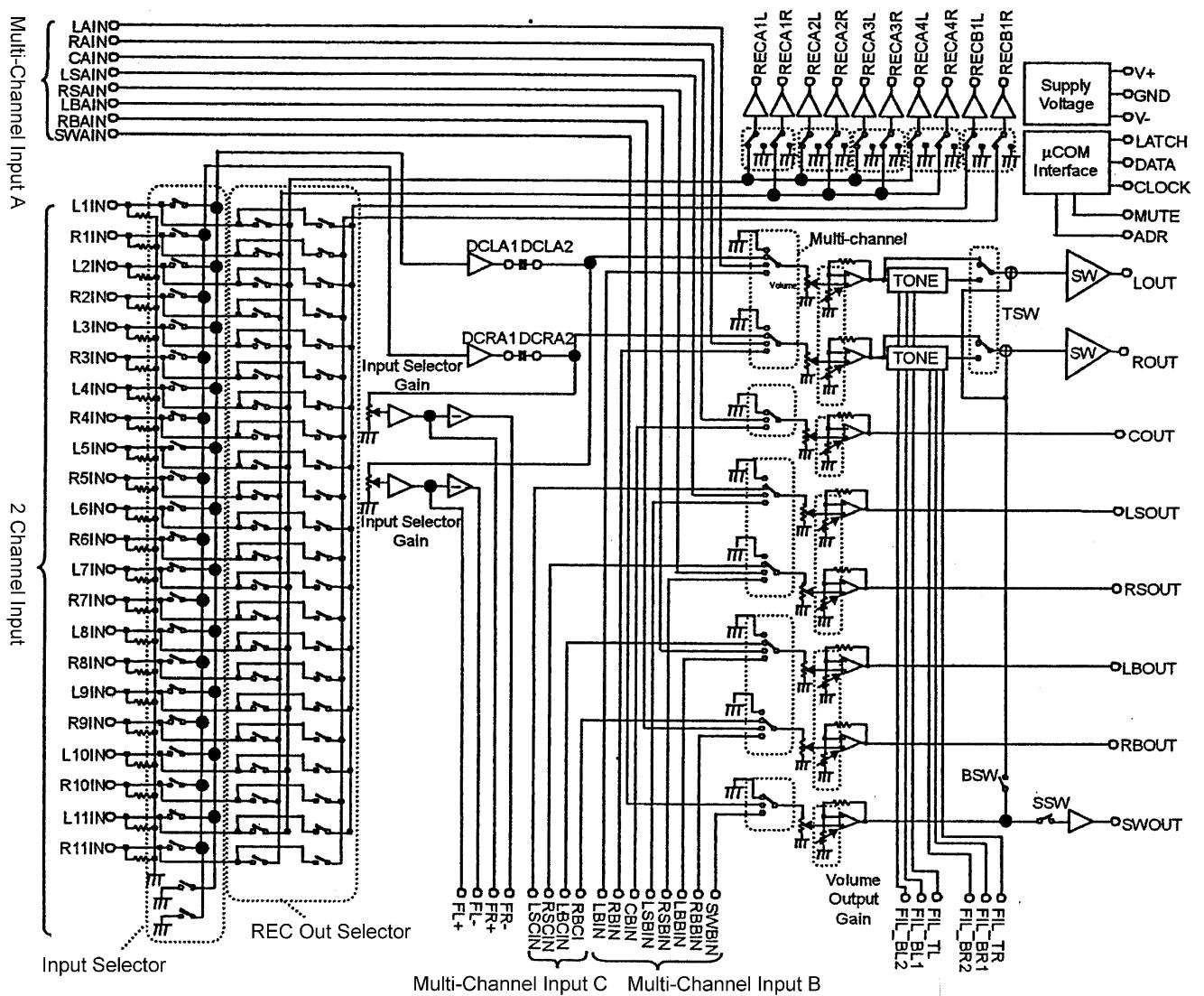
### M30843FHFP (IC401) FRONT P.W.B.



## M30843FHFP Terminal Function

PIN No.	Port Function	Port Name	I/O		Function
			P-ON	Standby	
1	P96, TxD4/SDA4/SRx4D	SIRIUS_Tx	O	O/L	SIRIUS data transmission
2	P95, CLK4	SIRIUS MUTE	O	O/L	SIRIUS MUTE control
3	P94	(HD CE)	O	O/L	HD Radio enable output
4	P93	MULT3 SW	O	O/L	ZONE3 output, HPFcontrol
5	P92, TxD3/SDA3/SRx3D	HD Radio TX/(SDA)	O	O/L	HD Radio data transmission
6	P91, TxD3/SDA3/SRx3D	HD Radio RX/(SCL)	I	I	HD Radio Data reception
7	P90, CLK3	(HD CLK)	O	O/L	HD Radio clock output
8	BYTE		I	-	Ext. data bus bit width switching
9	CNV <sub>ss</sub>		I	-	Processor mode switching
10	P87, X <sub>CIN</sub>	(HD RESET)	O	O/L	HD Radio reset output
11	P86, X <sub>COUT</sub>	FLT_RESET	O	O/L	FLT reset output
12	/RESET		I	-	Hard reset
13	X <sub>OUT</sub>		O	-	Oscillator connection
14	V <sub>SS</sub>		I	-	GND
15	X <sub>IN</sub>		I	-	Oscillator connection
16	V <sub>CC1</sub>		I	-	5V
17	P85	NMI	I	-	NMI interruption input
18	P84, /INT2	RS232C_Tx	I	I	RS232C signal detection
19	P83, /INT1	REMOCON	I	I	Remote control input
20	P82, /INT0	PROTECTION	I	I	Unusual operation detection
21	P81	FLT_CLK	O	O/L	FLT clock output
22	P80	FLT_DATA	O	O/L	FLT data output
23	P77	FLT_CE1	O	O/L	FLT chip select output
24	P76	SPK_RLY_A	O	O/L	Speaker A Relay control
25	P75	CPU_5V_SW	O	O/L	CPU 5V control
26	P74	SPK_RLY_B	O	O/L	Speaker B Relay control
27	P73	(NC)		O/L	
28	P72, CLK2	iPod_DET	I	I	iPod connection detection
29	P71, RxD2/SCL2/STxD2	iPod_Rx	I	I	iPod data reception
30	P70, TxD2/SDA2/SRx2D	iPod_Tx	O	O/L	iPod data transmission
31	P67, TxD1/SDA1/SRx1D1	RS232C_Tx	O	O/L	RS232C data reception
32	P66, RxD1/SCL1/STxD1	RS232C_Rx	I	I	RS232C data reception
33	P65, CLK1	PLL_DI	I	I	PLL data input
34	P64	PLL_DO/XM-DAC_DO	O	O/L	PLL/XM-DAC data output
35	P63, TxD0/SDA0/SRx0D0	XM_Tx	O	O/L	XM data transmission
36	P62, RxD0/SCL0/STxD0	XM_Rx	I	I	XM data reception
37	P61, CLK0	PLL_CLK/XM-DAC_CLK	O	O/L	PLL/XM-DAC clock output
38	P60	PLL_CE	O	O/L	PLL enable output
39	P57	/TUNED	I	I	TUNED detection
40	P56	/STEREO	I	I	STEREO broadcast detection
41	P55	RS232C_UPDATE_EPM			
42	P54	VOL_UP	I	I	Volume encoder input
43	P53	VOL_DOWN	I	I	Volume encoder input
44	P52	SELECT_DOWN	I	I	Select encoder input
45	P51	SELECT_UP	I	I	Select encoder input
46	P50	RS232C_UPDATE_CE	O	O/L	
47	P47	DC TRIGGER_2ON	O	O/L	Trigger Out2 ON/OFF control
48	P46	FUNCTION_UP	I	I	Function encoder input
49	P45	TUNER MUTE	O	O/L	TUNER MUTE control
50	P44	E2PROM_SCL	O	O/L	E2P Clock output
51	P43	E2PROM_SDA	I/O	O/L	E2PROM data transmission and reception
52	P42	ZONE3_MUTE	O	O/L	ZONE3 MUTE control
53	P41	ZONE2_MUTE	O	O/L	ZONE2 MUTE control
54	P40	STBY LED_RED	O	O/L	StandbyLED(R) control

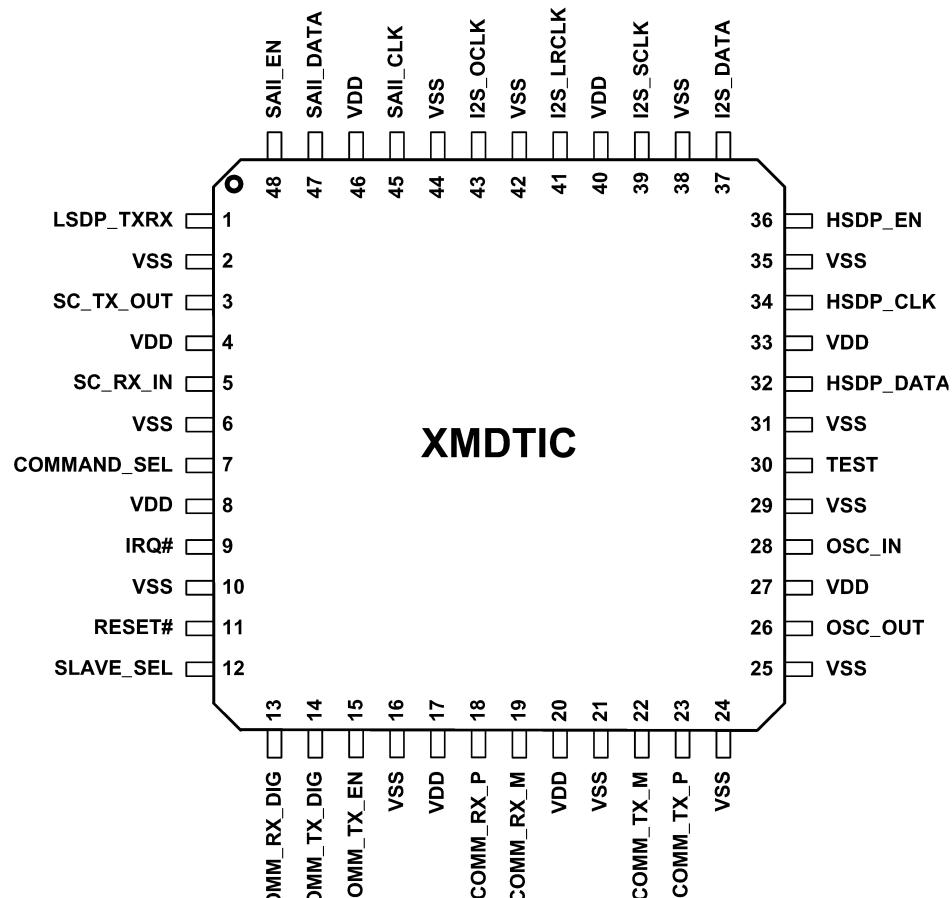
PIN No.	Port Function	Port Name	I/O		Function
			P-ON	Standby	
55	P37	HD Radio MUTE	O	O/L	HD Radio MUTE control
56	P36	DC TRIGGER 1	O	O/L	Trigger Out1 ON/OFF control
57	P35	H/P RELAY	O	O/L	H/P Relay control
58	P34	SW_MUTE	O	O/L	SW MUTE control
59	P33	VIDEO OFF	O	O/L	VIDEO Reg control
60	P32	HD Radio DET	I	I	HD Radio Installing detection
61	P31	HD Radio P/E	O	O/L	HD Radio power supply control
62	V <sub>CC2</sub>		I	-	5V
63	P30	(NC)			
64	V <sub>SS</sub>		I	-	GND
65	P27	XM_DBPOWER	O	O/L	XM Reg control
66	P26	XM_DIC_RESET	O	O/L	XM DIC reset output
67	P25	XM_DAC_PDN	O	O/L	XM DAC reset reset output
68	P24	XM_COMMAND	O	O/L	XM DIC CBM output
69	P23	XM_REQ	I	I	XM DIC Interrupt request
70	P22	H/P DET	I	I	H/P connection detection
71	P21	POWER RELAY	O	O/L	POWER RELAY control
72	P20	FUNCTION_DOWN	I	I	Function encoder input
73	P17, /INT5	POWER DOWN	I	I	CPU 5.6V detection
74	P16, /INT4	ETHERNET REQ	I	I	ETHERNET interrupt request
75	P15, /INT3	POWER	I	I	POWER Key input detection
76	P14	MULT2 SW	O	O/L	ZONE3 output §HPF control
77	P13	STBY_LED_GREEN	O	O/L	Standby LED(G) control
78	P12	NJW1197W_LATCH	O	O/L	NJW1197 latch output
79	P11	NJW1197W_CLK	O	O/L	NJW1197 Clock output
80	P10	NJW1197W_DATA	O	O/L	NJW1197 data output
81	P07	MAIN_MUTE	O	O/L	MAIN MUTE control
82	P06	VIDEO_A	O	O/L	VIDEO output control
83	P05	VIDEO_B	O	O/L	VIDEO output control
84	P04	VIDEO_C	O	O/L	VIDEO output control
85	P03	VIDEO_D	O	O/L	VIDEO output control
86	P02	VIDEO_E	O	O/L	VIDEO output control
87	P01	ZONE2_VIDEO_MUTE	O	O/L	ZONE2 VIDEO MUTE control
88	P00	ZONE3_VIDEO_MUTE	O	O/L	ZONE3 VIDEO MUTE control
89	P107	EMODE	I	I	
90	P106, AN6	KEY_IN1	I	I	Key input
91	P105, AN5	KEY_IN2	I	I	Key input
92	P104, AN4	KEY_IN3	I	I	Key input
93	P103	LOUDNESS ON	O	O/L	LOUDNESS ON/OFF control
94	P102	SIRIUS P/E	O	O/L	SIRIUS enable output
95	P101	XM MUTE	O	O/L	XM MUTE control
96	AV <sub>ss</sub>		I	-	GND
97	P100	XM_DACNS	O	O/L	XM DAC chip select input
98	V <sub>REF</sub>		I	-	standard voltage input
99	AV <sub>cc</sub>		I	-	5V
100	P97, RxD4/SCL4/STxD4	SIRIUS_Rx	I	I	SIRIUS data reception

**NJW1197 (IC101) INPUT P.W.B.****PIN FUNCTION****BLOCK DIAGRAM**

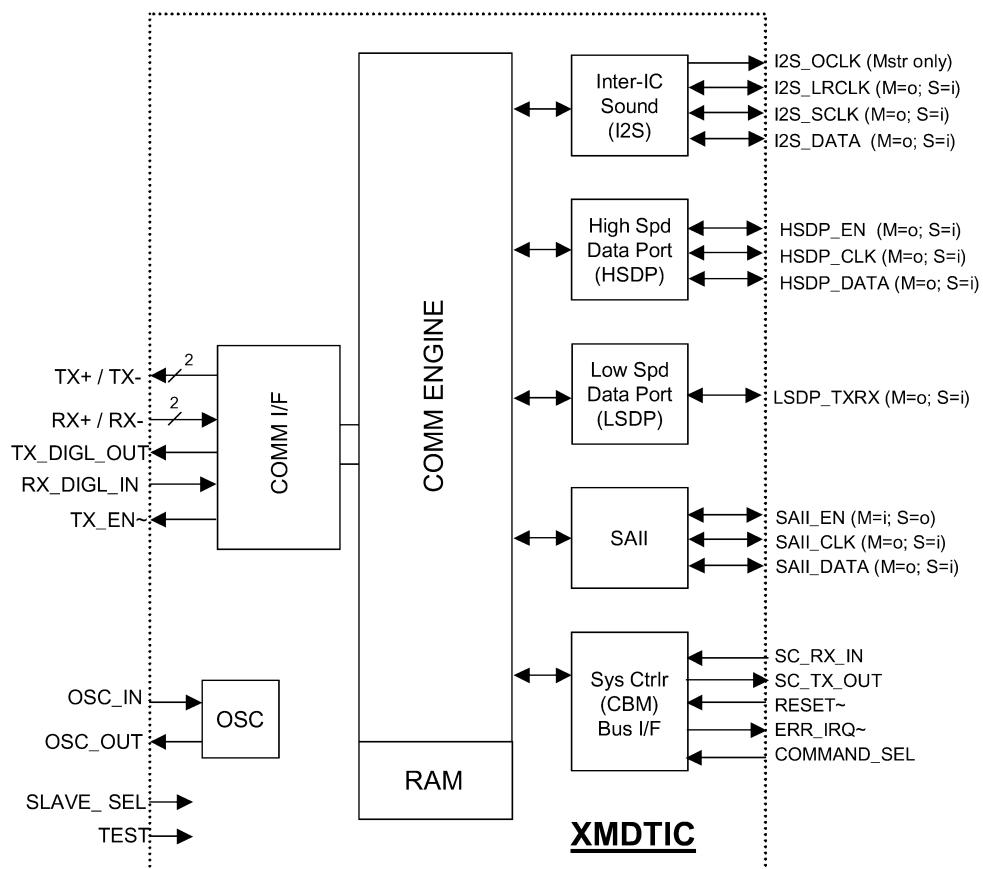
**NJW1197 Terminal Function**

No.	SYMBOL	FUNCTION	No.	SYMBOL	FUNCTION
1	ROUT	Rch output	51	DCR_IN	Multi-channel selector Rch input
2	COUT	Cch output	52	DCR_OUT	Input selector Rch output
3	LSOUT	LSch output	53	GND	Ground
4	RSOUT	RSch output	54	DCL_IN	Multi-channel selector Lch input
5	LBOUT	LBch output	55	DCL_OUT	Input selector Lch output
6	RBOUT	RBch output	56	GND	Ground
7	SWOUT	SWch output	57	REC_B1R	Input selector Rch REC output B1
8	GND	Ground	58	REC_B1L	Input selector Lch REC output B1
9	FIL_BL2	Lch Bass filter terminal 2	59	REC_A4R	Input selector Rch REC output A4
10	FIL_BL1	Lch Bass filter terminal 1	60	REC_A4L	Input selector Lch REC output A4
11	FIL_TL	Lch Treble filter terminal	61	REC_A3R	Input selector Rch REC output A3
12	TCAP	Switching noise rejection capacitor	62	REC_A3L	Input selector Lch REC output A3
13	FIL_BR2	Rch Bass filter terminal 2	63	REC_A2R	Input selector Rch REC output A2
14	FIL_BR1	Rch Bass filter terminal 1	64	REC_A2L	Input selector Lch REC output A2
15	FIL_TR	Rch Treble filter terminal	65	REC_A1R	Input selector Rch REC output A1
16	V+	+ Power supply voltage input	66	REC_A1L	Input selector Lch REC output A1
17	ADR	Chip address select input	67	VDDOUT	Internal Digital +Power Supply Output
18	V-	- Power supply voltage input	68	DATA	Control data signal input
19	L1IN	Input selector Lch input 1	69	CLOCK	Clock signal input
20	DCCAP_SW	Switching noise rejection capacitor	70	LATCH	Latch signal input
21	R1IN	Input selector Rch input 1	71	MUTE	External Mute control
22	DCCAP_RB	Switching noise rejection capacitor	72	FL+	Input selector gain control Lch no-inverted output
23	L2IN	Input selector Lch input 2	73	FL-	Input selector gain control Lch inverted output
24	DCCAP_LB	Switching noise rejection capacitor	74	FR+	Input selector gain control Rch no-inverted output
25	R2IN	Input selector Rch input 2	75	FR-	Input selector gain control Rch inverted output
26	DCCAP_RS	Switching noise rejection capacitor	76	GND	Ground
27	L3IN	Input selector Lch input 3	77	LSCIN	Multi-channel LSch input C
28	DCCAP_LS	Switching noise rejection capacitor	78	RSCIN	Multi-channel RSch input C
29	R3IN	Input selector Rch input 3	79	LBCIN	Multi-channel LBch input C
30	DCCAP_C	Switching noise rejection capacitor	80	RBCIN	Multi-channel RBch input C
31	L4IN	Input selector Lch input 4	81	GND	Ground
32	DCCAP_R	Switching noise rejection capacitor	82	LAIN	Multi-channel Lch input A
33	R4IN	Input selector Rch input 4	83	RAIN	Multi-channel Rch input A
34	DCCAP_L	Switching noise rejection capacitor	84	CAIN	Multi-channel Cch input A
35	L5IN	Input selector Lch input 5	85	LSAIN	Multi-channel LSch input A
36	GND	Ground	86	RSAIN	Multi-channel RSch input A
37	R5IN	Input selector Rch input 5	87	LBAIN	Multi-channel LBch input A
38	GND	Ground	88	RBAIN	Multi-channel RBch input A
39	L6IN	Input selector Lch input 6	89	SWAIN	Multi-channel SWch input A
40	L9IN	Input selector Lch input 9	90	GND	Ground
41	R6IN	Input selector Rch input 6	91	LBIN	Multi-channel Lch input B
42	R9IN	Input selector Rch input 9	92	RBIN	Multi-channel Rch input B
43	L7IN	Input selector Lch input 7	93	CBIN	Multi-channel Cch input B
44	L10IN	Input selector Lch input 10	94	LSBIN	Multi-channel LSch input B
45	R7IN	Input selector Rch input 7	95	RSBIN	Multi-channel RSch input B
46	R10IN	Input selector Rch input 10	96	LBBIN	Multi-channel LBch input B
47	L8IN	Input selector Lch input 8	97	RBBIN	Multi-channel RBch input B
48	L11IN	Input selector Lch input 11	98	SWBIN	Multi-channel SWch input B
49	R8IN	Input selector Rch input 8	99	GND	Ground
50	R11IN	Input selector Rch input 11	100	LOUT	Lch output

## F2602-1 XMDTIC (IC203) XM-READY P.W.B.



## Functional Description



**F2602-1 XMDTIC Pin Descriptions**

<b>Pin #</b>	<b>Pin Name</b>	<b>Type</b>	<b>Function in Slave Mode</b>	<b>Function in Master Mode</b>	<b>Notes</b>
1	LSDP_TXRX	S=In M=Out	Low Speed Data Port Output	Low Speed Data Port Input	LVTTL S/T
3	SC_TX_OUT	S=Out M=Out	System Controller Bus (CBM) Transmit Data Out	System Controller Bus (CBM) Transmit Data Out	4mA, SLC
5	SC_RX_IN	S=In M=In	System Controller Bus (CBM) Receive Data In	System Controller Bus (CBM) Receive Data In	LVTTL S/T
7	COMMAND_SEL	S=In M=In	Command Mode Select In (1= Command Mode, 0=Normal Mode)	Command Mode Select In (1= Command Mode, 0=Normal Mode)	LVTTL S/T
9	IRQ#	S=Out M=Out	Interrupt Request Out (Active Low)	Interrupt Request Out (Active Low)	4mA Open Drain
11	RESET#	S=In M=In	Asynchronous Reset In, (Active Low)	Asynchronous Reset In, (Active Low)	LVTTL S/T
12	SLAVE_SEL	S=In M=In	M/S Mode Select In (High = Slave Mode)	M/S Mode Select In (Low = Master Mode)	LVTTL S/T
13	COMM_RX_DIG	S=In M=In	DT Comm Bus External Transceiver Receive Data In	DT Comm Bus External Transceiver Receive Data In	LVTTL S/T
14	COMM_TX_DIG	Output	DT Comm Bus External Transceiver Transmit Data Out	DT Comm Bus External Transceiver Transmit Data Out	LVTTL S/T
15	COMM_TX_EN	Output	DT Comm Bus External Transceiver Direction Out (1=Transmit, 0=Receive)	DT Comm Bus External Transceiver Direction Out (1=Transmit, 0=Receive)	LVTTL S/T
18	COMM_RX_P	S=In M=In	DT Comm Bus Internal Receiver Differential Positive In	DT Comm Bus Internal Receiver Differential Positive In	LVDS in+
19	COMM_RX_M	S=In M=In	DT Comm Bus Internal Receiver Differential Negative In	DT Comm Bus Internal Receiver Differential Negative In	LVDS in-
22	COMM_TX_M	Output	DT Comm Bus Internal Transmitter Differential Negative Out	DT Comm Bus Internal Transmitter Differential Negative Out	LVDS out-
23	COMM_TX_P	Output	DT Comm Bus Internal Transmitter Differential Positive Out	DT Comm Bus Internal Transmitter Differential Positive Out	LVDS out+
26	OSC_OUT	Output	Crystal Output	Crystal Output	Crystal Buffer
28	OSC_IN	S=In M=In	Crystal Input	Crystal Input	Crystal Buffer
30	TEST	S=In M=In	Factory Test Mode Select (1=Test, 0= Normal Oper.)	Factory Test Mode Select (1=Test, 0= Normal Oper.)	LVTTL S/T
32	HSDP_DATA	S=In M=Out	High Speed Data Port Data Input	High Speed Data Port Data Output	Out= 4mA, SLC In=LVTTL S/T
34	HSDP_CLK	S=In M=Out	High Speed Data Port Clock Input	High Speed Data Port Clock Output	Out= 4mA, SLC In=LVTTL S/T
36	HSDP_EN	S=Out M=In	High Speed Data Port Enable Output	High Speed Data Port Enable Input	Out= 4mA, SLC In=LVTTL S/T
37	I2S_DATA	S=In M=Out	I2S Digital Audio Port Data In	I2S Digital Audio Port Data Out	Out= 4mA, SLC In=LVTTL S/T

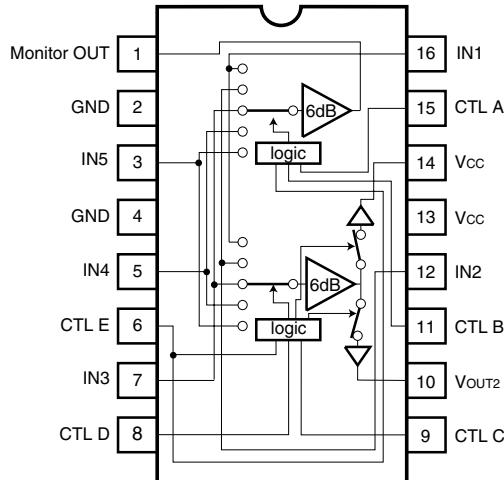
Pin #	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
39	I2S_SCLK	S=In M=Out	I2S Digital Audio Port Bit Clock In	I2S Digital Audio Port Bit Clock Out	Out= 4mA, SLC In=LVTTL S/T
41	I2S_LRCLK	S=In M=Out	I2S Digital Audio Port Left/Right Clock In	I2S Digital Audio Port Left/Right Clock Out	Out= 4mA, SLC In=LVTTL S/T
43	I2S_OCLK	S=In M=Out	I2S Digital Audio Port Oversample Clock (not used - connect to Gnd???)	I2S Digital Audio Port Oversample Clock Out	Out= 4mA, SLC
45	SAII_CLK	S=Out M=In	SAII Port Clock Output	SAII Port Clock Input	Out= 4mA, SLC 3.3V S/T
47	SAII_DATA	S=Out M=In	SAII Port Data Output	SAII Port Data Input	Out= 4mA, SLC In=LVTTL S/T
48	SAII_REQ	S=In M=Out	SAII Port Request Input	SAII Port Request Output	Out= 4mA, SLC In=LVTTL S/T

Pin#	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
4, 8, 17, 20, 27, 33, 40, 46	VDD	PWR	+3.3V Supply Voltage	+3.3V Supply Voltage	
2, 6, 10, 16, 21, 24, 25, 29, 31, 25, 38, 42, 44	VSS	GND	Digital Ground	Digital Ground	

Notes: All Inputs are 3.3V LVTTL compatible; S/T = Schmitt Trigger inputs; SLC = Slew Rate Controller Output

## BA7626F (IC601) MAIN P.W.B.

Block diagram



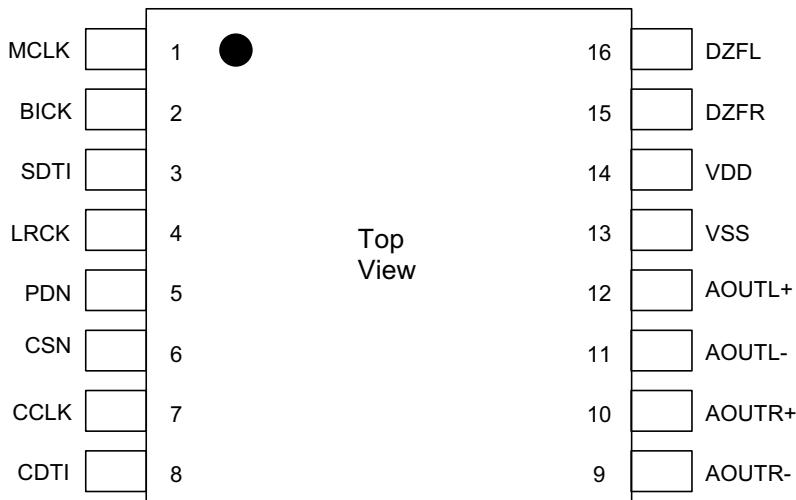
Truth table

A	B	E	Monitor OUT
L	L	*	IN1
H	L	*	IN2
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

C	D	E	V <sub>OUT1</sub>
L	L	*	—
H	L	*	IN2
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

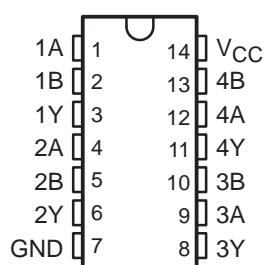
C	D	E	V <sub>OUT2</sub>
L	L	*	IN1
H	L	*	—
L	H	*	IN3
H	H	L	IN4
H	H	H	IN5

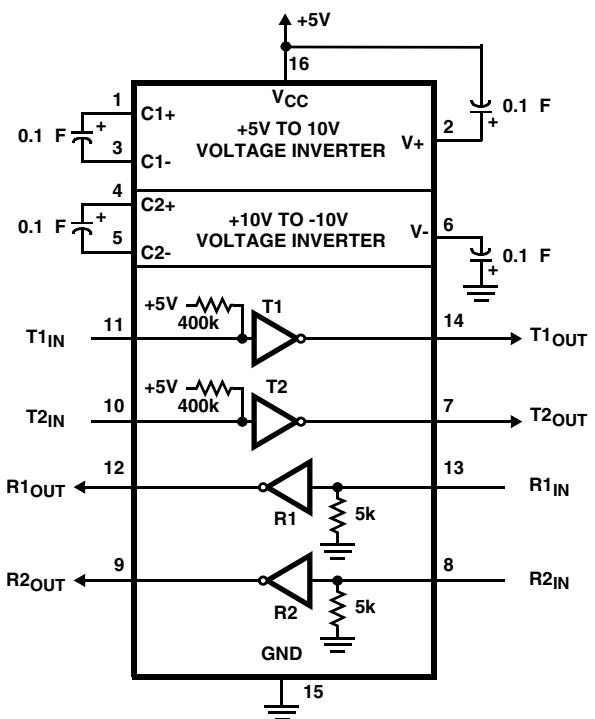
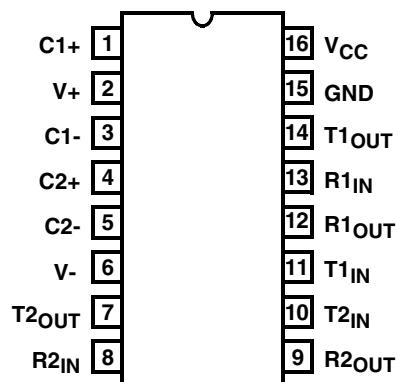
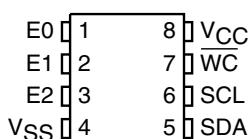
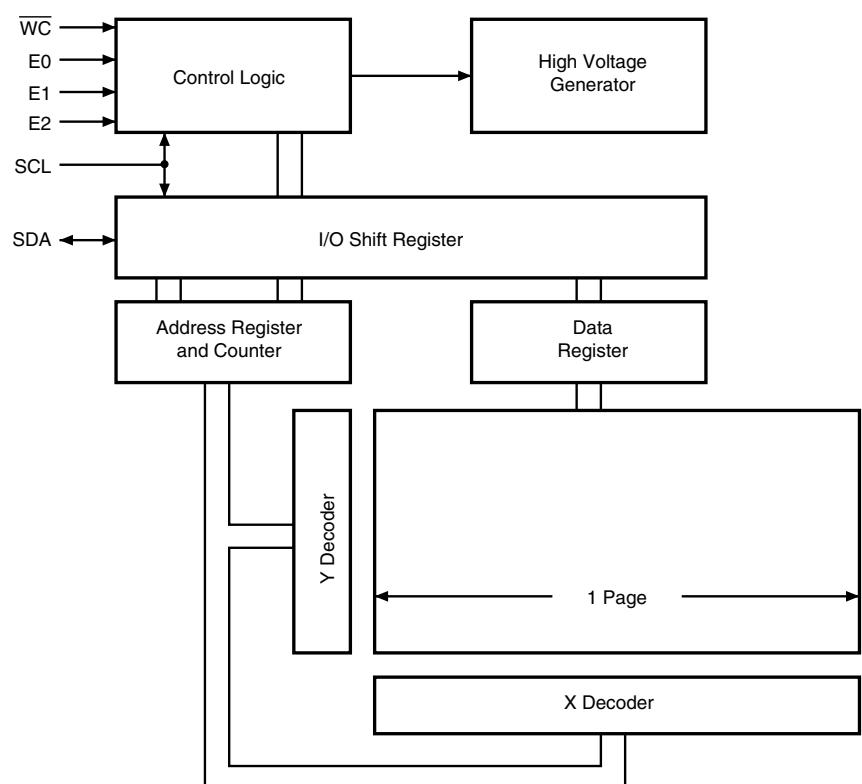
Note 1: \* indicates "don't care" (H or L).

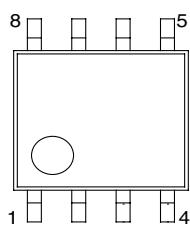
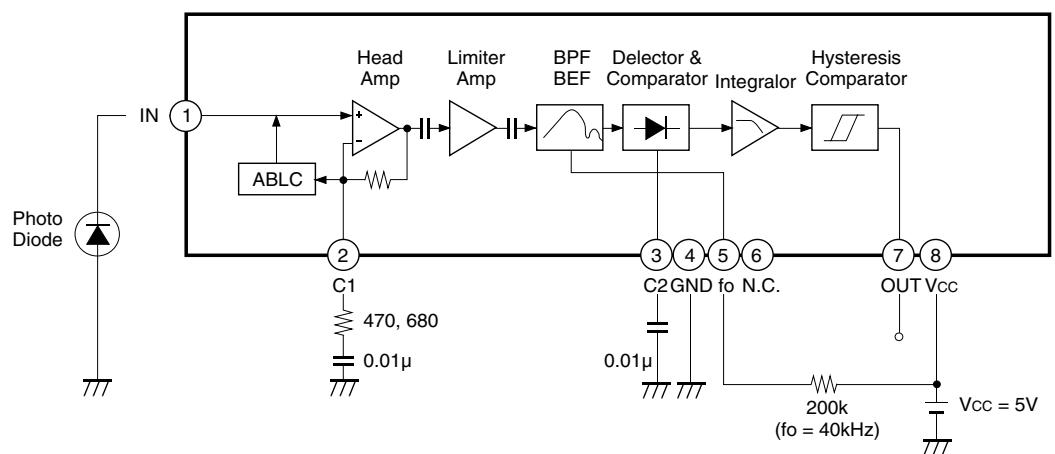
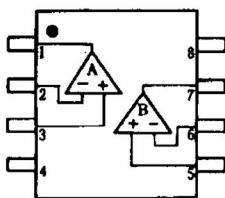
**AK4385 (IC 207) XM-READY P.W.B.****Pin function**

No.	Pin Name	I/O	Function
1	MCLK	I	Master Clock Input Pin An external TTL clock should be input on this pin.
2	BICK	I	Audio Serial Data Clock Pin
3	SDTI	I	Audio Serial Data Input Pin
4	LRCK	I	L/R Clock Pin
5	PDN	I	Power-Down Mode Pin When at "L", the AK4385 is in the power-down mode and is held in reset. The AK4385 should always be reset upon power-up.
6	CSN	I	Chip Select Pin
7	CCLK	I	Control Data Input Pin
8	CDTI	I	Control Data Input Pin
9	AOUTR-	O	Rch Negative Analog Output Pin
10	AOUTR+	O	Rch Positive Analog Output Pin
11	AOUTL-	O	Lch Negative Analog Output Pin
12	AOUTL+	O	Lch Positive Analog Output Pin
13	VSS	-	Ground Pin
14	VDD	-	Power Supply Pin
15	DZFR	O	Rch Data Zero Input Detect Pin
16	DZFL	O	Lch Data Zero Input Detect Pin

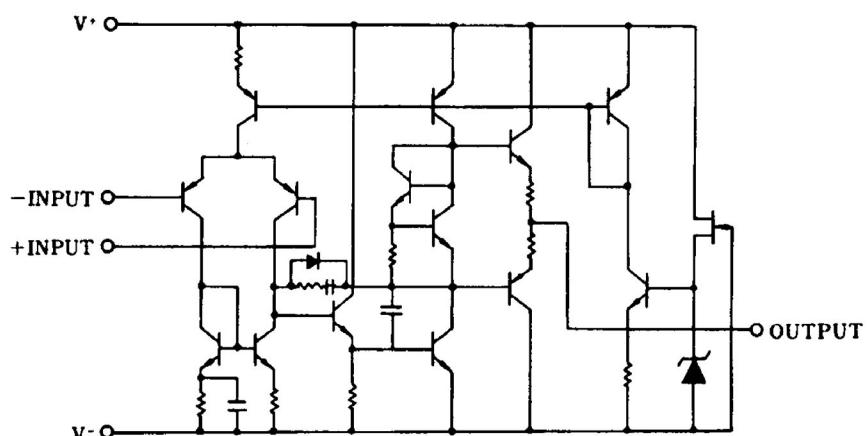
Note: All input pins should not be left floating.

**SN74LV08A (IC 204) XM-READY P.W.B.**  
**SN74HCT08 (IC 205, 206, 211) XM-READY P.W.B.**


**HIN202EIBNZ-T (IC 602) MULTI P.W.B.****M24C64 (IC 404) FRONT P.W.B****Block Diagram**

**CXA1511M (IC 201) XM-READY P.W.B.****Block Diagram and Pin Configuration****NJM2068 (IC 104-114, 120) INPUT P.W.B.  
(IC 209) XM-READY P.W.B.**

- 1 . A OUTPUT
- 2 . A-INPUT
- 3 . A+INPUT
- 4 . V-
- 5 . B+INPUT
- 6 . B-INPUT
- 7 . B OUTPUT
- 8 . V+

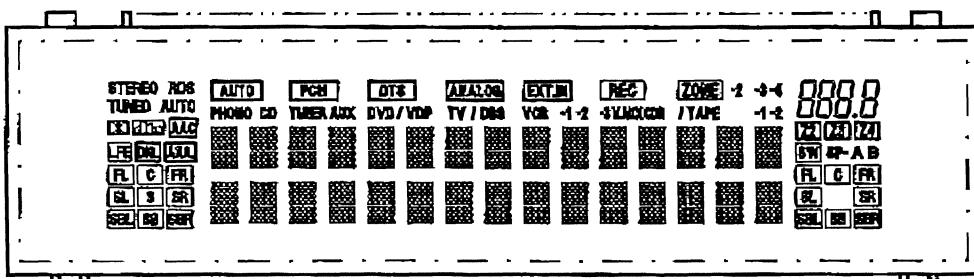


## 2. FL DISPLAY

16-ST-87GINK (FLT301)

62

1

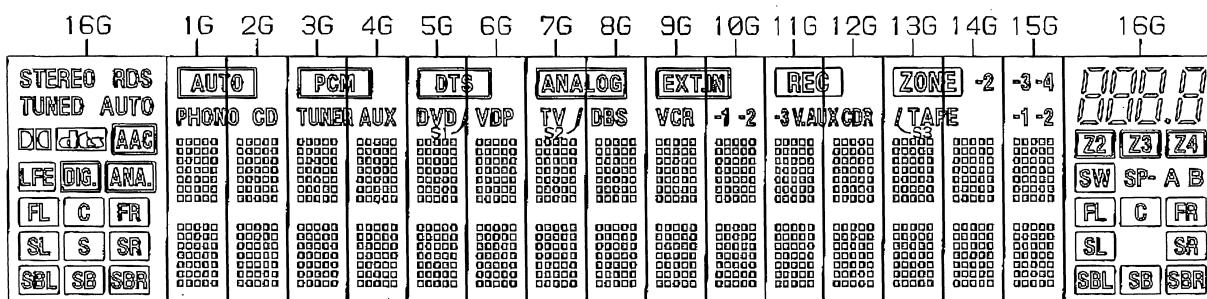


## PIN CONNECTION

PIN NO.	6	6	5	5	5	5	5	5	5	5	4	4	4	4	4	~	5	4	3	2
	2	1	0	9	8	7	6	5	4	3	2	1	0	9	8	7	6	5	4	3
CONNECTION			L	P		R		E		Q						N	N	N	F	
	F	N	N	N	N	V	O	S	C	T	T	1	1			N	X	P	P	X
	2	X	P	P	P	D	D	S	C	T	S	A	B	G						1

NOTE 1) F1, F2 ----- Filament 4) NX ----- No extend pin  
 2) NP ----- No pin 5) DL ----- Datum Line  
 3) 16G ----- Grid

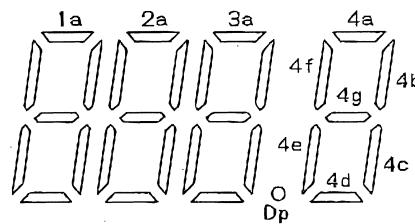
## GRID ASSIGNMENT



(上段)

1-1 B	2-1 B	3-1 B	4-1 B	5-1 B	1-1 A	2-1 A	3-1 A	4-1 A	5-1 A
I-2 B	2-2 B	3-2 B	4-2 B	5-2 B	I-2 A	2-2 A	3-2 A	4-2 A	5-2 A
I-3 B	2-3 B	3-3 B	4-3 B	5-3 B	I-3 A	2-3 A	3-3 A	4-3 A	5-3 A
I-4 B	2-4 B	3-4 B	4-4 B	5-4 B	I-4 A	2-4 A	3-4 A	4-4 A	5-4 A
I-5 B	2-5 B	3-5 B	4-5 B	5-5 B	I-5 A	2-5 A	3-5 A	4-5 A	5-5 A
I-6 B	2-6 B	3-6 B	4-6 B	5-6 B	I-6 A	2-6 A	3-6 A	4-6 A	5-6 A
I-7 B	2-7 B	3-7 B	4-7 B	5-7 B	I-7 A	2-7 A	3-7 A	4-7 A	5-7 A

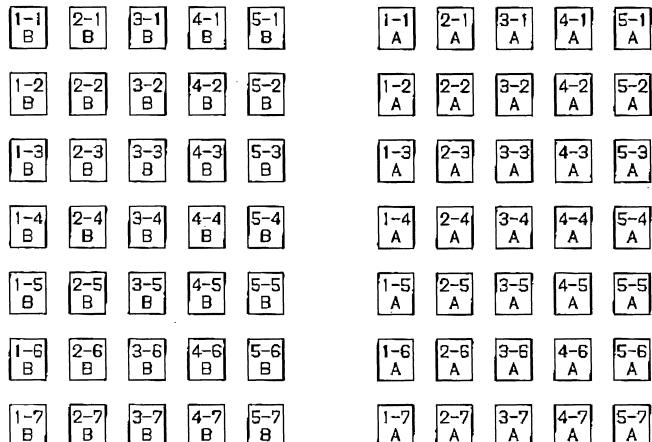
(1G~15G)



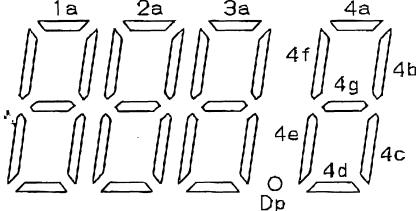
(16G)

### TIMING ASSIGNMENT

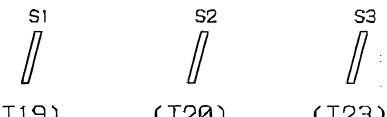
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15  
(上段) (下段)



(T1~T15)



(T16)



19)

KT20

CT23

### ANODE TIMING CHART

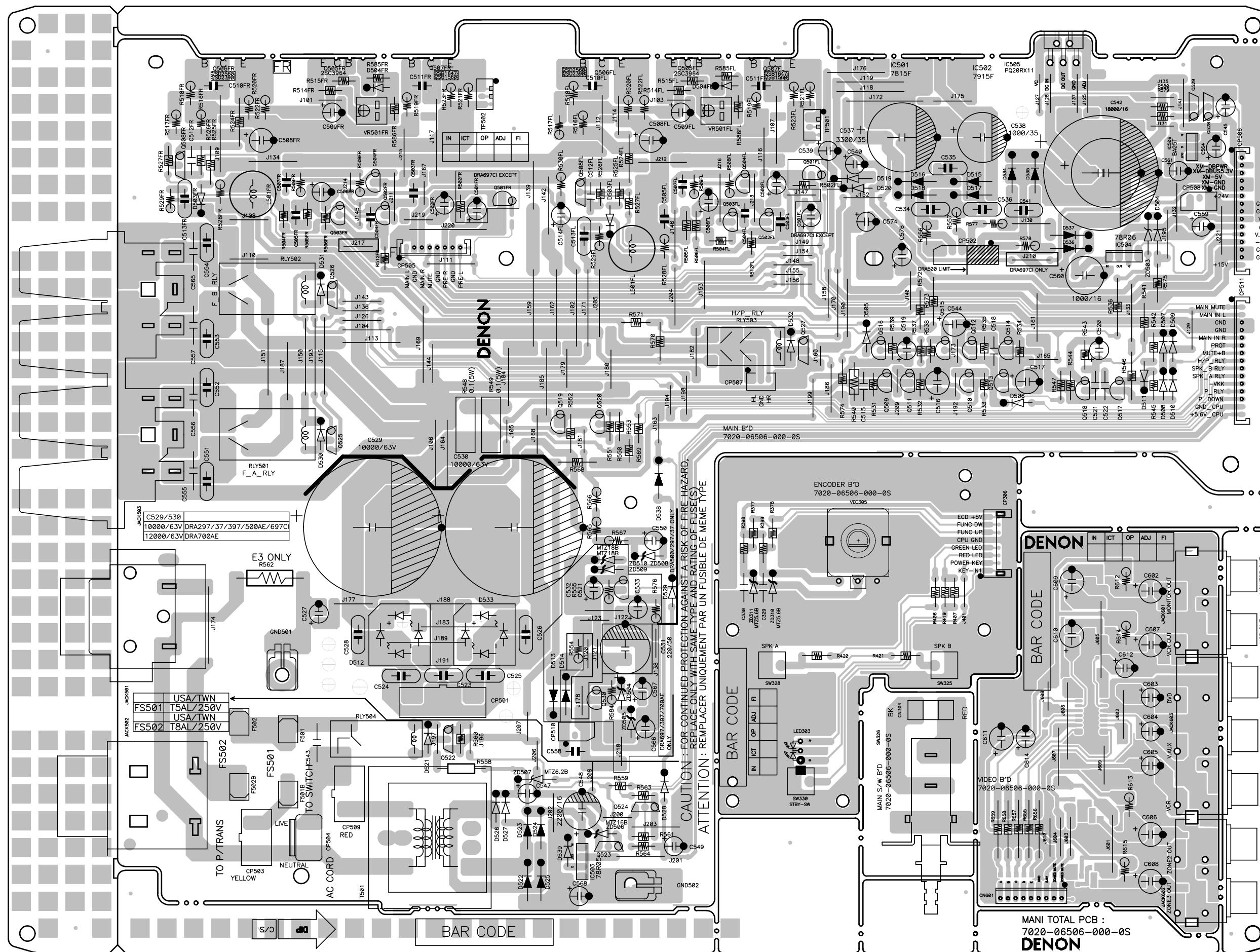
	T1~T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
D0A	1-1A	1-1A	Dp							
D1A	2-1A	2-1A	1d							
D2A	3-1A	3-1A	2d							
D3A	4-1A	4-1A	3d							
D4A	5-1A	5-1A	4d							
D5A	1-2A	1-2A								
D6A	2-2A	2-2A	1e							
D7A	3-2A	3-2A	2e							
D8A	4-2A	4-2A	3e							
D9A	5-2A	5-2A	4e							
D10A	1-3A	1-3A								
D11A	2-3A	2-3A	1c							
D12A	3-3A	3-3A	2c							
D13A	4-3A	4-3A	3c							
D14A	5-3A	5-3A	4c							
D15A	1-4A	1-4A								
D16A	2-4A	2-4A	1g							
D17A	3-4A	3-4A	2g							
D18A	4-4A	4-4A	3g							
D19A	5-4A	5-4A	4g							
D20A	1-5A	1-5A								
D21A	2-5A	2-5A	1f							
D22A	3-5A	3-5A	2f							
D23A	4-5A	4-5A	3f							
D24A	5-5A	5-5A	4f							
D25A	1-6A	1-6A								
D26A	2-6A	2-6A	1b							
D27A	3-6A	3-6A	2b							
D28A	4-6A	4-6A	3b							
D29A	5-6A	5-6A	4b							
D30A	1-7A	1-7A								
D31A	2-7A	2-7A	1a							
D32A	3-7A	3-7A	2a							
D33A	4-7A	4-7A	3a							
D34A	5-7A	5-7A	4a							

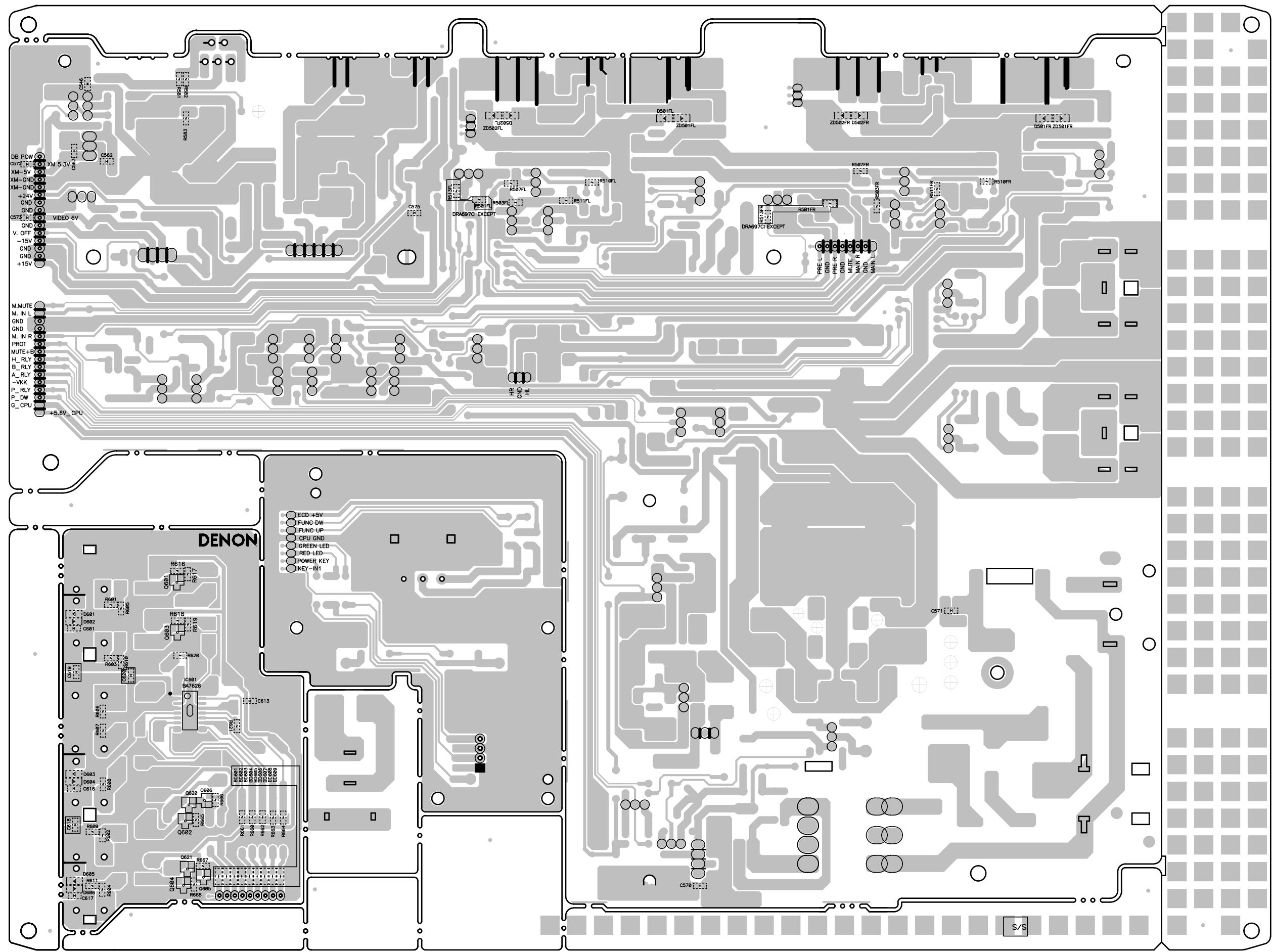
## ANODE TIMING CHART

	T1~T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
D0B	1~1B	1~1B	[2]							
D1B	2~1B	2~1B	[2]							
D2B	3~1B	3~1B	[2]							
D3B	4~1B	4~1B								
D4B	5~1B	5~1B	[1]							
D5B	1~2B	1~2B	[1]							
D6B	2~2B	2~2B	[1]							
D7B	3~2B	3~2B	[1]							
D8B	4~2B	4~2B	[1]							
D9B	5~2B	5~2B	[1]							
D10B	1~3B	1~3B								
D11B	2~3B	2~3B								
D12B	3~3B	3~3B								
D13B	4~3B	4~3B	[1]							
D14B	5~3B	5~3B	[P]							
D15B	1~4B	1~4B	[A]							
D16B	2~4B	2~4B	[B]							
D17B	3~4B	3~4B	[R] (左)							
D18B	4~4B	4~4B	[C] (右)							
D19B	5~4B	5~4B	[R] (右)							
D20B	1~5B	1~5B	[S]							
D21B	2~5B	2~5B	[R] (右)							
D22B	3~5B	3~5B	[S]							
D23B	4~5B	4~5B	[S]							
D24B	5~5B	5~5B	[S]							
D25B	1~6B	1~6B								
D26B	2~6B	2~6B	[R] (左)							
D27B	3~6B	3~6B	[C] (左)							
D28B	4~6B	4~6B	[R] (左)							
D29B	5~6B	5~6B	[S]							
D30B	1~7B	1~7B	[S]							
D31B	2~7B	2~7B	[R] (左)							
D32B	3~7B	3~7B	[S]							
D33B	4~7B	4~7B	[S]							
D34B	5~7B	5~7B	[S]							
AD1	-3	Stereo	AUTO	PCM	DTS	ANALOG	EXT.M	REC	ZONE	
AD2	-4	RDS	PHONO	TUNER	DVD	TV	VCR	-3	-2	
AD3	-1	TUNED	CD	AUX	S1	S2	-1	V.AUX	S3	
AD4	-2	AUTO			VDP	DPS	-2	CDR	TAPE	

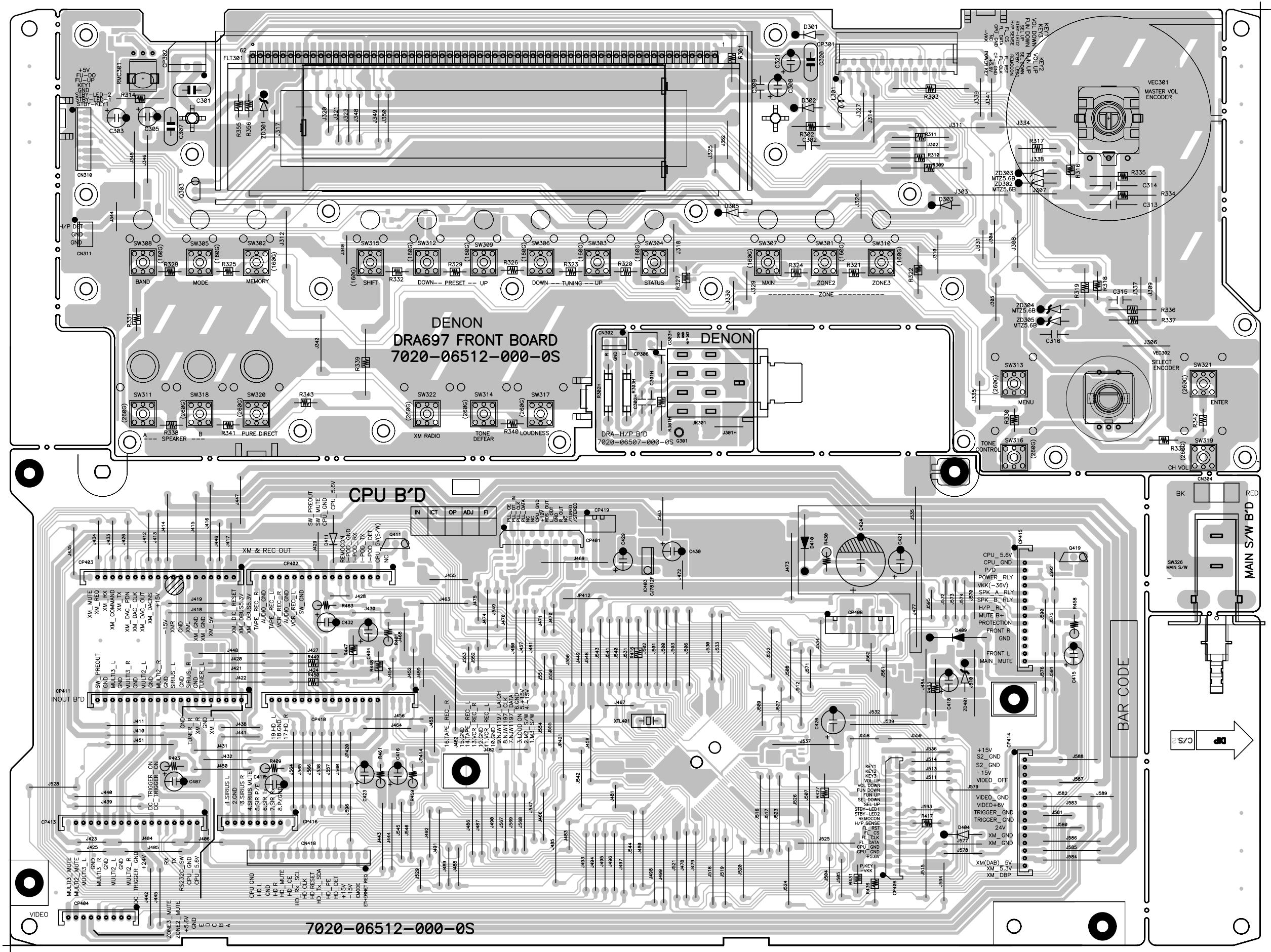
## PRINTED WIRING BOARDS

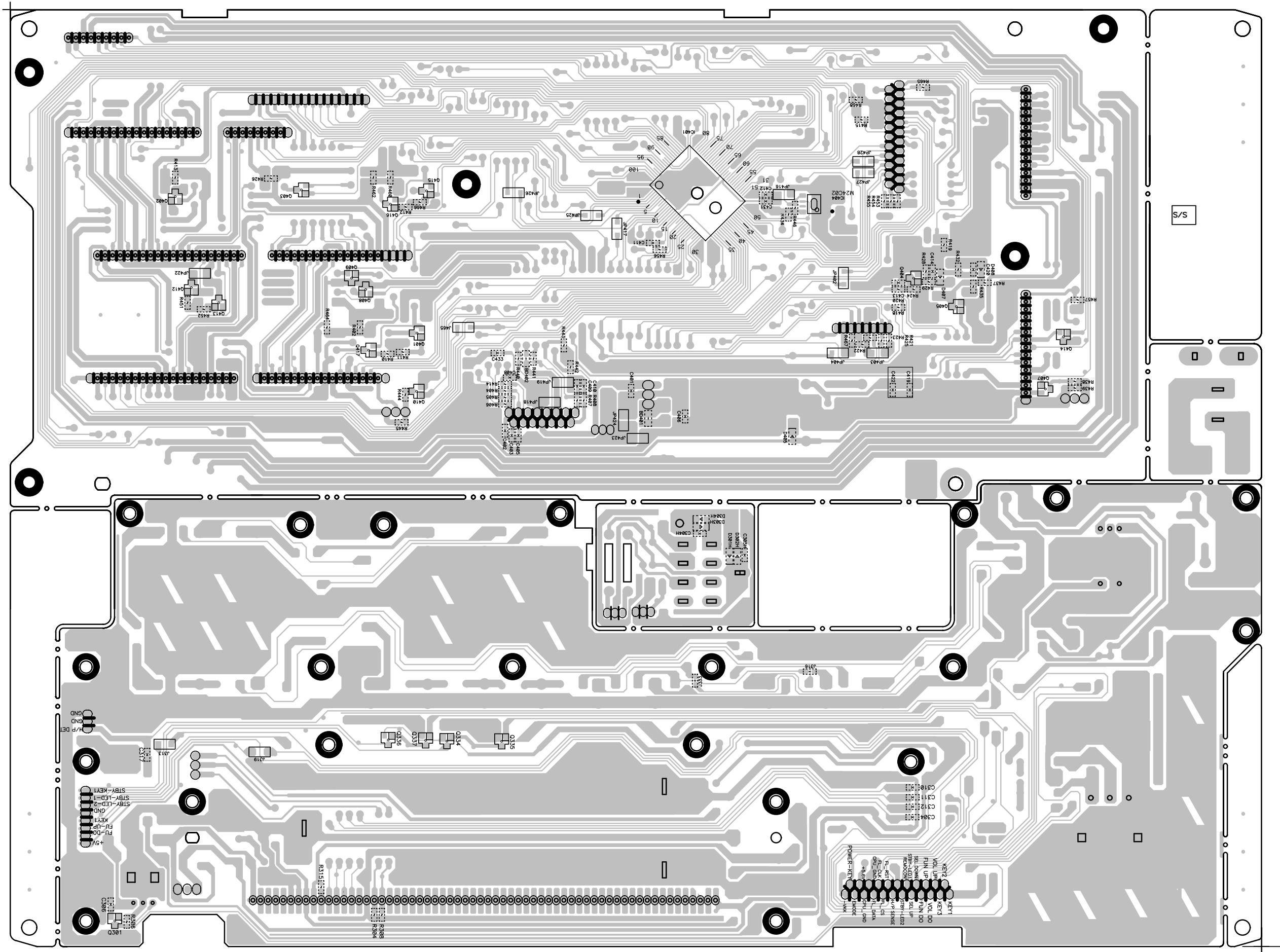
MAIN P.W.B. UNIT



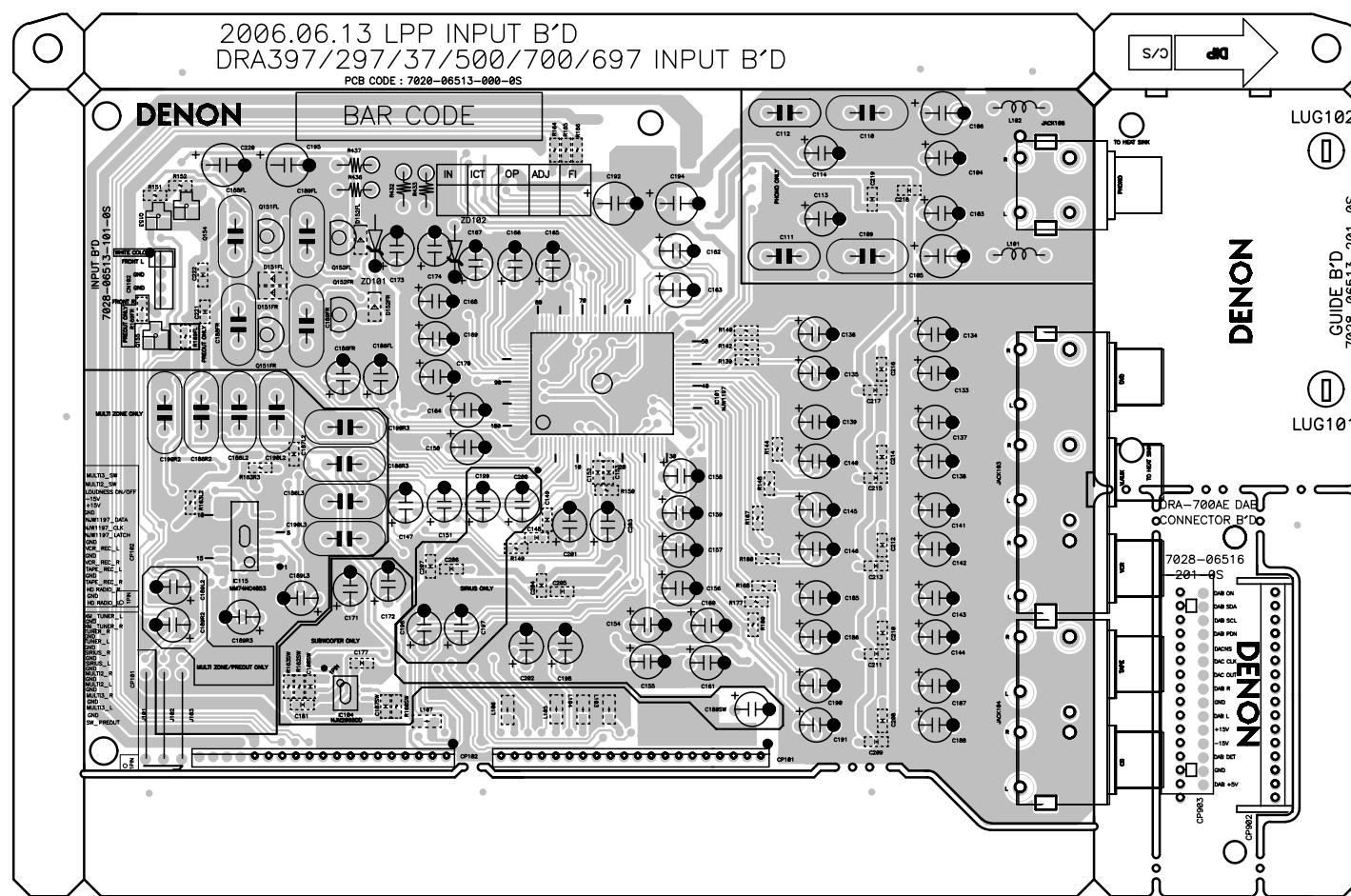


## FRONT P.W.B.UNIT

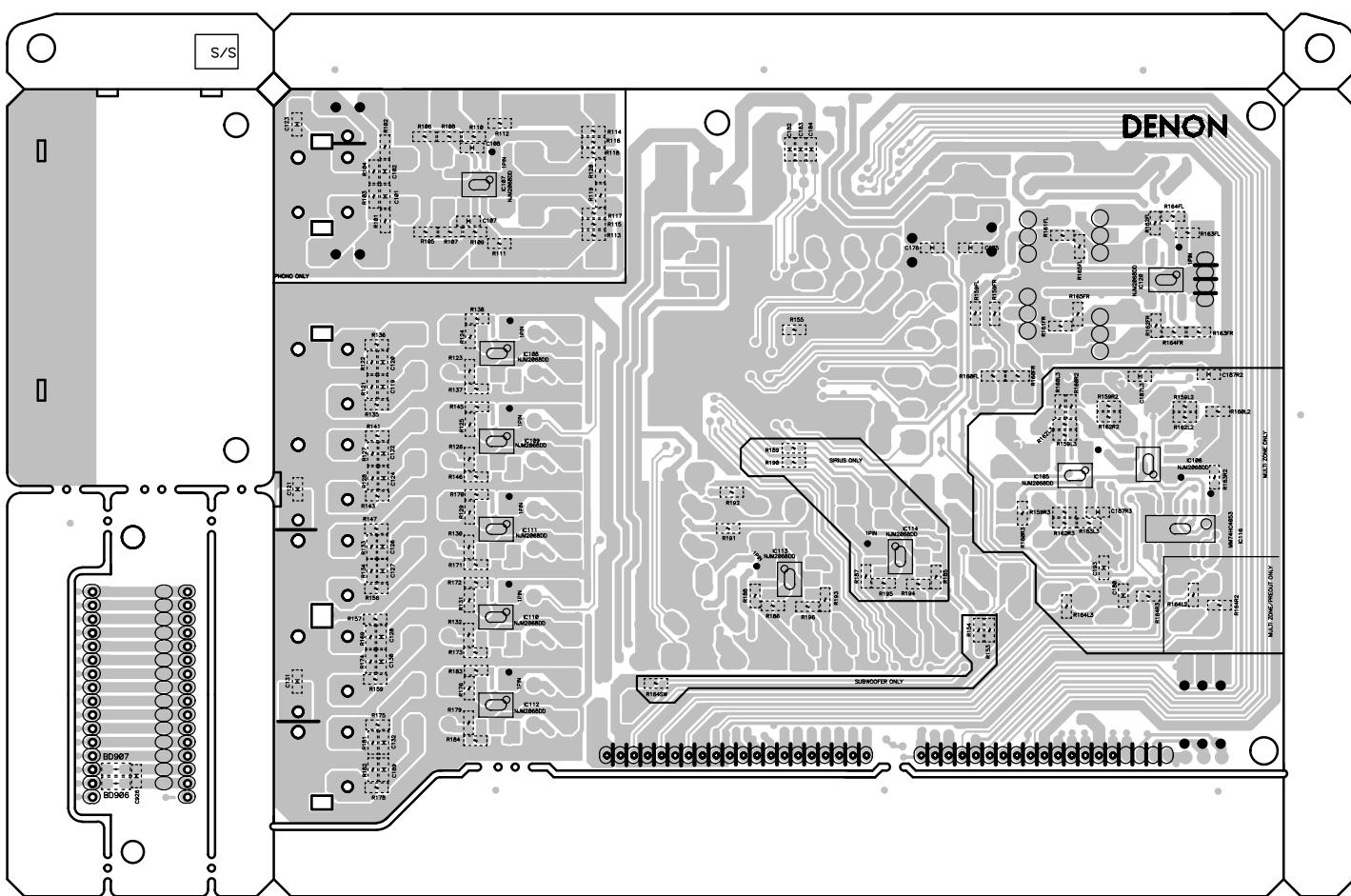




## INPUT P.W.B. UNIT

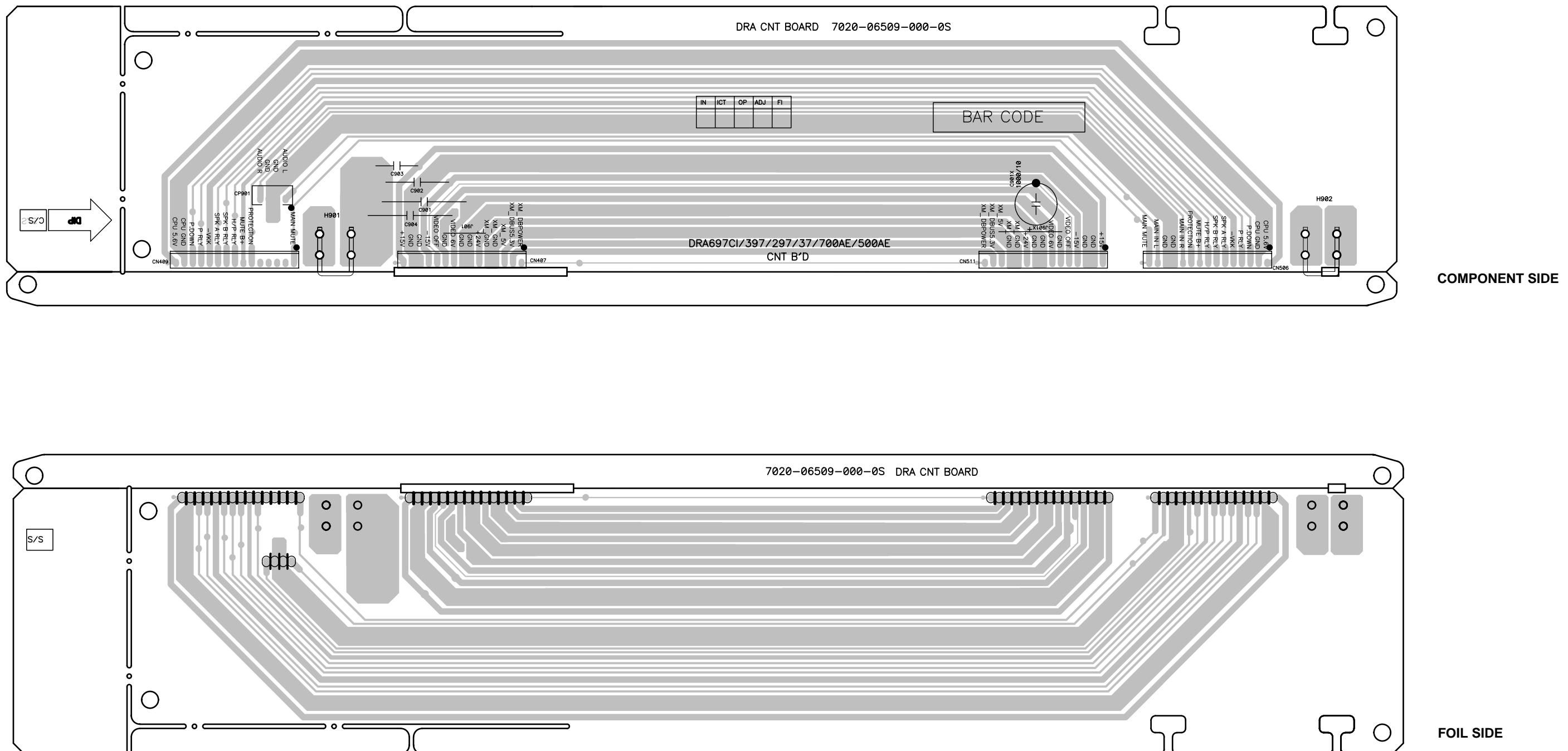


COMPONENT SIDE

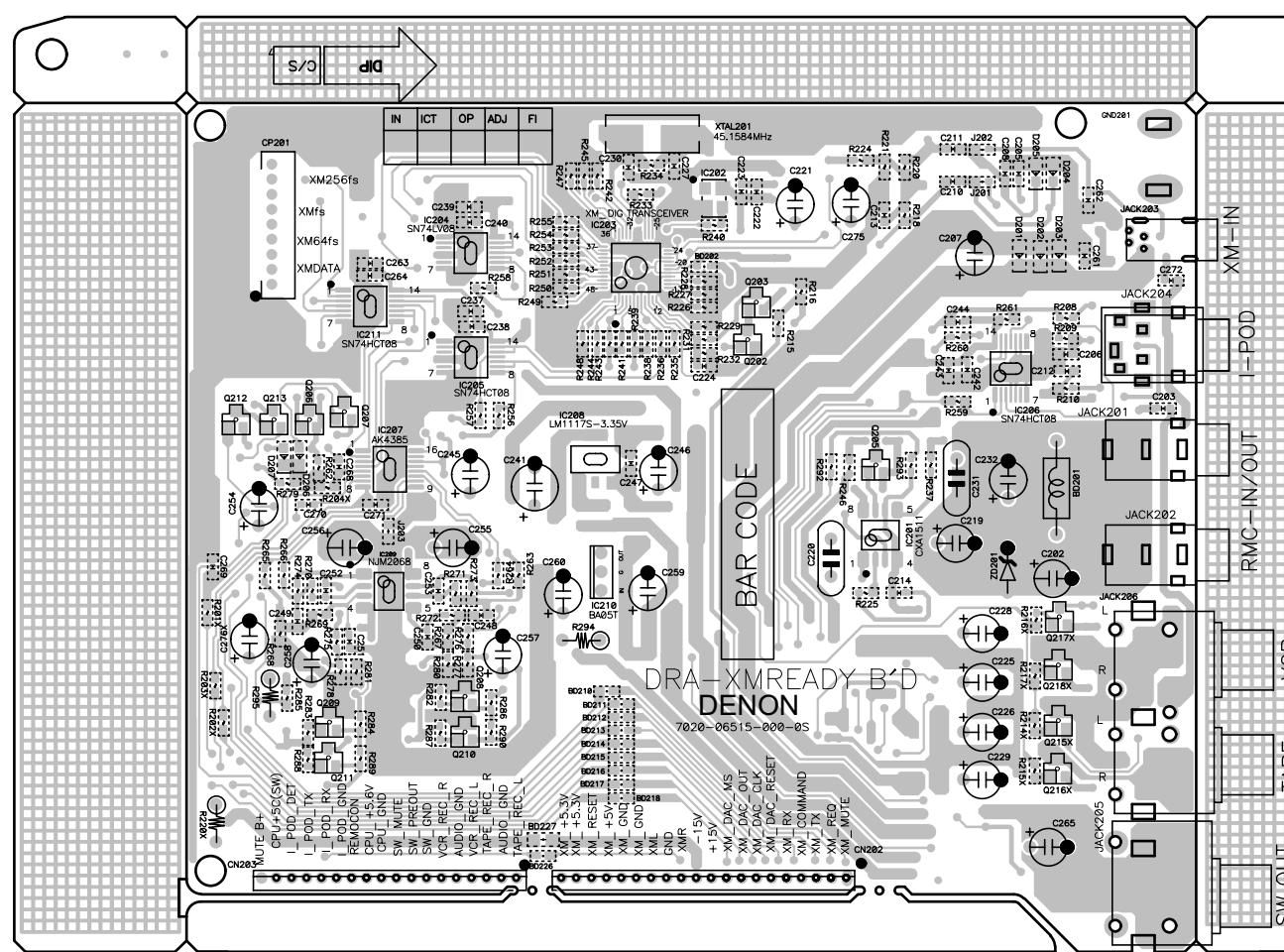


FOIL SIDE

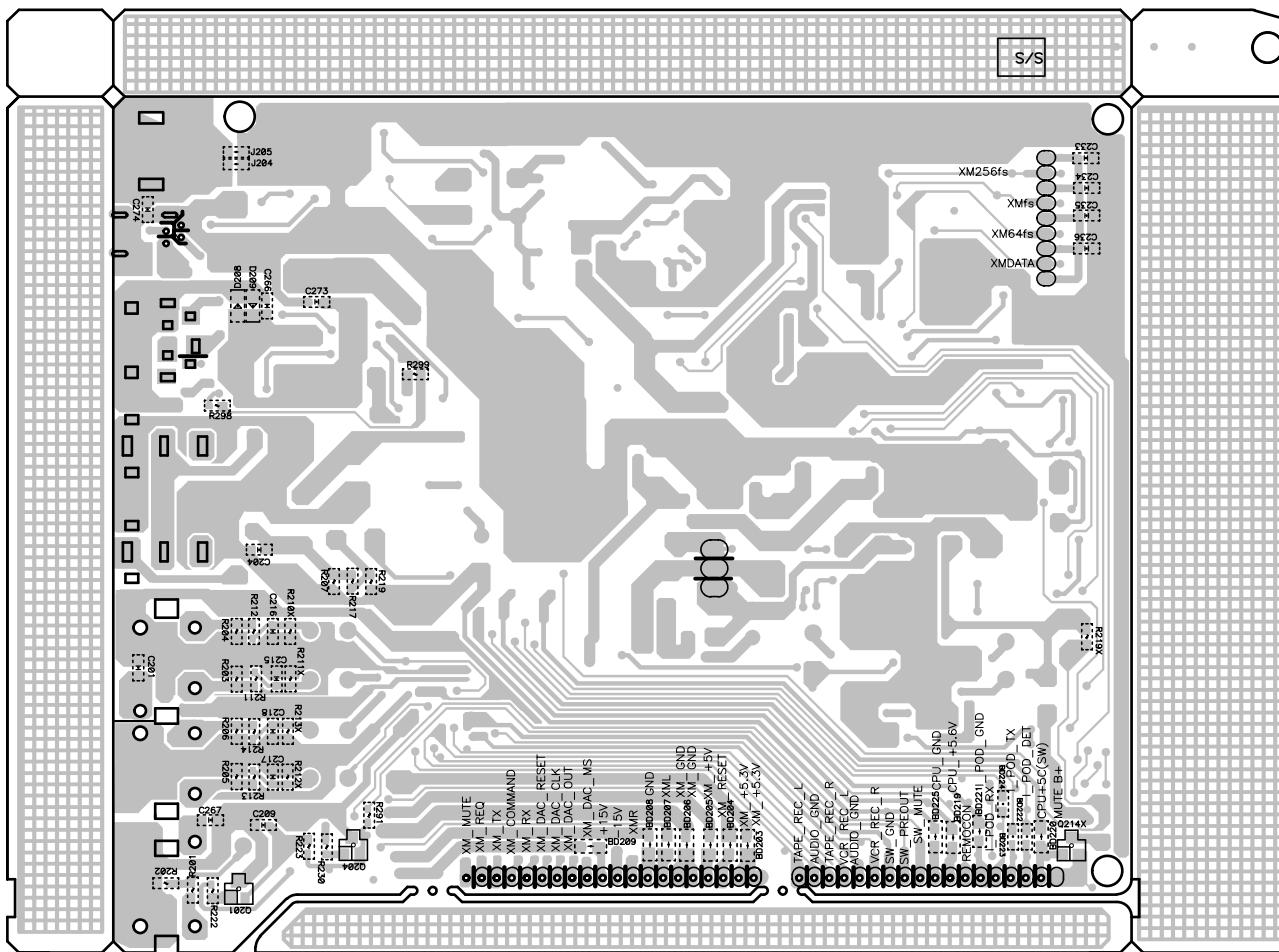
CNT P.W.B. UNIT



## XM-READY P.W.B. UNIT

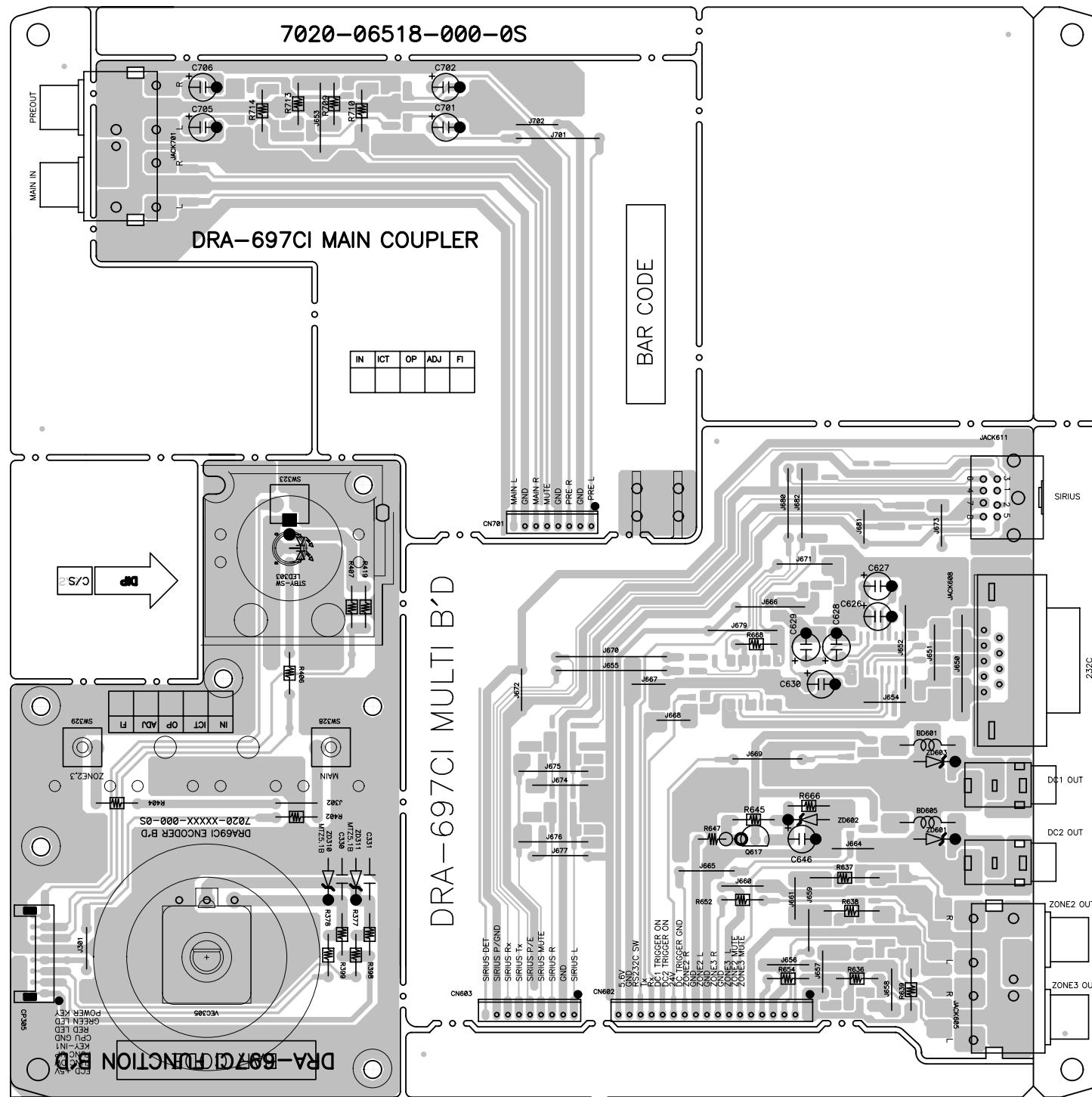


COMPONENT SIDE

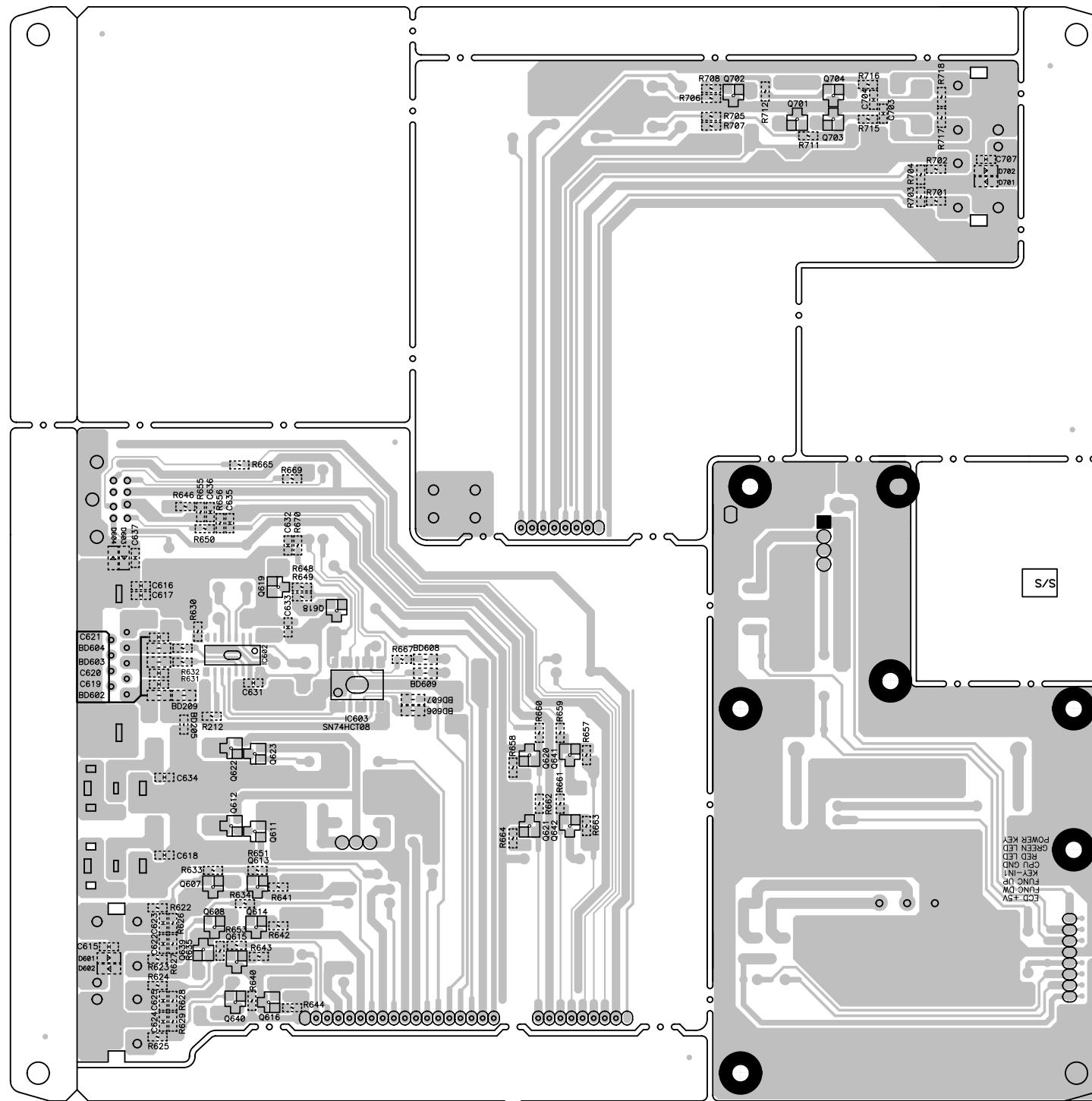


FOIL SIDE

MULTI P.W.B.UNIT



COMPONENT SIDE



FOIL SIDE

## NOTE FOR PARTS LIST

- Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including General-purpose Carbon Film Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- Not including General-purpose Carbon Chip Resistor in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

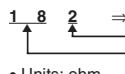
**WARNING:**

Parts marked with this symbol  have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

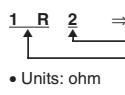
**● Resistors**

Ex.: RN	14K	2E	182	G	FR
Type	Shape and performance	Power	Resist-ance	Allowable error	Others
RD : Carbon	2B : 1/8W	F : ±1%	P : Pulse-resistant type		
RC : Composition	2E : 1/4W	G : ±2%	NL : Low noise type		
RS : Metal oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type		
RW : Winding	3A : 1W	K : ±10%	FR : Fuse-resistor		
RN : Metal film	3D : 2W	M : ±20%	F : Lead wire forming		
RK : Metal mixture	3F : 3W				
	3H : 5W				

**\* Resistance**

 ⇒ 1800 ohm = 1.8 kohm  
Indicates number of zeros after effective number.  
2-digit effective number.

• Units: ohm

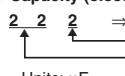
 ⇒ 1.2 ohm  
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

• Units: ohm

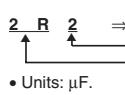
**● Capacitors**

Ex.: CE	04W	1H	2R2	M	BP
Type	Shape and performance	Dielectric strength	Capacity	Allowable error	Others
CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	HS : High stability type		
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type		
CS : Tantalum electrolytic	1C : 16V	J : ±5%	HR : Ripple-resistant type		
CQ : Film	1E : 25V	K : ±10%	DL : For change and discharge		
CK : Ceramic	1V : 35V	M : ±20%	HF : For assuring high frequency		
CC : Ceramic	1H : 50V	Z : +80%	U : UL part		
CP : Oil	2A : 100V	-20%	C : CSA part		
CM : Mica	2B : 125V	P : +100%	W : UL-CSA type		
CF : Metallized	2C : 160V	-0%	F : Lead wire forming		
CH : Metallized	2D : 200V	C : ±0.25pF			
	2E : 250V	D : ±0.5pF			
	2H : 500V	= : Others			
	2J : 630V				

**\* Capacity (electrolyte only)**

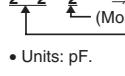
 ⇒ 2200μF  
Indicates number of zeros after effective number.  
2-digit effective number.

• Units: μF

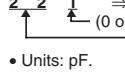
 ⇒ 2.2μF  
1-digit effective number.  
2-digit effective number, decimal point indicated by R.

• Units: μF

**\* Capacity (except electrolyte)**

 ⇒ 2200pF=0.0022μF  
(More than 2) Indicates number of zeros after effective number.  
2-digit effective number.

• Units: pF

 ⇒ 220pF  
(0 or 1) Indicates number of zeros after effective number.  
2-digit effective number.

• Units: pF

• When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

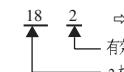
## 部品表について

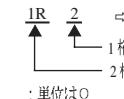
- nsp 印の部品は常時在庫していませんので供給に長時間を要することがあります。  
場合によっては、供給をお断りすることがあります。
- 部品を発注する際は特に数字の "1" と英字の "I"との区別をはっきり記入してください。
- 部品番号を表示していない部品は供給できません。
- △印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。
- ★印のついている部品は分解図には記載していません。
- 汎用カーボン抵抗器は記載していません。定数は回路図を参照願います。
- 汎用カーボンチップ抵抗器は記載していません。定数は回路図を参照願います。
- 部品表の抵抗器、コンデンサの品名記号の読み方は表を参照してください。

**● 抵抗器**

例) RN	14K	2E	182	G	FR
種類	形状特性	電力	抵抗値	許容差	その他
RD : カーボン	2B : 1/8W	F : ±1%	P : 耐パルス形		
RC : 固定体	2E : 1/4W	G : ±2%	NL : 低雑音形		
RS : 金属系皮膜	2H : 1/2W	J : ±5%	NB : 不燃形		
RW : 巻線	3A : 1W	K : ±10%	FR : ヒューズ抵抗		
RN : 金属皮膜	3D : 2W	M : ±20%	F : リード線成形		
RK : 金属混合体	3F : 3W				
	3H : 5W				

**\* 抵抗値**

 ⇒ 1800Ω=1.8kΩ  
有効数字につづく0の数を表す。  
2桁の有効数字を表す。

 ⇒ 1.2Ω  
1桁の有効数字を表す。  
2桁の有効数字で小数点はRで表す。

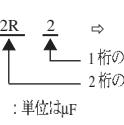
: 単位はΩ

**● コンデンサ**

例) CE	04W	1H	2R2	M	BP
種類	形状特性	耐压	容量	許容差	その他
CE : アルミ箔電解	0J : 6.3V	F : ±1%	HS : 高安定形		
CA : アルミ固体電解	1A : 10V	G : ±2%	BP : 無極性形		
CS : タンタル電解	1C : 16V	J : ±5%	HR : 耐リップル形		
CQ : フィルム	1E : 25V	K : ±10%	DL : 充放電対策用		
CK : セラミック	1V : 35V	M : ±20%	HF : 高周波保証用		
CC : セラミック	1H : 50V	Z : +80%	U : UL部品		
CP : オイル	2A : 100V	U : UL part	C : CSA部品		
CM : マイカ	2B : 125V	C : CSA part	W : UL-CSA部品		
CF : メタライズド	2C : 160V	W : UL-CSA type	F : リード線成形		
CH : メタライズド	2D : 200V	F : Lead wire forming			
	2E : 250V				
	2H : 500V				
	2J : 630V				

**\* 容量値**
**● 電解コンデンサの場合**

 ⇒ 2200μF  
有効数字につづく0の数を表す。  
2桁の有効数字を表す。  
: 単位はμF

 ⇒ 2.2μF  
1桁の有効数字を表す。  
2桁の有効数字で小数点はRで表す。  
: 単位はμF

**● 電解コンデンサ以外の場合**

 ⇒ 2200pF=0.0022μF  
有効数字につづく0の数を表す。  
(0の数が2以上の場合)  
2桁の有効数字を表す。  
: 単位はpF

 ⇒ 220pF  
有効数字につづく0の数を表す。  
(0の数が0または1の場合)  
2桁の有効数字を表す。  
: 単位はpF

**● 耐圧を交流で表示する場合は、耐圧表示の次に「AC」を表示します。**

## PARTS LIST OF P.W.B. UNIT

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

### MAIN P.W.B. UNIT ASSY

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>SEMICONDUCTORS GROUP</b>								
	IC503		00D 963 0057 806	IC KIA78R05PI		J126780500370S		
	IC504		00D 963 0313 809	IC KIA78R06PI		J126780600210S		
	IC506		00D 263 1092 003	IC BA05T		J126050000020S		*
	IC601		00D 963 0083 304	IC BA7626F		J171762600010S		
	Q502FL		00D 960 0196 205	TR KSA992F		J5000992F0050S		
	Q502FR		00D 960 0196 205	TR KSA992F		J5000992F0050S		
	Q503FL		00D 960 0196 205	TR KSA992F		J5000992F0050S		
	Q503FR		00D 960 0196 205	TR KSA992F		J5000992F0050S		
	Q504FL		00D 960 0196 506	TR KSC1845F		J5021845F0000S		
	Q504FR		00D 960 0196 506	TR KSC1845F		J5021845F0000S		
	Q508FL		00D 960 0196 506	TR KSC1845F		J5021845F0000S		
	Q508FR		00D 960 0196 506	TR KSC1845F		J5021845F0000S		
	Q509		00D 960 0196 302	TR KTA1268BL		J5001268B0050S		
	Q510,511		00D 960 0005 202	TR KTC3198Y		J5023198Y0000S		
	Q512		00D 960 0196 302	TR KTA1268BL		J5001268B0050S		
	Q513-515		00D 960 0005 202	TR KTC3198Y		J5023198Y0000S		
	Q516,517		00D 960 0196 302	TR KTA1268BL		J5001268B0050S		
	Q518		00D 960 0196 700	TR KTC3200BL		J5023200B0050S		
	Q519,520		00D 960 0196 302	TR KTA1268BL		J5001268B0050S		
	Q522		00D 960 0196 409	TR 2SC1740SR		J5021740S0010S		
	Q523		00D 963 0121 208	TR KRC107M		J6020107M0010S		
	Q524		00D 960 0196 409	TR 2SC1740SR		J5021740S0010S		
	Q525-527		00D 963 0219 602	TR KRC106M		J6020106M0010S		
	Q528,529		00D 960 0097 304	TR KRC102M		J6020102M0010S		
	Q530		00D 963 0226 705	TR KTC102Y		J5021027Y0020S		
	Q601-604		00D 960 0068 207	TR KTA1504Y(ASY)		J5201504Y0210S		
	Q605,606		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
	Q620,621		00D 963 0159 102	TR 2SC KRC111S (NM)		J52201100210S		
	D501FL		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
	D501FR		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
	D502FL		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
	D502FR		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
	D503FL		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D503FR		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D504-511		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D512		00D 960 0197 107	D,RECTIFIER KBPC604 6A		K047604000020S		
	D514-518		00D 963 0058 407	D,SWITCHING IN4007		K000400700520S		
	D519-521		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D522-525		00D 963 0058 407	D,SWITCHING IN4007		K000400700520S		
	D526-532		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D533		00D 960 0197 107	D,RECTIFIER KBPC604 6A		K047604000020S		
	D534-538		00D 963 0058 407	D,SWITCHING IN4007		K000400700520S		
	D539		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
	D601-606		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
	ZD501FL		00D 963 0279 804	D,ZENER UDZS4.3B		K06604R34P410S		
	ZD501FR		00D 963 0279 804	D,ZENER UDZS4.3B		K06604R34P410S		
	ZD502FL		00D 963 0295 503	D,ZENER UDZS3.6B		K06603R64P400S		

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	ZD502FR ZD503 ZD504 ZD505		00D 963 0295 503 00D 963 0314 206 00D 963 0058 708 00D 963 0046 202	D,ZENER UDZS3.6B D,ZENER MTZJ7.5B D,ZENER MTZJ20B D,ZENER MTZJ18B		K06603R64P400S K06007R544520S K0620R044520S K0618R044520S		
	ZD506 ZD507 ZD508		00D 963 0058 708 00D 960 0095 704 00D 960 0095 500	D,ZENER MTZJ20B D,ZENER MTZJ6.2B D,ZENER MTZJ5.1B		K06020R044520S K06006R244520S K06005R144520S		
<b>RESISTORS GROUP</b>								
	R508FL R508FR R509FL R509FR		00D 960 9004 301 00D 960 9004 301 00D 960 9005 902 00D 960 9005 902	R,METAL FILM 47-J,1/4W R,METAL FILM 47-J,1/4W R,METAL FILM 1.2K-J,1/4W R,METAL FILM 1.2K-J,1/4W		C060047063050S C060047063050S C06012263050S C06012263050S		
	R516FL R516FR R517FL R517FR R518FL		00D 963 9006 285 00D 963 9006 285 00D 963 9006 285 00D 963 9006 285 00D 963 0215 907	R,FIXED 1WJ-5.6K R,FIXED 1WJ-5.6K R,FIXED 1WJ-5.6K R,FIXED 1WJ-5.6K R,METAL FILM 4.7-J,1W		N113135656220S N113135656220S N113135656220S N113135656220S C0604R7065050S		
	R518FR R519FL R519FR R520FL R520FR		00D 963 0215 907 00D 963 0215 907 00D 963 0215 907 00D 963 0345 903 00D 963 0345 903	R,METAL FILM 4.7-J,1W R,METAL FILM 4.7-J,1W R,METAL FILM 4.7-J,1W R,FIXED 2WJ-0.47 R,FIXED 2WJ-0.47		C0604R7065050S C0604R7065050S C0604R7065050S N113136647820S N113136647820S	*	*
	R521FL R521FR R522FL R522FR R523FL		00D 963 0345 903 00D 963 0345 903 00D 963 0345 903 00D 963 0345 903 00D 963 0345 903	R,FIXED 2WJ-0.47 R,FIXED 2WJ-0.47 R,FIXED 2WJ-0.47 R,FIXED 2WJ-0.47 R,FIXED 2WJ-0.47		N113136647820S N113136647820S N113136647820S N113136647820S N113136647820S	*	*
	R523FR R528FL R528FR R529FL R529FR		00D 963 0345 903 00D 963 9006 256 00D 963 9006 256 00D 963 9006 256 00D 963 9006 256	R,FIXED 2WJ-0.47 R,FIXED 1WJ-10 R,FIXED 1WJ-10 R,FIXED 1WJ-10 R,FIXED 1WJ-10		N113136647820S N113135610020S N113135610020S N113135610020S N113135610020S	*	*
	R530FL R540 R548,549 R554 R556,557		00D 963 9006 256 00D 963 0232 906 00D 963 0144 502 00D 963 0215 907 00D 963 0216 003	R,FIXED 1WJ-10 R,METAL FILM 47K-F R,METAL FILM 47K-F R,METAL FILM 4.7-J,1W R,METAL FILM 0.22-J,1W		N113135610020S C060047343530S C141R10069000S C0604R7065050S C060R22065050S		
	R558 R562 R565-567 R576 R577,578		00D 963 0232 809 00D 963 0244 305 00D 960 9005 642 00D 963 0310 501 00D 963 0216 003	R,METAL FILM 10-J,1/4W R,METAL FILM 100PPM 2.2M 0.5W R,METAL FILM 1.2K-J,1W R,METAL FILM 47K-J,1/4W R,METAL FILM 0.22-J,1W		C060010063520S C060022564520S C06012265050S C060047363050S C060R22065050S		
	R584 R612-615  VR501FL VR501FR		00D 963 0310 404 00D 963 9005 639  00D 960 0091 601 00D 960 0091 601	R,METAL FILM 2.2K-J,1W R,METAL FILM 100-J,1W  VR,SEMI CERMET 1KB VR,SEMI CERMET 1KB		C060022265050S C06010165060S  C544102015130S C544102015130S		
<b>CAPACITORS GROUP</b>								
	C502FL C502FR		00D 963 0234 205 00D 963 0234 205	C,ELECT 10UF-M/50V C,ELECT 10UF-M/50V		D040100087070S D040100087070S		
	C503FL C503FR C504FL C504FR C505FL		00D 963 0216 207 00D 963 0216 207 00D 963 0216 207 00D 963 0216 207 00D 963 0216 100	C,CERAMIC 220PF 500V C,CERAMIC 220PF 500V C,CERAMIC 220PF 500V C,CERAMIC 220PF 500V C,CERAMIC 33PF-J/500V		D009092212500S D009092212500S D009092212500S D009092212500S D00033006D050S		

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
C505FR		00D 963 0216 100	C,CERAMIC 33PF-J/500V		D00033006D050S		
C506FL		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C506FR		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C507FL		00D 963 9003 194	C,FILM 0.0022UF-J/100V		D02022206C060S		
C507FR		00D 963 9003 194	C,FILM 0.0022UF-J/100V		D02022206C060S		
C508FL		00D 963 0234 506	C,ELECT 47UF-M/50V (Pb Free)		D040470087070S		
C508FR		00D 963 0234 506	C,ELECT 47UF-M/50V (Pb Free)		D040470087070S		
C509FL		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C509FR		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C510FL		00D 963 9003 084	C,CERAMIC B100PF-K/500V)		D00410106D050S		
C510FR		00D 963 9003 084	C,CERAMIC B100PF-K/500V)		D00410106D050S		
C511FL		00D 963 9003 084	C,CERAMIC B100PF-K/500V)		D00410106D050S		
C511FR		00D 963 9003 084	C,CERAMIC B100PF-K/500V)		D00410106D050S		
C512FL		00D 960 9003 108	C,CERAMIC 0.022UF-Z/25V		D005223594520S		
C512FR		00D 960 9003 108	C,CERAMIC 0.022UF-Z/25V		D005223594520S		
C513FL		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C513FR		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C514FL		00D 963 0234 302	C,ELECT 10UF-M/100V		D04010008C050S		
C515		00D 963 0020 202	C,CERAMIC 0.1UF-Z/50V		D005104597530S		
C516		00D 963 0333 203	C,ELECT 100UF-M/16V		D040101083090S	*	
C517		00D 963 0130 309	C,ELECT 470UF-M/6.3V		D040471081230S		*
C518		00D 963 0020 202	C,CERAMIC 0.1UF-Z/50V		D005104597530S		
C519		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C520		00D 963 0312 606	C,ELECT 2.2UF-M/50V(GREEN CAP)		D0402R2087270S		
C521,522		00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C523-526		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C527		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C528		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C529,530		00D 963 0149 400	C,GENERIC 10000UF/63V(M)		N211210388110S		*
C531		00D 963 0312 402	C,ELECT 220UF-M/50V SY (Pb Free)		D040221087140S		
C534-536		00D 963 0021 900	C,FILM 0.047UF-J/100V		D02047306C060S		
C537		00D 963 0312 703	C,ELECT 3300UF-M/35V		D040332085050S		
C538		00D 963 0311 801	C,ELECT 1000UF-M/35V(SHL)		D040102085040S		
C539,540		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C541		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C542		00D 963 0255 501	C,ELECT 18000UF-M/16V		D040183083000S		
C543		00D 963 9006 191	C,CERAMIC AC13F472MDOA		D00847208K070S		
C544		00D 963 0234 506	C,ELECT 47UF-M/50V (Pb Free)		D040470087070S		
C545		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C546		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C547		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C548		00D 963 0312 509	C,ELECT 2200UF-M/16V		D040222083080S		
C549,550		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C551-554		00D 963 0024 703	C,FILM 0.01UF-J/100V		D02010306C060S		
C555-557		00D 963 0233 400	C,CERAMIC 2200PF-K/16V		D005222773530S		
C558		00D 963 9003 097	C,FILM -0.1UF-K/250V		D02010407H080S		
C559		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C560		00D 960 9009 940	C,ELECT 1000UF-M/16V		D040102083030S		
C561		00D 963 0333 203	C,ELECT 100UF-M/16V		D040101083090S		
C562,563	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S	*	
C564		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C565		00D 963 0233 400	C,CERAMIC 2200PF-K/16V		D005222773530S		
C566-568		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C570-573		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		
C574		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C575		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C576		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		
C601		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C602		00D 963 9005 901	C,ELECT 470UF-M/10V		D040471082060S		

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	C603-605		00D 963 0312 004	C,ELECT 22UF-M/25V		D040220084050S		
	C606-608		00D 963 9005 901	C,ELECT 470UF-M/10V		D040471082060S		
	C609,610		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
	C611		00D 963 9005 901	C,ELECT 470UF-M/10V		D040471082060S		
	C612		00D 963 0312 004	C,ELECT 22UF-M/25V		D040220084050S		
	C613	nsp	00D 963 0234 001	C,CERAMIC 0.047UF-Z/50V		D011473597160S		
	C614		00D 963 0312 004	C,ELECT 22UF-M/25V		D040220084050S		
	C616,617		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
	C618-620		00D 963 9003 372	R,CHIP 0-J,1/16W		C20000006M160S		

**OTHERS PARTS GROUP**

	BD601-609	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
	CN601	nsp	00D 963 0085 506	CN.WAFER 9P		L101100030910S		
	CP501	nsp	00D 963 0066 208	CN.WAFER 3.96MM		L104353280300S		
	CP502	nsp	00D 960 0128 804	CN.WAFER 2.5MM 6P		L102526700600S		
	CP503		00D 963 0315 302	CN.WAFER 7.92MM		L108353280290S		
	CP504		00D 963 0262 604	CN.WAFER 7.92MM		L108202000220S		
	CP505	nsp	00D 963 0097 400	CN.WAFER 2.0MM 8P		L101100040810S		
	CP506	nsp	00D 963 0097 507	CN.WAFER 2.0MM 15P		L101100041510S		
	CP507	nsp	00D 963 0235 806	CN.WAFER 2.0MM		L101220030000S		
	CP508	nsp	00D 960 0123 207	CN.WAFER 2.5MM 3P		L102526700300S		
	CP509		00D 963 0315 205	CN.WAFER 7.92MM		L108353280280S		
	CP510	nsp	00D 960 0123 207	CN.WAFER 2.5MM 3P		L102526700300S		
	CP511	nsp	00D 963 0097 507	CN.WAFER 2.0MM 15P		L101100041510S		
	F501		00D 960 0005 804	HOLDER,FUSE		G645000050010S		
	F501B		00D 960 0005 804	HOLDER,FUSE		G645000050010S		
	F502		00D 960 0005 804	HOLDER,FUSE		G645000050010S		
	F502B		00D 960 0005 804	HOLDER,FUSE		G645000050010S		
	GND501,502		-	TERMINAL GND PLATE		3790040876010S		
⚠	JACK501		00D 963 0313 508	SOCKET A206D0050P 3P		G435206D00050S		
	JACK503		00D 963 0119 906	TER,BOARD SCREW 8P		G614801A0200YS		
	JACK601		00D 963 0257 004	TER,RCA 2PIN		G601206B0100YS		
	JACK603		00D 963 0257 101	TER,RCA 3PIN		G606303B1010YS		
	L501FL		00D 963 0049 005	COIL,INDUCTOR 0.5UH		D330R50000000S		
	L501FR		00D 963 0049 005	COIL,INDUCTOR 0.5UH		D330R50000000S		
	RLY501,502		00D 960 0181 702	RELAY G5PA-28 24V 5A		G680240502020S		
	RLY503		00D 963 0218 506	RELAY BC3-24 24V 2A		G680240202040S		
⚠	RLY504		00D 963 0218 205	RELAY HL3-1A-9SH DC9V 1A		G680090102020S	*	
	TP501,502	nsp	00D 960 0161 405	CN.WAFER 2.0MM 3P		L101530140310S		
⚠	FS501,502		00D 963 0236 106	FUSE GLASS TUBE T8A/250V		N751228001110S		
⚠	T501		00D 963 0232 100	POWER TRANS 120V/60HZ		8200350150200S		
	JCAK602		00D 963 0257 004	5TER,RCA 2PIN		G601206B0100YS		
			-	LABEL RATING		5527200040410S		

**FRONT P.W.B. UNIT ASSY**

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>SEMICONDUCTORS GROUP</b>							
IC401		00D 963 0333 805	IC M30843FHFP		J020308530010S		*
IC403		00D 960 0100 301	IC KIA781API		J126781200040S		
IC404		00D 963 0267 007	IC M24C64		J000240640010S		
Q301		00D 963 0121 402	TR KRA104S		J520010400210S		
Q303		00D 960 0005 202	TR KTC3198Y		J5023198Y0000S		
Q334		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
Q335		00D 963 0121 606	TR KRC107S (NH)		J522107S00210S		
Q336		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
Q337		00D 963 0121 606	TR KRC107S (NH)		J522107S00210S		
Q401-403		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
Q404		00D 963 0121 509	TR KTC3875S		J522038750210S		
Q405		00D 960 0285 006	TR KRC104S (ND)		J522104S00210S		
Q408,409		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q410		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q411		00D 963 0102 803	TR 2SA933S		J5000933S0050S		
Q412,413		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q414-417		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
D301		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
D301H		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D302		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
D302H		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D303		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
D303H		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D304H		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D305		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
D404		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
D405		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D407,408		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D409		00D 963 0058 407	D,SWITCHING IN4007		K000400700520S		
D411		00D 963 0020 309	D,SWITCHING 1SS133T		K000013300520S		
ZD301		00D 960 0095 801	D,ZENER MTZJ6.8B		K06006R844520S		
ZD302-305		00D 960 0095 607	D,ZENER MTZJ5.6B		K06005R644520S		
ZD401		00D 963 0047 502	D,ZENER MTZJ3.3B		K06003R344520S		
<b>RESISTORS GROUP</b>							
R302H		00D 960 9009 270	R,METAL FILM 470-J,2W		C060047166520S		
R303H		00D 960 9009 270	R,METAL FILM 470-J,2W		C060047166520S		
R401		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
R403		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
R409		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
R458,459		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
R461		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
R463		00D 963 0128 007	R,METAL FILM 1K-J,1/4W		C060010263050S		
<b>CAPACITORS GROUP</b>							
C301		00D 963 0216 401	C,FILM 0.1UF-J/100V		D02010406C060S		
C301H		00D 963 0233 206	C,CERAMIC 0.001UF-K/50V		D005102177530S		
C302		00D 963 0020 202	C,CERAMIC 0.1UF-Z/50V		D005104597530S		
C302H		00D 963 0233 206	C,CERAMIC 0.001UF-K/50V		D005102177530S		

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
C303	nsp	00D 960 9010 366	C,ELECT 47UF-M/16V		D040470083070S		*
C303H	nsp	00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C304	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S		
C304H	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C305	nsp	00D 963 0311 005	C,ELECT 1UF-M/50V(Pb Free)		D040010087090S		
C305H		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		
C306		00D 963 9010 641	C,CERAMIC 0.047UF-K/16V		D011473773160S		
C307		00D 963 0021 900	C,FILM 0.047UF-J/100V		D02047306C060S		
C308		00D 963 0311 209	C,ELECT 10UF-M/50V		D040100087060S		
C309		00D 963 0020 202	C,CERAMIC 0.1UF-Z/50V		D005104597530S		
C310	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C311	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C312	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C313	nsp	00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C314	nsp	00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C315		00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C316		00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C317		00D 963 9010 641	C,CERAMIC 0.047UF-K/16V		D011473773160S		
C320		00D 963 0021 900	C,FILM 0.047UF-J/100V		D02047306C060S		
C321		00D 963 0311 005	C,ELECT 1UF-M/50V(Pb Free)		D040010087090S		
C401	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C402	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C403	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C404	nsp	00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C405	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C406	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C407	nsp	00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C408	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C409	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C410	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C411		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C412		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C413	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C414	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C416		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C417		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C418		00D 960 9010 010	C,ELECT GE 85C 4.7UF-M/50V		D0404R7087250S		
C420		00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C423		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C426		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C429		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C430		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C431		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		
C432		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C433	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
<b>OTHERS PARTS GROUP</b>							
BD401	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD402	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
CN302		00D 963 0314 400	CN,WIRE 240MM/3P		L000241030010S		
CN304		00D 963 0301 109	CN,WIRE 350MM/2P		L000351020160S		
CN310		00D 963 0314 808	CN,WIRE 60MM/8P		L000600080040S		
CN311		00D 963 0246 002	CN,WIRE 80MM/3P		L000800030110S	*	
CN418		00D 963 0334 707	CN,WIRE 300MM/14P		L000301140020S		*

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	CP301	nsp	00D 963 0161 006	CN.FPC 1.25MM 23P		L131102300010S		
	CP302	nsp	00D 963 0236 009	CN.WAFER 2.5MM 3P		L102526803010S		
	CP306	nsp	00D 963 0235 806	CN.WAFER 2.0MM		L101220030000S		
	CP401		00D 963 0149 303	CN.FPC 1.25MM 15P		L13111500010S		
	CP402	nsp	00D 963 0087 601	CN.WAFER 2.0MM 18P		L101100041810S		
	CP403	nsp	00D 963 0315 001	CN.WAFER 2.0MM 20P		L101100042010S		
	CP404	nsp	00D 963 0206 505	CN.WAFER 2.0MM 9P		L101100040910S		
	CP406	nsp	00D 963 0161 103	CN.FPC 1.25MM 23P		L131112300010S		
	CP408	nsp	00D 963 0060 709	CN.WAFER 2.0MM 8P		L101220080000S		
	CP410	nsp	00D 963 0087 504	CN.WAFER 2.0MM 19P		L101100041910S		
	CP411	nsp	00D 963 0315 001	CN.WAFER 2.0MM 20P		L101100042010S		
	CP413	nsp	00D 963 0087 601	CN.WAFER 2.0MM 18P		L101100041810S		
	CP414	nsp	00D 963 0097 507	CN.WAFER 2.0MM 15P		L101100041510S		
	CP415	nsp	00D 963 0097 507	CN.WAFER 2.0MM 15P		L101100041510S		
	CP416	nsp	00D 963 0206 505	CN.WAFER 2.0MM 9P		L101100040910S		
	CP419	nsp	00D 963 0235 806	CN.WAFER 2.0MM		L101220030000S		
	G301		-	RING,TER WIRE 120MM/1P		8410121010060S		*
	JK301	nsp	00D 963 0294 708	JACK,D6.5 PHONE		G402PJ612AG0YS		
	L301	nsp	00D 960 0128 008	COIL,INDUCTOR 100UH		D330101001020S		
	RMC301		00D 963 0217 808	COIL,INDUCTOR 100UH 38KHZ		E940343800010S		
	SW301-310		00D 963 0095 305	SW,TACT SKHV10910D01		G180040500010S		
	SW311		00D 963 0200 103	SW,TACT SKHV10920A		G180000270010S		
	SW312		00D 963 0095 305	SW,TACT SKHV10910D01		G180040500010S		
	SW313,314		00D 963 0200 103	SW,TACT SKHV10920A		G180000270010S		
⚠	SW315		00D 963 0095 305	SW,TACT SKHV10910D01		G180040500010S		
	SW316-322		00D 963 0200 103	SW,TACT SKHV10920A		G180000270010S		
	SW326		00D 963 0145 802	SW,PUSH SDDL-005-S(C-UL)		G000122006060S		
	VEC301		00D 963 0095 208	SW,ENCODER EC16B24SA		G121162400040S		
	VEC302		00D 963 0300 401	SW,ENCODER EC11B20C2		G121112020000S		
	FLT301		00D 963 0300 906	DISPLAY,FLT 16-ST-87GINK		K530168700010S		
	XTL401		00D 963 0217 701	RESONATOR ZTT12.00MT-TF		E83012000060S		
	JP402-404		00D 963 0258 003	R,CHIP 0-J,1/8W		C200000061300S		
	JP416-419		00D 963 0258 003	R,CHIP 0-J,1/8W		C200000061300S		
	JP422-428		00D 963 0258 003	R,CHIP 0-J,1/8W		C200000061300S		
			-	HOLDER FLT		4320210536000S		

**INPUT P.W.B. UNIT ASS'Y**

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>SEMICONDUCTORS GROUP</b>							
IC101		00D 963 0295 202	IC NJW1197		J084119700010S		
IC104-114		00D 963 0202 305	IC NJM2068M		J121206800020S		
IC115,116		00D 963 0116 103	IC MMT74HC4053MX		J040744053040S		
IC120		00D 963 0202 305	IC NJM2068M		J121206800020S		
Q151FL		00D 960 0196 807	TR 2SK117Y		J5441170Y0050S		
Q151FR		00D 960 0196 807	TR 2SK117Y		J5441170Y0050S		
Q152FL		00D 960 0196 807	TR 2SK117Y		J5441170Y0050S		
Q152FR		00D 960 0196 807	TR 2SK117Y		J5441170Y0050S		
Q153,154		00D 963 0121 402	TR KRA104S		J520010400210S		
Q155		00D 960 0285 006	TR KRC104S (ND)		J522104S00210S		
D151FL		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D151FR		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D152FL		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D152FR		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
ZD101,102		00D 963 0314 206	D,ZENER MTZJ7.5B		K06007R544520S		
<b>RESISTORS GROUP</b>							
R3		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
R432,433		00D 963 9005 668	R,METAL FILM 220-J,1W		C060022165050S		
R436,437		00D 963 9005 639	R,METAL FILM 100-J,1W		C060010165060S		
<b>CAPACITORS GROUP</b>							
C101,102	nsp	00D 963 0233 604	C,CERAMIC 220PF-J/50V		D010221167160S		
C103,104		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C105,106	nsp	00D 963 0312 305	C,ELECT 220UF-M/16V		D040221083110S		
C107,108		00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C109,110		00D 963 0216 605	C,FILM 0.024UF-J/50V		D020243167050S	*	
C111,112		00D 963 0216 809	C,FILM 0.0068UF-J/50V		D020682167050S	*	
C113,114		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C119,120	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C121	nsp	00D 963 9003 372	R,CHIP 0-J,1/16W		C20000006M160S		
C122		00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C123		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		
C124	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C126-128	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C130	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C131		00D 963 9003 372	R,CHIP 0-J,1/16W		C20000006M160S		
C132	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C133-146		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C147		00D 960 9010 010	C,ELECT GE 85C 4.7UF-M/50V		D0404R7087250S		
C148		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C149		00D 963 0276 108	C,CERAMIC 3300PF-K/50V		D011332777160S		
C150		00D 963 0310 909	C,ELECT GE 85C 1UF-M/50V		D040010087070S		
C151		00D 960 9010 010	C,ELECT GE 85C 4.7UF-M/50V		D0404R7087250S		
C152		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C153		00D 963 0276 108	C,CERAMIC 3300PF-K/50V		D011332777160S		
C154-161		00D 963 9005 862	C,ELECT GE 85C 47UF-M/16V		D040470083080S		
C162,163		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C164		00D 963 0310 909	C,ELECT GE 85C 1UF-M/50V		D040010087070S		
C165-172		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C173,174		00D 963 0333 203	C,ELECT 100UF-M/16V		D040101083090S		*

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
C175-177		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C180,181	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C182-184		00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C185,186		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C186FL		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C186FR		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C186L2		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C186L3		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C186R2		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C186R3		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C187		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C187L2		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C187L3		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C187R2		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C187R3		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C187SW	nsp	00D 963 0233 808	C,CERAMIC 47PF-J/50V		D010470167160S		
C188		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C188FL		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C188FR		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C188SW	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C189	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C189	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C189FL		00D 963 0216 605	C,FILM 0.024UF-J/50V		D020243167050S	*	
C189FR		00D 963 0216 605	C,FILM 0.024UF-J/50V		D020243167050S	*	
C189L2		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C189L3		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C189R2		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C189SW		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C190		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C190L2		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C190L3		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C190R2		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C190R3		00D 963 0333 106	C,FILM 0.068UF-K/63V		D020683078060S	*	
C191		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C192		00D 963 9005 875	C,ELECT 47UF-M/25V		D040470084070S		
C193		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C194,195		00D 963 9005 875	C,ELECT 47UF-M/25V		D040470084070S		
C196-203		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C204-219		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C220		00D 963 9005 875	C,ELECT 47UF-M/25V		D040470084070S		
C221,222		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
<b>OTHERS PARTS GROUP</b>							
CN102		00D 963 0314 303	CN,WIRE 180MM/4P		L000181040080S		
CP101	nsp	00D 963 0314 905	CN.WAFER 2.0MM 20P		L101100032010S		
CP102		00D 963 0086 204	CN.WAFER 2.0MM 19P		L101100031910S		
JACK103		00D 960 0268 803	TER,RCA 6PIN		G603603B09000S		
JACK104		00D 963 0146 209	TER,RCA 4PIN		G602405B01000S		
JACK106		00D 963 0158 501	TER,RCA 2PIN		G601207AE010YS		
L103-107	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
LUG101,102	nsp	00D 960 0260 005	CLAMP WIRE(SOLDER)		4330000120000S		

**XM-READY P.W.B. UNIT ASS'Y**

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>SEMICONDUCTORS GROUP</b>							
IC201		00D 960 0174 104	IC CXA1511M-T4		J030151100010S		*
IC203		00D 262 3517 907	IC F2602-1XM		J080260200010S		*
IC204		00D 262 2517 908	IC SN74LVO8APW		J040740800200S		*
IC205,206		00D 262 2813 903	IC SN74AHCT08		J040740800190S		*
IC207		00D 963 0294 902	IC AK4385		J042438500010S		
IC208		00D 963 0300 702	IC LM1117S-3.35V		J126111733030S		
IC209		00D 963 0202 305	IC NJM2068M		J121206800020S		
IC210		00D 263 1092 003	IC BA05T		J126050000020S		*
IC211		00D 262 2813 903	IC SN74AHCT08		J040740800190S		*
Q201		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q202		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q203		00D 963 0121 402	TR KRA104S		J520010400210S		
Q204		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q205		00D 963 0121 703	TR 2SA KRA107S (PH)		J5200107S0050S		
Q206		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q207		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
Q208-211		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q212		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q213		00D 963 0120 704	TR KRA102S(PB)		J520010200210S		
D201-209		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
ZD201		00D 960 0095 704	D,ZENER MTZJ6.2B		K06006R244520S		
<b>RESISTORS GROUP</b>							
R294,295		00D 963 9005 639	R,METAL FILM 100-J,1W		C060010165060S		
<b>CAPACITORS GROUP</b>							
C201		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C202		00D 963 0293 602	C,ELECT 1UF-M/50V (Pb Free)		D040010087150S		*
C203		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C204	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C205	nsp	00D 963 9006 528	C,CERAMIC 20PF-J/50V		D010200167160S		
C206	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C207	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C208	nsp	00D 963 9006 528	C,CERAMIC20PF-J/50V		D010200167160S		
C209	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C210,211	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C212	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C213	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C214-218	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C219		00D 960 9010 010	C,ELECT GE 85C 4.7UF-M/50V		D0404R7087250S		
C220		00D 963 0332 806	C,FILM 0.012UF-J/100V		D02012306C060S		*
C224		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C225,226		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C227		00D 963 0275 701	C,CERAMIC 6PF-D/50V		D010060117160S		
C228,229		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C230		00D 963 0275 701	C,CERAMIC 6PF-D/50V		D010060117160S		
C231		00D 963 0332 806	C,FILM 0.012UF-J/100V		D02012306C060S		*
C232		00D 963 9005 875	C,ELECT 47UF-M/25V		D040470084070S		
C233-236		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C237	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S		
C238		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
C239	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S		
C240		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C241		00D 963 0311 607	C,ELECT 100UF-M/10V(Pb Free)		D040101082090S		
C242	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C243	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S		
C244	nsp	00D 963 0233 808	C,CERAMIC 47PF-J/50V		D010470167160S		
C245,246	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C247	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C248,249		00D 963 0332 602	C,CERAMIC 3300PF-K/50V		D010332777160S		*
C250-253		00D 963 0224 008	C,CERAMIC 470PF-J/50V		D010471167160S		
C254		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C255,256		00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C257,258		00D 963 0312 208	C,ELECT 22UF-M/50V		D040220087100S		
C259,260	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C261,262	nsp	00D 963 9006 528	C,CERAMIC 20PF-J/50V		D010200167160S		
C263	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C264	nsp	00D 963 0224 105	C,CERAMIC 1000PF-K/50V		D011102777160S		
C265	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C266,267	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C268	nsp	00D 963 9004 698	C,CERAMIC 0.01UF-K/50V		D011103777160S		
C269-271	nsp	00D 963 0233 808	C,CERAMIC 47PF-J/50V		D010470167160S		
C272,273		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C274		00D 963 9003 372	R,CHIP 0-J,1/16W		C20000006M160S		
C275		00D 963 0312 004	C,ELECT 22UF-M/25V		D040220084050S		

**OTHERS PARTS GROUP**

BD201		00D 963 0312 800	COIL,LINE BFS2550A0F1		D320255000520S		
BD202	nsp	00D 963 0234 603	COIL,BEAD MB-160808		D340160800060S		
BD203-205	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD206		-	R,CHIP 1/10W		C200000060200S		
BD207	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD208		-	R,CHIP 1/10W		C200000060200S		
BD209	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD210-218	nsp	00D 963 0234 603	COIL,BEAD MB-160808		D340160800060S		
BD219,220	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD221		-	R,CHIP 1/10W		C200000060200S		
BD222-224	nsp	00D 963 0234 603	COIL,BEAD MB-160808		D340160800060S		
BD225	nsp	-	R,CHIP 1/10W		C200000060200S		
BD226	nsp	00D 963 0234 603	COIL,BEAD MB-160808		D340160800060S		
BD227	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
CN202		00D 963 0314 905	CN.WAFER 2.0MM 20P		L101100032010S		
CN203	nsp	00D 963 0086 301	CN.WAFER 18P		L101100031810S		
CP201	nsp	00D 963 0068 303	CN.WAFER 9P		L101220090000S		
GND201		-	SHIELD PLATE GND		3070045526010S		
JACK201,202		00D 963 0244 703	JACK,D3.5 EARPHONE		G40130802000YS		
JACK203		00D 205 1362 009	CN.WAFER 4P		L109040000010S		*
JACK204		00D 963 0294 601	JACK,D3.5 EARPHONE		G40100350000YS		
JACK205		00D 963 0146 005	TER,RCA 1PIN		G600107A0000YS		
JACK206		00D 963 0146 209	TER,RCA 4PIN		G602405B01000S		
XTAL201		00D 963 0313 304	CRYSTAL FCX-02(45.1584MHz)		E80545R150010S		

**MULTI P.W.B. UNIT ASS'Y**

Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>SEMICONDUCTORS GROUP</b>							
IC602		00D 963 0333 902	IC HIN202EIBN		J040202000020S		
IC603		00D 963 0334 008	IC SN74HAHCT08		J040740800180S		
Q607,608		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q611		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q612		00D 963 0121 402	TR KRA104S		J520010400210S		
Q613-616		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q617		00D 963 0255 802	TR 2SC KTC3199Y		J5023199Y0010S		
Q618		00D 963 0148 508	TR KTA1504S		J520015040150S		
Q619		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q620,621		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q622		00D 963 0121 402	TR KRA104S		J520010400210S		
Q623		00D 963 0245 003	TR 2SC KRC106S (NF)		J522010600210S		
Q639-642		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
Q701-704		00D 963 0044 301	TR KTC2875B(MB)		J5222875B0010S		
D601,602		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
D701,702		00D 963 0219 709	D,SWITCHING 1N4148W		K005041480020S		
ZD310,311		00D 960 0095 607	D,ZENER MTZJ5.6B		K06005R644520S		
ZD601		00D 963 0219 903	D,ZENER MTZJ16B		K06016R044520S		
ZD602		00D 963 0058 601	D,ZENER MTZJ12B		K06012R044520S		
ZD603		00D 963 0219 903	D,ZENER MTZJ16B		K06016R044520S		
LED303		00D 963 0148 605	LEDSML1216W(RED/GREEN)		K500052600030S		
<b>RESISTORS GROUP</b>							
R647		00D 963 0215 800	R,METAL FILM 390-J,1W		C060039165050S		
<b>CAPACITORS GROUP</b>							
C330,331		00D 963 0233 303	C,CERAMIC 0.01UF-M/16V		D005103773530S		
C615		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C618-621		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S		*
C622-625	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C626-629		00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C630		00D 963 0293 709	C,ELECT 100UF-M/10V		D040101082070S		
C631		00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C632	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C633,634	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
C635,636	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C646	nsp	00D 963 0244 606	C,ELECT 0.1UF-M/50V (Pb Free)		D040R10087080S		
C701,702	nsp	00D 963 0312 004	C,ELECT 22UF-M/25V		D040220084050S		
C703,704	nsp	00D 963 0223 601	C,CERAMIC 100PF-J/50V		D010101167160S		
C705,706	nsp	00D 963 0234 205	C,ELECT 10UF-M/50V		D040100087070S		
C707	nsp	00D 963 0332 709	C,CERAMIC 0.1UF-K/50V		D011104577162S	*	
<b>OTHERS PARTS GROUP</b>							
BD205	nsp	00D 963 0333 504	COIL,BEAD HB-1S1608		D340160800030S		
BD209	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
BD601	nsp	00D 963 0154 602	BEAD,COIL 3580-52RE-AX		7610010030000S		
BD602-604	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		

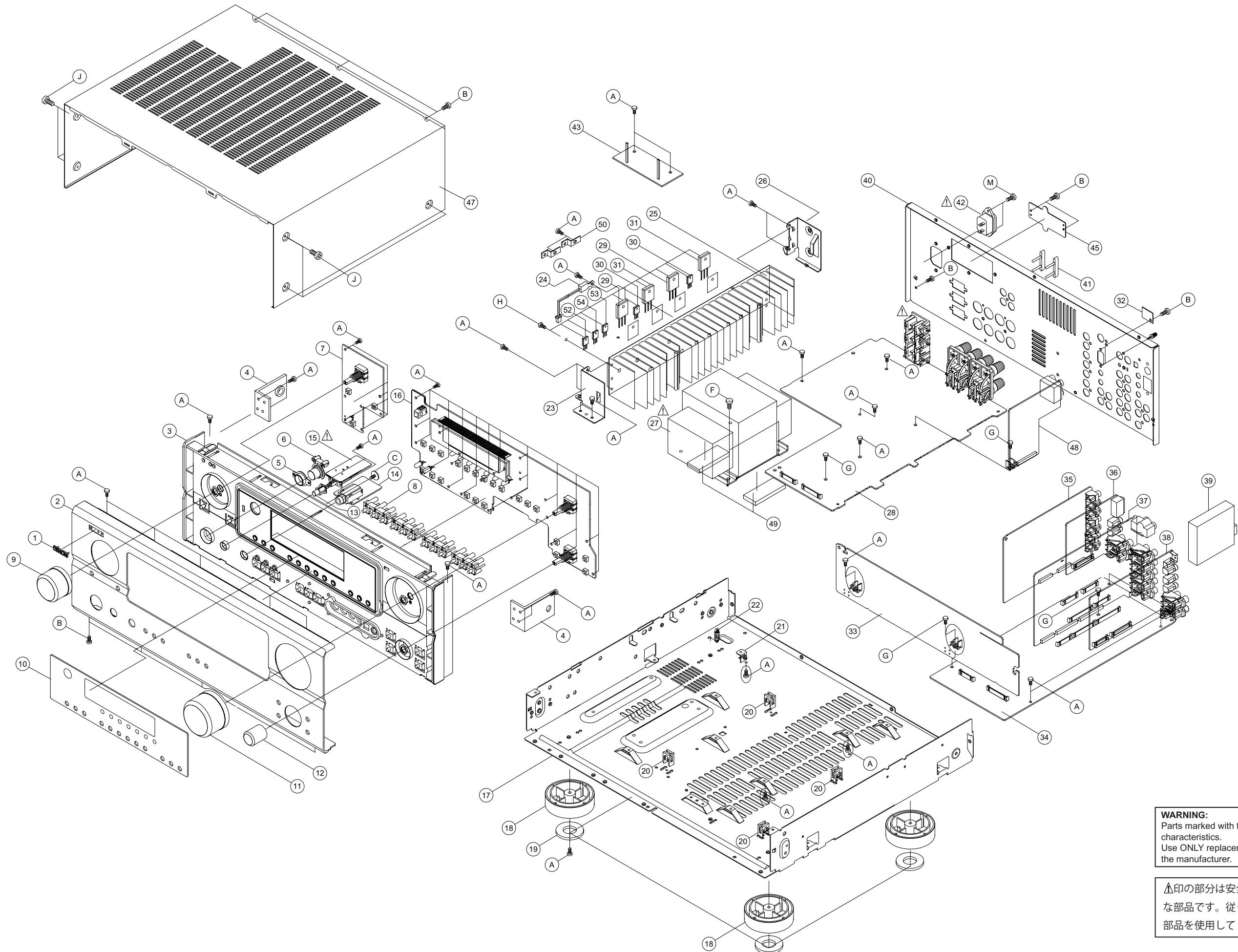
	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	BD605	nsp	00D 963 0154 602	BEAD,COIL 3580-52RE-AX		7610010030000S		
	BD606-609	nsp	00D 963 0220 002	BEAD,COIL 121JT		7611010000020S		
	CN602	nsp	00D 963 0086 301	CN.WAFER 18P		L101100031810S		
	CN603	nsp	00D 963 0085 506	CN.WAFER 9P		L101100030910S		
	CN701	nsp	00D 963 0097 206	CN.WAFER 8P		L101100030810S		
	CP305	nsp	00D 963 0160 900	CN.WAFER 2.0MM		L101220080010S		
	JACK605		00D 963 0146 209	TER,RCA 4PIN		G602405B01000S		
	JACK608		00D 963 0256 500	CN.WAFER 9P		L103090090030S		
	JACK609,610		00D 963 0325 606	JACK,D3.5 EARPHONE(RD)		G40130802001YS		
	JACK611		00D 963 0333 601	JACK,DIN MINI 8P		G403515397000S		*
	JACK701		00D 963 0132 103	TER,RCA 4PIN		G602405B0400YS		
	SW323		00D 963 0200 103	SW,TACT SKHV10920A		G180000270010S		
	SW328,329		00D 963 0200 103	SW,TACT SKHV10920A		G180000270010S		
	VEC305		00D 963 0095 208	SW,ENCODER EC16B24SA		G121162400040S		
		nsp	00D 960 0184 000	BRACKET SCREW		4010210196000S		

### CTN P.W.B. UNIT ASS'Y

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
<b>OTHERS PARTS GROUP</b>								
	CN407	nsp	00D 963 0097 303	CN.WAFER 2.0MM 15P		L101100031510S		
	CN409	nsp	00D 963 0097 303	CN.WAFER 2.0MM 15P		L101100031510S		
	CN506	nsp	00D 963 0097 303	CN.WAFER 2.0MM 15P		L101100031510S		
	CN511	nsp	00D 963 0097 303	CN.WAFER 2.0MM 15P		L101100031510S		
	CP901	nsp	00D 963 0235 903	CN.WAFER 2.0MM		L101220040000S		
	H901,902	nsp	00D 960 0184 000	BRACKET SCREW		4010210196000S		

## EXPLODED VIEW

DRA-697CI



**WARNING:**  
Parts marked with this symbol have critical characteristics.  
Use ONLY replacement parts recommended by the manufacturer.

印の部分は安全を維持するために重要な部品です。従って交換時は必ず指定の部品を使用してください。

## PARTS LIST OF EXPLODED VIEW

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。

\* The parts listed below are for maintenance only, might differ from the parts used in the unit in appearances or dimensions.

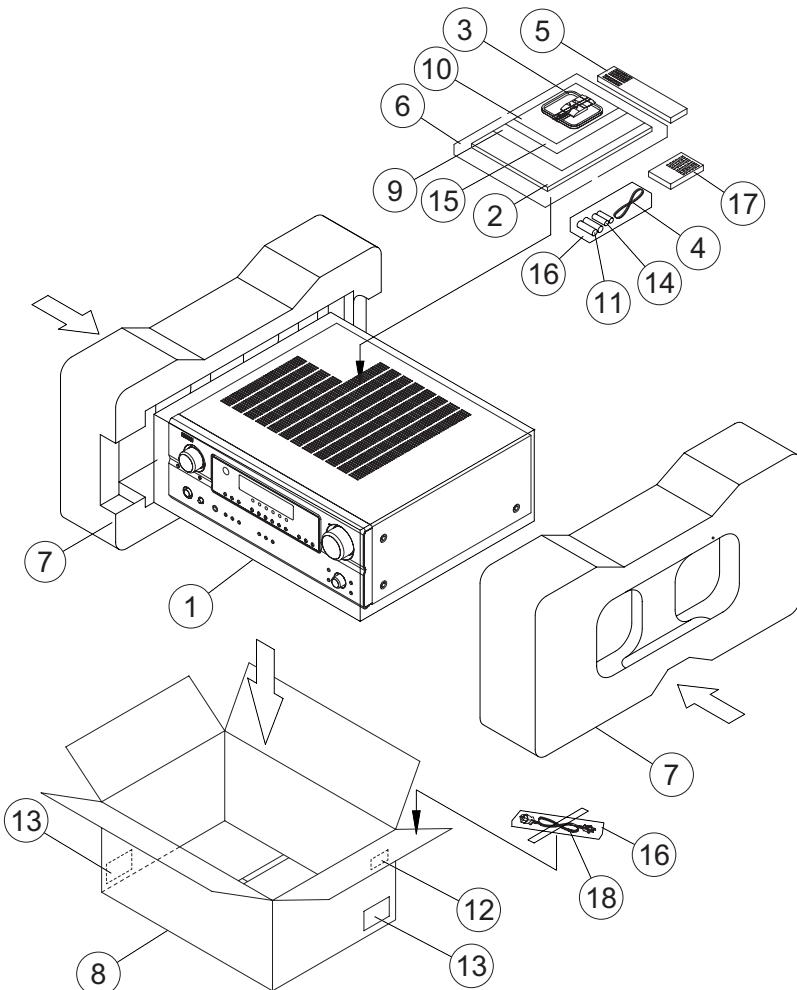
\* "nsp" 印の部品は常時在庫していませんので供給に長時間を要することがあります。場合によっては、供給をお断りする場合があります。

\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	16A 14 15 16 34	nsp	00D 963 0331 807	FRONT P.W.B. UNIT ASSY HEAD PHONE UNIT POWER SW UNIT FRONT UNIT CPU UNIT		7025HK0605011	1	*
	28A 28 35	nsp	00D 963 0331 700	MAIN P.W.B. UNIT ASSY MAIN UNIT VIDEO UNIT		7025HK0605010	1	*
	33A 33	nsp	00D 963 0332 204	CNT P.W.B. UNIT ASSY CNT UNIT		7025HK0605015	1	*
	36A 7	nsp	00D 963 0332 107	MULTI P.W.B. UNIT ASSY FUNCTION UNIT		7025HK0605014	1	*
	36 48			MULTI UNIT MAIN COUPLER				
	37A 37	nsp	00D 963 0331 904	INPUT2 P.W.B. UNIT ASSY INPUT2 UNIT		7025HK0605012	1	*
	43			GUIDE UNIT				
	38A 38	nsp	00D 963 0332 000	XM READY P.W.B. UNIT ASSY XM READY UNIT		7025HK0605013	1	*
	1 2 3 4	nsp	00D 963 0051 501 00D 963 0331 205 00D 963 0319 007 00D 963 0138 000	BADGE DENON PANEL FRONT FRAME FRONT BRACKET SIDE L/R		5630210028000S 3067211768300S 3217211241000S 4010211986000S	1 1 1 2	*
	5 6 8 9 10		00D 963 0137 807 00D 963 0184 106 00D 963 0094 801 00D 963 0152 303 00D 963 0305 600	LENS STANDBY BUTTON STANDBY BUTTON 3KEY(A) KNOB INPUT WINDOW DISPLAY		3710210503000S 5097212368000SZ 5090211741000S 5087210938000SZ 50772119220L0S	1 1 4 1 1	
	11 12 13 17 18	nsp	00D 963 0152 604 00D 963 0297 705 00D 963 0184 009 - 00D 963 0137 904	KNOB VOLUME KNOB SELECT(KD) BUTTON POWER CHASSIS MAIN FOOT		5087210948000SZ 5087211298000SZ 5097212358000SZ 3200210146306S 4007210261000S	1 1 1 1 4	
	19 20 21 22 23	nsp	00D 963 0214 607 00D 960 0003 301 00D 960 0184 107 - 00D 960 0184 301	CUSHION FOOT SUPPORTER PCB BRACKET SUPPORTER SUPPORTER P.C. BRACKET HEAT SINK-F		4050211295000S 4070001601010S 4010210206000S 4070210192000S 4010210396000S	4 4 1 1 1	
⚠	24 25 26 27 29	nsp	00D 960 0187 900 - 00D 960 0184 204 00D 963 0332 301 00D 963 0235 204	POSISTOR P43T7D330BW16 HEAT SINK MAIN BRACKET HEAT SINK-B POWER TRANS MAIN TR, 2SB1647Y	Q507FL, Q507FR	F320161001020S 2120210968200S 4010210386000S 8200990630010S J5011647Y0170S	1 1 1 1 2	*
	30		00D 963 0280 107	TR, 2SC3964	Q505FL, Q505FR	J502396400000S	2	

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	31		00D 963 0235 301	TR, 2SD2560Y	Q506FL, Q506FR	J5032560Y0170S	2	
	32		00D 963 0344 603	PLATE (A)		4477211146000S	1	*
	39		00D 963 0145 608	TUNER FM/AM		E903014000020S	1	
	40		-	CHASSIS BACK		3207211966000S	1	
⚠	41		00D 960 0190 007	CORD RCA JUMPER PLUG		L063040750000S	1	
	42		00D 963 0158 404	SOCKET POWER AC AC INLET		G430040560020S	1	
	45		00D 963 0315 807	PLATE TUNER B		4470211006010S	1	
	47	nsp	00D 963 01838 06	CABINET TOP		3000210026002S	1	
	49		00D 963 0331 302	CUSHION TRANS BOTTOM		4050211635000S	2	*
	50	nsp	00D 963 0101 600	BRACKET PCB		4010210186000S	2	
	52		00D 963 0334 503	IC,PQ20RX11	IC505	J126201100010S	1	*
	53		00D 963 0334 600	IC,KIA7815API	IC501	J126781500000S	1	*
	54		00D 963 0147 800	IC,KIA7915PI	IC502	J126791500030S	1	
	★ 55		-	TERMINAL		3790000090000S	1	
	★ 56		-	LABEL RATING		5527042410290S	1	
	★ 57		00D 963 0315 506	CABLE,FLAT CARD		L301171230020S	1	
	★ 58		00D 963 0315 603	CABLE,FLAT CARD 1.25MM		N712151743810S	1	
<b>SCREWS</b>								
	A	nsp	00D 963 0018 007	SCREW(3*8 B-TYPE ZNW/BH)		B020030081B10S	74	
	B	nsp	00D 960 0108 701	SCREW(3*10 B-TYPE(DOT) BK/BH)		B020030103B11S	35	
	C	nsp	00D 960 9008 420	SCREW( 3*8 ZnY WASHER PI12)		1500001456010S	1	
	F		00D 960 9008 417	SCREW(4*8 P+S-WASHER ZNW/BH)		B028940081B10S	4	
	G	nsp	00D 963 0018 104	SCREW(3*17 B-TYPE ZNW/BH)		B020030171B10S	4	
	H	nsp	00D 963 9006 175	SCREW(3*14 P(Φ6)+S-WASHER ZNY/HH)		B018230141H11S	9	
	J	nsp	00D 963 0048 307	SCREW(4*8 B-TYPE(DOT) BK/BH)		1500040083B10S	6	
	M	nsp	00D 963 9006 735	SCREW(3*10 B-TYPE BK/FH)		B020030103F10S	2	

## PACKING VIEW



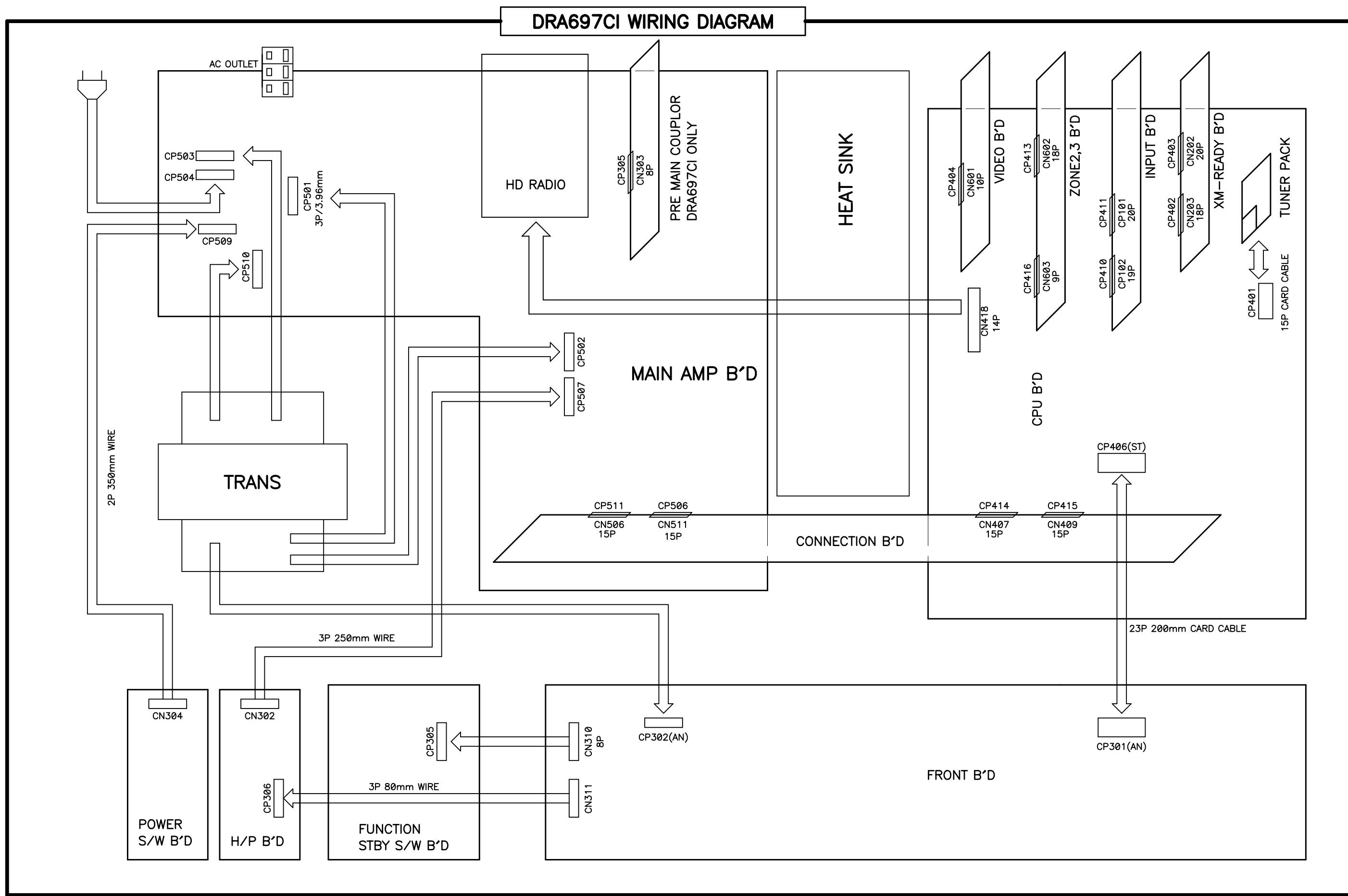
## PARTS LIST OF PACKING & ACCESSORIES

\* 本表に記載されている部品は、補修用部品のため製品に使用している部品とは一部、形状、寸法などが異なる場合があります。  
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\* Part indicated with the mark "nsp" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.

	Ref. No.	nsp	Part No.	Part Name	Remarks		Q'ty	New
	1	nsp	00D 963 0241 405	POLY BAG SET		6327040059000S	1	
	2		00D 963 0331 409	INSTRUCTION MANUAL		5707210130270S	1	*
	3		00D 231 0089 007	AM ANTENNA,WIRE		E605010110010S	1	
	4		00D 963 0158 006	FM ANTENNA,WIRE		E605010070001S	1	
	5		00D 963 0307 307	REMOTE CONTROL	RC-1052	8300105200010S	1	
	6	nsp	00D 963 0045 106	POLY BAG		6330000240000S	1	
	7	nsp	00D 963 0331 603	CUSHION SNOW L/R		6230210124002S	1	*
	8	nsp	00D 963 0331 506	BOX GIFT		6007210510310S	1	*
	9		-	CARD WARRANTY		5777001610036S	1	
	10		-	CARD S.S LIST		5777001620019S	1	
	11		-	BATTERY DRY		G670001R50210S	2	
	12		-	LABEL UPC		5507002360290S	1	
	13		-	LABEL CONTROL		5500014920010S	2	
	14		-	BATTERY,DRY		G670001R50190S	1	
	15		-	WARRANTY CARD XM RADIO		5727001230051S	1	
⚠	16	nsp	00D 963 0268 006	POLY BAG ACCESSORY		6330210222000S	2	
	17		00D 963 0310 307	REMOTE CONTROL(ZONE2 )	RC-1056	8300105600010S	1	
	18		00D 963 0330 002	CORD ASSY		L068125130010S	1	
★	19		00D 513 4162 000	CI STICKER			1	

## WIRING DIAGRAM



## NOTE FOR SCHEMATIC DIAGRAM

### WARNING:

Parts marked with this symbol  have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

### CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 millamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

### WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.

### NOTICE:

ALL RESISTANCE VALUES IN OHM.  $k=1,000$  OHM

$M=1,000,000$  OHM

ALL CAPACITANCE VALUES IN MICRO FARAD.

P=MICRO-MICRO FARAD

EACH VOLTAGE AND CURRENT ARE MEASURED AT  
NO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE  
WITHOUT PRIOR NOTICE.

## 配線図について

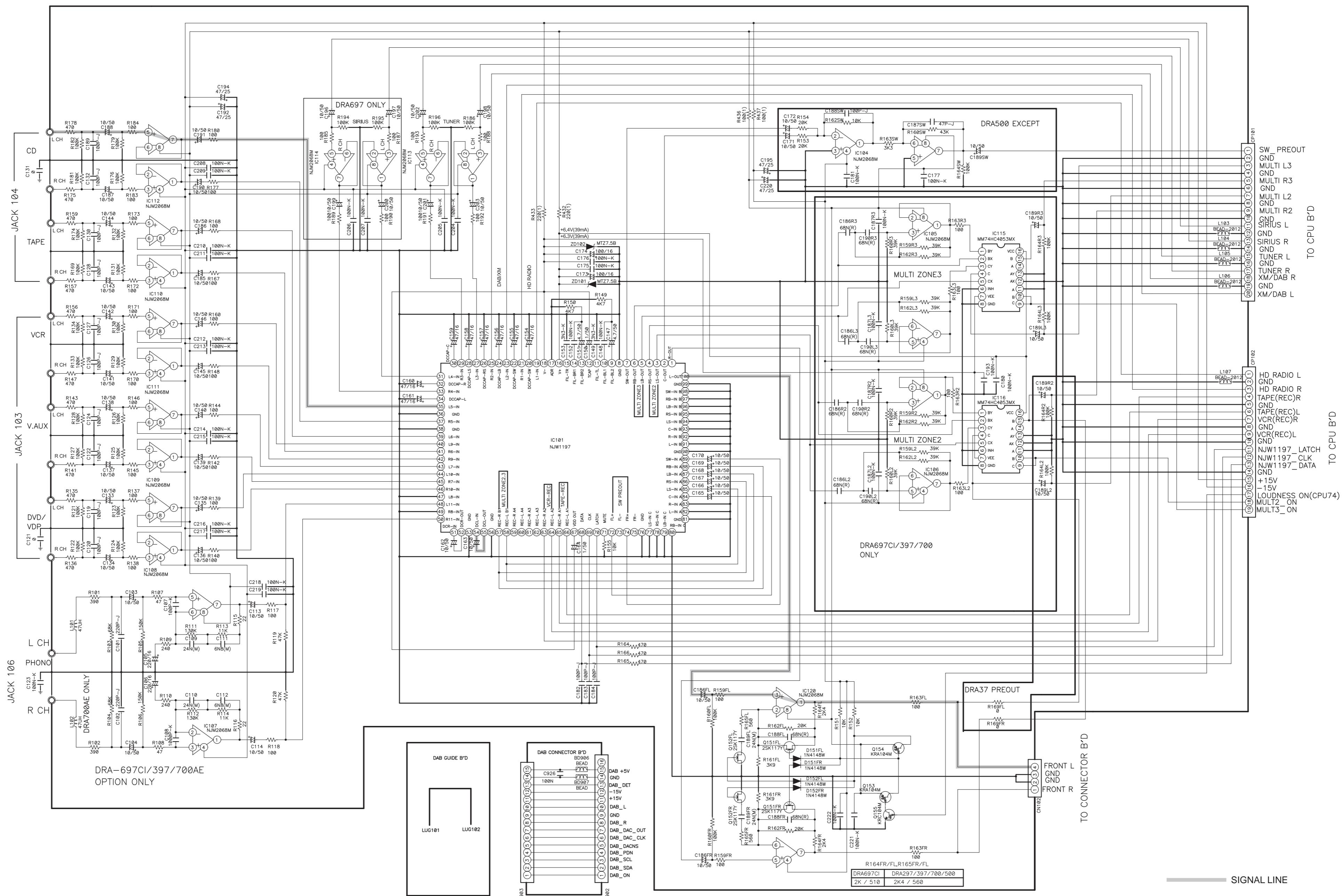
△印の部品は安全を維持するために重要な部品です。  
従って交換時は必ず指定の部品を使用してください。

### 注)

- (1) 指定なき抵抗値は  $\Omega$ 、k は  $k\Omega$ 、M は  $M\Omega$  を示す。
- (2) 指定なきコンデンサーの値は  $\mu F$ 、p は  $pF$  を示す。
- (3) 各部の電圧は無信号の値を示す。
- (4) この配線図は基本配線図です。改良等のため変更する  
ことがありますのでご了承ください。

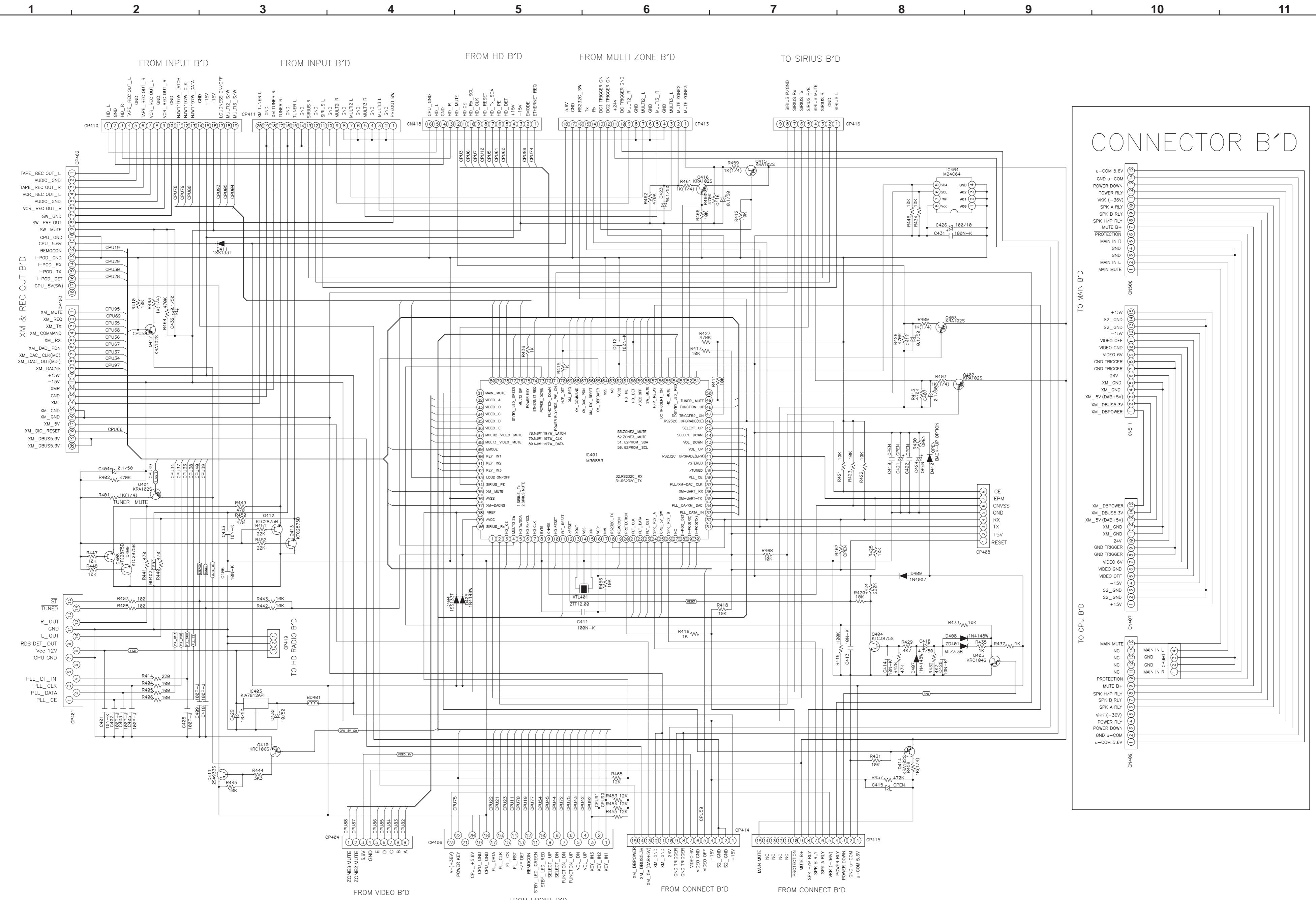
## SCHEMATIC DIAGRAMS (1/7)

1 2 3 4 5 6 7 8 9 10 11

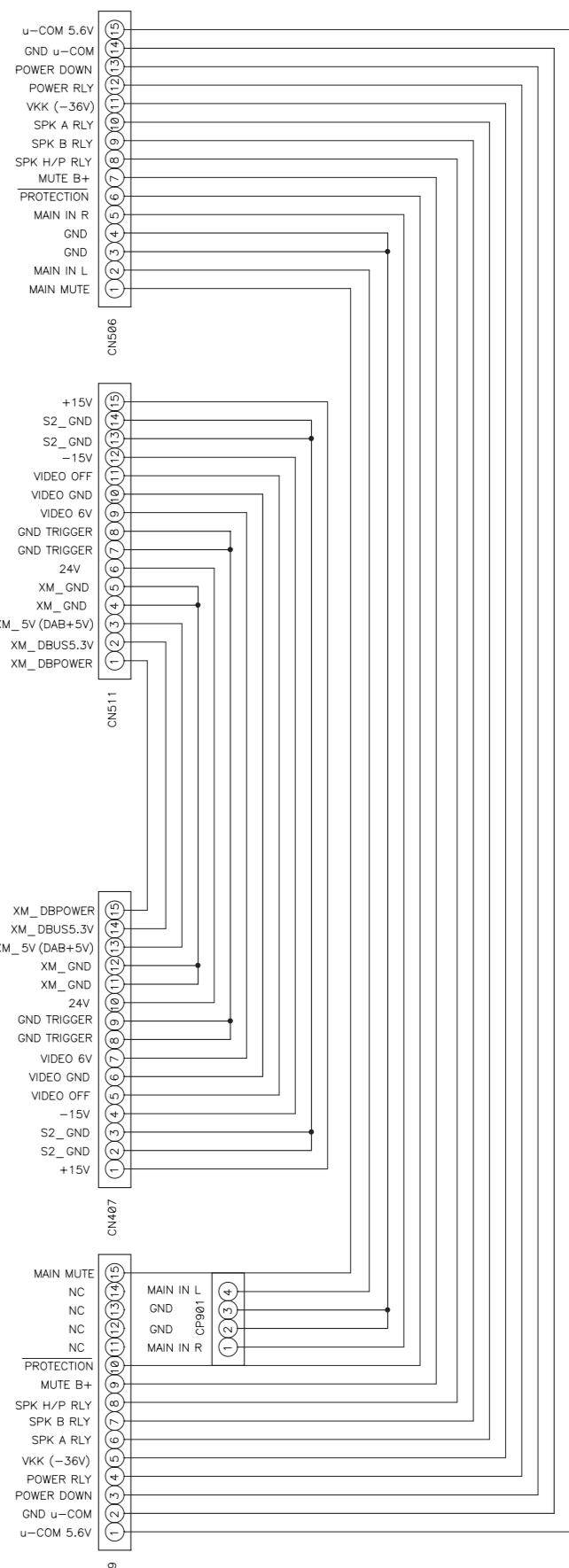


## SCHEMATIC DIAGRAMS (1/7) INPUT/GUIDE UNIT

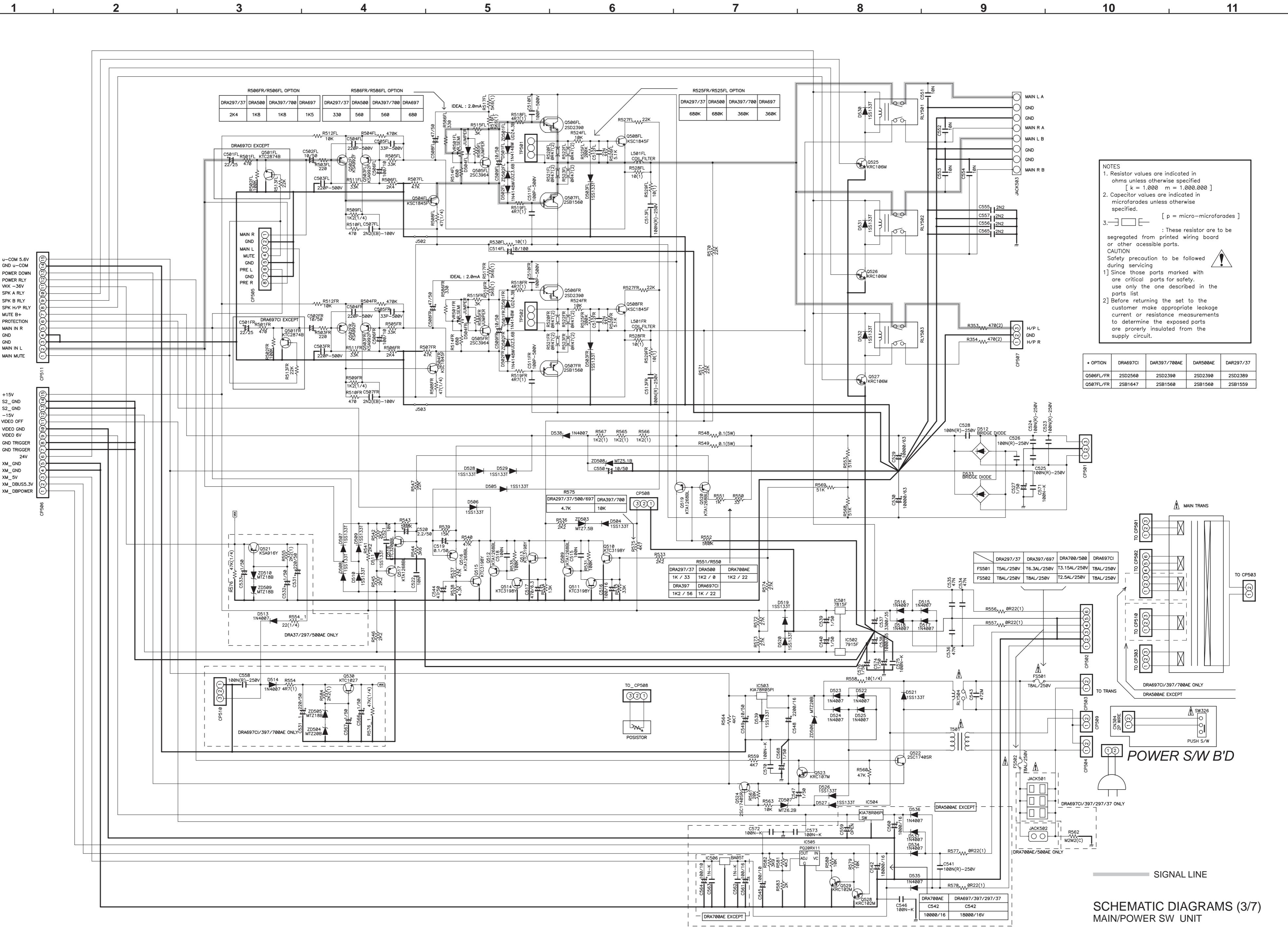
## SCHEMATIC DIAGRAMS (2/7)



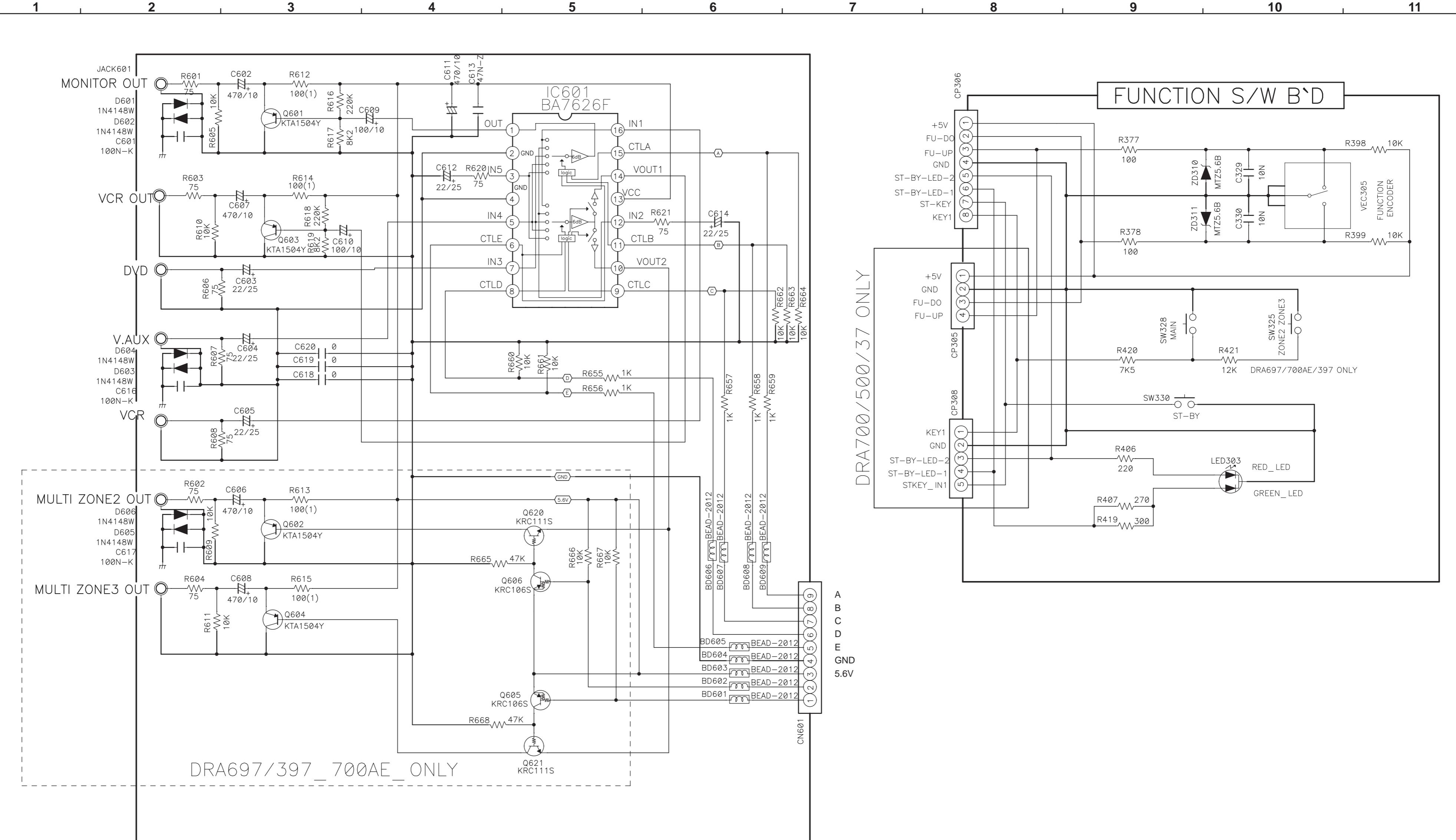
## CONNECTOR B'D

SCHEMATIC DIAGRAMS (2/7)  
CPU/CNT UNIT

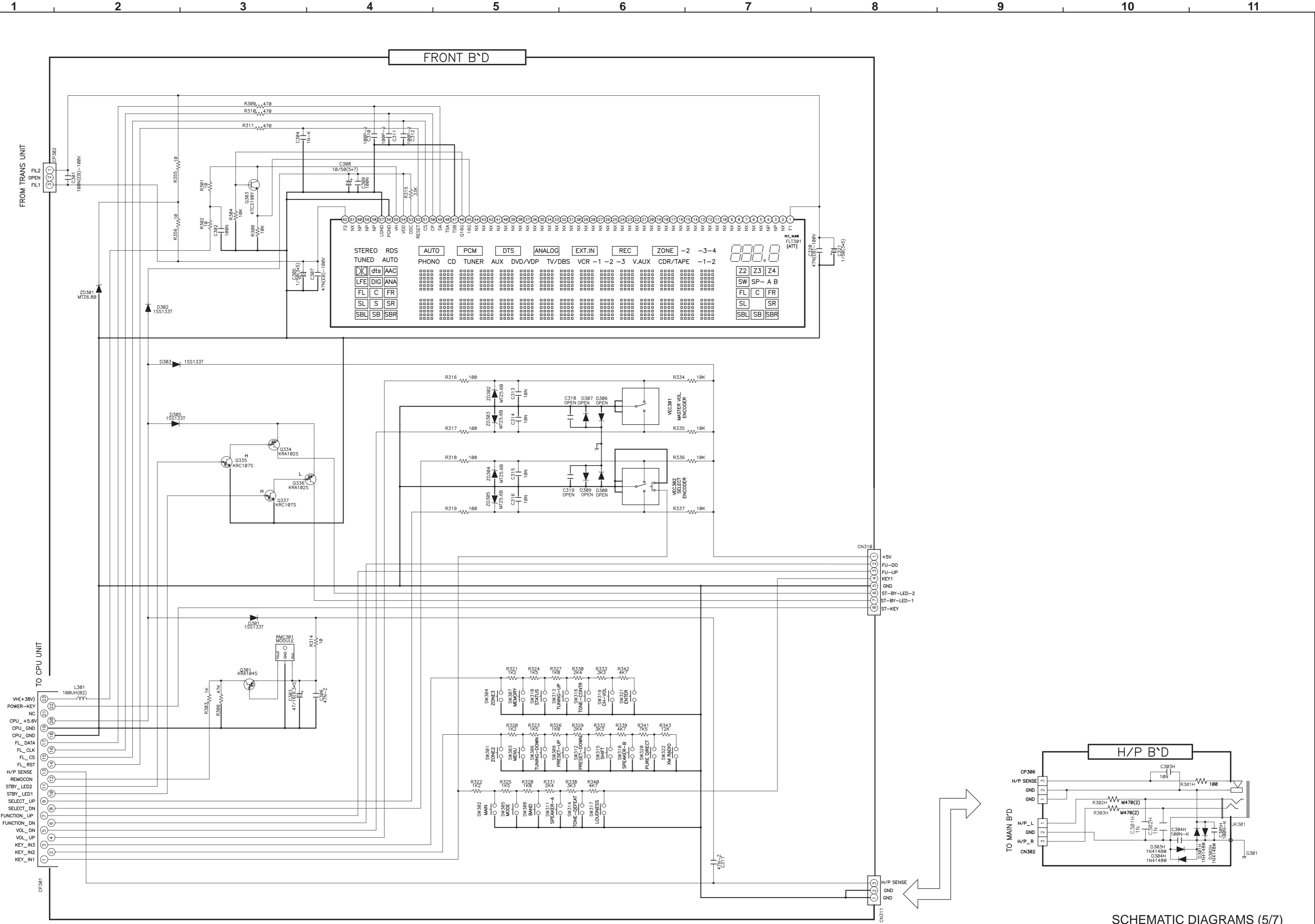
## SCHEMATIC DIAGRAMS (3/7)



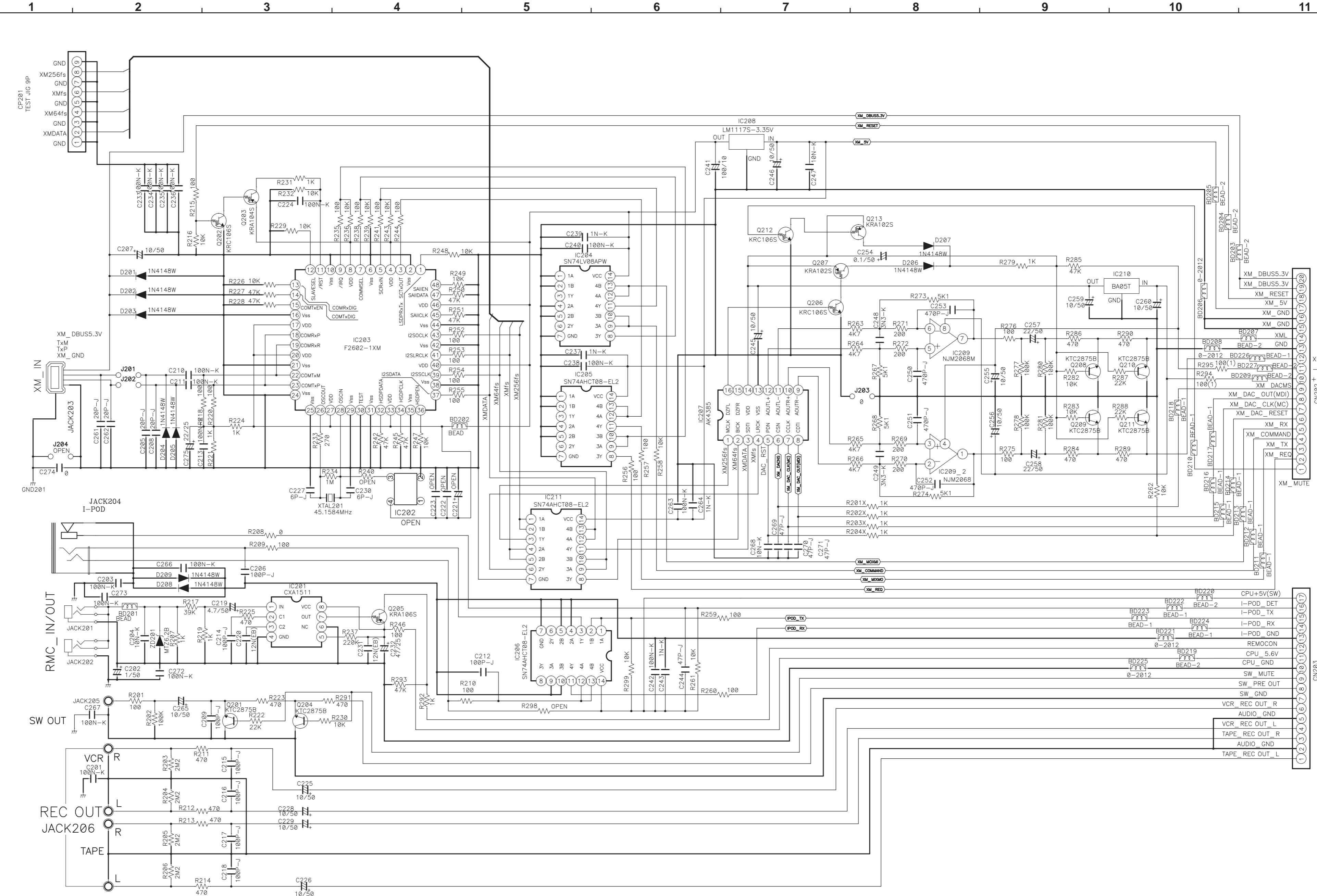
## SCHEMATIC DIAGRAMS (4/7)



## SCHEMATIC DIAGRAMS (5/7)



## **SCHEMATIC DIAGRAMS (6/7)**



## SCHEMATIC DIAGRAMS (6/7) XM READY UNIT

## SCHEMATIC DIAGRAMS (7/7)

