

SERVICE MANUAL

Ver. 1

MODEL AVR-M330

AV SURROUND 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おります。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, Ltd.

TOKYO, JAPAN

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 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

注意

サービス、点検時には次のことにご注意願います。

●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、絶縁トランス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。

●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△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！

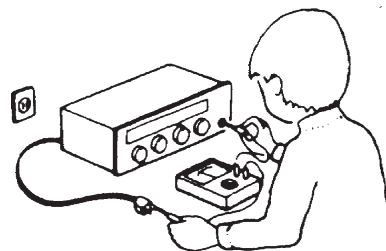
安全上、テープやチューブなどの絶縁材料を使用したり、プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランプによって発熱部品や高圧部品に接近しないように配慮されていますので、これらは必ず元どおりにしてください。

●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かなどを点検し、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1MΩ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

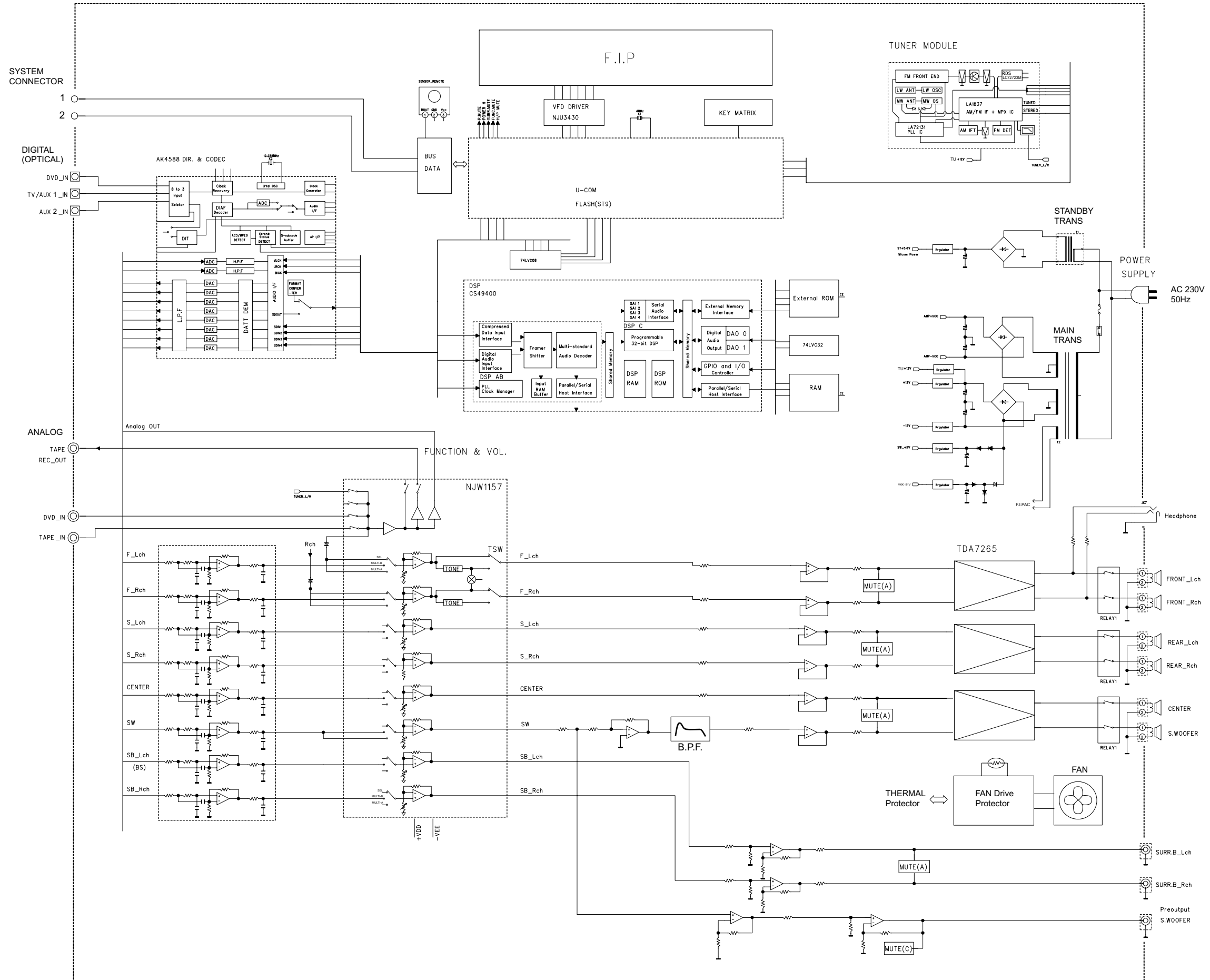
本機に使用している多くの電気部品、および機構部品は安全上、特別な特性を持っています。この特性はほとんどの場合、外観では判別つきにくく、また、もとの部品より高い定格（定格電力、耐圧）を持ったものを使用しても安全性が維持されるとは、限りません。安全上の特性を持った部品は、このサービスマニュアルの配線図、部品表につきのように表示していますので、必ず指定されている部品番号のものを使用願います。

(1) 配線図… △マークで表示しています。

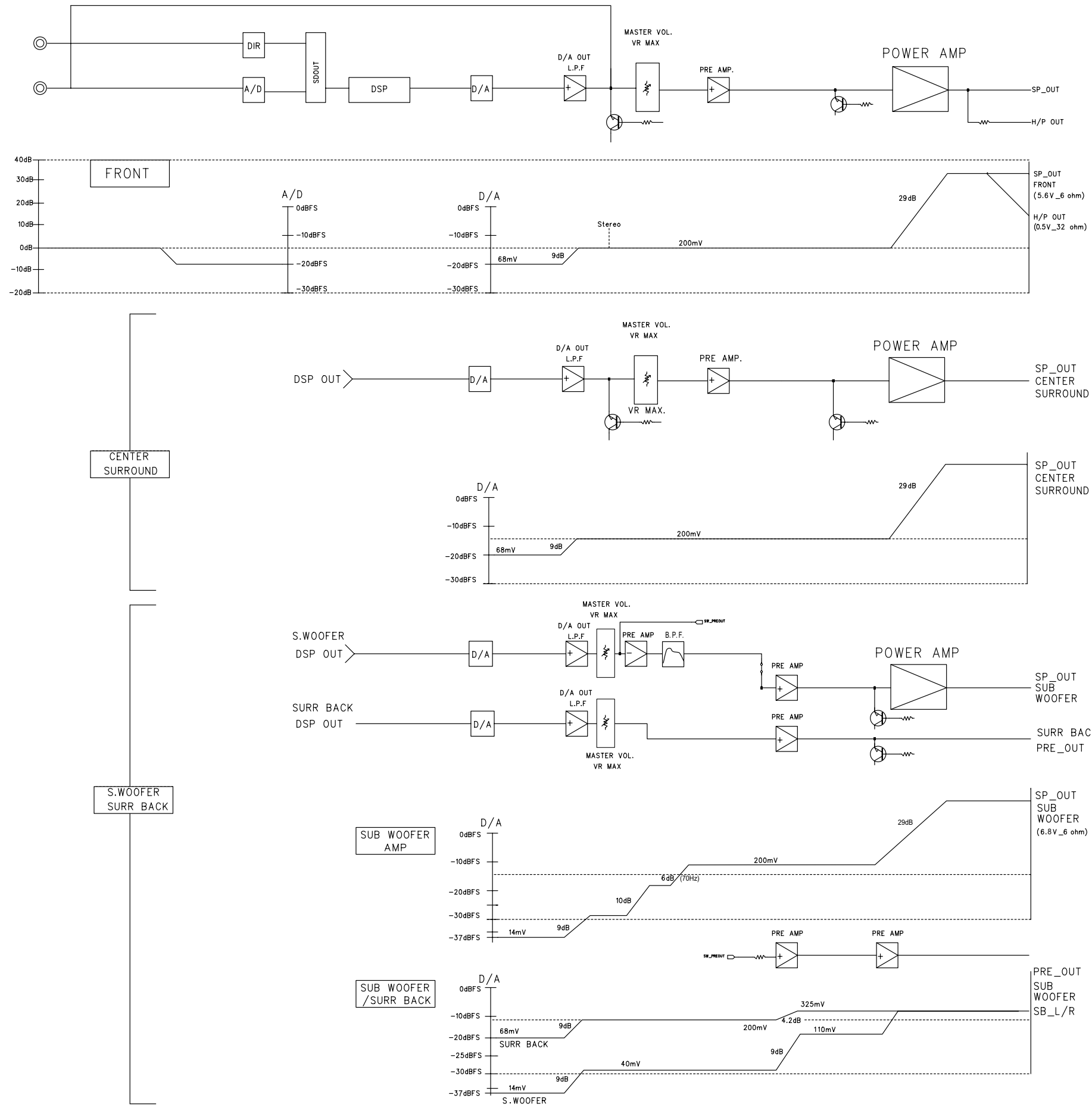
(2) 部品表… △マークで表示しています。

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。

BLOCK DIAGRAM



LEVEL DIAGRAM

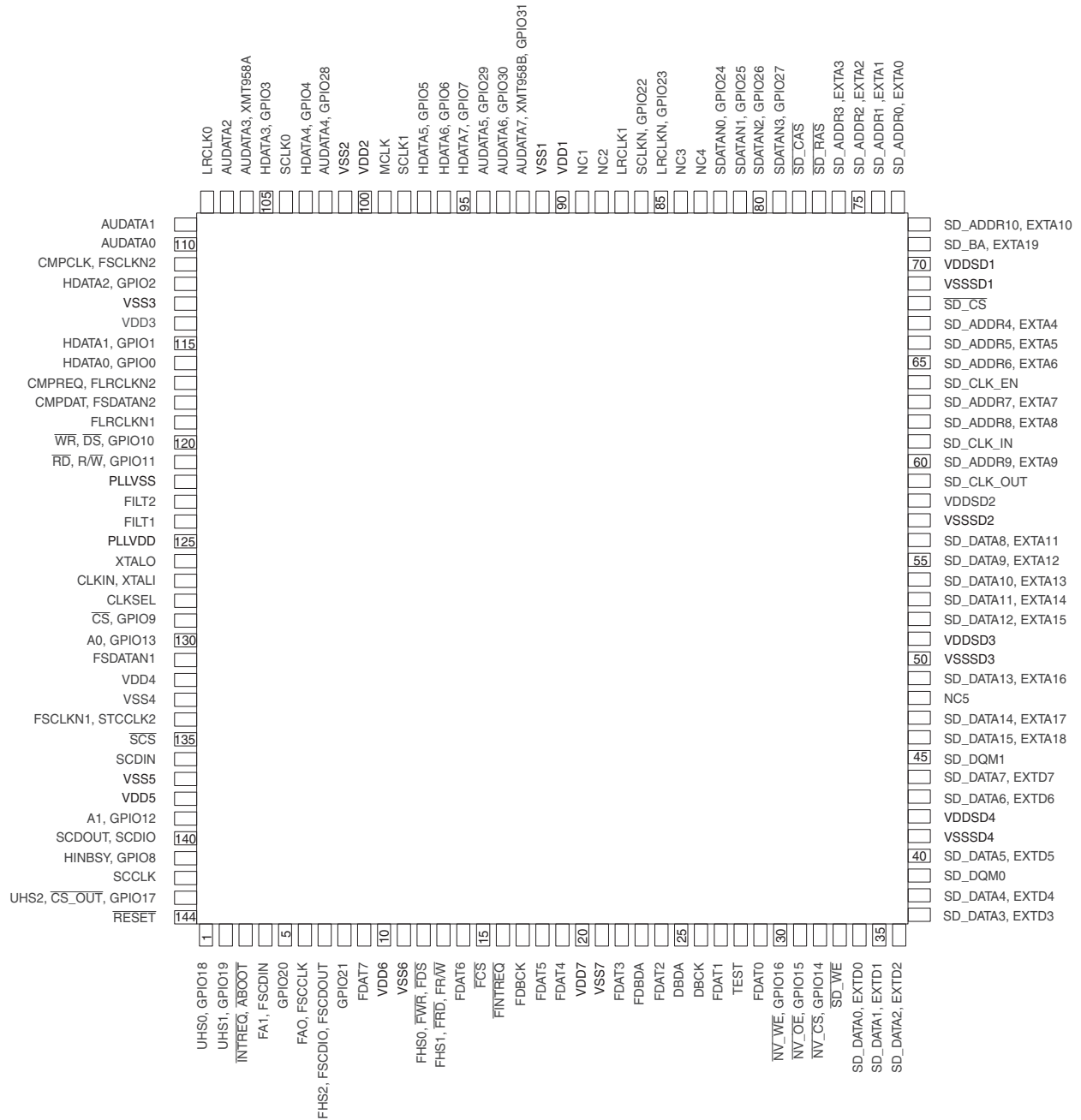


SEMICONDUCTORS/ 半導体一覧表

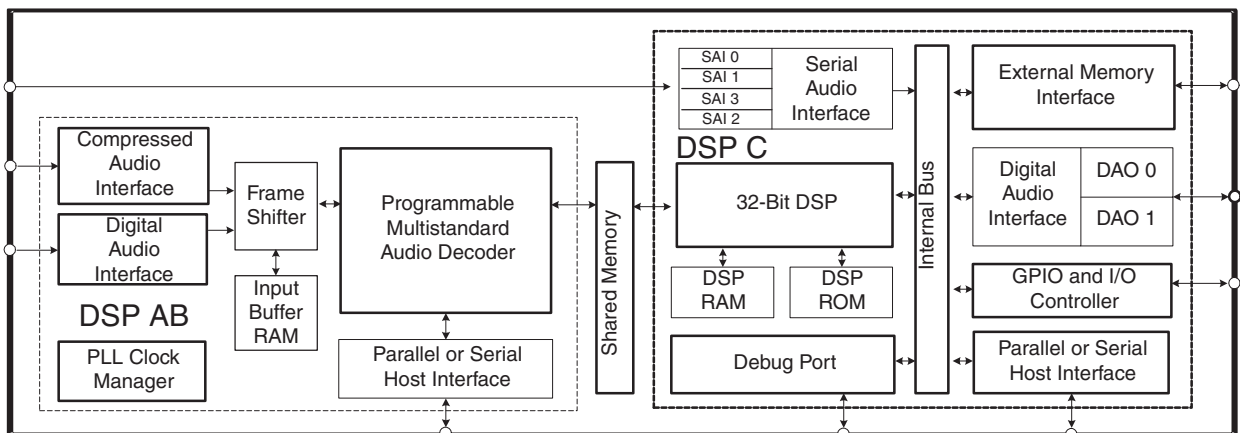
Only major semiconductors are shown, general semiconductors etc. are omitted to list.
 主な半導体を記載しています。汎用の半導体は記載を省略しています。

● IC's

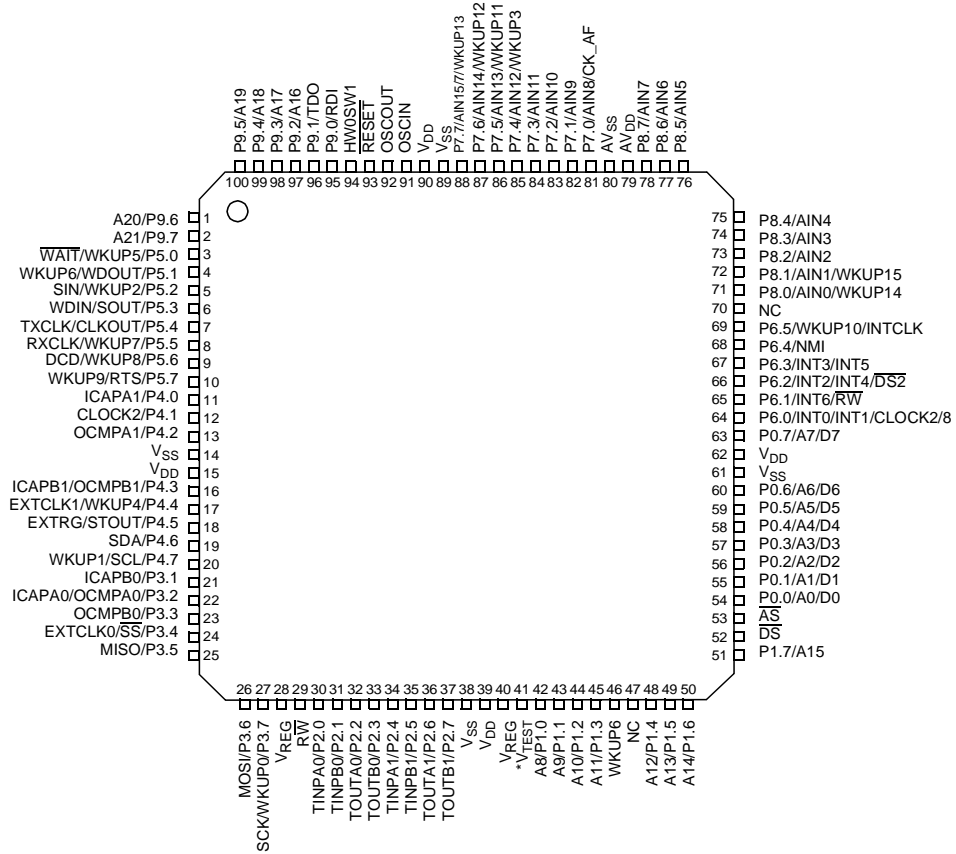
CS49400 (IC12)



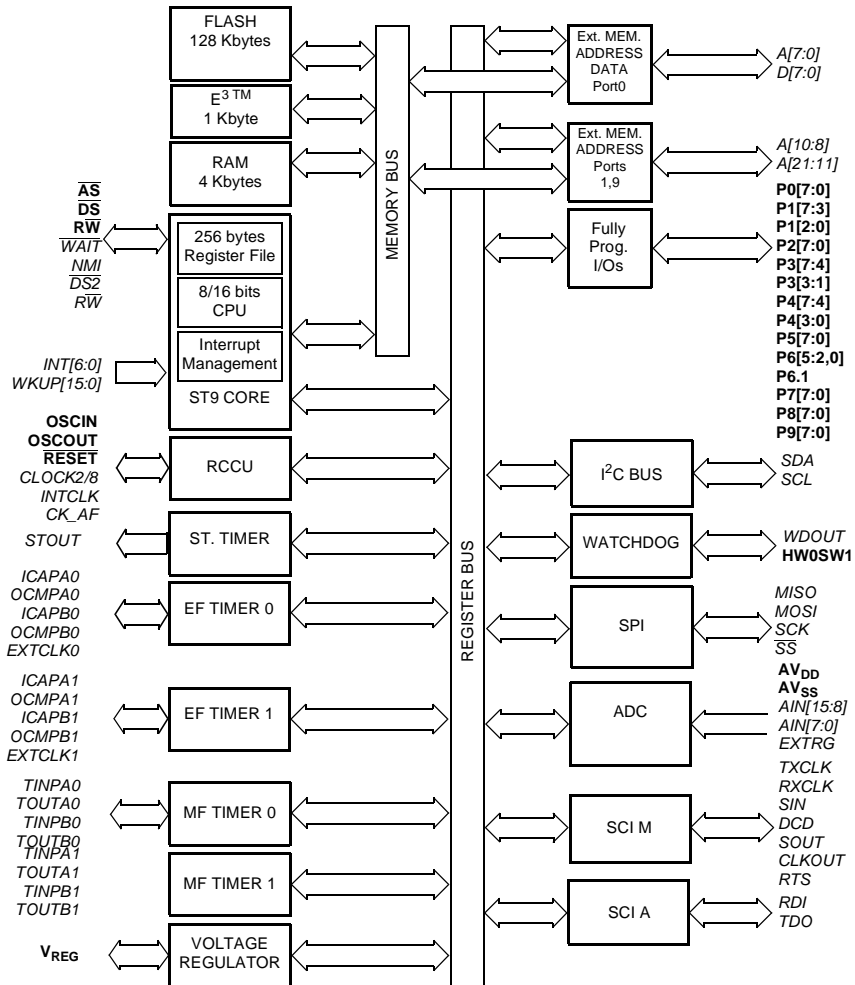
Block Diagram



ST92F124V1 (IC16)

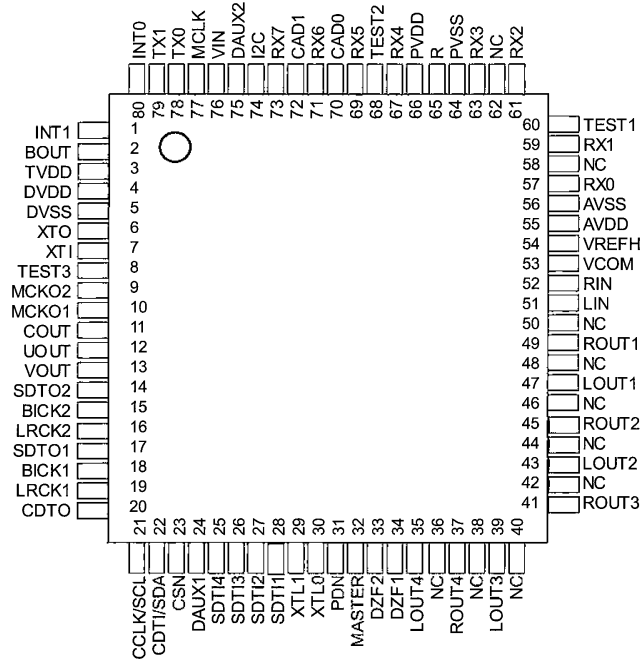


Block Diagram

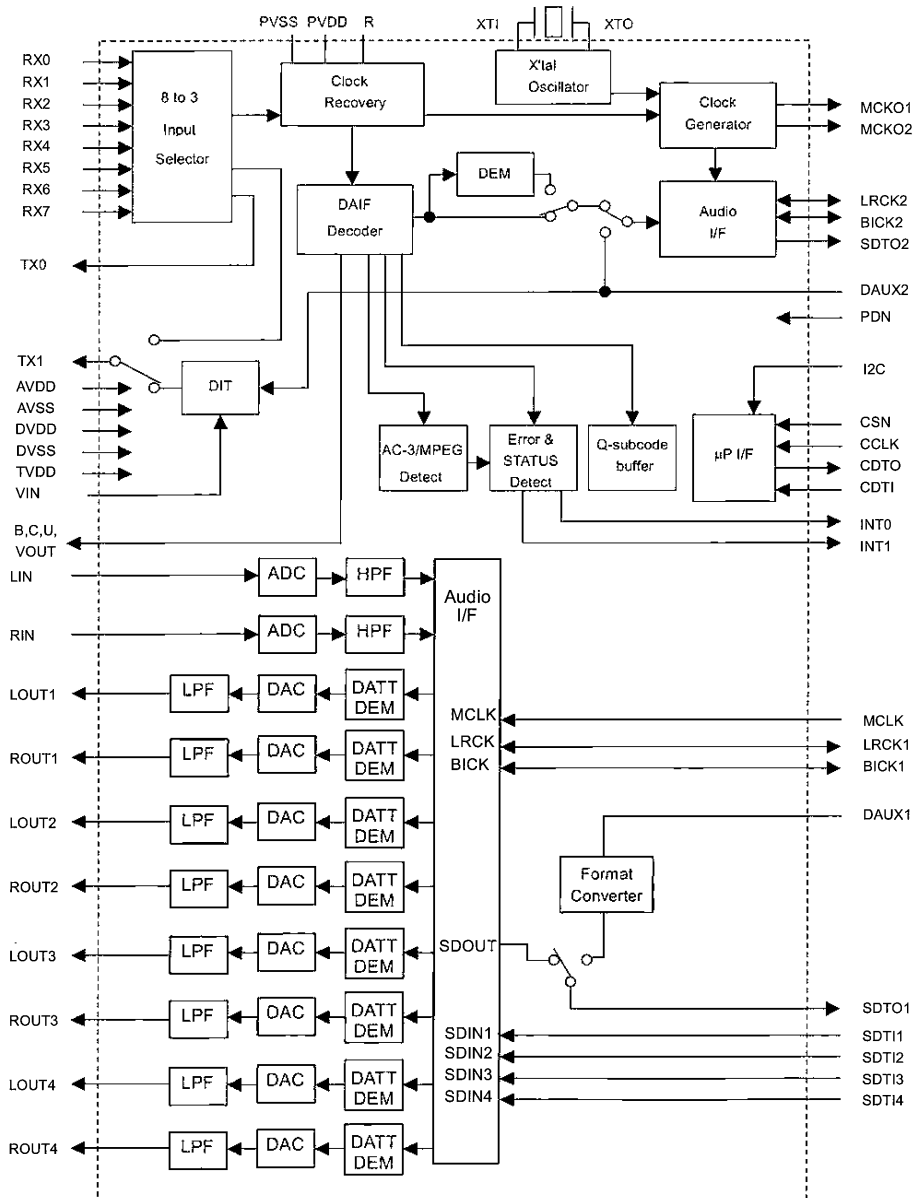


The alternate functions (*Italic characters*) are mapped on Port 0, Port 1, Port2, Port3, Port4, Port5, Port6, Port7, Port8 and Port9.

AK4588VQ (IC11)



Block Diagram



AK4588VQ Terminal Function

No.	Pin Name	I/O	Function
1	INT1	O	Interrupt 1 Pin
2	BOUT	O	Block-Start Output Pin for Receiver Input "H" during first 40 frames.
3	TVDD	-	Output Buffer Power Supply Pin, 2.7V~5.5V
4	DVDD	-	Digital Power Supply Pin, 4.5V~5.5V
5	DVSS	-	Digital Ground Pin
6	XTO	O	X'tal clock Output Pin
7	XTI	I	X'tal / External clock Input Pin
8	TEST3	I	Test 3 Pin This pin should be connected to DVSS.
9	MCKO2	O	Master Clock Output 2 Pin
10	MCKO1	O	Master Clock Output 1 Pin
11	COUT	O	C-bit Output Pin for Receiver Input
12	UOUT	O	U-bit Output Pin for Receiver Input
13	VOUT	O	V-bit Output Pin for Receiver Input
14	SDTO2	O	Audio Serial Data Output Pin (DIR/DIT part)
15	BICK2	I/O	Audio Serial Data Clock Pin (DIR/DIT part)
16	LRCK2	I/O	Channel Clock Pin (DIR/DIT part)
17	SDTO1	O	Audio Serial Data Output Pin (ADC/DAC part)
18	BICK1	I/O	Audio Serial Data Clock Pin (ADC/DAC part)
19	LRCK1	I/O	Input Channel Clock Pin
20	CDTO	O	Control Data Output Pin in Serial Mode, I2C pin="L".
21	CCLK	I	Control Data Clock Pin in Serial Mode, I2C pin="L"
	SCL	I	Control Data Clock Pin in Serial Mode, I2C pin="H"
22	CDTI	I	Control Data Input Pin in Serial Mode, I2C pin="L".
	SDA	I/O	Control Data Pin in Serial Mode, I2C pin="H".
23	CSN	I	Chip Select Pin in Serial Mode, I2C pin="L".
		I	This pin should be connected to DVSS, I2C pin="H".
24	DAUX1	I	AUX Audio Serial Data Input Pin (ADC/DAC part)
25	SDTI4	I	DAC4 Audio Serial Data Input Pin
26	SDTI3	I	DAC3 Audio Serial Data Input Pin
27	SDTI2	I	DAC2 Audio Serial Data Input Pin
28	SDTI1	I	DAC1 Audio Serial Data Input Pin
29	XTL1	I	X'tal Frequency Select 0 Pin
30	XTL0	I	X'tal Frequency Select 1 Pin

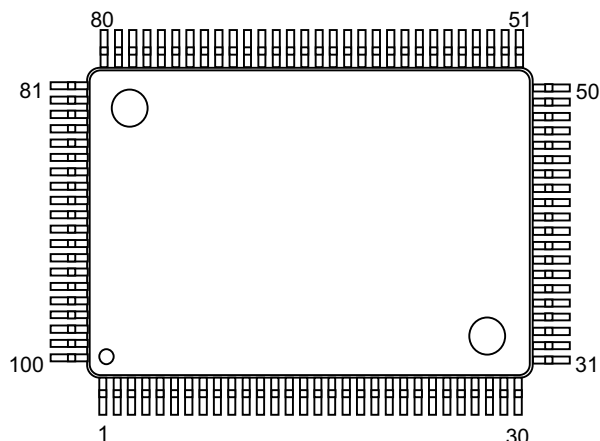
No.	Pin Name	I/O	Function
31	PDN	I	Power-Down Mode Pin When "L", the AK4588 is powered-down, all output pin goes "L", all registers are reset. When CAD1-0 pins are changed, the AK4588 should be reset by PDN pin.
32	MASTER	I	Master Mode Select Pin "H": Master mode, "L": Slave mode
33	DZF2	O	Zero Input Detect 2 Pin (Table 13) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". When RSTN1 bit is "0" or PWDAN bit is "0", this pin goes to "H".
	OVF	O	Analog Input Overflow Detect Pin This pin goes to "H" if the analog input of Lch or Rch overflows. This pin becomes OVF pin if OVFE bit is set to 1.
34	DZF1	O	Zero Input Detect 1 Pin (Table 13) When the input data of the group 1 follow total 8192 LRCK cycles with "0" input data, this pin goes to "H". When RSTN1 bit is "0" or PWDAN bit is "0", this pin goes to "H".
35	LOUT4	O	DAC4 Lch Analog Output Pin
36	NC	-	No Connect pin No internal bonding. This pin should be opened.
37	ROUT4	O	DAC4 Rch Analog Output Pin
38	NC	-	No Connect pin No internal bonding. This pin should be opened.
39	LOUT3	O	DAC3 Lch Analog Output Pin
40	NC	-	No Connect pin No internal bonding. This pin should be opened.
41	ROUT3	O	DAC3 Rch Analog Output Pin
42	NC	-	No Connect pin No internal bonding. This pin should be opened.
43	LOUT2	O	DAC2 Lch Analog Output Pin
44	NC	-	No Connect pin No internal bonding. This pin should be opened.
45	ROUT2	O	DAC2 Rch Analog Output Pin
46	NC	-	No Connect pin No internal bonding. This pin should be opened.
47	LOUT1	O	DAC1 Lch Analog Output Pin
48	NC	-	No Connect pin No internal bonding. This pin should be opened.
49	ROUT1	O	DAC1 Rch Analog Output Pin
50	NC	-	No Connect pin No internal bonding. This pin should be opened.
51	LIN	I	Lch Analog Input Pin
52	RIN	I	Rch Analog Input Pin
53	VCOM	-	Common Voltage Output Pin 2.2 μ F capacitor should be connected to AVSS externally.
54	VREFH	-	Positive Voltage Reference Input Pin, AVDD

No.	Pin Name	I/O	Function
55	AVDD	-	Analog Power Supply Pin, 4.5V~5.5V
56	AVSS	-	Analog Ground Pin, 0V
57	RX0	I	Receiver Channel 0 Pin (Internal biased pin. Internally biased at PVDD/2)
58	NC	-	No Connect pin No internal bonding. This pin should be connected to PVSS.
59	RX1	I	Receiver Channel 1 Pin (Internal biased pin. Internally biased at PVDD/2)
60	TEST1	I	Test 1 Pin This pin should be connected to PVSS.
61	RX2	I	Receiver Channel 2 Pin (Internal biased pin. Internally biased at PVDD/2)
62	NC	-	No Connect pin No internal bonding. This pin should be connected to PVSS.
63	RX3	I	Receiver Channel 3 Pin (Internal biased pin. Internally biased at PVDD/2)
64	PVSS	-	PLL Ground pin
65	R	-	External Resistor Pin 12k Ω +/-1% resistor should be connected to PVSS externally.
66	PVDD	-	PLL Power supply Pin, 4.5V~5.5V
67	RX4	I	Receiver Channel 4 Pin (Internal biased pin. Internally biased at PVDD/2)
68	TEST2	I	Test 2 Pin This pin should be connected to PVSS.
69	RX5	I	Receiver Channel 5 Pin (Internal biased pin. Internally biased at PVDD/2)
70	CAD0	I	Chip Address 0 Pin (ADC/DAC part)
71	RX6	I	Receiver Channel 6 Pin (Internal biased pin. Internally biased at PVDD/2)
72	CAD1	I	Chip Address 1 Pin (ADC/DAC part)
73	RX7	I	Receiver Channel 7 Pin (Internal biased pin. Internally biased at PVDD/2)
74	I2C	I	Control Mode Select Pin. “L”: 4-wire Serial, “H”: I ² C Bus
75	DAUX2	I	Auxiliary Audio Data Input Pin (DIR/DIT part)
76	VIN	I	V-bit Input Pin for Transmitter Output
77	MCLK	I	Master Clock Input Pin
78	TX0	O	Transmit Channel (Through Data) Output 0 Pin
79	TX1	O	Transmit Channel Output1 pin When TX bit = “0”, Transmit Channel (Through Data) Output 1 Pin. When TX bit = “1”, Transmit Channel (DAUX2 Data) Output Pin (Default).
80	INT0	O	Interrupt 0 Pin

Note : Please make no digital input pins except an internal bias pins into floating.

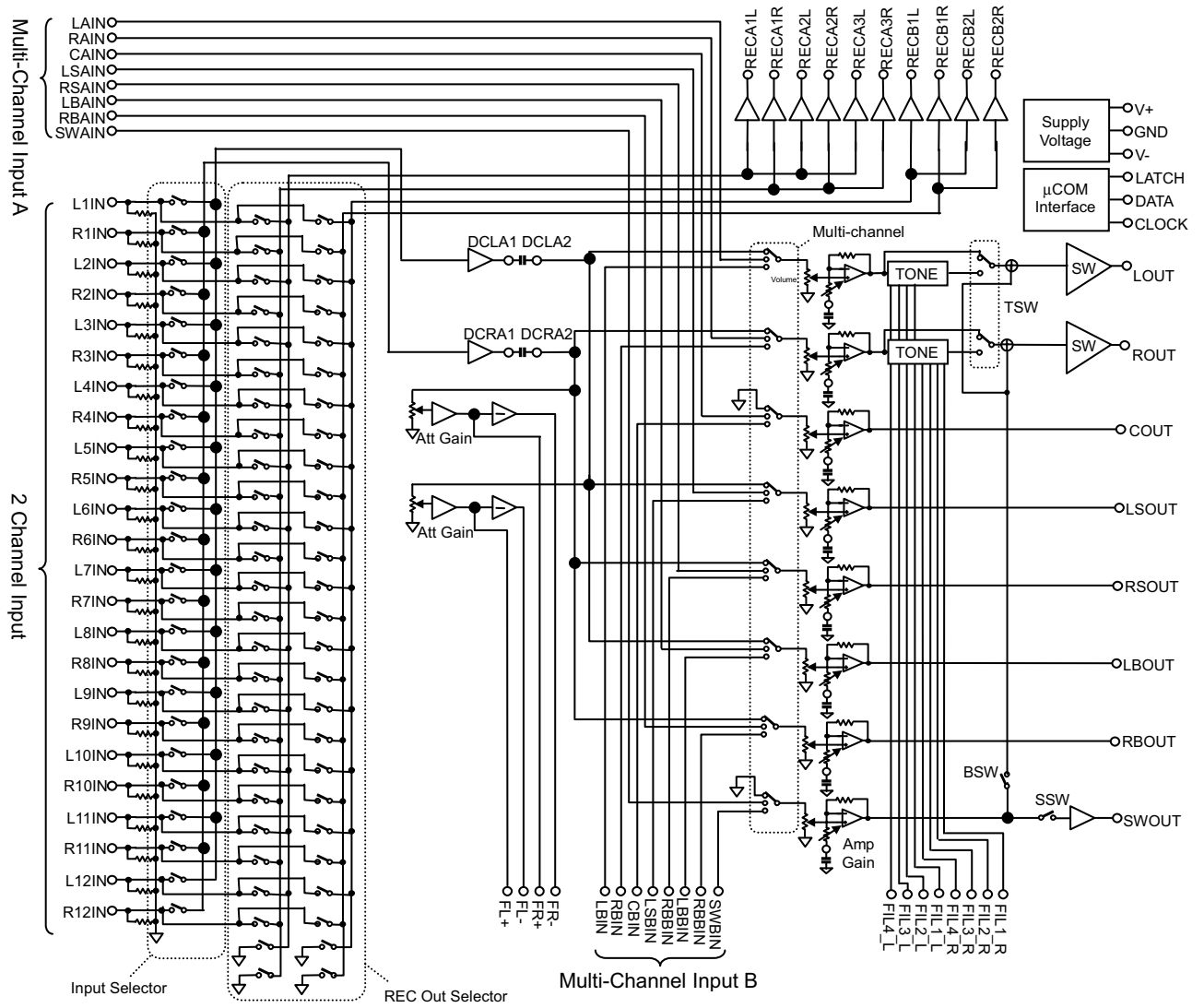
NJW1157 (IC73)

■ PIN FUNCTION

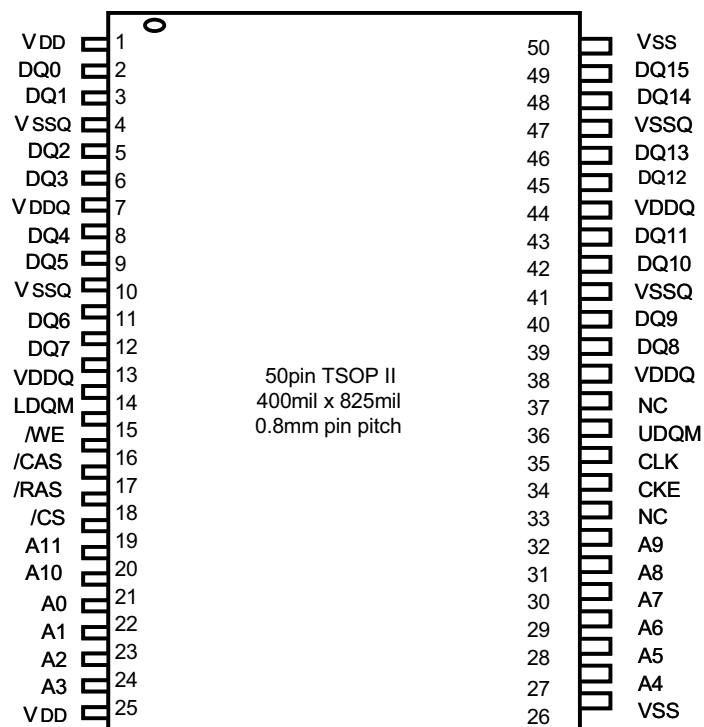


No.	SYMBOL	FUNCTION	No.	SYMBOL	FUNCTION
1	LOUT	Lch output	51	L11IN	"Input selector" Lch input 1
2	ROUT	Rch output	52	R11IN	"Input selector" Rch input 1
3	COUT	Cch output	53	L2IN	"Input selector" Lch input 2
4	LSOUT	LSch output	54	R2IN	"Input selector" Rch input 2
5	RSOUT	RSch output	55	L3IN	"Input selector" Lch input 3
6	LBOUT	LBch output	56	R3IN	"Input selector" Rch input 3
7	RBOUT	RBch output	57	L4IN	"Input selector" Lch input 4
8	SWOUT	SWch output	58	R4IN	"Input selector" Rch input 4
9	DC_L1	Lch Bass filter DC cut capacitor output terminal	59	L5IN	"Input selector" Lch input 5
10	DC_L2	Lch Bass filter DC cut capacitor input terminal	60	R5IN	"Input selector" Rch input 5
11	FIL_BL	Lch Bass filter terminal	61	L6IN	"Input selector" Lch input 6
12	FIL_TL	Lch Treble filter terminal	62	R6IN	"Input selector" Rch input 6
13	DC_R1	Rch Bass filter DC cut capacitor output terminal	63	L7IN	"Input selector" Lch input 7
14	DC_R2	Rch Bass filter DC cut capacitor input terminal	64	R7IN	"Input selector" Rch input 7
15	FIL_BR	Rch Bass filter terminal	65	L8IN	"Input selector" Lch input 8
16	FIL_TR	Rch Treble filter terminal	66	R8IN	"Input selector" Rch input 8
17	N.C.	No Connect	67	L9IN	"Input selector" Lch input 9
18	N.C.	No Connect	68	R9IN	"Input selector" Rch input 9
19	V+	+ Power supply voltage input	69	L10IN	"Input selector" Lch input 10
20	V-	- Power supply voltage input	70	R10IN	"Input selector" Rch input 10
21	REC_A1L	"Input selector" Lch REC output A1	71	L11IN	"Input selector" Lch input 11
22	REC_A1R	"Input selector" Rch REC output A1	72	R11IN	"Input selector" Rch input 11
23	REC_A2L	"Input selector" Lch REC output A2	73	L12IN	"Input selector" Lch input 12
24	REC_A2R	"Input selector" Rch REC output A2	74	R12IN	"Input selector" Rch input 12
25	REC_A3L	"Input selector" Lch REC output A3	75	N.C.	No Connect
26	REC_A3R	"Input selector" Rch REC output A3	76	DGND	Digital Ground
27	REC_B1L	"Input selector" Lch REC output B1	77	DATA	Control data signal input
28	REC_B1R	"Input selector" Rch REC output B1	78	CLOCK	Clock signal input
29	REC_B2L	"Input selector" Lch REC output B2	79	LATCH	Latch signal input
30	REC_B2R	"Input selector" Rch REC output B2	80	LAIN	Multi-channel Lch input A
31	DCCAP_L	Switching noise rejection capacitor	81	RAIN	Multi-channel Rch input A
32	DCCAP_R	Switching noise rejection capacitor	82	CAIN	Multi-channel Cch input A
33	DCCAP_C	Switching noise rejection capacitor	83	LSAIN	Multi-channel LSch input A
34	GND	Ground	84	RSAIN	Multi-channel RSch input A
35	GND	Ground	85	LBAIN	Multi-channel LBch input A
36	DCCAP_LS	Switching noise rejection capacitor	86	RBAIN	Multi-channel RBch input A
37	DCCAP_RS	Switching noise rejection capacitor	87	SWAIN	Multi-channel SWch input A
38	DCCAP_LB	Switching noise rejection capacitor	88	LBIN	Multi-channel Lch input B
39	DCCAP_RB	Switching noise rejection capacitor	89	RBIN	Multi-channel Rch input B
40	DCCAP_SW	Switching noise rejection capacitor	90	CBIN	Multi-channel Cch input B
41	DCL_OUT	"Input selector" Lch output	91	LSBIN	Multi-channel LSch input B
42	DCL_IN	"Multi-channel selector" Lch input	92	RSBIN	Multi-channel RSch input B
43	DCR_OUT	"Input selector" Rch output	93	LBBIN	Multi-channel LBch input B
44	DCR_IN	"Multi-channel selector" Rch input	94	RBBIN	Multi-channel RBch input B
45	FL+	"Input selector gain control" Lch no-inverted output	95	SWBIN	Multi-channel SWch input B
46	FL-	"Input selector gain control" Lch inverted output	96	GND	Ground
47	FR+	"Input selector gain control" Rch no-inverted output	97	GND	Ground
48	FR-	"Input selector gain control" Rch inverted output	98	VSSOUT2	Internal Digital -Power Supply Output 2
49	VDDOUT	Internal Digital +Power Supply Output	99	VDDOUT2	Internal Digital +Power Supply Output 2
50	VSSOUT	Internal Digital -Power Supply Output	100	TCCAP	Switching noise rejection capacitor

Block Diagram



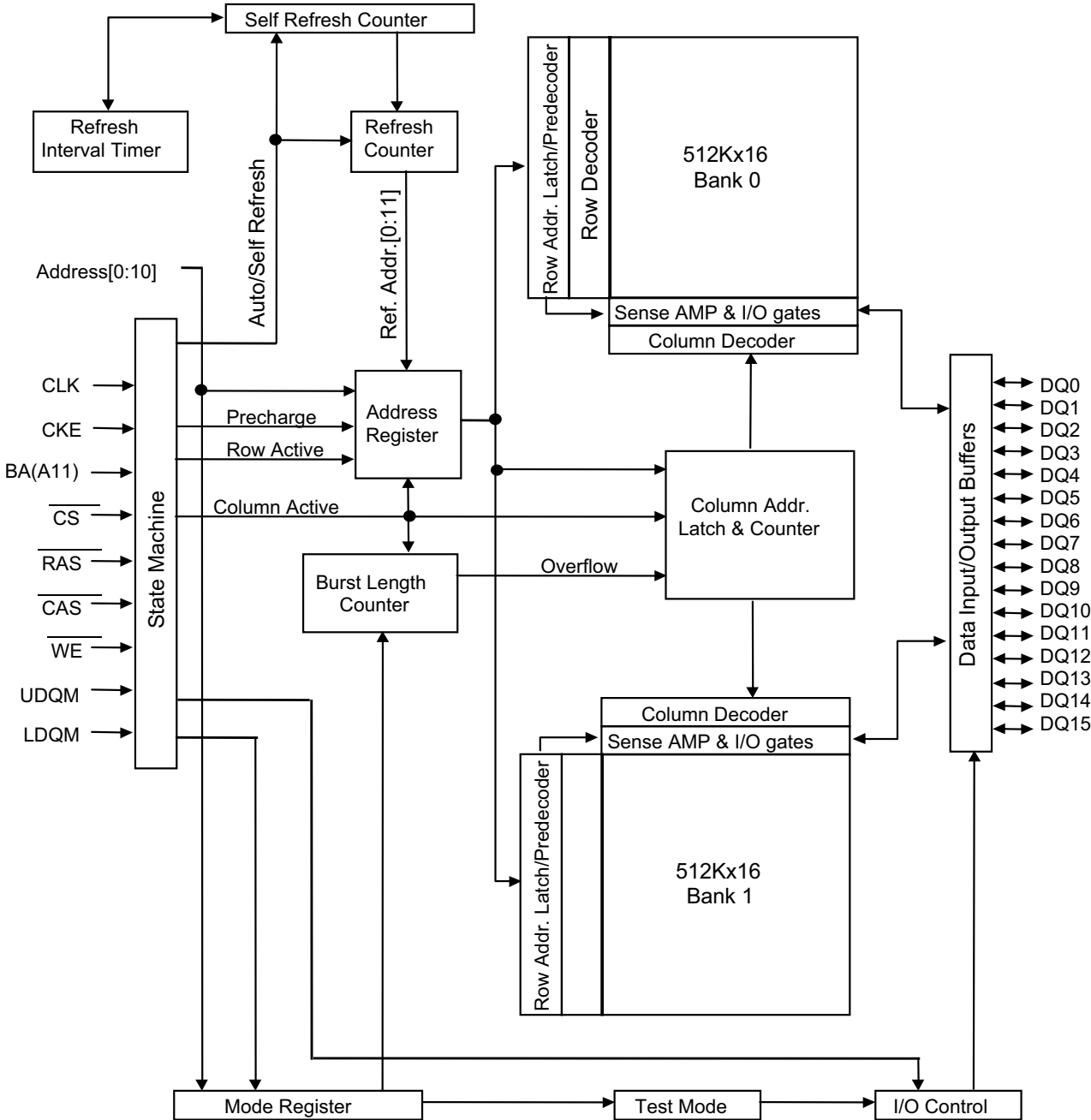
HY57V161610E (IC15)



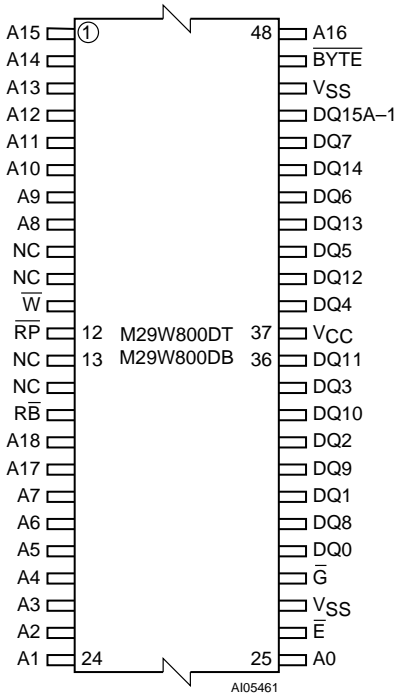
PIN DESCRIPTION

PIN	PIN NAME	DESCRIPTION
CLK	Clock	The system clock input. All other inputs are referenced to the SDRAM on the rising edge of CLK.
CKE	Clock Enable	Controls internal clock signal and when deactivated, the SDRAM will be one of the states among power down, suspend or self refresh.
\overline{CS}	Chip Select	Command input enable or mask except CLK, CKE and DQM
BA	Bank Address	Select either one of banks during both \overline{RAS} and \overline{CAS} activity.
A0 ~ A10	Address	Row Address : RA0 ~ RA10, Column Address : CA0 ~ CA7 Auto-precharge flag : A10
\overline{RAS} , \overline{CAS} , \overline{WE}	Row Address Strobe, Column Address Strobe, Write Enable	\overline{RAS} , \overline{CAS} and \overline{WE} define the operation. Refer function truth table for details
LDQM, UDQM	Data Input/Output Mask	DQM control output buffer in read mode and mask input data in write mode
DQ0 ~ DQ15	Data Input/Output	Multiplexed data input / output pin
VDD/VSS	Power Supply/Ground	Power supply for internal circuit and input buffer
VDDQ/VSSQ	Data Output Power/Ground	Power supply for DQ
NC	No Connection	No connection

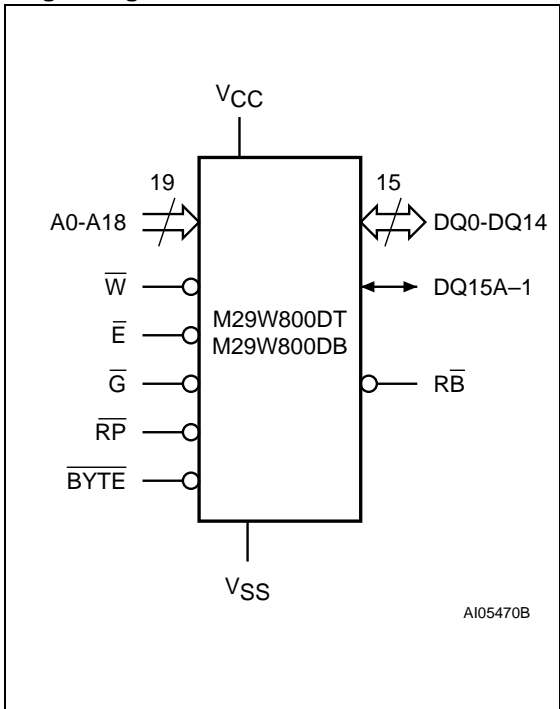
Block Diagram



M29W800DT (IC13)



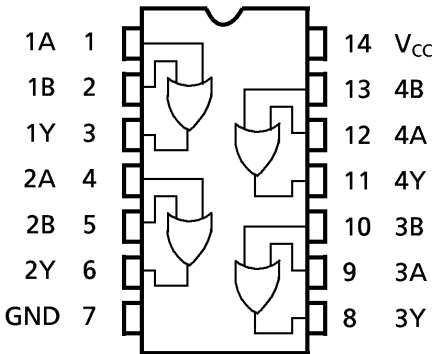
Logic Diagram



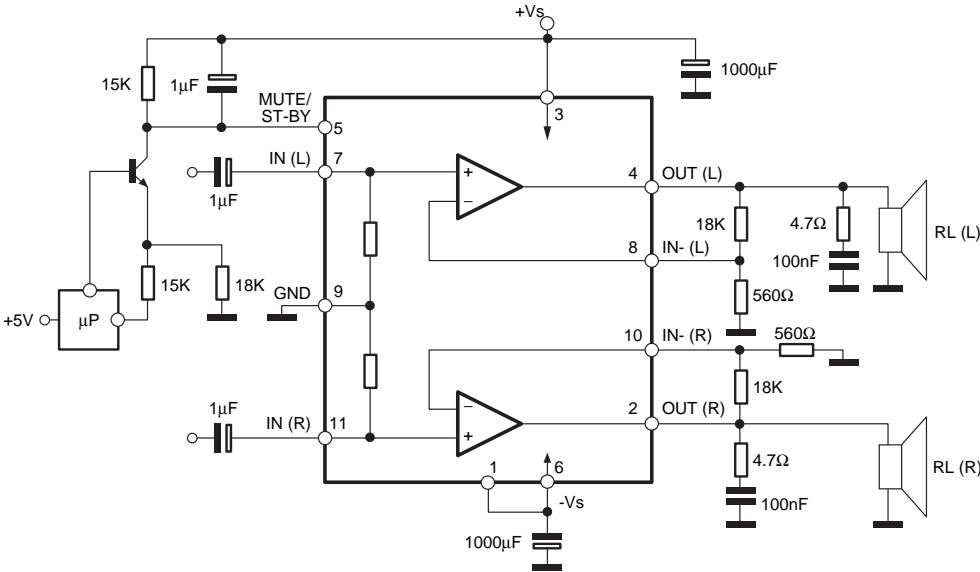
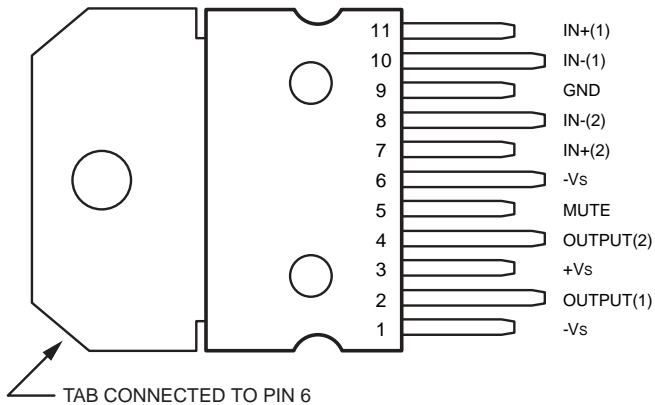
Signal Names

A0-A18	Address Inputs
DQ0-DQ7	Data Inputs/Outputs
DQ8-DQ14	Data Inputs/Outputs
DQ15A-1	Data Input/Output or Address Input
\bar{E}	Chip Enable
\bar{G}	Output Enable
\bar{W}	Write Enable
$\bar{R}\bar{P}$	Reset/Block Temporary Unprotect
$\bar{R}\bar{B}$	Ready/Busy Output (not available on SO44 package)
$\bar{B}\bar{Y}\bar{T}\bar{E}$	Byte/Word Organization Select
VCC	Supply Voltage
VSS	Ground
NC	Not Connected Internally

74LVC32APWR (IC14)

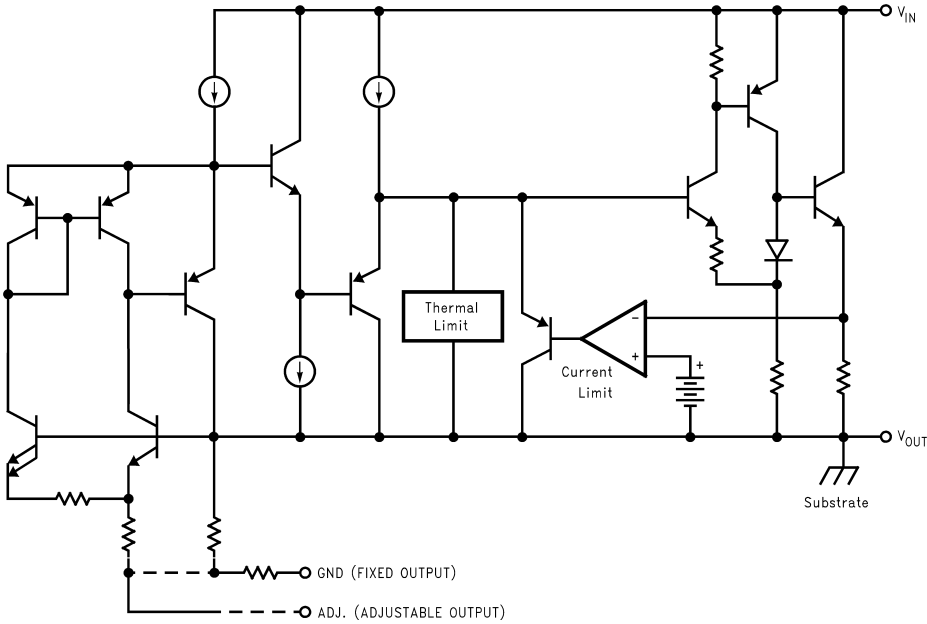
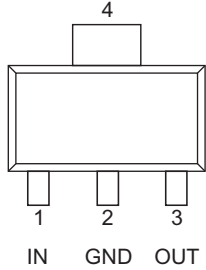


TDA7265 (IC74, 75, 76)

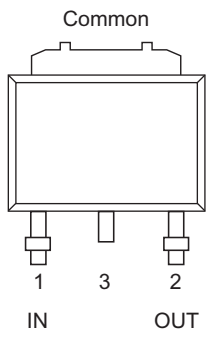


LM1117 (IC17)

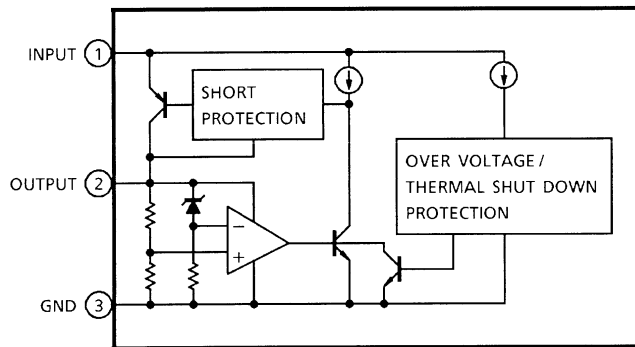
Block Diagram



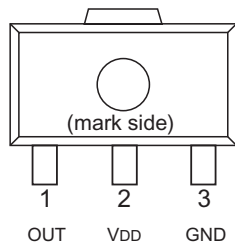
TA48025F (IC18)



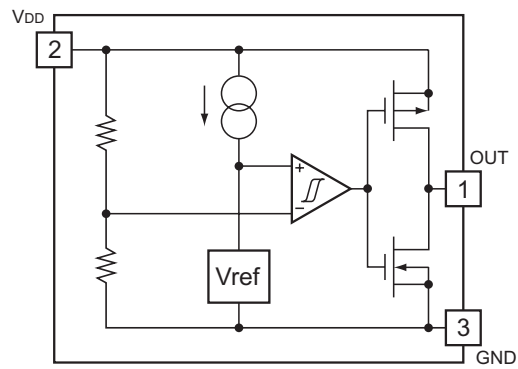
Block Diagram



RH5V35C (IC19)

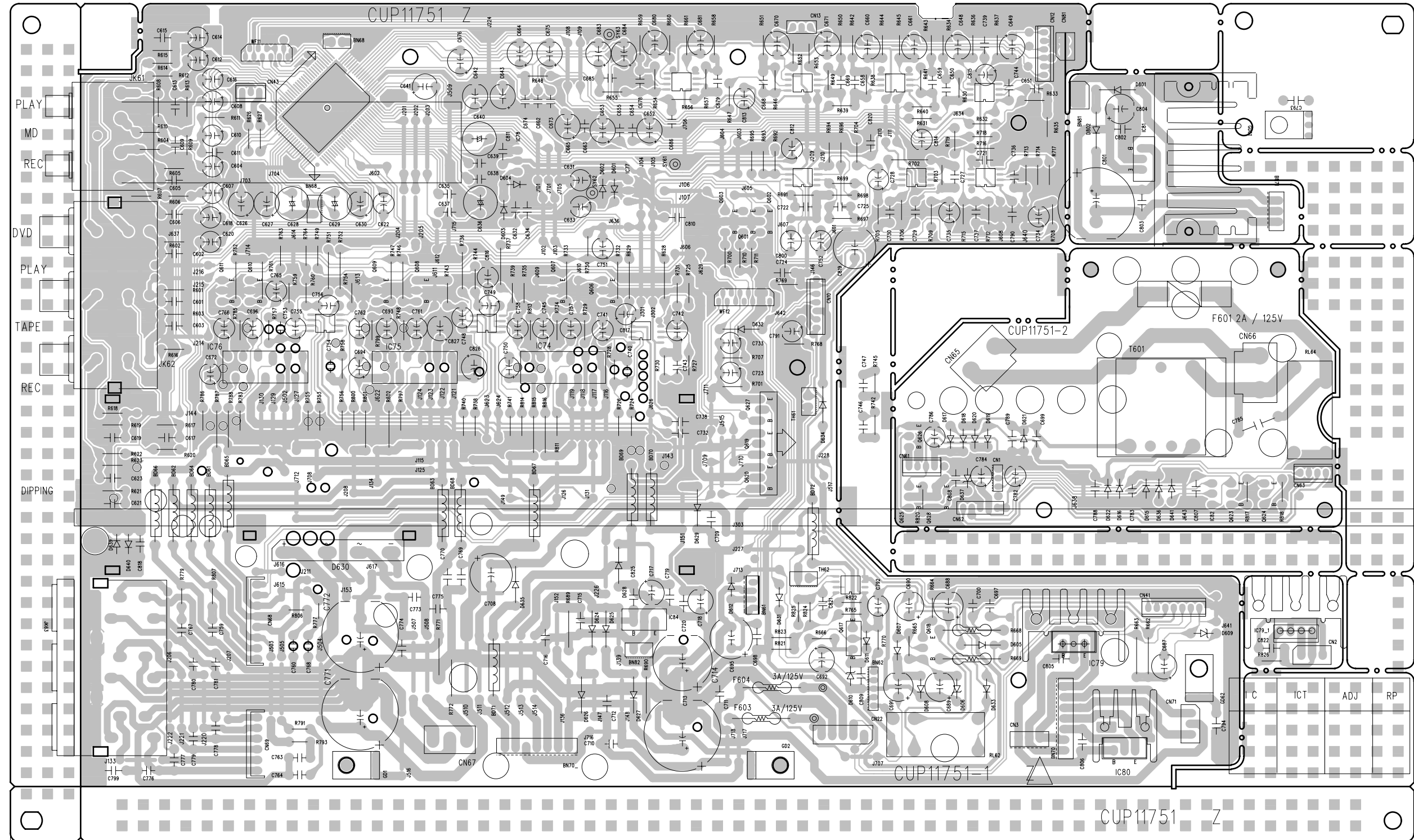


Block Diagram

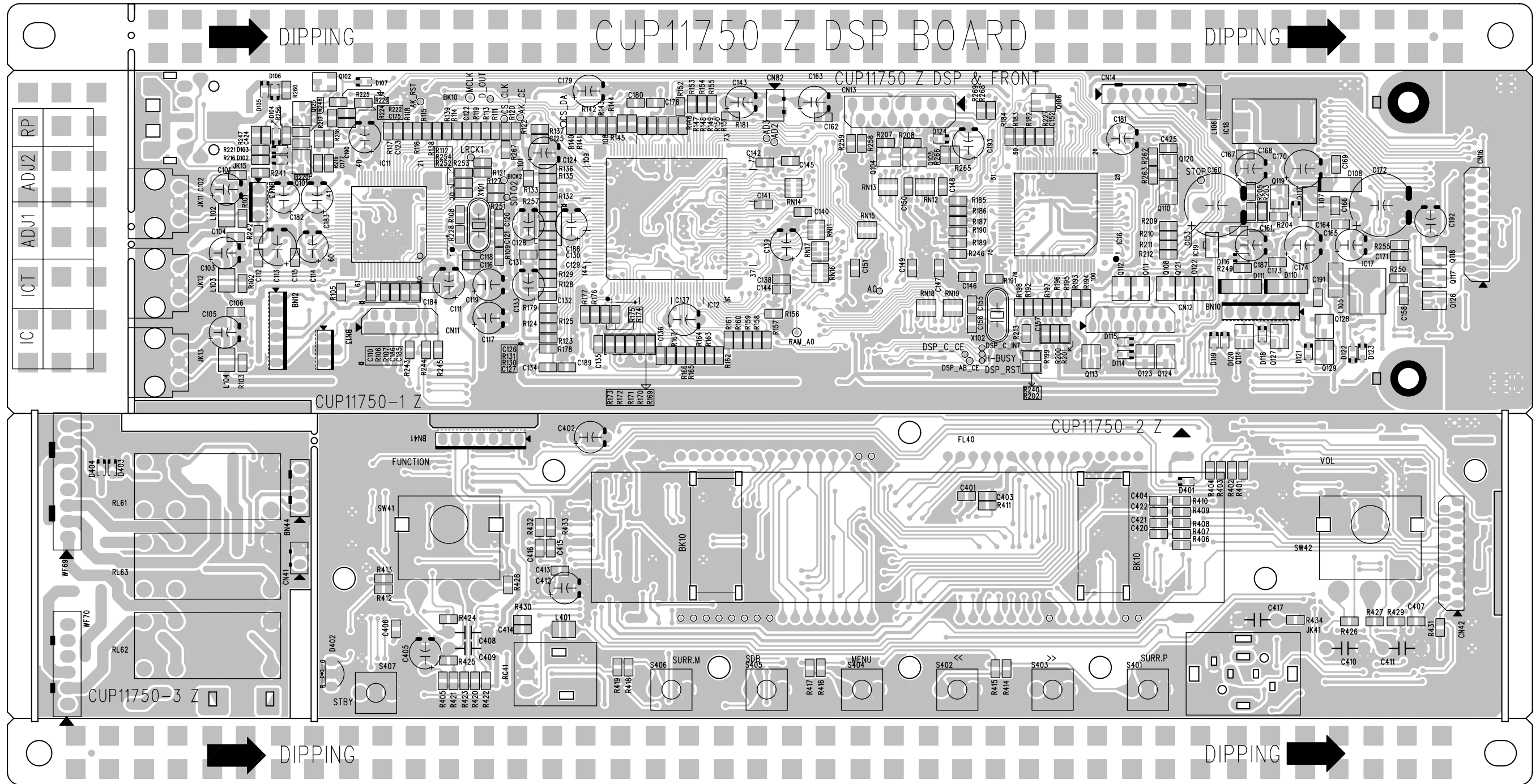


PRINTED WIRING BOARDS

MAIN P.W.B. UNIT

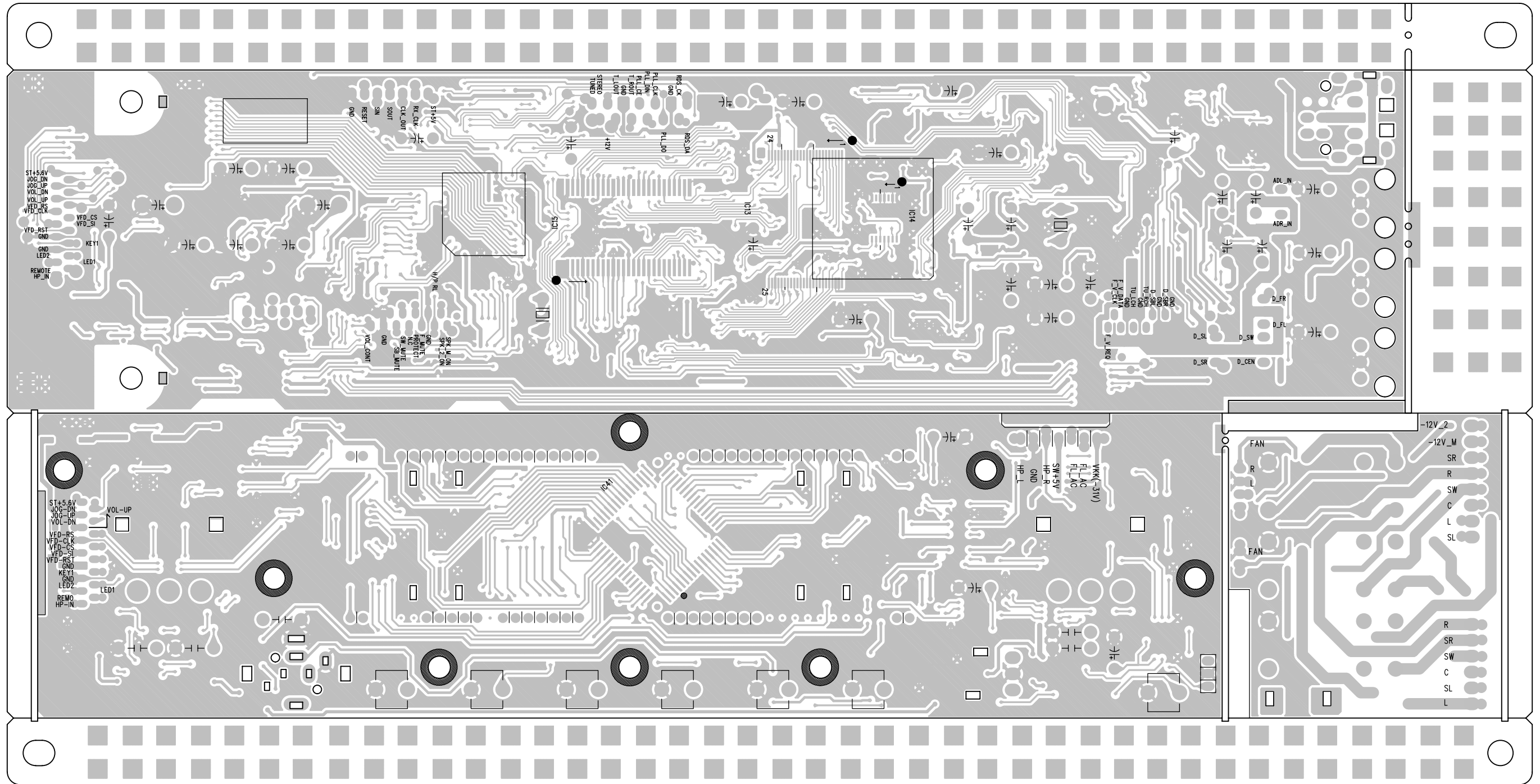


DSP P.W.B. UNIT



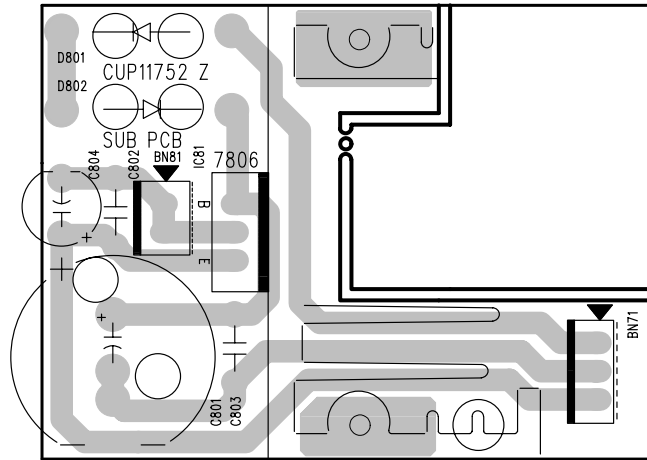
COMPONENT SIDE

DSP P.W.B. UNIT



FOIL SIDDE

REGULATOR P.W.B. UNIT



NOTE FOR PARTS LIST

- Part indicated with the mark "⊙" 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 Carbon Film Resistor ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)
- Not including Carbon Chip Resistor 1/16W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

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

● Resistors

Ex.: $\frac{RN}{Type} \frac{14K}{Shape \text{ and performance}} \frac{2E}{Power} \frac{182}{Resist-ance} \frac{G}{Allowable error} \frac{FR}{Others}$

RD : Carbon RC : Composition RS : Metal oxide film RW : Winding RN : Metal film RK : Metal mixture	2B : 1/8W 2E : 1/4W 2H : 1/2W 3A : 1W 3D : 2W 3F : 3W 3H : 5W	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20%	P : Pulse-resistant type NL : Low noise type NB : Non-burning type FR : Fuse-resistor F : Lead wire forming
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*** Resistance**

$\frac{1}{\uparrow} \frac{8}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1800 \text{ ohm} = 1.8 \text{ kohm}$
Indicates number of zeros after effective number.
2-digit effective number.
• Units: ohm

$\frac{1}{\uparrow} \frac{R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1.2 \text{ ohm}$
1-digit effective number.
2-digit effective number, decimal point indicated by R.
• Units: ohm

● Capacitors

Ex.: $\frac{CE}{Type} \frac{04W}{Shape \text{ and performance}} \frac{1H}{Dielectric strength} \frac{2R2}{Capacity} \frac{M}{Allowable error} \frac{BP}{Others}$

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

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200\mu\text{F}$
Indicates number of zeros after effective number.
2-digit effective number.
• Units: μF .

$\frac{2}{\uparrow} \frac{R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2.2\mu\text{F}$
1-digit effective number.
2-digit effective number, decimal point indicated by R.
• Units: μF .

*** Capacity (except electrolyte)**

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200\text{pF} = 0.0022\mu\text{F}$
(More than 2) Indicates number of zeros after effective number.
2-digit effective number.
• Units: pF.

$\frac{2}{\uparrow} \frac{2}{\uparrow} \frac{1}{\uparrow} \Rightarrow 220\text{pF}$
(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

- 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。
- Δ 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中には記載していません。
- カーボン抵抗器±5%、1/4W型は記載していません。定数は回路図を参照願います。
- カーボンチップ抵抗器 1/16W型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) $\frac{RN}{種類} \frac{14K}{形状特性} \frac{2E}{電力} \frac{182}{抵抗値} \frac{G}{許容差} \frac{FR}{その他}$

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

$\frac{18}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1800\Omega = 1.8\text{k}\Omega$
有効数字につづく0の数を表わす。
2桁の有効数字を表わす。

$\frac{1R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 1.2\Omega$
1桁の有効数字を表わす。
2桁の有効数字で小数点はRで表わす。
: 単位は Ω

● コンデンサ

例) $\frac{CE}{種類} \frac{04W}{形状特性} \frac{1H}{耐圧} \frac{2R2}{容量} \frac{M}{許容差} \frac{BP}{その他}$

CE : アルミ箔電解 CA : アルミ固体電解 CS : タンタル電解 CQ : フィルム CK : セラミック CC : セラミック CP : オイル CM : マイカ CF : メタライズド CH : メタライズド	0J : 6.3 V 1A : 10 V 1C : 16 V 1E : 25 V 1V : 35 V 1H : 50 V 2A : 100 V 2B : 125 V 2C : 160 V 2D : 200 V 2E : 250 V 2H : 500 V 2J : 630 V	F : ±1% G : ±2% J : ±5% K : ±10% M : ±20% Z : +80% -20% P : +100% -0% C : ±0.25pF D : ±0.5pF = : その他	HS : 高安定形 BP : 無極性形 HR : 耐リップル形 DL : 充放電対策用 HF : 高周波保証用 U : UL 部品 C : CSA 部品 W : UL-CSA 部品 F : リード線成形
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*** 容量値**

● 電解コンデンサの場合

$\frac{22}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200\mu\text{F}$
有効数字につづく0の数を表わす。
2桁の有効数字を表わす。
: 単位は μF

$\frac{2R}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2.2\mu\text{F}$
1桁の有効数字を表わす。
2桁の有効数字で小数点はRで表わす。
: 単位は μF

● 電解コンデンサ以外の場合

$\frac{22}{\uparrow} \frac{2}{\uparrow} \Rightarrow 2200\text{pF} = 0.0022\mu\text{F}$
有効数字につづく0の数を表わす。
(0の数が2以上の場合)
2桁の有効数字を表わす。
: 単位はpF

$\frac{22}{\uparrow} \frac{1}{\uparrow} \Rightarrow 220\text{pF}$
有効数字につづく0の数を表わす。
(0の数が0または1の場合)
2桁の有効数字を表わす。
: 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

MAIN P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC61-64	00D 943 0007 108	OP AMPNJM2068MD-TE1	HVINJM2068MDTE1		
IC66-71	00D 943 0007 108	OP AMPNJM2068MD-TE1	HVINJM2068MDTE1		
IC73	00D 943 0107 202	NJW1157FC2	HVINJW1157FC2		
IC74-76	00D 943 0107 600	AMPTDA7265	HVITDA7265		
IC77	00D 943 0005 605	REGULATOR (+8V)KA78LXXAZTA	HVIKA78L08AZT		
IC78	00D 943 0005 605	REGULATOR, -8VKA79LXXAZTA	HVIKA79L08AZT		
IC79	00D 943 0106 902	REGULATORMC7812C	HVIMC7812C		
IC80	00D 943 0106 708	REGULATORL7912(ST)	HVIL7912CP		
IC82	00D 943 0005 605	REGULATOR (+8V)KA78LXXAZTA	HVIKA78L08AZT		
IC84	00D 943 0106 902	REGULATORMC7812C	HVIMC7812C		
D601	00D 943 0004 101	1SS133T-77	HVD1SS133MT		
D602	00D 943 0041 902	SCHOTTKY 1N5819	HVD1N5819T		
D603	00D 943 0004 101	1SS133T-77	HVD1SS133MT		
D604,605	00D 943 0041 902	SCHOTTKY 1N5819	HVD1N5819T		
D606	00D 943 0106 106	ZENER33V, 1/2W	HVDMTZJ33BT		
D607,608	00D 943 0035 002	TW1N4003	KVD1N4003SRT		
D609	00D 943 0087 500	ZENER5.6V , 1/2W	HVDMTZJ5.6BT		
D610	00D 943 0087 607	ZENER6.2V, 1/2W	HVDMTZJ6.2BT		
D611,612	00D 943 0035 002	TW 1N4003	KVD1N4003SRT		
D615-618	00D 943 0004 101	1SS133T-77	HVD1SS133MT		
D619-622	00D 943 0035 002	TW1N4003	KVD1N4003SRT		
D624-627	00D 943 0110 008	1N4003	KVD1N4003ST		
D628,629	00D 943 0041 902	SCHOTTKY1N5819	HVD1N5819T		
D630	00D 943 0106 009	BRIDGEGBJ1006	HVDGBJ1006		
D631-633	00D 943 0004 101	1SS133T-77	HVD1SS133MT		
D634	00D 943 0041 902	SCHOTTKY1N5819	HVD1N5819T		
D635	00D 943 0110 008	1N4003	KVD1N4003ST		
D636	00D 943 0041 902	SCHOTTKY1N5819	HVD1N5819T		
D639-641	00D 943 0004 101	1SS133T-77	HVD1SS133MT		
Q601-603	00D 943 0108 104	T.R , MUTEKTC2874B	HVTKTC2874BT		
Q606-611	00D 943 0108 104	T.R , MUTEKTC2874B	HVTKTC2874BT		
Q617	00D 943 0059 004	T.RKSC2316Y	HVTKSC2316YT		
Q618	00D 943 0108 007	T.RKTA1271Y	HVTKTA1271YT		
Q619,620	00D 943 0107 804	T.RKRC102M	HVTKRC102MT		
Q623	00D 943 0108 007	T.RKTA1271Y	HVTKTA1271YT		
Q624	00D 943 0037 408	T.RKSC2785Y(DEAD)	HVTKSC2785YT		
Q625	00D 943 0004 208	T.RKRA107M	HVTKRA107MT		
Q626,627	00D 943 0107 804	T.RKRC102M	HVTKRC102MT		
TH61	00D 943 0109 909	POSISTORP42T7D330BW20	KRTP42T7D330B		
RESISTORS GROUP					
R668,669	00D 943 0112 705	RES , METAL OXIDE FILM330Ω, 1W, J	CRG1ANJ331H		*
R704	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
R728	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
R730	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
R757,758	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
R770	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
R777	00D 943 0109 705	RES , METAL OXIDE FILM10Ω, 1W, J	KRG1SANJ100RT		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
R779	00D 943 0109 705	RES , METAL OXIDE FILM10Ω, 1W, J	KRG1SANJ100RT		
R791	00D 943 0109 705	RES , METAL OXIDE FILM10Ω, 1W, J	KRG1SANJ100RT		
R793	00D 943 0109 705	RES , METAL OXIDE FILM10Ω, 1W, J	KRG1SANJ100RT		
R806,807	00D 943 0109 705	RES , METAL OXIDE FILM10Ω, 1W, J	KRG1SANJ100RT		
R824,825	00D 943 0110 202	WIRE, COPPERSN95/PB5, 0.6	C3A206		*
CAPACITORS GROUP					
C601-603	00D 943 0046 208	CERAMIC 470pF, 50V, K	HCBS1H471KBT		*
C612	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C613	00D 943 0046 208	CERAMIC 470pF, 50V, K	HCBS1H471KBT		*
C614	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C615	00D 943 0046 208	CERAMIC 470pF, 50V, K	HCBS1H471KBT		*
C616	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C617	00D 943 0046 208	CERAMIC 470pF, 50V, K	HCBS1H471KBT		*
C618	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C619	00D 943 0046 208	CERAMIC 470pF, 50V, K	HCBS1H471KBT		*
C620	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C621	00D 943 0103 303	CERAMIC 180pF, 50V, K	HCBS1H181KBT		*
C622	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C623	00D 943 0103 303	CERAMIC 180pF, 50V, K	HCBS1H181KBT		*
C626,627	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C628,629	00D 943 0045 209	ELECT 4.7uF, 50V	HCEA1HN4R7T		
C630	00D 943 0016 115	ELECT 47uF, 10V	HCEA1AH470T		*
C631	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C632	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C633	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C634	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C635	00D 943 0073 501	CERAMIC 4700pF, 50V, KB	CCKT1H472KB		
C636	00D 943 0045 209	ELECT 4.7uF, 50V	HCEA1HN4R7T		
C637	00D 943 0108 405	FILM(POLYESTER) 0.22uF, 63V J	KCFE1J224JBT		
C638	00D 943 0073 501	CERAMIC 4700pF, 50V, KB	CCKT1H472KB		
C639	00D 943 0108 405	FILM(POLYESTER) 0.22uF, 63V J	KCFE1J224JBT		
C640	00D 943 0045 209	ELECT 4.7uF, 50V	HCEA1HN4R7T		
C641	00D 943 0080 002	ELECT 1uF, 50V	HCEA1HH1R0T		*
C642,643	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C648,649	00D 943 0104 001	ELECT 22uF, 16V	HCEA1CKS220T		
C650,651	00D 943 0073 404	CERAMIC 330pF, 50V, KB	CCKT1H331KB		
C652,653	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C654,655	00D 943 0025 863	MYLAR 3300pF, 50V J	HCQI1H332JZT		
C658	00D 943 0073 404	CERAMIC 330pF, 50V, KB	CCKT1H331KB		
C659	00D 943 0104 603	MYLAR 0.047pF, 50V, J	HCQI1H473JZT		
C660,661	00D 943 0104 001	ELECT 22uF, 16V	HCEA1CKS220T		
C662	00D 943 0025 863	MYLAR 3300pF, 50V J	HCQI1H332JZT		
C663	00D 943 0104 603	MYLAR 0.047pF, 50V, J	HCQI1H473JZT		
C664,665	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C668,669	00D 943 0073 404	CERAMIC 330pF, 50V, KB	CCKT1H331KB		
C670,671	00D 943 0104 001	ELECT 22uF, 16V	HCEA1CKS220T		
C672	00D 943 0016 173	ELECT 47uF, 25V	HCEA1EH470T		
C673,674	00D 943 0025 863	MYLAR 3300pF, 50V J	HCQI1H332JZT		
C675,676	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C678,679	00D 943 0073 404	CERAMIC 330pF, 50V, KB	CCKT1H331KB		
C680,681	00D 943 0104 001	ELECT 22uF, 16V	HCEA1CKS220T		
C683,684	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C685,686	00D 943 0025 863	MYLAR 3300pF, 50V J	HCQI1H332JZT		
C687	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C688,689	00D 943 0025 850	ELECT 47uF, 50V	HCEA1HH470T		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C690,691	00D 943 0104 409	ELECT 100uF, 50V	HCEA1HH101T		*
C692	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C693,694	00D 943 0016 173	ELECT 47uF, 25V	HCEA1EH470T		
C695	00D 943 0046 004	ELECT 1000uF, 16V	HCEA1CH102E		*
C696	00D 943 0016 173	ELECT 47uF, 25V	HCEA1EH470T		
C697	00D 943 0082 408	MYLAR 0.01uF, 50V J	HCQI1H103JZT		
C698	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C699	00D 943 0046 402	CERAMIC 0.022uF, 50V, Z	HCBS1H223ZFT		*
C700	00D 943 0082 408	MYLAR 0.01uF, 50V J	HCQI1H103JZT		
C708	00D 943 0016 102	ELECT 1000uF, 6.3V	HCEA0JH102T		
C709	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C710	00D 943 0073 307	CERAMIC 0.022uF, 50V, ZF	CCKT1H223ZF		
C711,712	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C713	00D 943 0073 006	ELECT(SAMHWA) 3300uF, 25V, 105°C	CCEA1ERD332EH		
C714	00D 943 0104 205	ELECT 2200uF, 25V	HCEA1EH222E		*
C715,716	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C717,718	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C719-721	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C722	00D 943 0073 200	CERAMIC 150pF, 50V, KB	CCKT1H151KB		
C723	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C724	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C725	00D 943 0073 200	CERAMIC 150pF, 50V, KB	CCKT1H151KB		
C727	00D 943 0044 802	MYLAR 0.022uF, 50V J	HCQI1H223JZT		
C728	00D 943 0080 002	ELECT 1uF, 50V	HCEA1HH1R0T		*
C729,730	00D 943 0056 803	METALLIZED FILM 0.15uF, 100V	CCME2A154JXT		
C732	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C733	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C734,735	00D 943 0045 102	ELECT 10uF, 35V	HCEA1VH100T		
C736,737	00D 943 0073 200	CERAMIC 150pF, 50V, KB	CCKT1H151KB		
C738,739	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C741,742	00D 943 0045 102	ELECT 10uF, 35V	HCEA1VH100T		
C744	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C745	00D 943 0016 173	ELECT 47uF, 25V	HCEA1EH470T		
C748,749	00D 943 0045 102	ELECT 10uF, 35V	HCEA1VH100T		
C750	00D 943 0016 173	ELECT 47uF, 25V	HCEA1EH470T		
C751	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C752	00D 943 0080 002	ELECT 1uF, 50V	HCEA1HH1R0T		*
C755,756	00D 943 0045 102	ELECT 10uF, 35V	HCEA1VH100T		
C757,758	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C759,760	00D 943 0104 603	MYLAR 0.047uF, 50V J	HCQI1H473JZT		
C761,762	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C763,764	00D 943 0104 603	MYLAR 0.047uF, 50V J	HCQI1H473JZT		
C765,766	00D 943 0061 607	ELECT 4.7uF, 50V	HCEA1HH4R7T		
C767,768	00D 943 0104 603	MYLAR 0.047uF, 50V J	HCQI1H473JZT		
C769,770	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C771,772	00D 943 0073 006	ELECT(SAMHWA) 3300uF, 25V, 105°C	CCEA1ERD332EH		
C773,774	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C775	00D 943 0073 307	CERAMIC 0.022uF, 50V, ZF	CCKT1H223ZF		
C776-781	00D 943 0082 408	MYLAR 0.01uF, 50V J	HCQI1H103JZT		
C782	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		
C783	00D 943 0082 408	MYLAR 0.01uF, 50V J	HCQI1H103JZT		
C784	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C785	00D 943 0024 408	CERAMIC (X1/Y2/SC) 0.0047uF, 2.5KV	KCKDKS472ME		
C786	00D 943 0080 002	ELECT 1uF, 50V	HCEA1HH1R0T		*
C788-790	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
C791	00D 943 0016 186	ELECT 10uF, 50V	HCEA1HH100T		

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	C793,794	00D 943 0103 400	CAP . CERAMIC 0.047uF, 50V, Z	HCBS1H473ZFT		
	C799	00D 943 0016 018	CERAMIC 0.1uF, 50V, Z	HCBS1H104ZFT		
	C800	00D 943 0045 801	CAP . ELECT 47uF, 16V	HCEA1CH470T		*
	C805-807	00D 943 0016 018	CERAMIC 0.1uF, 50V, Z	HCBS1H104ZFT		
	C809-811	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
	C812-817	00D 943 0061 500	ELECT 10uF, 35V	HCEA1VKS100T		
	C818	00D 943 0103 400	CAP . CERAMIC 0.047uF, 50V, Z	HCBS1H473ZFT		
	C819	00D 943 0016 102	ELECT 1000uF, 6.3V	HCEA0JH102T		
	C826,827	00D 943 0104 108	ELECT 100uF, 25V	HCEA1EH101T		
OTHER PARTS GROUP						
	BD61-72	00D 943 0035 701	BEAD , CORE	KLZ9H001Z		
	BN61	00D 943 0102 003	WIRE ASS'Y	CWB1B004120EN		
	BN62	00D 943 0102 100	WIRE ASS'Y	CWB1B005120EN		
	BN68	00D 943 0113 908	WIRE ASS'Y	CWB1B002080MM		*
	BN70	00D 943 0102 702	WIRE ASS'Y	CWB1C007180MM		
	BN82	00D 943 0102 207	WIRE ASS'Y	CWB1C002350BN		
	CN10	00D 943 0115 304	WAFERMOLEX53014-0610	KJP06GA19ZM		*
	CN12	00D 943 0115 304	WAFERMOLEX53014-0610	KJP06GA19ZM		*
	CN13	00D 943 0115 207	WAFERMOLEX53014-0610	KJP03GA19ZM		*
	CN22	00D 943 0108 900	WAFERMOLEX 5267-05A	KJP05GA01ZM		
	CN41	00D 943 0025 203	WAFERMOLEX53014-0710	KJP07GA19ZM		
	CN43	00D 943 0115 207	WAFER	KJP03GA19ZM		*
	CN61	00D 943 0108 803	WAFER	KJP04GA19ZM		
	CN62	00D 943 0109 006	WAFERMOLEX53014-0510	KJP05GA19ZM		
	CN63	00D 943 0108 803	WAFER	KJP04GA19ZM		
	CN65	00D 943 0108 502	WAFERMOLEX35328-02	KJP02GA89ZM		
	CN66	00D 943 0036 700	WAFER7.92MM(YUNHO)	KJP02KA060ZY		
	CN67	00D 943 0108 706	WAFERMOLEX35313-0310	KJP03GA90ZM		
	CN68	00D 943 0109 307	WATER	KJP08GA63ZY		
	CN69	00D 943 0115 401	WAFERYEONHO BMW250	KJP06GA63ZY		*
	CN71	00D 943 0108 609	WAFERMOLEX 5267-03A	KJP03GA01ZM		
	CN81	00D 943 0036 807	WAFERMOLEX 5267-03A	KJP02GA01ZM		
	GD01,02	00D 943 0105 408	PALTE, EARTHMET37-0002	HJT1A025		
	GD62	00D 943 0105 408	PALTE , EARTHMET37-0002	HJT1A025		
	JK62	00D 943 0110 406	JACK , IN/OUT	CJJ4L008Y		*
	JK63	00D 943 0105 301	SPK , TERMINAL	HJJ5R009Z		
	RL62	00D 943 0086 006	REALY (TYCO)PCI212DM (OEG)	HSL3A016ZE		
	RL64	00D 943 0105 806	RELAY(TYCO)SDT-S-109LMR	HSL1D017ZE		
	SY61	00D 943 0101 305	PIN, STYLE	CHK1A005		*
	SY63	00D 943 0101 305	PIN, STYLE	CHK1A005		*
⚠	T601	00D 943 0110 600	TRANS , SUBAVR-M330(EUR)	CLT5I005ZE		*
	WF11	00D 943 0101 402	WAFER , CARD CABLE	CJP11GA117ZY		*
	WF12	00D 943 0109 501	WAFER , CARD CABLEGF102-13S-TS	KJP13GA117ZG		
⚠	F601	00D 943 0108 308	FUSE 250V/0.63A	KBA2C0630TLEY		
⚠	F603,604	00D 943 0114 907	FUSE, LEAD TYPE250V/2A	KBA2B2000TLEY		*

DSP P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC11	00D 943 0106 504	AK4588	HVIAK4588VQ-T		
IC12	00D 943 0040 204	S49400-CQ	HVICS49400-CQ		
IC13	00D 943 0106 805	M29W800DT-70N	HVIM29W800DT70N		
IC14	00D 943 0040 505	74LVC32APWR	HVI74LVC32APWR		
IC15	00D 943 0106 407	HY57V161610ET-7	HVI57V161610ET7		
IC16	00D 943 0107 406	MCU (FLASH 128K,TQFP100)ST92F124V1T6	HVIST92F124V1T6		
IC17	00D 943 0038 902	1117S-3.3V	HVILM1117S-3V3		
IC18	00D 943 0107 503	TA48025FTE16	HVITA48025FTE16		
IC19	00D 943 0107 309	3.5V RICH0	HVIRH5VT35C		
D102,103 D104-107 D108 D110,111	00D 943 0060 200 00D 943 0041 708 00D 943 0060 501 00D 943 0060 404	DZENER (CHIP,6.8V) 1SS355 1SR159-200 HKRB160L-60TE25	HVDUDZS6.8BSR HVD1SS355T HVD1SR159-200 HVDRB160L60TE25		
D114-117 D118 D119-123 Q101	00D 943 0041 708 00D 943 0040 903 00D 943 0041 708 00D 943 0058 801	1SS355 ZENER (CHIP,4.3V) 1SS355 CHIPKTC3875S Y RTK	HVD1SS355T HVDUDZS4.3BSR HVD1SS355T HVTKTC3875SYRTK		
Q102 Q104,105 Q106 Q108 Q110	00D 943 0110 105 00D 943 0107 901 00D 943 0038 009 00D 943 0037 903 00D 943 0107 707	KTA1504S Y RTK KRC111S CHIPKRA102S CHIPKRC102S CHIPKRA111S	HVTKTA1504SYRTK HVTKRC111S HVTKRA102S HVTKRC102S HVTKRA111ST		
Q111-114 Q117-119 Q120 Q121,122 Q123,124	00D 943 0038 009 00D 943 0038 009 00D 943 0058 801 00D 943 0107 707 00D 943 0037 903	CHIPKRA102S CHIPKRA102S CHIPKTC3875S Y RTK CHIPKRA111S CHIPKRC102S	HVTKRA102S HVTKRA102S HVTKTC3875SYRTK HVTKRA111ST HVTKRC102S		
Q125 Q126 Q127 Q128,129	00D 943 0058 801 00D 943 0107 901 00D 943 0037 903 00D 943 0107 707	CHIPKTC3875S Y RTK CHIPKRC111S CHIPKRC102S CHIPKRA111S	HVTKTC3875SYRTK HVTKRC111S HVTKRC102S HVTKRA111ST		
RESISTORS GROUP					
RN11-19	00D 943 0114 703	RES, ARRAY, 100 OHM (PHILIPS)ARC 241 100R	HRJ104DJ101T		*
CAPACITORS GROUP					
C101	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C102	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C103	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C104	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C105	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C106	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C110	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C111	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C112	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C113	00D 943 0103 507	ELECT 470uF, 6.3V	HCEA0JH471T		*
C114	00D 943 0103 604	ELECT 220uF, 10V	HCEA1AH221T		*
C115,116 C117 C118	00D 943 0016 238 00D 943 0016 160 00D 943 0016 238	CHIP , 0.1uF, 25V, ZF ELECT 22uF, 25V CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF HCEA1EH220T HCUS1E104ZF		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
C119	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C120,121	00D 943 0043 900	CHIP 22pF, 50V, JA	HCUS1H220JA		
C122	00D 943 0044 307	CHIP 100pF, 50V, JA	HCUS1H101JA		
C123	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C124	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C125	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C126	00D 943 0043 308	CHIP 68pF, 50V, JA	HCUS1H680JA		
C127	00D 943 0044 006	CHIP 1200pF, 50V, KC	HCUS1H122KC		
C128	00D 943 0045 801	ELECT 47uF, 16V	HCEA1CH470T		
C129	00D 943 0104 700	CHIP 1uF, 16V,ZF	HCUS1C105ZF		
C130	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C131,132	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C133	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C134-136	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C137	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C138	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C139	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C140-142	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C143	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C144-153	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C155,156	00D 943 0104 807	CHIP 15pF, 50V, JA	HCUS1H150JA		
C157	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C158	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C160	00D 943 0016 102	ELECT 1000uF, 6.3V	HCEA0JH102T		
C161,162	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C163	00D 943 0016 144	ELECT 220uF, 16V	HCEA1CH221T		
C164	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C165	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C166,167	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C168	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C169	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C170	00D 943 0016 157	ELECT 470uF, 16V	HCEA1CH471T		
C171	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C172	00D 943 0016 102	ELECT 1000uF, 6.3V	HCEA0JH102T		
C173	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C174	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C175	00D 943 0044 200	CHIP 1000pF, 50V, KC	HCUS1H102KC		
C177	00D 943 0044 200	CHIP 1000pF, 50V, KC	HCUS1H102KC		
C178	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C179	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C180	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C181	00D 943 0080 002	ELECT 1uF, 50V	HCEA1HH1R0T		*
C182,183	00D 943 0016 160	ELECT 22uF, 25V	HCEA1EH220T		
C184-186	00D 943 0104 904	CHIP 180pF, 50V, JA	HCUS1H181JA		
C187	00D 943 0104 302	ELECT 33uF, 25V	HCEA1EH330T		
C188	00D 943 0045 403	ELECT 2.2uF, 50V	HCEA1HH2R2T		
C189	00D 943 0044 307	CHIP 100pF, 50V, JA	HCUS1H101JA		
C190	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
C191	00D 943 0016 238	CHIP , 0.1uF, 25V, ZF	HCUS1E104ZF		
C192	00D 943 0016 128	ELECT 470uF, 10V	HCEA1AH471T		*
OTHER PARTS GROUP					
BK10	00D 943 0101 305	PIN, STYLE	CHK1A005		
BN10	00D 943 0102 508	WIRE ASS'Y	CWB1C006120EN		*
BN12	00D 943 0102 906	WIRE ASS'Y(SHIELD)	CWZAVCM330SBN12		
BN13	00D 943 0103 002	WIRE ASS'Y	CWZAVCM330SBN13		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
CN11	00D 943 0101 402	WAFER , CARD CABLE	CJP11GA117ZY		*
CN12	00D 943 0109 501	WAFER , CARD CABLEGF102-13S-TS	KJP13GA117ZG		
CN13	00D 943 0110 503	WAFER , CARD CABLE	CJP13GA115ZY		*
CN14	00D 943 0025 203	WAFERMOLEX53014-0710	KJP07GA19ZM		
CN16	00D 943 0036 001	WAFER , CARD CABLEGF102-17S-TS	KJP17GA117ZG		
CN82	00D 943 0115 003	WAFERMOLEX53014-0710	KJP02GA19ZM		*
JK11	00D 943 0105 301	MODULE , OPTICAL(RX)TORX179L	HJJ5R009Z		
JK12-13	00D 943 0042 901	MODULE , OPTICAL(RX)TORX179L	HJSTORX179L		
JK15	00D 943 0105 107	DUAL MINI JACK	HJJ1D003Z		
JW14	00D 943 0114 402		CWE2202040UU		*
L101	00D 943 0105 602	BEAD , FERRITE(CHIP) HKBLM21A121SPT	HLZ9J003Z		
L102-104	00D 943 0105 505	INDUCTOR , CHIP3225 SIZE	HLQ06E100KRZ		
L105-107	00D 943 0042 406	CHIP , BEADHU-1H4516-600JT	HLZ9Z014Z		
X101	00D 943 0042 202	CRYSTAL(HC-49/S,ATS)22P,R=15	HOX12288E220TFB		
X102	00D 943 0004 907	CRYSTAL , 4MHZ	HOX04000E150C		

FRONT/RELAY P.W.B. UNIT ASS'Y

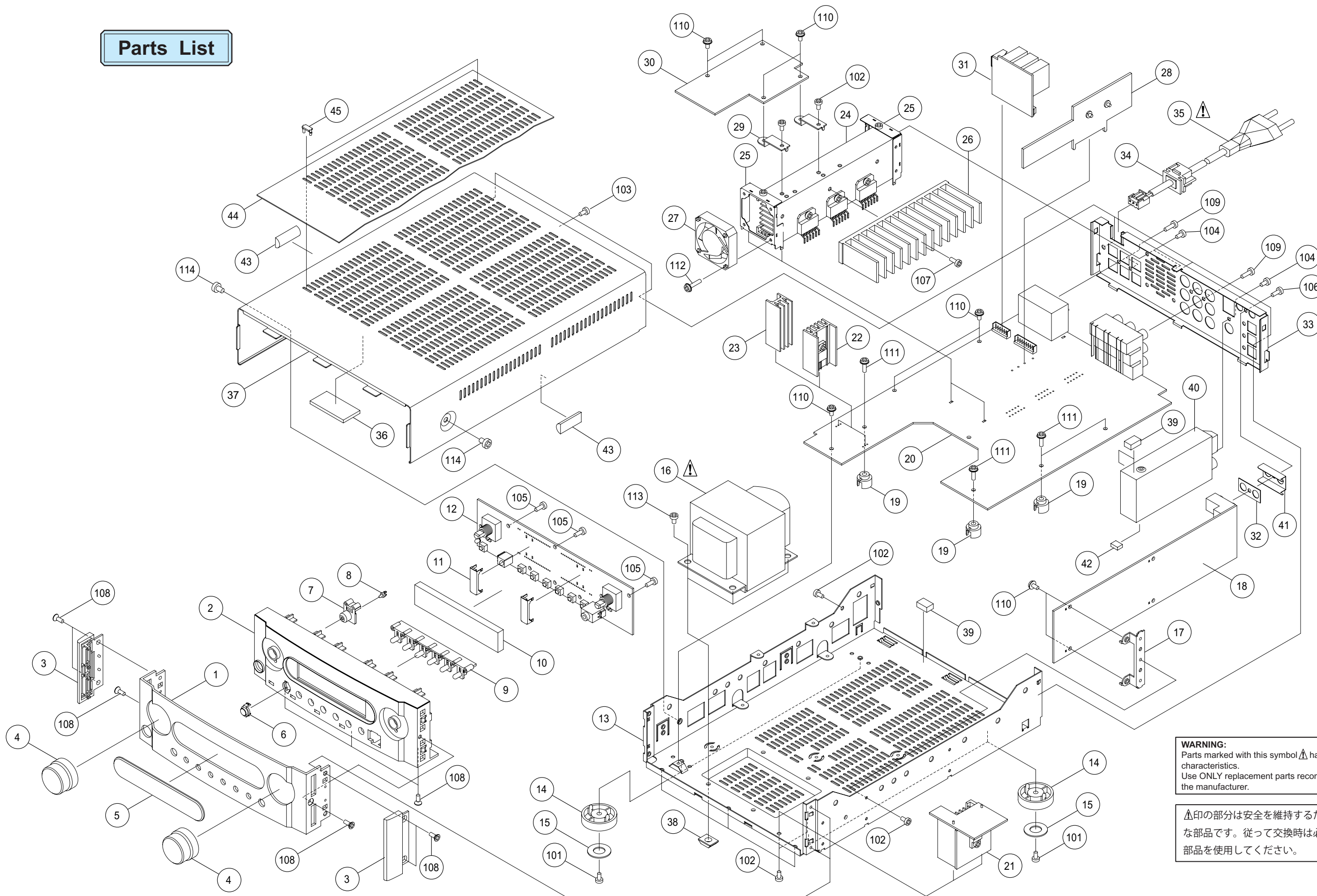
Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP					
IC41	00D 943 0107 105	VFD DRIVER NJU3430F	HVINJU3430F		
FL40	00D 943 0099 705	F.I.P 15-ST-43GN	HFL15ST43GN		
RC41	00D 943 0004 800	REMOCON SENSER CN KSM-603TH2	HRVKSM603TH2		
D401	00D 943 0041 708	CHIP 1SS355	HVD1SS355T		
D402	00D 943 0106 203	L.E.D , 2COLOR SPR-39MVW3	HVDSPR39MVW3		
D403,404	00D 943 0041 708	CHIP 1SS355	HVD1SS355T		
CAPACITORS GROUP					
C401	00D 943 0044 307	CHIP 100pF, 50V, JA	HCUS1H101JA		
C402	00D 943 0104 506	ELECT 10uF, 50V, KS	HCEA1HKS100T		
C403	00D 943 0105 000	CHIP 390pF, 50V, JA	HCUS1H391JA		
C404	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C405	00D 943 0045 704	ELECT 100uF, 16V, KS	HCEA1CKS101T		
C406,407	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C408-411	00D 943 0103 206	CERAMIC 0.01uF, 50V, KC	HCBS1H103ZFT		*
C412	00D 943 0045 704	ELECT 100uF, 16V, KS	HCEA1CKS101T		
C413	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C414	00D 943 0083 504	CHIP 47pF, 50V, JA	HCUS1H470JA		
C415,416	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
C417	00D 943 0103 206	CERAMIC 0.01uF, 50V, KC	HCBS1H103ZFT		*
C420-422	00D 943 0044 307	CHIP 100pF, 50V, JA	HCUS1H101JA		
C424	00D 943 0044 200	CHIP 1000pF, 50V, KC	HCUS1H102KC		
C425	00D 943 0044 103	CHIP 0.01uF, 50V, KC	HCUS1H103KC		
OTHER PARTS GROUP					
CN41	00D 943 0115 100	WAFER	KJP02GA68ZG		*
CN42	00D 943 0076 809	WAFER , CARD CABLE	CJP17GB113ZY		
S401-407	00D 943 0077 206	SW , TACT	CST1A012ZT		
BN41	00D 943 0102 605	WIRE ASS'Y	CWB1C007120EW		*
BN43	00D 943 0103 109	WIRE ASS'Y(SHIELD)	CWZAVCM330SBN43		
BN44	00D 943 0102 401	WIRE ASS'Y	CWB1C004100EN		*
JK41	00D 943 0105 204	JACK , HEADPHONE (SILVER)	HJJ2D003Y		
L401	00D 943 0114 606	COIL , CHIP(100UH,K) HK NLC322522T-101K	HLZ9M001Z		*
RL61-63	00D 943 0086 006	REALY (TYCO) PCI212DM (OEG)	HSL3A016ZE		
SW41	00D 943 0105 903	ENCODER , SWITCH EC16B24S00A1ZZZ	HSR2A027Y		
SW42	00D 943 0114 800	ENCODER , SWITCH EC16B24T02A1ZZZ	HSR2A027Z		*
WF70	00D 943 0109 200	HOUSING , ANGLE YEONHO BMH250	KJP06HB60ZY		
WF69	00D 943 0109 404	WAFER	KJP08HB60ZY		
	00D 943 0114 208	CARD CABLE	CWC1B2A17A120B		*

REGULATOR P.W.B. UNIT ASS'Y

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
SEMICONDUCTORS GROUP						
	IC81	00D 943 0107 008	IC , REGULATOR '+6V	HVINJM7806FA		
	D801,802	00D 943 0106 300	DIODE	HVDUF5404H		
CAPACITORS GROUP						
	C801	00D 943 0073 006	ELECT 3300uF , 25V	CCEA1ERD332EH		
	C802	00D 943 0103 206	CERAMIC 0.01uF, 50V, Z	HCBS1H103ZFT		*
	C803	00D 943 0016 018	CERAMIC 0.1uF ,50V	HCBS1H104ZFT		
	C804	00D 943 0016 131	ELECT 100uF, 16V	HCEA1CH101T		
OTHER PARTS GROUP						
	BN71	00D 943 0102 304	WIRE ASS'Y	CWB1C003150BM		*
	BN81	00D 943 0114 004	WIRE ASS'Y	CWB3B002080BM		*

EXPLODED VIEW

Parts List



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

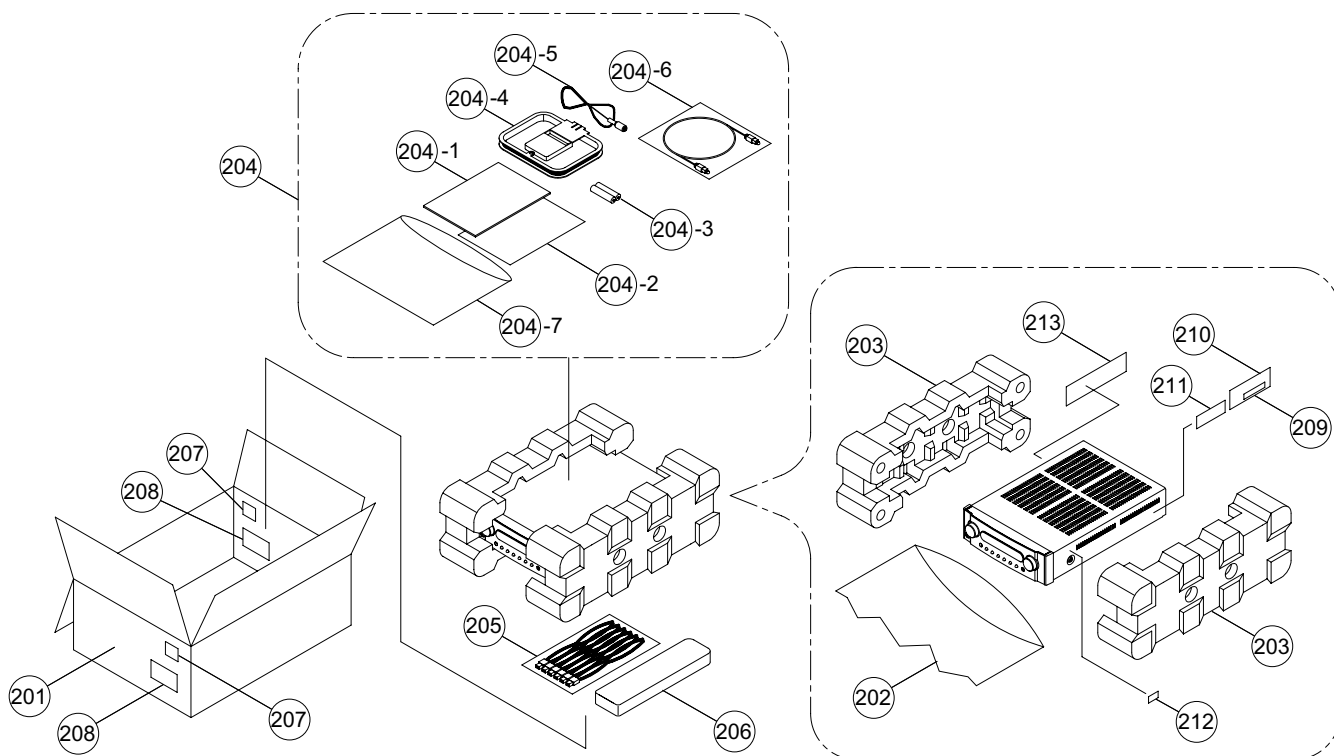
⚠印の部分は安全を維持するために重要な部品です。従って交換時は必ず指定の部品を使用してください。

PARTS LIST OF EXPLODED VIEW

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	1		PANEL , FRONT(AL)	CKM1A155YC39	1	
	2	00D 943 0066 505	PANEL , SUB	CGW1A391RED3	1	*
	3	00D 943 0093 303	ORNAMENT , SIDE	CGR1A357MBC22	2	*
	4	00D 943 0099 404	VOLUME KNOB ASS'Y	HGK1A104ZA	2	
	5	00D 943 0066 408	WINDOW , FIP	CGU1A361Z	1	*
	6	00D 943 0099 501	WINDOW , IR	CGU1A360	1	*
	7	00D 943 0093 604	STAND BY KNOB ASS'Y	CGK1A105ZA	1	*
	8	00D 943 0093 701	INDICATOR , LED	CGL1A233	1	*
	9	00D 943 0099 608	KNOB , FUNCTION	CBT1A953MBC22	1	
	10	00D 943 0099 705	FIP	HFL15ST43GN	1	
	11	00D 943 0094 205	BRACKET , FIP	CMD1A504	2	*
	12		FRONT PCB ASS'Y	COP11750B-2	1	
	13	00D 943 0099 909	CHASSIS , BOTTOM	CUA1A253	1	
	14	00D 943 0094 506	FOOT	CKL1A189	4	*
	15	00D 943 0094 603	CUSHION , FOOT	KHG1A285	4	
⚠	16		MAIN TRANS(EUR)	CLT5P041ZE	1	
	17	00D 943 0094 904	BRACKET , PCB	CMD1A543	1	*
	18		DSP PCB ASS'Y	COP11750B-2	1	
	19	00D 943 0095 107	HOLDER , PCB	CHE170	5	*
	20		MAIN PCB ASS'Y	COP11751B-1	1	
	21	-	HEAT SINK ASS'Y	CMY1A252ZA	1	
	22	-	HEAT SINK ASS'Y	CMY3A222ZA	1	
	23	-	HEAT SINK ASS'Y	CMY1A043ZA	1	*
	24	-	HEAT SINK	CMY1A251	1	
	25	00D 943 0100 209	COVER , FAN	CMD1A551	2	*
	26	-	HEAT SINK	CMY1A250	1	*
	27	00D 943 0100 306	FAN , MOTOR	HDMF410T12L1C01	1	
	28	-	HEAT SINK ASS'Y	CMY1A255ZA	1	
	29	00D 943 0100 403	BRACKET , PCB	CMD1A544	2	*
	30		SUB TRANS PCB ASS'Y	COP11751B-2	1	
	31		RELAY PCB ASS'Y	COP11750B-3	1	
	32	00D 943 0095 806	SHEET , COVER	CGX1A364	1	*
	33		PANEL , REAR	CKF2A289Y	1	
	34	00D 943 0095 505	BUSHING , AC CORD	KHR1A028	1	
⚠	35		CORD , POWER	CJA2B043YA	1	
	36	00D 943 0093 507	CUSHION , TRANS	CHG1A294	1	*
	37	00D 943 0066 602	CABINET , TOP	CKC1A160G23	1	*
	38	00D 943 0094 700	RUBBER	CHG1A113	4	*
	39	00D 943 0095 204	CUSHION	CHG1A243	1	*
	40		TUNER , MODULE	CNVML114MA1-A17	1	
	41	00D 943 0101 606	PLATE , SHIELD	CMC1A266	1	*
	42		STOPPER , IR SENSOR	CHG1A262	1	
	43		CUSHION , SHIELD	KMC1A254	2	
	44	00D 943 0116 109	SHEET , TOP	CGX1A367	1	
	45	00D 943 0116 206	STOPPER , SHEET	CMH1A246	4	
SCREW						
	101	00D 943 0097 804	SCREW	CTB3+6F	4	
	102	00D 943 0097 901	SCREW	CTB3+6J	7	
	103	00D 943 0098 007	SCREW	CTB3+6JFC	3	
	104	00D 943 0095 000	SCREW	CTB3+6JFZ	5	
	105	00D 943 0098 104	SCREW	CTB3+8G	8	
	106	00D 943 0098 201	SCREW	CTB3+8GFZ	4	
	107	00D 943 0098 308	SCREW	CTB3+8J	3	

	Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	108	00D 943 0098 405	SCREW	CTS3+8JFC	9	
	109	00D 943 0098 502	SCREW	CTB3+10GFZ	4	
	110	00D 943 0098 706	SCREW	CTW3+6J	9	
	111	00D 943 0098 803	SCREW	CTW3+12J	5	
	112	00D 943 0095 408	SCREW	CTW3+14J	4	
	113	00D 943 0095 709	SCREW	CTB4+6F	4	
	114	00D 943 0098 900	SCREW	CTWD4+6FFC	2	

PACKING VIEW



PARTS LIST OF PACKING VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
201		BOX , OUT CARTON	CPG1A777X	1	
202	00D 943 0066 903	BAG , POLY	CPB1A134Y	1	*
203	00D 943 0067 106	PAD , SNOW	CPS1A689	2	*
204		INSTRUCTION MANUAL ASS'Y	CQXAVRM330SRE2	1	
204-1		MANUAL , INSTRUCTION	CQX1A990Z	1	
204-2		SHEET, S.S(EX)	CQE1A226Z	1	
204-3		BATTERY	HABAAM1.5V	2	
204-4		AM LOOP ANT	CSA1A020Z	1	
204-5		FM 1 POLE ANT	CSA1A018Z	1	
204-6	00D 943 0096 902	CABLE , OPTICAL	CJS8H005Z	1	
204-7	00D 943 0068 707	BAG , POLY(MANUAL)	CPB1061Y	1	*
205	00D 943 0096 601	SP WIRE ASS'Y	CWXAVCM330S	1	
	00D 943 0096 805	SP WIRE , RED	HWX1A052	1	
	00D 943 0097 309	SP WIRE , WHITE	HWX1A053	1	
	00D 943 0097 503	SP WIRE , GREEN	HWX1A054	1	
	00D 943 0099 006	SP WIRE , PURPLE	HWX1A055	1	
	00D 943 0099 103	SP WIRE , GRAY	HWX1A056	1	
	00D 943 0099 200	SP WIRE , BLUE	HWX1A057	1	
206		REMOCON TRANSMITER ASS'Y	HARTAVRM330SRE2	1	
207		LABEL , EAN	CQB1A694Z	2	
208		LABEL , CONTROL	CQB1A627	2	
209	00D 943 0097 600	LABEL , SERIAL NO	CQB1A622	1	*
210		LABEL , RATING	CQB1A681Y	1	
211		LABEL , CAUTION	CQB1A661Z	1	
212		LABEL , CE	CQB1A662Z	1	
213	00D 943 0101 703	LABEL , NOTICE	CQB1A697Z	1	

NOTE FOR SCHEMATIC DIAGRAM

WARNING:

Parts marked with this symbol \triangle 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 milliamps, 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.

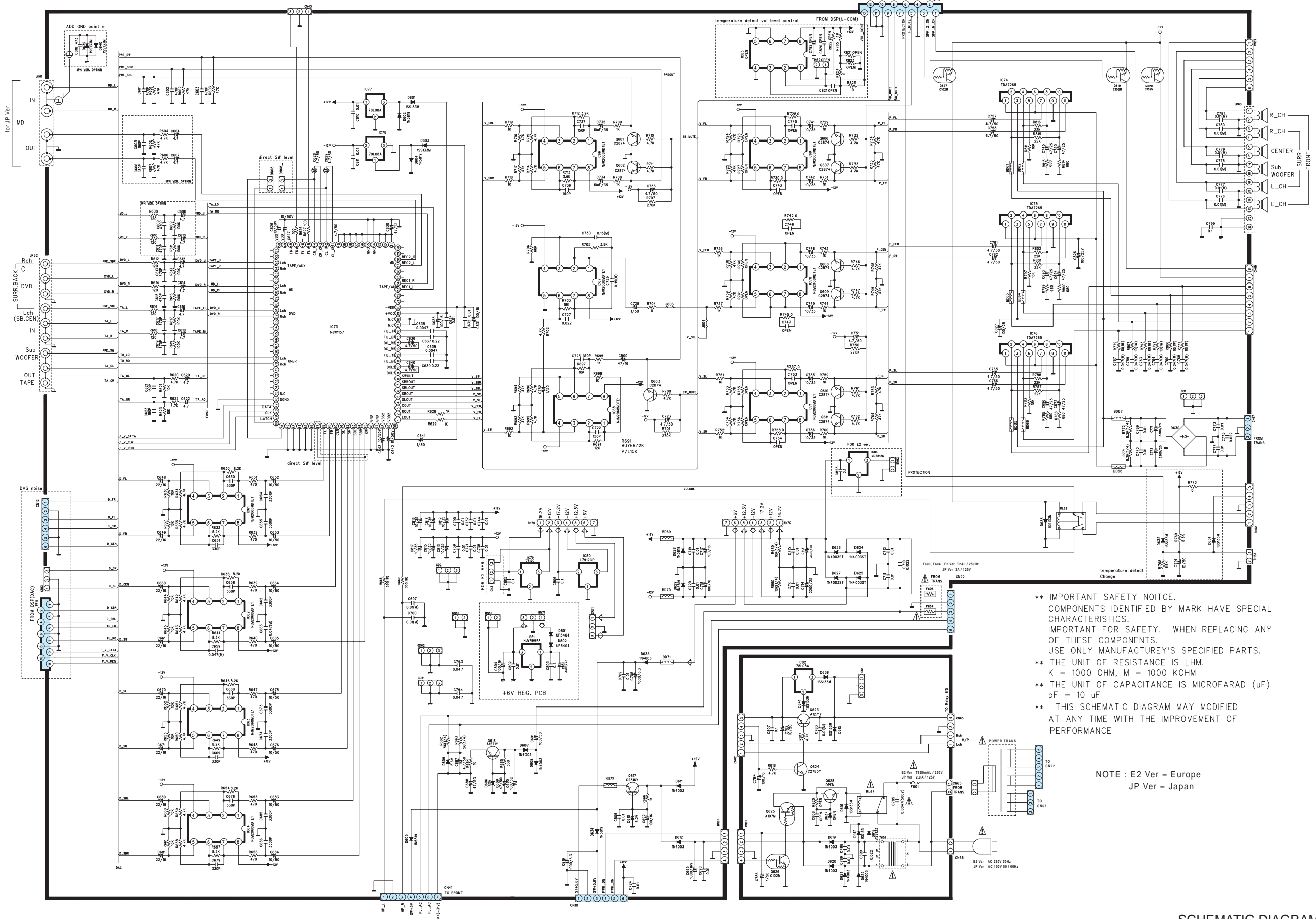
配線図について

\triangle 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 Ω 、k は k Ω 、M は M Ω を示す。
- (2) 指定なきコンデンサーの値は μF 、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。

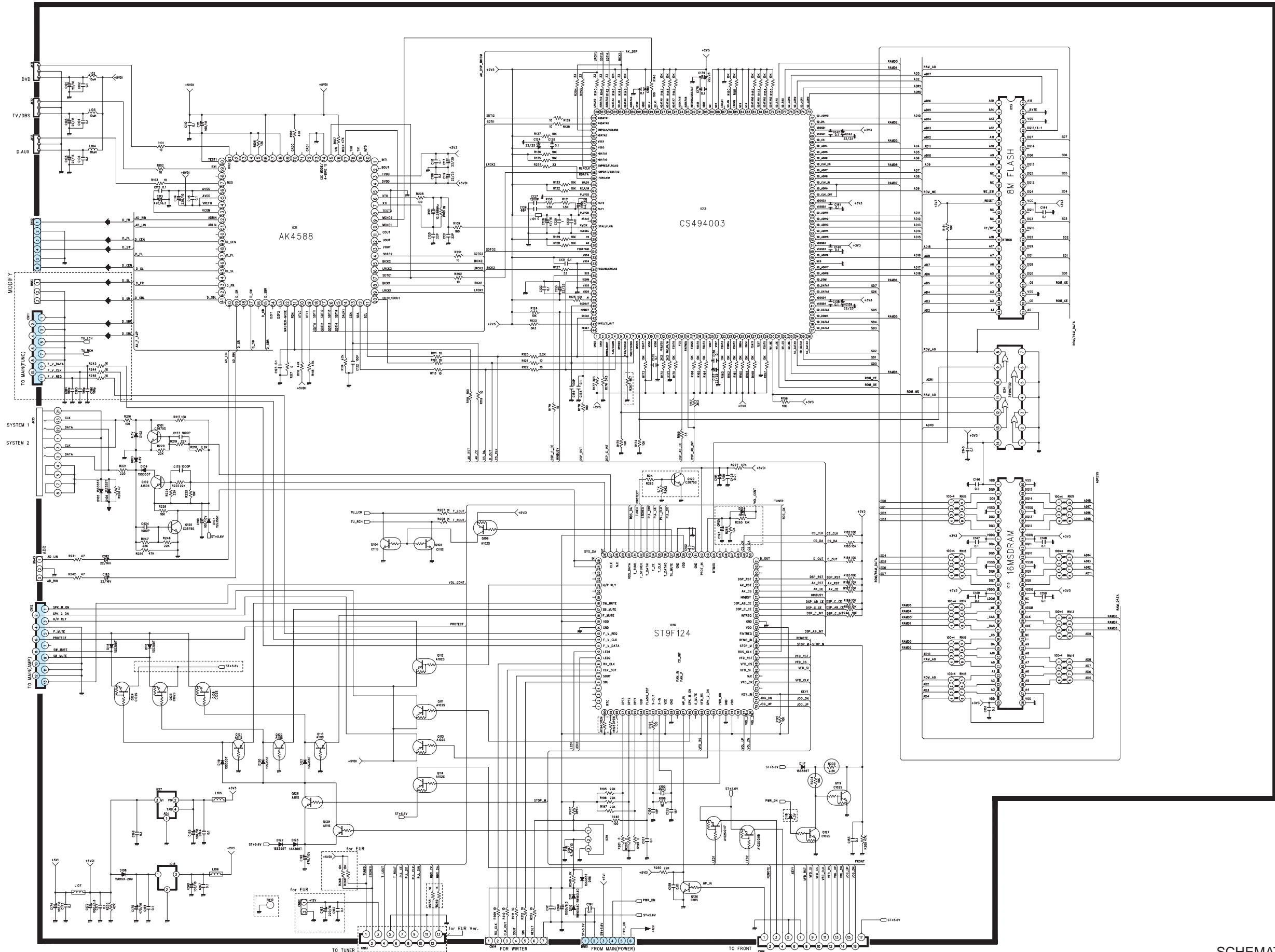
1 2 3 4 5 6 7 8 9 10 11



**** IMPORTANT SAFETY NOTICE.**
 COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS.
 IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS,
 USE ONLY MANUFACTURER'S SPECIFIED PARTS.
 ** THE UNIT OF RESISTANCE IS LHM.
 K = 1000 OHM, M = 1000 KOHM
 ** THE UNIT OF CAPACITANCE IS MICROFARAD (uF)
 pF = 10 uF
 ** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE

NOTE : E2 Ver = Europe
 JP Ver = Japan

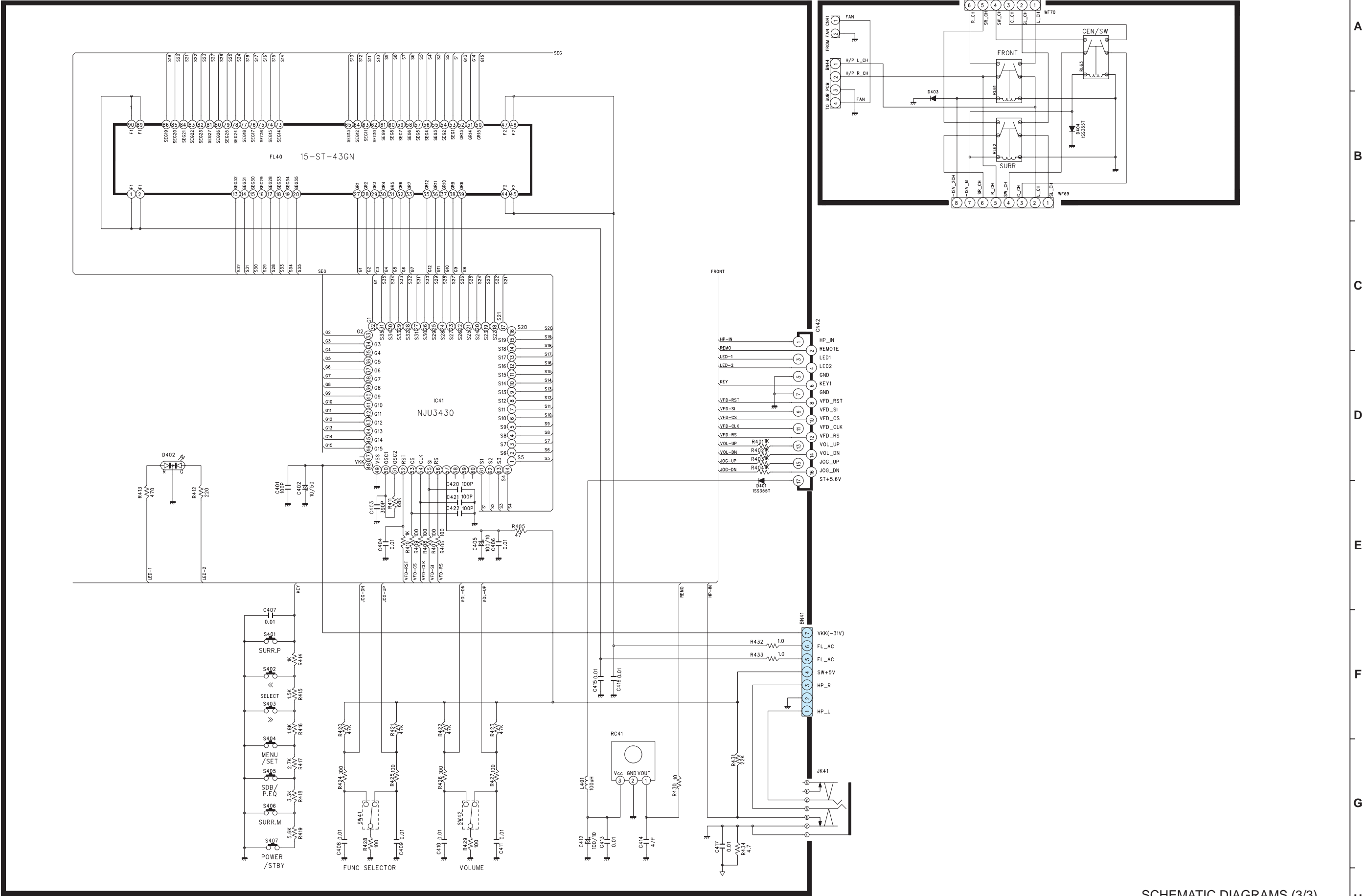
A
B
C
D
E
F
G
H



SCHEMATIC DIAGRAMS (2/3)
DSP UNIT

A
B
C
D
E
F
G
H

1 2 3 4 5 6 7 8 9 10 11



SCHEMATIC DIAGRAMS (3/3)
FRONT UNIT

A
B
C
D
E
F
G
H