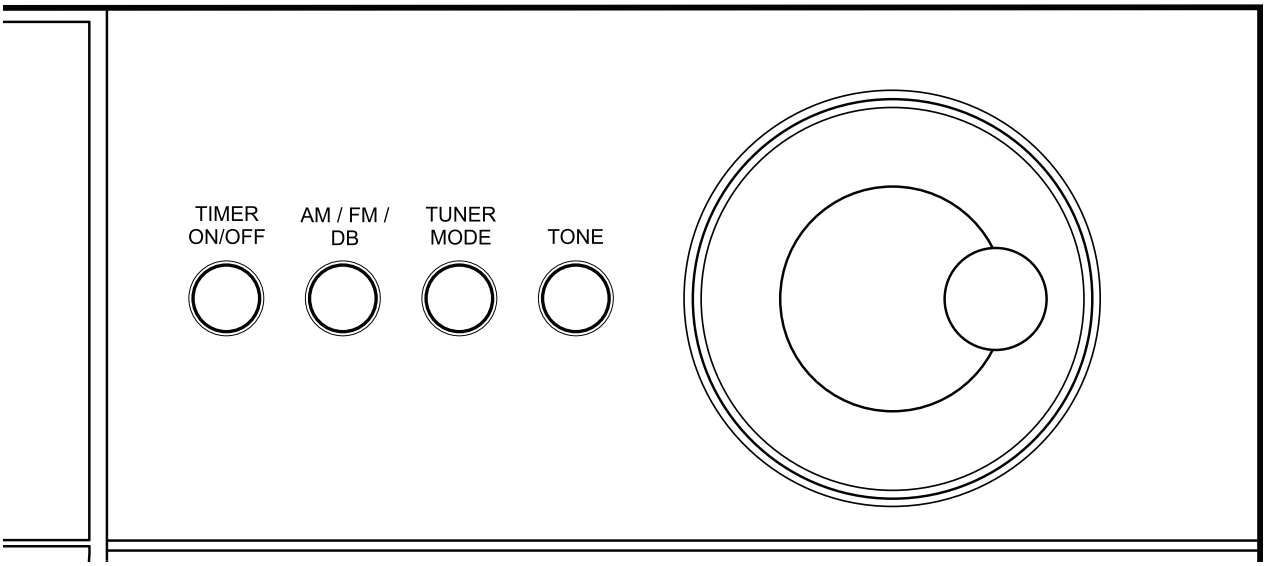
SERVICE MANUAL

NAD



Before SN A99VISOFIVE04701

VISO FIVE

DVD Surround Sound Receiver

VISO FIVE

DVD Surround Sound Receiver

SECTION 1
SUMMARY

CONTENTS

PRODUCT SAFETY SERVICING GUIDELINES

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY. NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

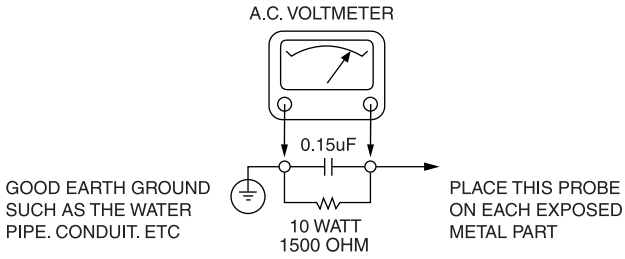
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM AC LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING AC CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN AC LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFET TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN AC VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD, 150V AC TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME.
   MEASURE THE AC VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR.
   REVERSE THE AC PLUG AND REPEAT AC VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART.
   VOLTAGE MEASURE MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP AC ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT : GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PLACEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCAL MOUNTING KIT MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the A/V Receiver covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.
Remember Safety First:

General Servicing Precautions

1. Always unplug the A/V Receiver AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this A/V Receiver or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cottontipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.

5. Do not apply AC power to this A/V Receiver and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.

6. Always connect test instrument ground lead to the appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical Es devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. Use only an antistatic solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freonpropelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handing unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SPECIFICATIONS

Amplifier Section

Output Power (Front) :
F.T.C Rating:
60 watts RMS per channel minimum, both channels driven into 8 ohms from 20 Hz to 20kHz with no more than 0.09% total harmonic distortion

Surround Output Power (0.5% THD, 1 kHz, 8 ohms) :
50 + 50 Watt (Front)
50 Watt (Center)
50 + 50 Watt (Rear)

Total Harmonic Distortion (Front) :
0.05 % (at 30 watts, 1 kHz)

Delay Time :
DOLBY DIGITAL : REAR : 0 - 15 ms
CENTER : 0 - 5 ms
DOLBY PRO LOGIC : REAR : 15 - 30 ms

Audio Input Sensitivity/Impedance :
*LINE : 320 mV/47 k ohms

Output Level / Impedance :
VCR REC : 300 mV/2.2 k ohms

Frequency Response :
*LINE : 10 Hz - 60 kHz, +1/ -3 dB

Signal-to-Noise Ratio : 1 Watt
*LINE : 70 dB (IHF-A)

Tone Control :
BASS : ±10 dB at 100 Hz
TREBLE : ±10 dB at 10 kHz

Digital Audio Section

Sampling Frequency :
32 kHz, 44.1 kHz, 48 kHz, 96 kHz

DIGITAL Input Level/Impedance
COAXIAL : 0.5 Vp-p/75 ohms
OPTICAL : -15 dBm ~ -21 dBm

Video Section

Input Sensitivity /Impedance : 1.0 Vp-p/75 ohms
Output Level /Impedance : 1.0 Vp-p/75 ohms

*LINE means CAB/SAT , VCR(IPOD) , FRONT

- Improvements may result in specifications and features changing without notice.
- Illustrations may differ slightly from production models.

FM Tuner Section

(Without notes 100.1 MHz, 65 dBf)

Tuning Range :
87.5 MHz - 108.0 MHz C: 50 kHz steps
AH: 100 kHz steps

AM Suppression Ratio: C: 50 dB
AH: 60 dB

Total Harmonic Distortion (1 kHz) :
Mono : 0.4%
Stereo : 0.5%

Frequency Respones : 20 Hz - 15 kHz, +1/ -1. 5 dB
Stereo Separation (1 kHz) : C: 40 dB
AH: 35 dB

Signal-to-Noise Ratio :
Mono : 70 dB
Stereo : 65 dB

AM Tuner Section

Tuning Range:
C : 522 kHz - 1,620 kHz (9 kHz steps)
AH : 520 kHz - 1,710 kHz (10 kHz steps)

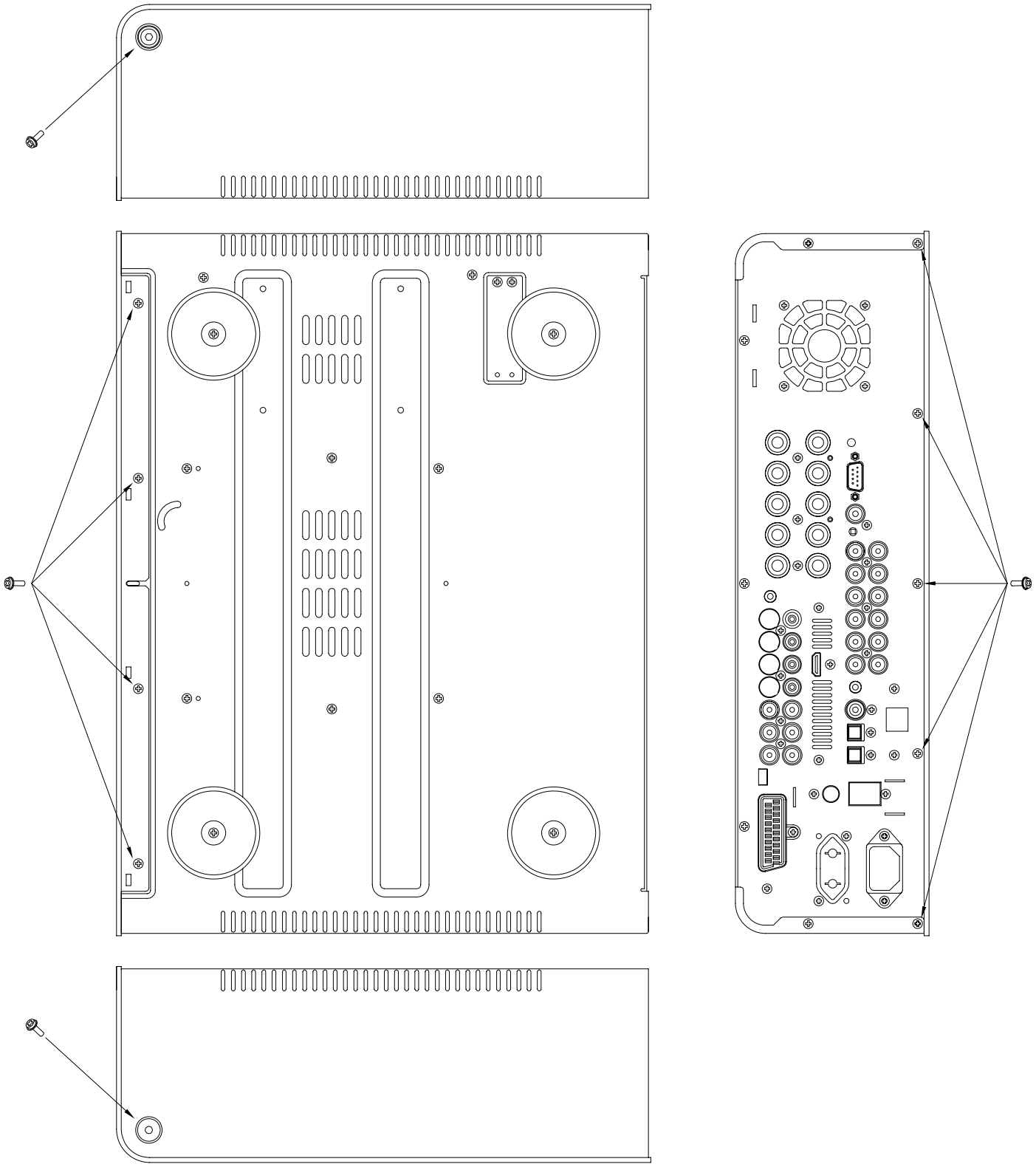
Usable Sensitivity : 55 dB/m
Total Harmonic Distortion : 0.1% at 85 dB/m
Signal-to-Noise Ratio : 40 dB at 85 dB/m

General

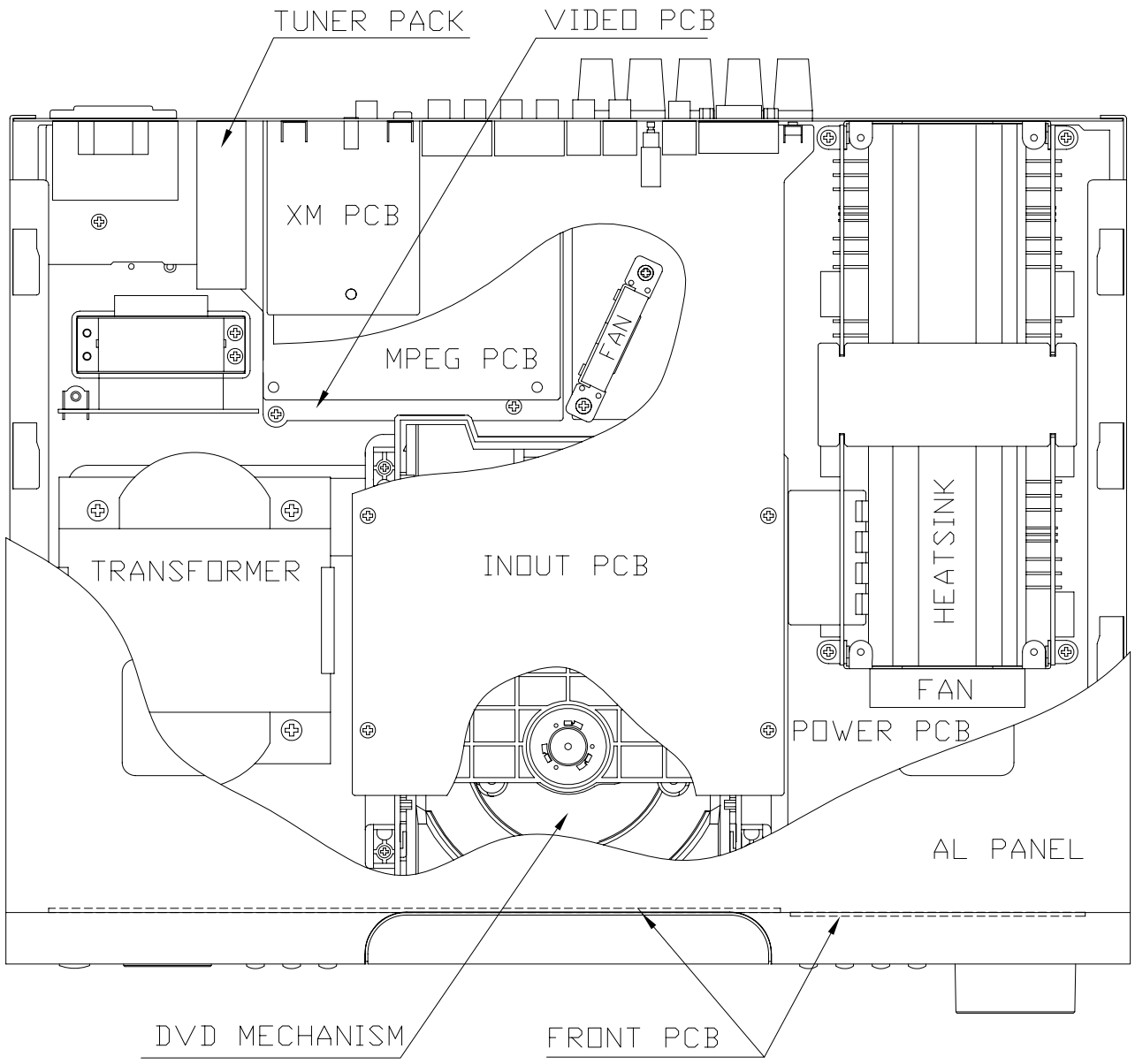
Power Requirements :
C : 230V AC, 50Hz
AH : 120V AC, 60Hz
Power Consumption : C: 1.3A
AH: 2.5A
AC Outlets : unswitched x 1, Total 100 W max. (1A)

Dimensions (W x H x D) : 435 x 133 x 375
Weight (net) : 11.8kg

DISASSEMBLY



PRINCIPAL PARTS LOCATION



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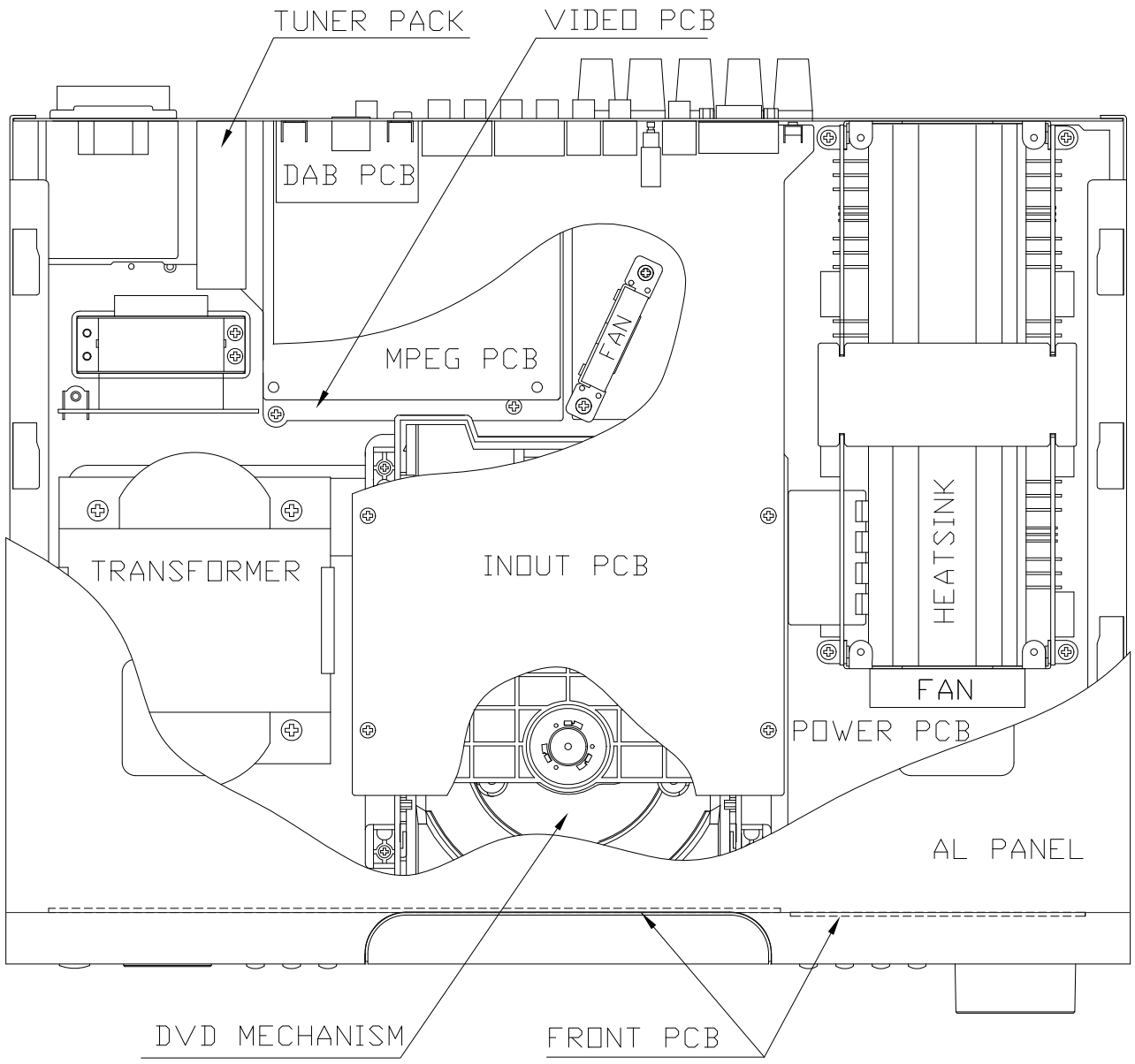
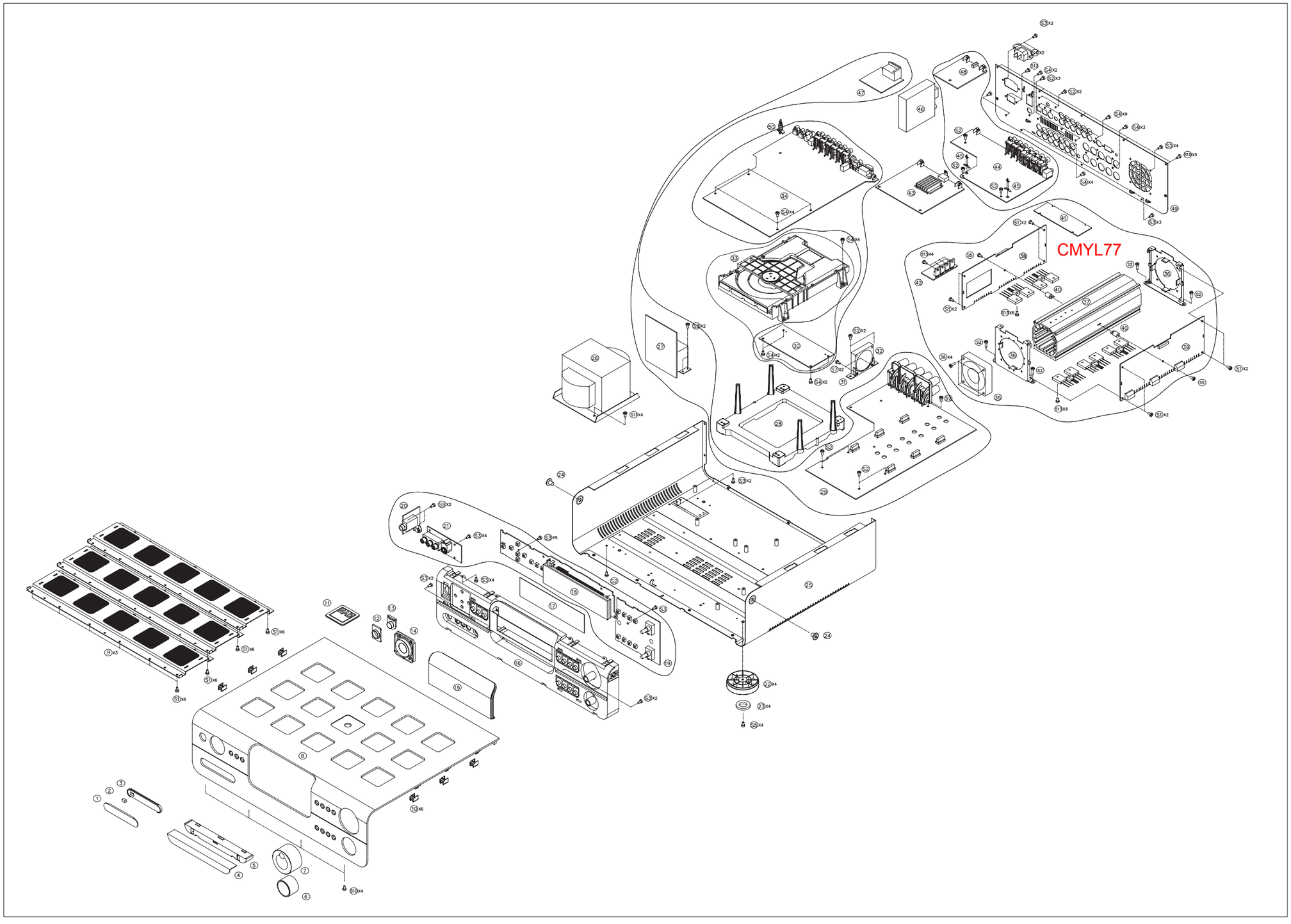


EXPLODED VIEW (AH VERSION)



VISO FIVE AH EXPLODED VIEW PARTS LIST

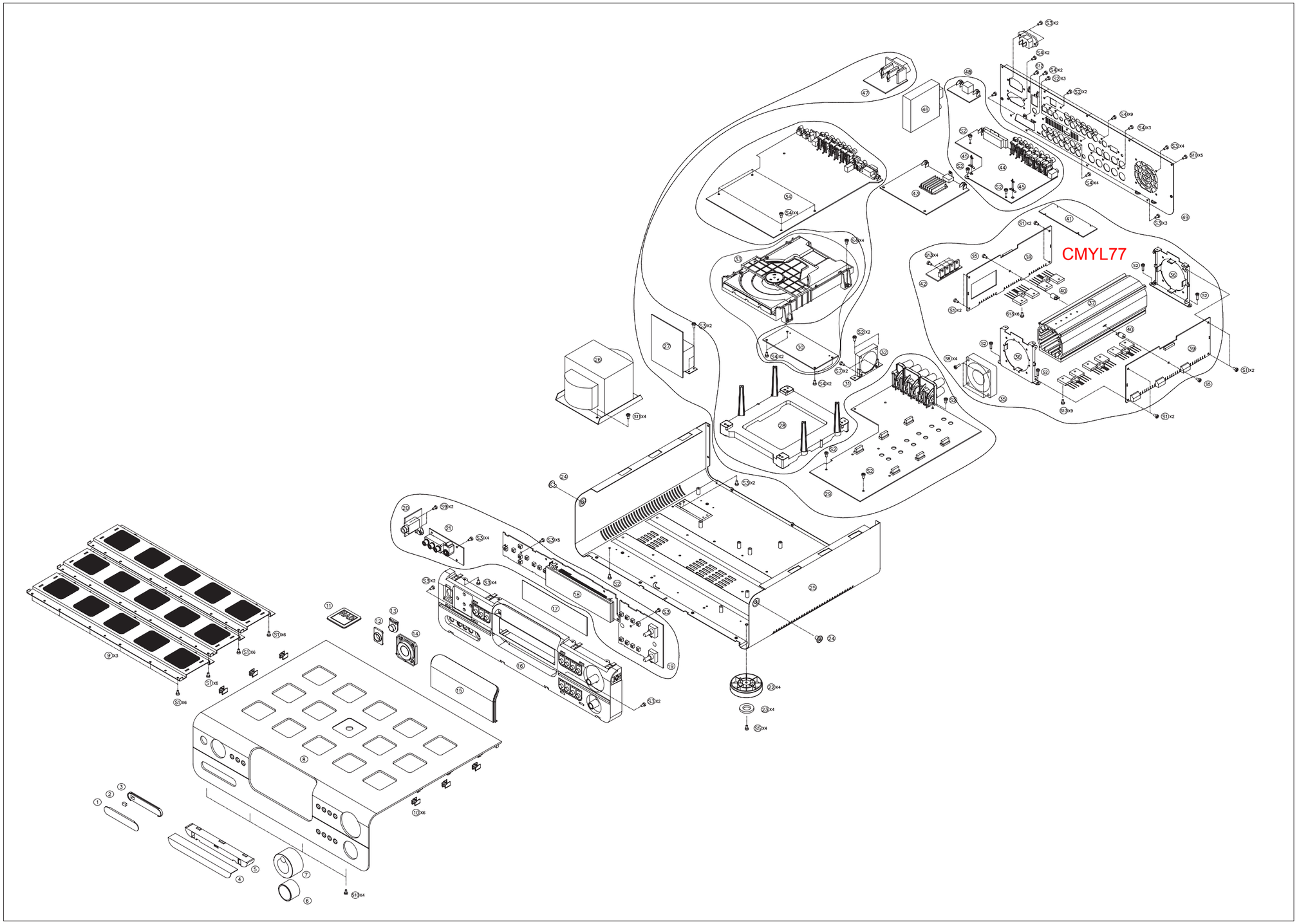
No.	PARTS No.	DESCRIPTION	Q'TY
1	CGX1A397ZC64	ORNAMENT, COVER	1
2	CJC1A008	MAGNET	1
3	CGR1A439B29	COVER, JACK	1
4	CGX1A396C69	ORNAMENT, DOOR	1
5	CGR1A438B29	DOOR	1
6	CGK1A127ZA	VOLUME KNOB ASS'Y	1
7	CGK1A128ZA	ROTARY KNOB ASS'Y	1
8	CKM1A188YC64	AL PANEL	1
9	CGG1A024ZA	GRILL ASS'Y	3
10	CMH1A283	SUPPORT, AL PANEL	6
11	CGB1A204Z	BADGE, NAD	1
12	CGL1A267Z	INDICATOR, POWER	1
13	CBT1A1058ZA	POWER KNOB ASS'Y	1
14	CGK1A126ZA	FUNCTION KNOB ASS'Y	1
15	CGU1A411XA28	WINDOW	1
16	CGW2A441B34	PANEL, SUB	1
17	CMZ1A131Z	FILTER	1
18	COP11955B-1	FRONT PCB ASS'Y	1
19	COP11955B-2	FRONT PCB ASS'Y	1
20	COP11955B-4	FRONT PCB ASS'Y	1
21	COP11955B-3	FRONT PCB ASS'Y	1
22	CKL1A095H61	FOOT	4
23	CHG1A297	CUSHION, FOOT	4
24	CHD1A062GFC	SCREW, SPECIAL	2
25	CUA1A278B36	CHASSIS	1
26	CLT5V046ZU	MAIN TRANSFORMER	1
27	COP11959B-2	POWER PCB ASS'Y	1
28	CMH1A282	SUPPORT, MECHA	1
29	COP11959B-1	POWER PCB ASS'Y	1
30	COP11957C-2	MAIN PCB ASS'Y	1
31	CMD1A507	BRACKT, FAN	1
32	HDMF410T12LIC01	FAN	1
33	CADL77ZA	MECHANISM ASS'Y	1
34	COP11957B-1	MAIN PCB ASS'Y	1
35	CFNCF12615S	FAN	1
36	CMD1A479	BRACKET, HEATSINK	2
37	CMY2A197C2	HEATSINK	1
38	COP11960B-1	AMP PCB ASS'Y	1
39	COP11960B-2	AMP PCB ASS'Y	1
40	CMH1A119	SUPPORT, HEATSINK	2
41	COP11960B-3	AMP PCB ASS'Y	1
42	COP11960B-4	AMP PCB ASS'Y	1
43	CIP11958CSMD	MPEG PCB ASS'Y	1
44	COP11956B-1	VIDEO PCB ASS'Y	1
45	KRE1A064	SUPORT, PCB	2
46	CNVMB014MA0J8LS	TUNER MODULE	1
47	COP11959B-3	POWER PCB ASS'Y	1
48	COP11956B-2	VIDEO PCB ASS'Y	1
49	CKF2A378WK1	PANEL, REAR	1
50	CRE1A072	SUPPORT, PCB	1

No.	PARTS No.	DESCRIPTION	Q'TY
S1	CTB3+6JR	SCREW	32
S2	CTB3+6FFZR	SCREW	17
S3	CTB3+8JFZR	SCREW	31
S4	CTB3+10JFZR	SCREW	32
S5	CTB3+16JR	SCREW	2
S6	CTW3+8JFZR	SCREW	4
S7	CTW3+18JR	SCREW	2
S8	CTW3+20JR	SCREW	4
S9	CTWS3+10GR	SCREW	2
S10	CTBD3+8JFZR	SCREW, DOT	9
S11	CHD1A023R	SCREW, SPECIAL	4
S12	CHD1A055R	SCREW, SPECIAL	0
S13	CHD1A012R	SCREW, SPECIAL	19

New Part Numbers Non-1W Versions

COP11955B-A
VISO FIVE FRONT AUTO PCB assembly NON-1W version
COP11957B
VISO FIVE MAIN AUDIO & MICOM PCB
AUTO assembly NON-1W version AH
COP11957C-A
VISO FIVE MAIN AUDIO & MICOM PCB
AUTO assembly NON-1W version C
COP11959C-A
VISO FIVE POWER PCB AUTO NON-1W version C

EXPLODED VIEW (C VERSION)



VISO FIVE C EXPLODED VIEW PARTS LIST

No.	PARTS No.	DESCRIPTION	Q'TY
1	CGX1A397ZC64	ORNAMENT, COVER	1
2	CJC1A008	MAGNET	1
3	CGR1A439B29	COVER, JACK	1
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48	COP11956C-3	VIDEO PCB ASS'Y	1
49	CKF1A378XK1	PANEL, REAR	1

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S7	CTW3+18JR	SCREW	2
S8	CTW3+20JR	SCREW	4
S9	CTWS3+10GR	SCREW	2
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VISO FIVE MAIN AUDIO & MICOM
PCB AUTO assembly NON-1W version C
COP11959B-A
VISO FIVE POWER PCB AUTO assembly NON-1W version AH
COP11959C-A
VISO FIVE POWER PCB AUTO NON-1W version C

SECTION 2
ELECTRICAL CONTENTS

CONTENTS

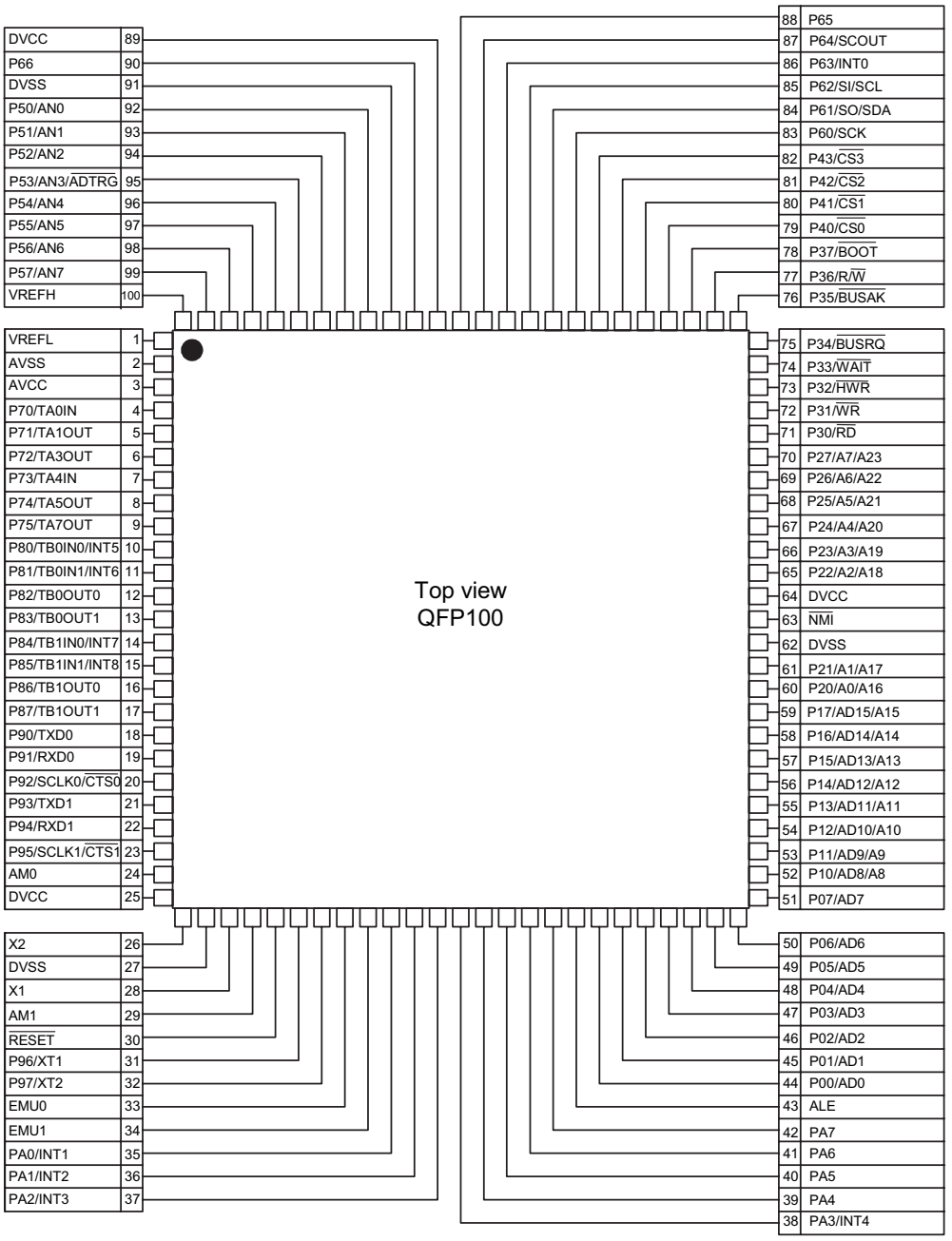
IC BLOCK DIAGRAMS & PIN DESCRIPTION

MCU(T5CC1) : IC81

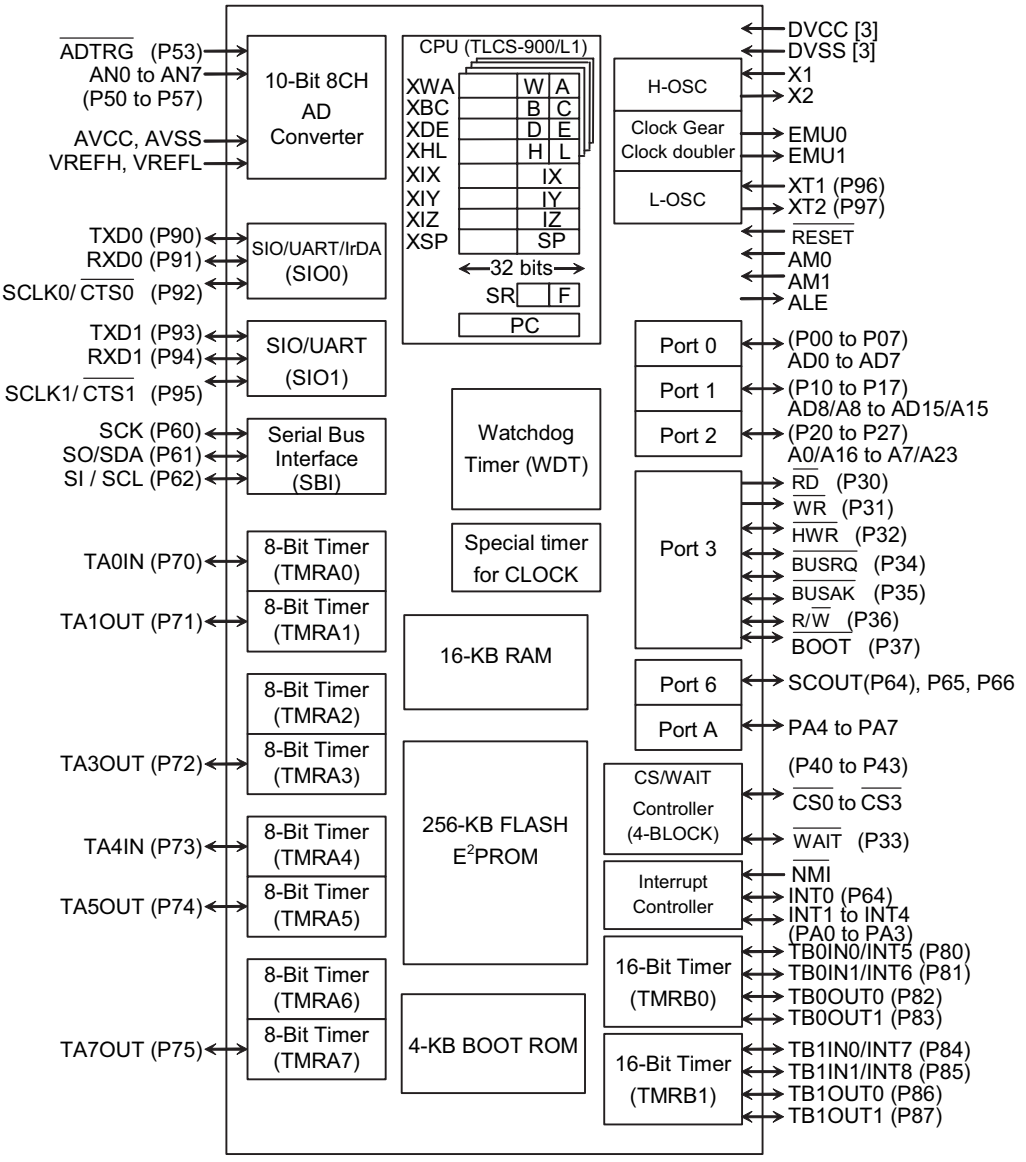
Pin Assignment and Pin Functions

The assignment of input/output pins for the T5CC1, their names and functions are as follows:

PIN ASSIGNMENT



BLOCK DIAGRAM



( ): Initial function after reset

I.C PIN DESCRIPTION (IC , FLASH-u COM : T5CC1)			
PIN NO	PIN NAME	I/O	FUNCTION
1	GND	-	GND
2	AVSS	-	GND
3	AVCC	-	Power Supply port
4	VFD_DOUT	O	VFD Display Data out port
5	VFD_CLK	O	VFD Display Clock out port
6	VFD_BLK	O	VFD Display Blank out port
7	VFD_CS	O	VFD Display Chip selector port
8	HP_IN	I	Headphone in port (Active "H")
9	FUNCTION_MUTE	O	Function Mute port (Active "L")
10	AMP_MUTE1	O	AMP Mute port (Active "H")
11	AMP_MUTE2	O	AMP Mute port (Active "H")
12	CNT_OFF	O	Center Mute port (Active "H")
13	SURR_OFF	O	Surround Mute port (Active "H")
14	SUB_OFF	O	SUB Mute port (Active "H")
15	DVD_CS (FPC_STB)	I	DVD Chip selector port
16	REC_MUTE	O	REC out Mute port (Active "L")
17	iPod_DET	I	iPod Detect port (Active "H")
18	XM & DAB_TX	O	XM & DAB Data out port
19	XM & DAB_RX	I	XM & DAB Data input port
20	TUNER_MUTE	O	TUNER Mute port (Active "H")
21	RS232_TX	O	RS232 Interface Data out port
22	RS232_RX	I	RS232 Interface Data in port
23	BUFFER_CS	O	Buffer IC Chip selector port
24	DVCC	-	Power Supply port
25	DVCC	-	Power Supply port
26	OSC_OUT	O	27MHz Crystal connection port
27	DVSS	-	GND
28	OSC_IN	I	27MHz Crystal connection port
29	DVCC	-	Power Supply port
30	RESET	I	Reset port
31	OSC_IN	I	32.768MHz Crystal connection port
32	OSC_OUT	O	32.768MHz Crystal connection port
33	NO USE	-	No connection
34	NO USE	-	No connection
35	REMOTE_IN	I	System Remote Data in port
36	RDS_DATA	I	RDS Data port
37	RDS_CLK	I	RDS Clock port
38	BACK-UP	I	Back Up port
39	PLL_CE	O	PLL Chip enable port
40	PLL_DATA	O	PLL Data in port
41	PLL_CLK	O	PLL Clock port
42	PLL_DOUT	I	PLL Data out port
43	NO USE	-	No connection
44	STEREO	I	Tuner Module STEREO Control port
45	TUNED	I	Tuner Module TUNED Control port
46	PROTECT_IN	I	Protection port (Active "L")
47	OPTION	I	Option port (H : FM 50KHz step,L : FM 100KHz step)
48	OPTION	I	Option port (H : AM 9K step,L : AM 10K step)
49	AMP_FAN	O	Main FAN operation port (Active "H")

50	SPK_ON	O	Speaker on port (Active "H")
51	FLASH_ADDR18	O	Flash IC Control port
52	BUFFER_CLK	O	Buffer IC Clock port
53	EP_SDA	I/O	EPROM Data port
54	EP_SCL	O	EPROM Clock port
55	DSP_AB_INTREQ	I	DSP Interrupt request port
56	DSP_AB_CS	O	DSP AB Chip selector port
57	DSP/CODEC_D_OUT	I	DSP/CODEC Data in port
58	DSP/CODEC_CLK	O	DSP/CODEC Clock port
59	DSP/CODEC_DATA	O	DSP/CODEC Data out port
60	DSP _C INTREQ	I	DSP Interrupt request port
61	DSP_RESET	O	DSP Reset port
62	DVSS	-	GND
63	DVCC	-	Power Supply port
64	DVCC	-	Power Supply port
65	CODEC_CS	O	CODEC Chip selector port
66	CODEC_RESET	O	CODEC Reset port
67	DSP_C_CS	O	DSP Chip selector port
68	XM_DAC_RESET	O	XM DAC Reset port
69	XM_DAC_MUTE	O	XM Dac Mute port
70	EVOL_MUTE	O	EVOL Mute port
71	EVOL_CLK	O	EVOL Clock port
72	EVOL_DATA	O	EVOL Data port
73	DVD_RESET (RESET)	O	DVD Reset port
74	XM_RESET	O	XM Reset port
75	EXP_DATA	O	EXP IC Data port
76	EXP_CE1	O	EXP IC Chip enable port
77	EXP_CLK	O	EXP Clock port
78	BOOT MODE	I	BOOT Mode port (Active "L")
79	DVD_ON (MPEG ON)	I	DVD ON port
80	MODEL OPTION	O	Model option
81	SMALL_FAN_ON	O	Small FAN operation port (Active "H")
82	DVDA_SEL	O	DVD-Audio selector port
83	DVD_CLK (FPC_CLK)	O	DVD Clock port
84	DVD_DOUT (IRRCV)	O	DVD Data out port
85	DVD_DATA (FPC_DOUT)	I	DVD Data in port
86	UART_RESET	O	Uart IC Reset port
87	POWER_ON	O	Power ON port
88	BUFFER_DATA_OUT	I	Buffer IC Data out port
89	DVCC	-	Power Supply port
90	BUFFER_DATA_IN	O	Buffer IC Data in port
91	DVSS	-	GND
92	KEY IN3	I	KEY Data in port
93	KEY_IN2	I	KEY Data in port
94	KEY_IN1	I	KEY Data in port
95	JOG A2 (FUN-UP)	I	Function A Control port
96	JOG A2 (FUN-DOWN)	I	Function B Control port
97	JOG A1 (VOL-UP)	I	Volume Data in port
98	JOG A1 (VOL-DOWN)	I	Volume Data in port
99	BUFFER_IRQ	I	Buffer IC Interrupt request port
100	DVCC	I	Power Supply port

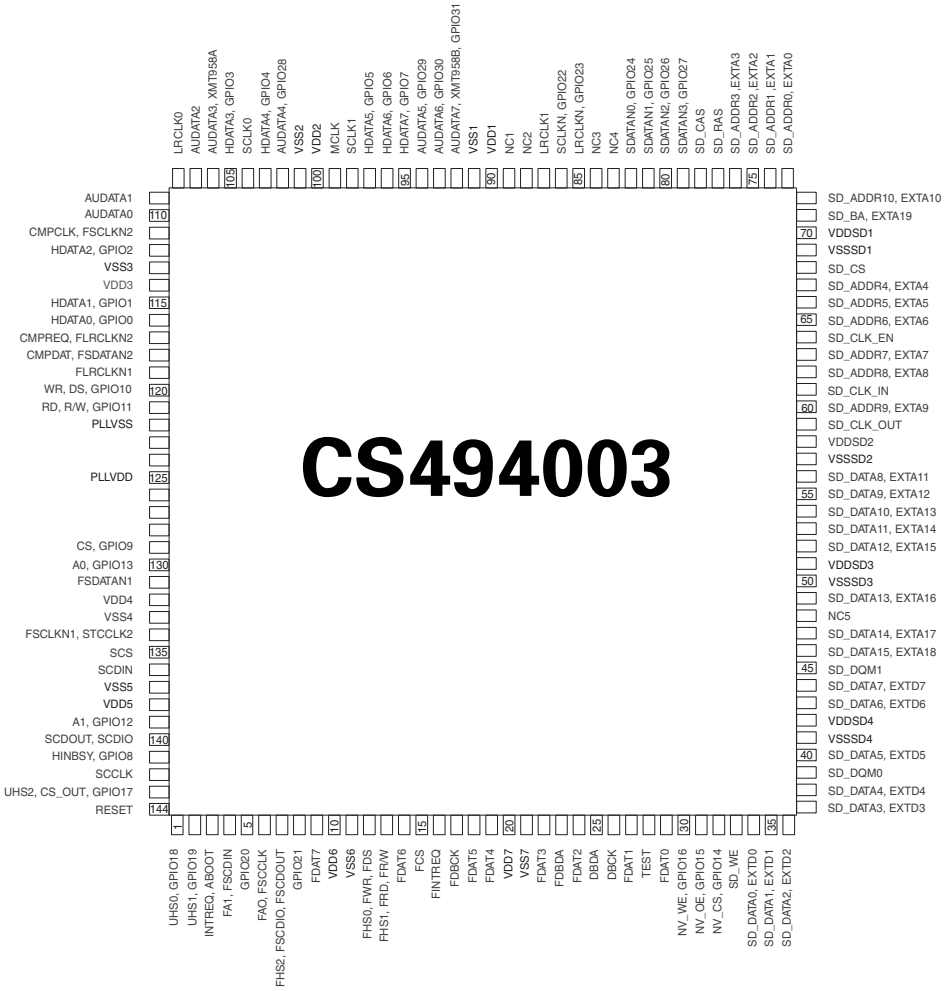
I.C PIN DESCRIPTIONS (IC45 : AUDIO DSP : CS494003)

PIN No	PIN Name	I/O	Function
1	UHS0	O	DSP C Control Mode Select BIT 0
2	HUS1	O	DSP C Control Mode Select BIT 0
3	$\overline{\text{INTREQ,ABODY}}$	O	Open-drain interrupt-request output
4	FA1,FSCDIN	I	Host Address Bit One or SPI Serial Control data input
5	GPIO20	O	General Purpose output
6	FA0,FSCCLK	I	Host parallel Address Bit Zero or Serial Control Port Clock
7	FHS2,FSCDIO	O	DSP AB Control port mode select bit2
8	GPIO21	O	General Purpose output
9	FDAT7	I	DSP AB Bidirectional data bus
10	VDD6		2.5V Supply Voltage
11	VSS6		2.5V Ground
12	FWR,FDS	I	Host write Strobe or Host data strobe
13	FRD,FR/W	O	Host Parallel Output Enable or
14	FDAT6	I	DSP AB Bidirectional data bus
15	$\overline{\text{FCS}}$	I	Host Parallel Chip Select , Host Serial SPI Chip Select
16	$\overline{\text{FINTREQ}}$	O	Open-drain interrupt-request output
17	FDBCK	I	Reserved
18	FDAT5	I	DSP AB Bidirectional data bus
19	FDAT4	I	DSP AB Bidirectional data bus
20	VDD7		2.5V Supply Voltage
21	VSS7		2.5V Ground
22	FDAT3	I	DSP AB Bidirectional data bus
23	FDBDA	I	Reserved
24	FDAT2	I	DSP AB Bidirectional data bus
25	DBDA	I	Debug Data
26	DBCK	I	Debug Clock
27	FDAT1	I	DSP AB Bidirectional data bus
28	TEST	I	Reserved
29	FDAT0	I	DSP AB Bidirectional data bus
30	$\overline{\text{NV\_WE}}$	O	SRAM Write Enable
31	$\overline{\text{NV\_OE}}$	O	SRAM Output Enable
32	$\overline{\text{NV\_CS}}$	O	SRAM Chip Select
33	$\overline{\text{SD\_WE}}$	O	SDRAM Write Enable
34	SD_DATA0	O	SDRAM Data Bus 0
35	SD_DATA1	O	SDRAM Data Bus 1
36	SD_DATA2	O	SDRAM Data Bus 2
37	SD_DATA3	O	SDRAM Data Bus 3
38	SD_DATA4	O	SDRAM Data Bus 4
39	SD_DQM0	O	SDRAM Data Mask 0
40	SD_DATA5	O	SDRAM Data Bus 5
41	VSSSD4		SDRAM Ground
42	VDDSD4		SDRAM Power Supply
43	SD_DATA6	O	SDRAM Data Bus 6
44	SD_DATA7	O	SDRAM Data Bus 7
45	SD_DQM1	O	SDRAM Data Mask 1
46	SD_DATA15	O	SDRAM Data Bus 15

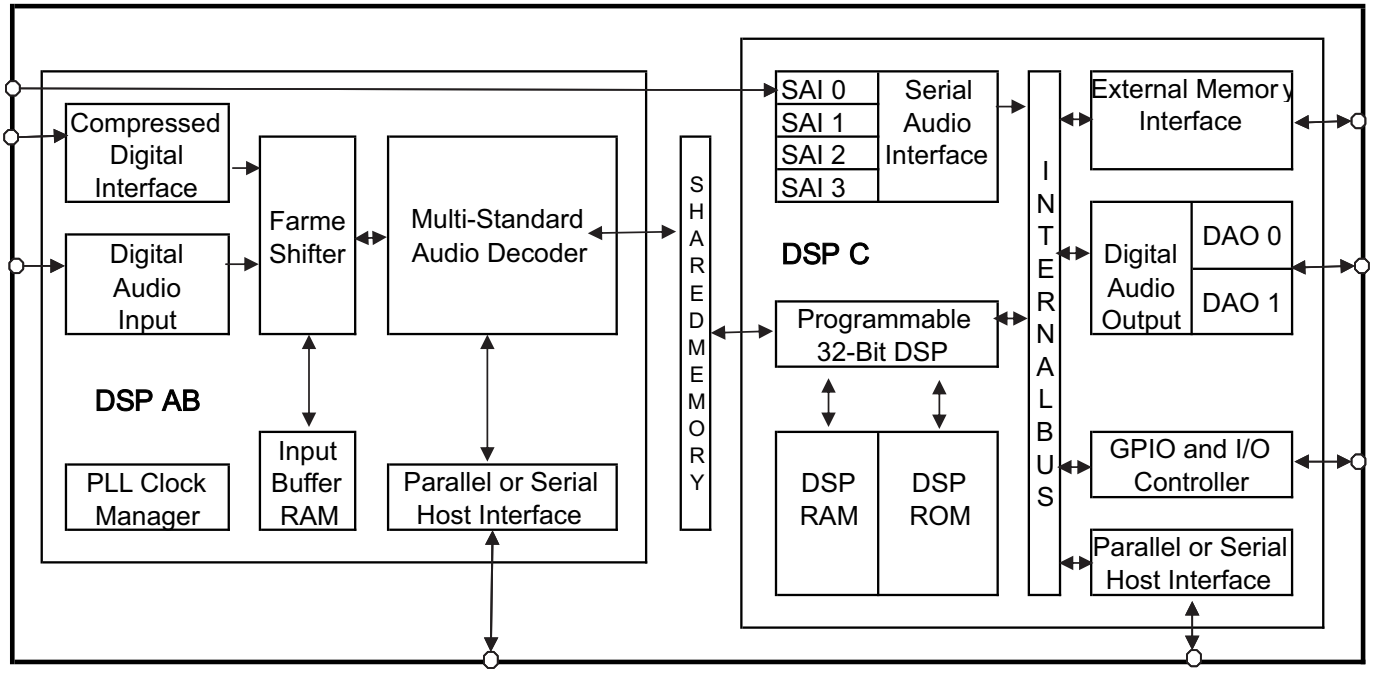
PIN No	PIN Name	I/O	Function
47	SD_DATA14	O	SDRAM Data Bus 14
48	NC5		No Connect (Ground)
49	SD_DATA13	O	SDRAM Data Bus 13
50	VSSSD3		SDRAM Ground
51	VDDSD3		SDRAM Power Supply
52	SD_DATA12	O	SDRAM Data Bus 12
53	SD_DATA11	O	SDRAM Data Bus 11
54	SD_DATA10	O	SDRAM Data Bus 10
55	SD_DATA9	O	SDRAM Data Bus 9
56	SD_DATA8	O	SDRAM Data Bus 8
57	VSSSD2		SDRAM Ground
58	VDDSD2		SDRAM Power Supply
59	SD_CLK_OUT	O	SDRAM CLOCK DATA OUT
60	SD_ADR9	O	SDRAM Address Bus
61	SD_CLK_IN	I	SDRAM CLOCK DATA IN
62	SD_ADR8	O	SDRAM Address Bus 8
63	SD_ADR7	O	SDRAM Address Bus 7
64	SD_CLK_EN	I	SDRAM Ground
65	SD_ADR6	O	SDRAM Address Bus 6
66	SD_ADR5	O	SDRAM Address Bus 5
67	SD_ADR4	O	SDRAM Address Bus 4
68	SD_CS	I	SDRAM Chip Select
69	VSSSD1		SDRAM Ground
70	VDDSD1		SDRAM Power Supply
71	SD_BA	O	SDRAM Bank Address Select
72	SD_ADR10	O	SDRAM Address Bus 10
73	SD_ADR0	O	SDRAM Address Bus 0
74	SD_ADR1	O	SDRAM Address Bus 1
75	SD_ADR2	O	SDRAM Address Bus 2
76	SD_ADR3	O	SDRAM Address Bus 3
77	SD_RAS	O	SDRAM Row Address Strobe
78	SD_CAS	O	SDRAM Column Address Strobe
79	SDATAN3	I	PCM Audio input Data 3
80	SDATAN2	I	PCM Audio input Data 2
81	SDATAN1	I	PCM Audio input Data 1
82	SDATAN0	I	PCM Audio input Data 0
83	NC4		No Connect (Ground)
84	NC3		
85	LRCLKN	I	PCM audio input sample rate clock
86	SCLKN	I	PCM audio input bit clock
87	LRCLK1	O	Audio Output Sample Rate Clock
88	NC2		No Connect (Ground)
89	NC1		
90	VDD1		2.5V Supply Voltage
91	VSS1		2.5V Ground
92	XMT958,AUDATA7	O	Digital Audio Output 7 , S/PDIF Transmitter
93	AUDATA6	O	Digital Audio Output 6
94	AUDATA5	O	Digital Audio Output 5
95	HDATA7	O	DSP C Bidirectional data bus 7

PIN No	PIN Name	I/O	Function
96	HDATA6	O	DSP C Bidirectional data bus 6
97	HDATA5	O	DSP C Bidirectional data bus 5
98	SCLK1	O	Audio output bit clock
99	MCLK	I	Audio Master clock
100	VDD2		2.5V Supply Voltage
101	VSS2		2.5V Ground
102	AUDATA4	O	Digital Audio Output 4
103	HDATA4	O	DSP C Bidirectional data bus 4
104	SCLK0	O	Audio output bit clock
105	HDATA3	O	DSP C Bidirectional data bus 3
106	AUDATA3	O	Digital Audio Output 3
107	AUDATA2	O	Digital Audio Output 2
108	LRCLK0	O	Audio Output Sample Rate Clock
109	AUDATA1	O	Digital Audio Output 1
110	AUDATA0	O	Digital Audio Output 0
111	CMPCLK,SCLKN2	I	PCM audio input bit clock
112	HDATA2	O	DSP C Bidirectional data bus 2
113	VSS3		2.5V Ground
114	VDD3		2.5V Supply Voltage
115	HDATA1	O	DSP C Bidirectional data bus 1
116	HDATA0	O	DSP C Bidirectional data bus 0
117	CMPREQ,FLRCLK2	I	PCM Audio Data input bit clock
118	CMPDAT,FSDATA2	I	PCM Audio data input Number two
119	FLRCLKN1	I	PCM audio data input one
120	WR,DS	I	DSP AB Control port mode select bit 0
121	RD,R/W	I	DSP AB Control port mode select bit 1
122	PLLVSS		PLL Ground voltage
123	FILT2		Phase-Locked Loop Filter
124	FILT1		Phase-Locked Loop Filter
125	PLLVDD		PLL supply voltage
126	XTALO	O	Crystal OSC Output
127	XTAL,1CLKIN	I	External Clock input/Crystal OSC input
128	CLKSEL	I	DSP Clock select
129	CS	O	Host parallel Chip Select
130	A0	O	Host Parallel Address bit 0
131	FSDATAN1	I	PCM Audio Data input one
132	VDD4		2.5V Supply Voltage
133	VSS4		2.5V Ground
134	FSCLKN1,STCLK2	I	PCM audio input bit clock
135	$\overline{SCS}$	I	Host Serial SPI Chip Select (Active "L")
136	SCDIN	I	SPI Serial control data input
137	VSS5		2.5V Ground
138	VDD5		2.5V Supply Voltage
139	A1	O	Host Address bit 1
140	SCDOUT	O	Serial control port data
141	HNBSY	I	Input Host Message status
142	SCCLK	O	Serial control port clock
143	UHS2,CS_OUT	O	DSP C Control Mode Select BIT 2
144	RESET	I	Master Reset Input

PIN ASSIGNMENT(IC45: CS494003)

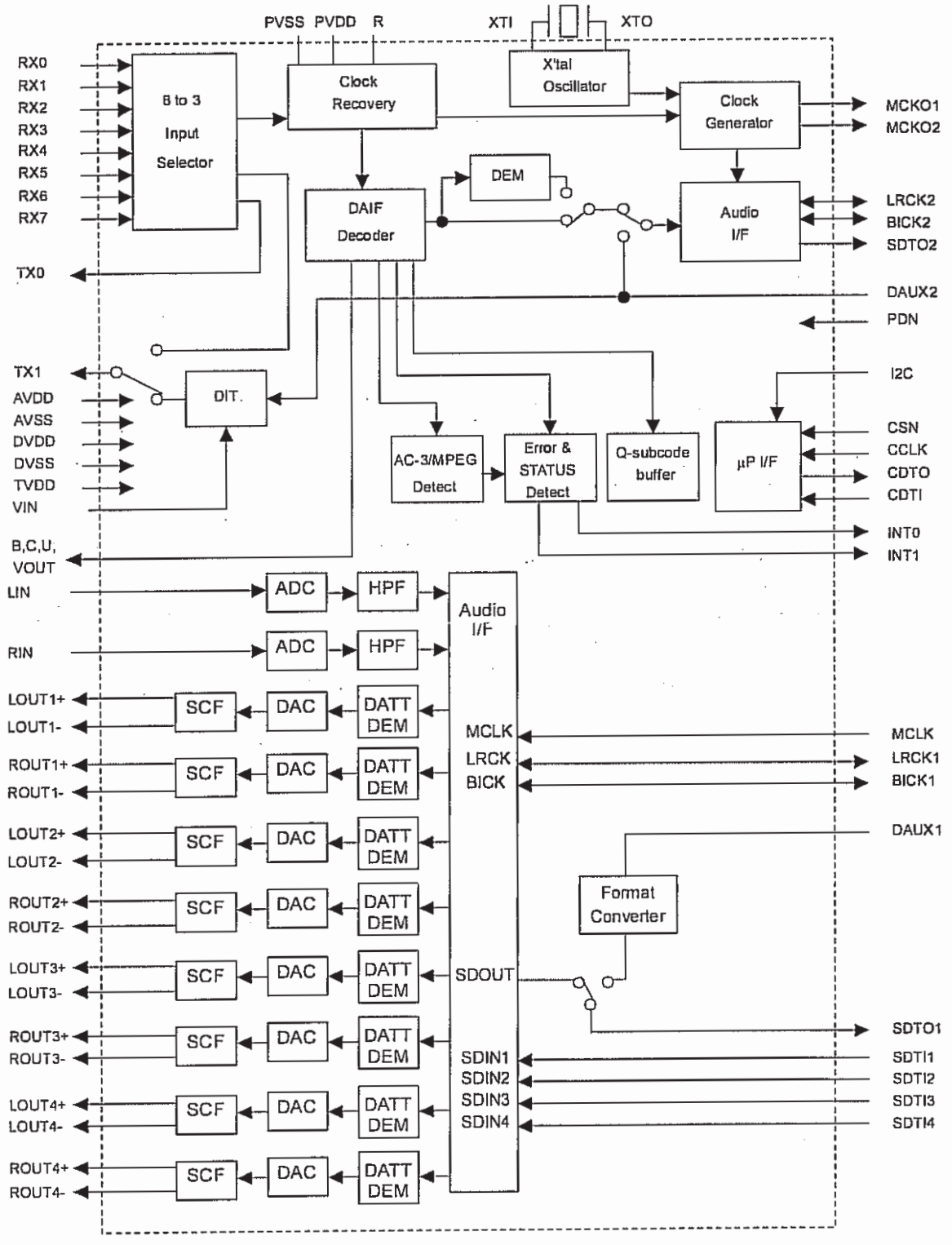


BLOCK DIAGRAM(IC45: CS494003)



CODEC+DIR (AK4589) : IC44

BLOCK DIAGRAM



PIN DESCRIPTION

PIN/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 flames.
3	TVDD	-	Output Buffer Power Supply Pin, 2.7V~5.25V
4	DVDD	-	Digital Power Supply Pin, 4.75V~5.25V
5	DVSS	-	Digital Ground Pin
6	XTO	O	X'tal Output Pin
7	XTI	I	X'tal 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= "L".
21	CCLK	I	Control Data Clock Pin in Serial Mode, I2C= "L"
	SCL	I	Control Data Clock Pin in Serial Mode, I2C= "H"
22	CDTI	I	Control Data Input Pin in Serial Mode, I2C= "L".
	SDA	I/O	Control Data Pin in Serial Mode, I2C= "H".
23	CSN	I	Chip Select Pin in Serial Mode, I2C= "L".
		I	This pin should be connected to DVSS, I2C= "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

PIN DESCRIPTION

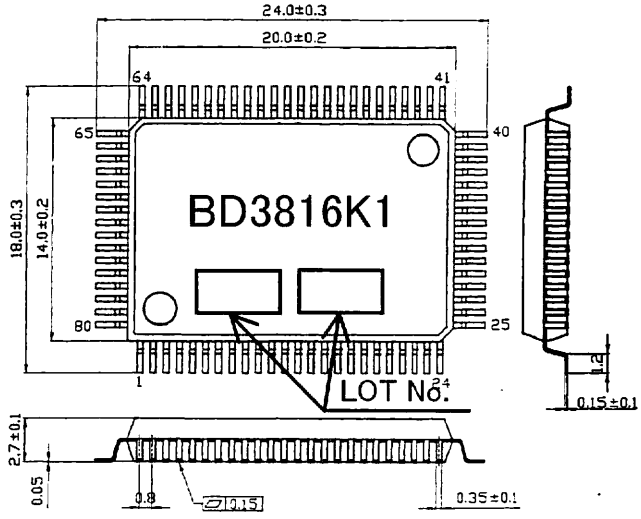
No.	Pin Name	I/O	Function	
31	PDN	I	Power-Down Mode Pin When "L", the AK4589 is powered-down, all digital output pins go "L", all registers are reset. When CAD1/0 pins are changed, the AK4589 should be reset by PDN pin.	
32	MASTER	I	Master Mode Select Pin "H": Master mode, "L": Slave mode	
33	DZF2	O	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". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H". It always is in "L" when P/S pin is "H".	
	OVF	O	Analog Input Overflow Detect Pin This pin goes to "H" if the analog input of Lch or Rch overflows.	
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". And when RSTN bit is "0", PWDAN bit is "0", this pin goes to "H". Output is selected by setting DZFE pin when P/S pin is "H".	
35	LOUT4-	O	DAC4 Lch Negative Analog Output Pin	470pF capacitor should be connected between LOUT4- and LOUT4+.
36	LOUT4+	O	DAC4 Lch Positive Analog Output Pin	
37	ROUT4-	O	DAC4 Rch Negative Analog Output Pin	470pF capacitor should be connected between ROUT4- and ROUT4+.
38	ROUT4+	O	DAC4 Rch Positive Analog Output Pin	
39	LOUT3-	O	DAC3 Lch Negative Analog Output Pin	470pF capacitor should be connected between LOUT3- and LOUT3+.
40	LOUT3+	O	DAC3 Lch Positive Analog Output Pin	
41	ROUT3-	O	DAC3 Rch Negative Analog Output Pin	470pF capacitor should be connected between ROUT3- and ROUT3+.
42	ROUT3+	O	DAC3 Rch Positive Analog Output Pin	
43	LOUT2-	O	DAC2 Lch Negative Analog Output Pin	470pF capacitor should be connected between LOUT2- and LOUT2+.
44	LOUT2+	O	DAC2 Lch Positive Analog Output Pin	
45	ROUT2-	O	DAC2 Rch Negative Analog Output Pin	470pF capacitor should be connected between ROUT2- and ROUT2+.
46	ROUT2+	O	DAC2 Rch Positive Analog Output Pin	
47	LOUT1-	O	DAC1 Lch Negative Analog Output Pin	470pF capacitor should be connected between LOUT1- and LOUT1+.
48	LOUT1+	O	DAC1 Lch Positive Analog Output Pin	
49	ROUT1-	O	DAC1 Rch Negative Analog Output Pin	470pF capacitor should be connected between ROUT1- and ROUT1+.
50	ROUT1+	O	DAC1 Rch Positive Analog Output Pin	
51	LIN	I	Lch Analog Input Pin	
52	RIN	I	Rch Analog Input Pin	
53	VCOM	-	Common Voltage Output Pin 2.2μF capacitor should be connected to AVSS externally.	
54	VREFH	-	Positive Voltage Reference Input Pin, AVDD	

PIN DESCRIPTION

No.	Pin Name	I/O	Function
55	AVDD	-	Analog Power Supply Pin, 4.75V~5.25V
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 12kΩ +/-1% resistor should be connected to PVSS externally.
66	PVDD	-	PLL Power supply Pin, 4.75V~5.25V
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^2C 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 DIT bit = "0", Through Data. When DIT bit = "1", DAUX2 Data.
80	INT0	O	Interrupt 0 Pin

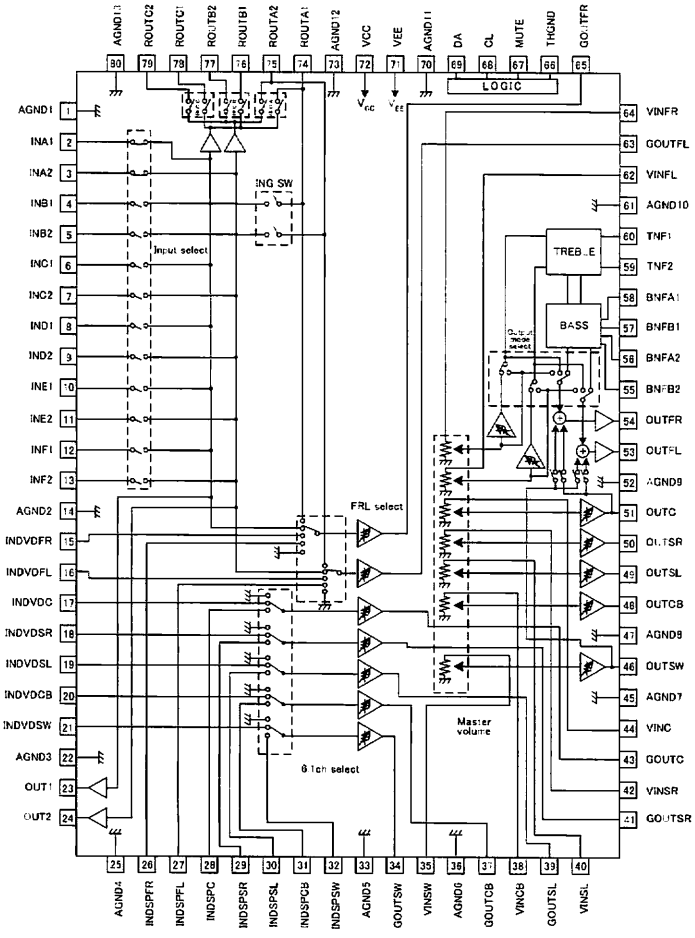
VOLUME&FUNCTION (BD3816K1) : IC11

Outline dimension・Marking dimension



QFP80(Unit:mm)

Block diagram



Pin number•Pin name

Pin number	Pin name	Pin number	Pin name	Pin number	Pin name	Pin number	Pin name
1	AGND1	21	INDVDSW	41	GOUTSR	61	AGND10
2	INA1	22	AGND3	42	VINSR	62	VINFL
3	INA2	23	OUT1	43	GOUTC	63	GOUTFL
4	INB1	24	OUT2	44	VINC	64	VINFR
5	INB2	25	AGND4	45	AGND7	65	GOUTFR
6	INC1	26	INDSPFR	46	OUTSW	66	THGND
7	INC2	27	INDSPFL	47	AGND8	67	MUTE
8	IND1	28	INDSPC	48	OUTCB	68	CL
9	IND2	29	INDSPSR	49	OUTSL	69	DA
10	INE1	30	INDSPSL	50	OUTSR	70	AGND11
11	INE2	31	INDSPCB	51	OUTC	71	VEE
12	INF1	32	INDSPSW	52	AGND9	72	VCC
13	INF2	33	AGND5	53	OUTFL	73	AGND12
14	AGND2	34	GOUTSW	54	OUTFR	74	ROUTA1
15	INDVDFR	35	VINSW	55	BNFB2	75	ROUTA2
16	INDVDFL	36	AGND6	56	BNFA2	76	ROUTB1
17	INDVDC	37	GOUTCB	57	BNFB1	77	ROUTB2
18	INDVDSR	38	VINCB	58	BNFA1	78	ROUTC1
19	INDVDSL	39	GOUTSL	59	TNF2	79	ROUTC2
20	INDVDCB	40	VINSL	60	TNF1	80	AGND13

Cautions on use

1. Operating power supply voltage range
   Basic circuit function and operation can be guaranteed within the operating temperature range and within the operating power supply voltage rage. Upon use, check those ranges carefully and specify the constant, element, voltage and temperature.

2. Operating temperature range
   Circuit function and operation can be guaranteed for the time being within the operating temperature range and within the operating voltage range. Please note that the conditions of allowable dissipation interlock with the temperature.
   Although specified value cannot be guaranteed under any conditions other than those specified by the electrical characteristics within this range, the original function is maintained.

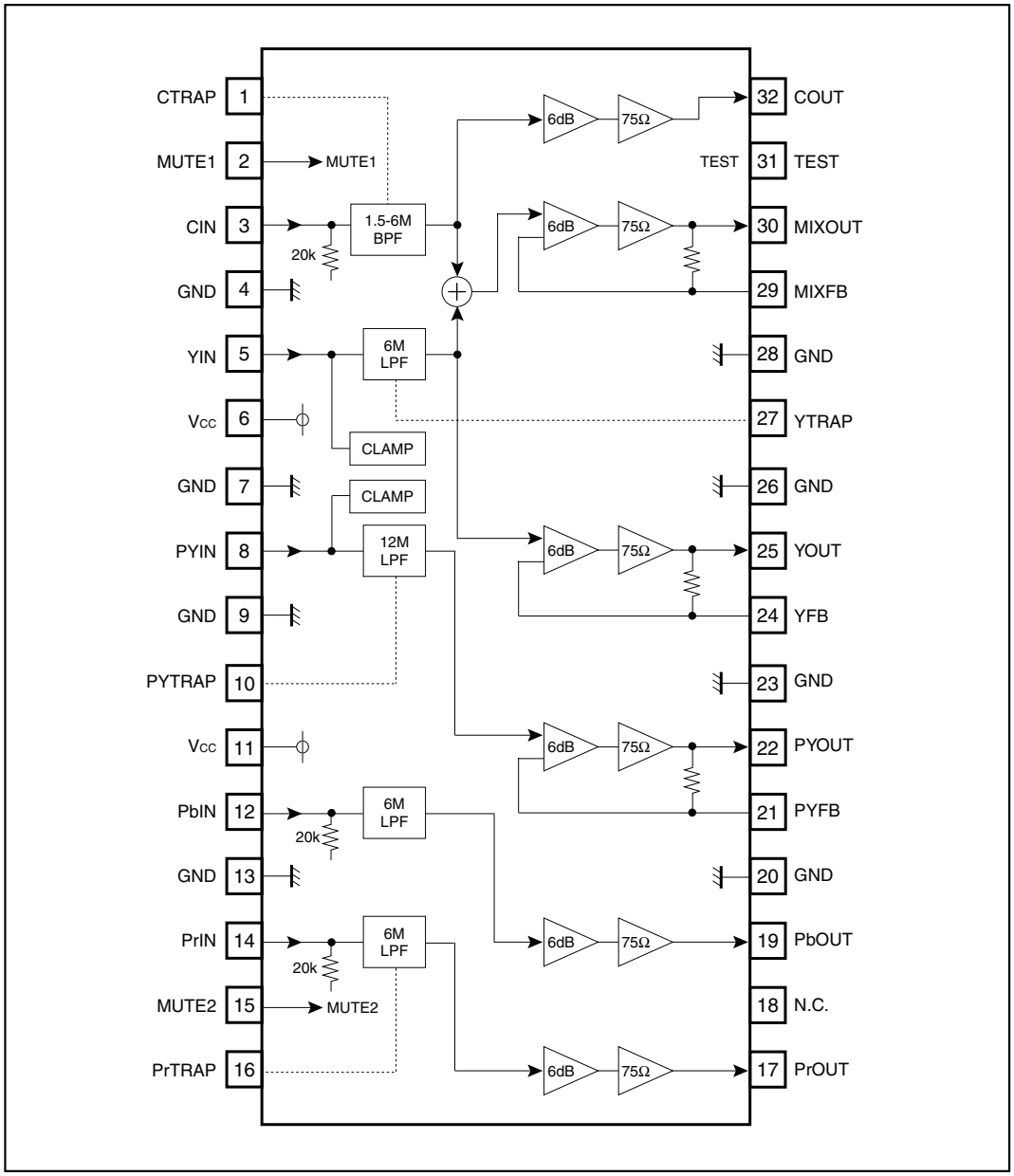
3. About power ON/OFF
   (1) When the power supply voltage is about ±1V, this IC occurs abnormal oscillation from output pins. Therefore, please use mute at set side.
   (2) At power ON/OFF, a shock sound will be generated and, therefore, MUTE shall be applied on the set.
   (3) When turning on power supplies, VEE and VCC should be powered on simultaneously or VEE first; then followed by VCC. If the VCC side is started up first, an excessive current may pass VCC through VEE.

4. About serial control
   For the CL and DA terminals, the patterned and other wirings should be routed not to cause interference with the analog-signal-related lines.

5. About function switching
   For the functions except Master Volume, Treble, and Bass Gain Settings, MUTE shall be applied on the set.

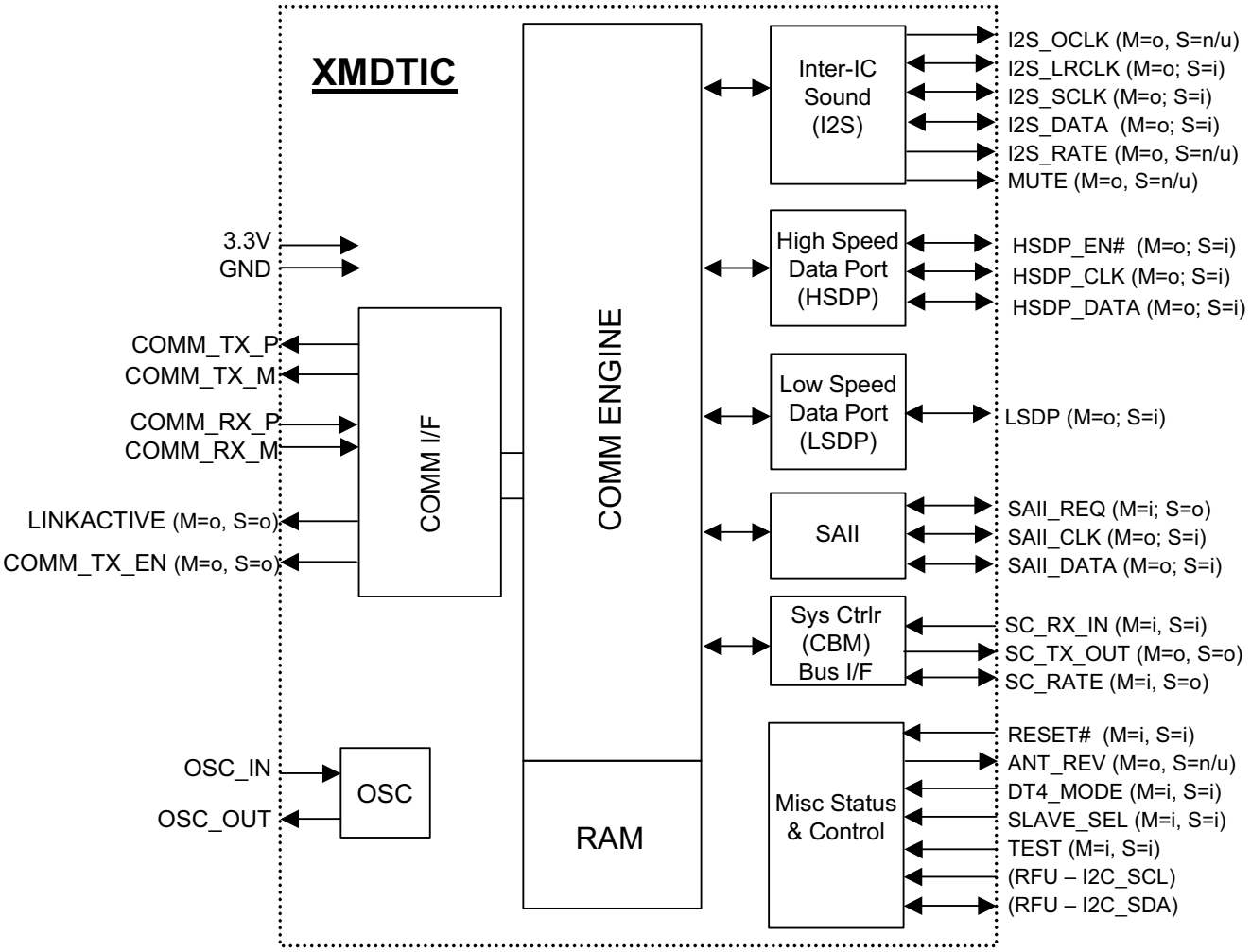
VIDEO DRIVER IC : IC55

●**Block diagram**

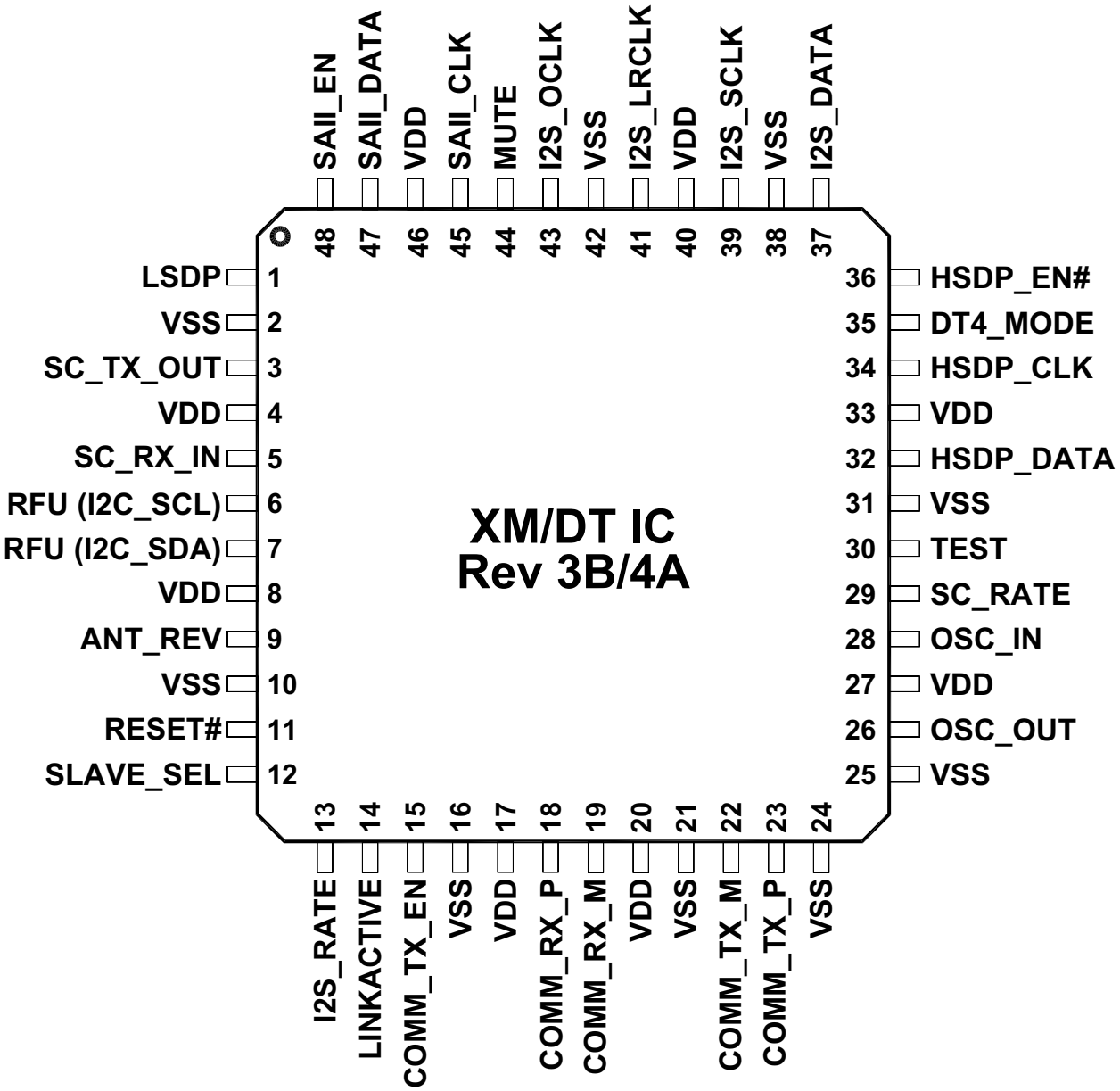


XM : IC70

Functional Description



Device Pin-out



Pin Descriptions

Table 3.2 Pin Descriptions

Pin #	Pin Name	Direct-ion	Function in Slave Mode	Function in Master Mode	Notes
1	LSDP	S=In M=Out	Low Speed Data Port Input	Low Speed Data Port Output	Out= 4mA, SLC In=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
6	RFU (I2C-SCL)	S=In M=In	Reserved for Future Use (pull down with a 100k resistor to Ground)	Reserved for Future Use (pull down with a 100k resistor to Ground)	LVTTL S/T
7	RFU (I2C-SDA)	S=In M=In	Reserved for Future Use (pull down with a 100k resistor to Ground)	Reserved for Future Use (pull down with a 100k resistor to Ground)	LVTTL S/T
9	ANT_REV	S=n/u M=Out	Not used in Slave mode, leave unconnected	Indication of incompatible antenna (refer to section 4.3.2 for usage)	4mA, SLC
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	Master/Slave Mode Select In (High = Slave Mode)	Master/Slave Mode Select In (Low = Master Mode)	LVTTL S/T
13	I2S_RATE	S=Out M=Out	Output driven high, leave unconnected	Indicator of incoming I2S data rate (see section 4.4.2)	4mA, SLC
14	LINKACTIVE	S=Out M=Out	Link Active indicator (High = DT bus link is active and data is flowing)	Link Active indicator (High = DT bus link is active and data is flowing)	4mA, SLC
15	COMM_TX_EN	S=Out M=Out	DT Comm Bus External Transceiver Direction Control Output (0=Tx, 1=Rx)	DT Comm Bus External Transceiver Direction Control Output (0=Tx, 1=Rx)	4mA, SLC
18	COMM_RX_P	S=In M=In	DT Differential Comm Bus Internal Receiver Positive In	DT Differential Comm Bus Internal Receiver Positive In	LVDS in+
19	COMM_RX_M	S=In M=In	DT Differential Comm Bus Internal Receiver Negative In	DT Differential Comm Bus Internal Receiver Negative In	LVDS in–
22	COMM_TX_M	S=Out M=Out	DT Differential Comm Bus Internal Transmitter Negative Out	DT Differential Comm Bus Internal Transmitter Negative Out	LVDS out–
23	COMM_TX_P	S=Out M=Out	DT Differential Comm Bus Internal Transmitter Positive Out	DT Differential Comm Bus Internal Transmitter Positive Out	LVDS out+
26	OSC_OUT	S=Out M=Out	Crystal Driver Output	Crystal Driver Output	
28	OSC_IN	S=In M=In	Crystal/ Ext. Clock Input	Crystal/ Ext. Clock Input	
29	SC_RATE (Rev 4A only, pull down for rev 3B)	S=Out M=In	SC interface baud rate Output (High = DT4_MODE is high and the Master DTIC is operating at 115.2K baud)	SC interface baud rate select Input (High = 115.2K baud, Low = 9600 baud)	Out= 4mA, SLC In=LVTTL S/T
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

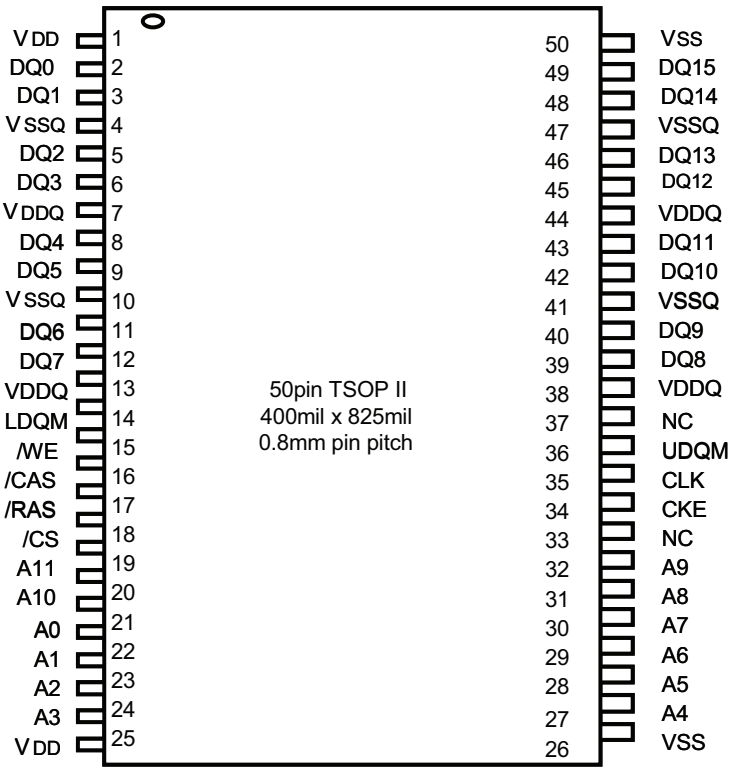
Pin #	Pin Name	Direct-ion	Function in Slave Mode	Function in Master Mode	Notes
32	HSDP_DATA	S=In M=Out	High Speed Data Port Data Input	High Speed Data Port Data Output	Out= 4mA, SLC In=LVTTL S/T
34	HSDP_CLK	S=In M=Out	High Speed Data Port Clock Input	High Speed Data Port Clock Output	Out= 4mA, SLC In=LVTTL S/T
35	DT4_MODE	S=In M=In	Enables/Disables driver on SC_RATE and ANT_REV (High = enable driver) This pin was VSS on rev 3 XM/DT IC	Enables/Disables drivers on MUTE and ANT_REV (High = enable drivers) This pin was VSS on rev 3 XM/DT IC	In=LVTTL S/T
36	HSDP_EN#	S=In M=Out	High Speed Data Port Enable Input (Active low)	High Speed Data Port Enable Output (Active low)	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
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, leave unconnected)	I2S Digital Audio Port Oversample Clock Out	Out= 4mA, SLC
44	MUTE	S=n/u M=Out	Not used in Slave mode, leave unconnected	Provides a mechanism for muting the audio during an I2S rate change (High=mute)	Out= 4mA, SLC
45	SAII_CLK	S=Out M=In	SAII Port Clock Output	SAII Port Clock Input	Out= 4mA, SLC In=LVTTL 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, 10, 16, 21, 24, 25, 31, 38, 42	VSS	GND	Digital Ground	Digital Ground	

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

SD RAM : IC47

PIN CONFIGURATION

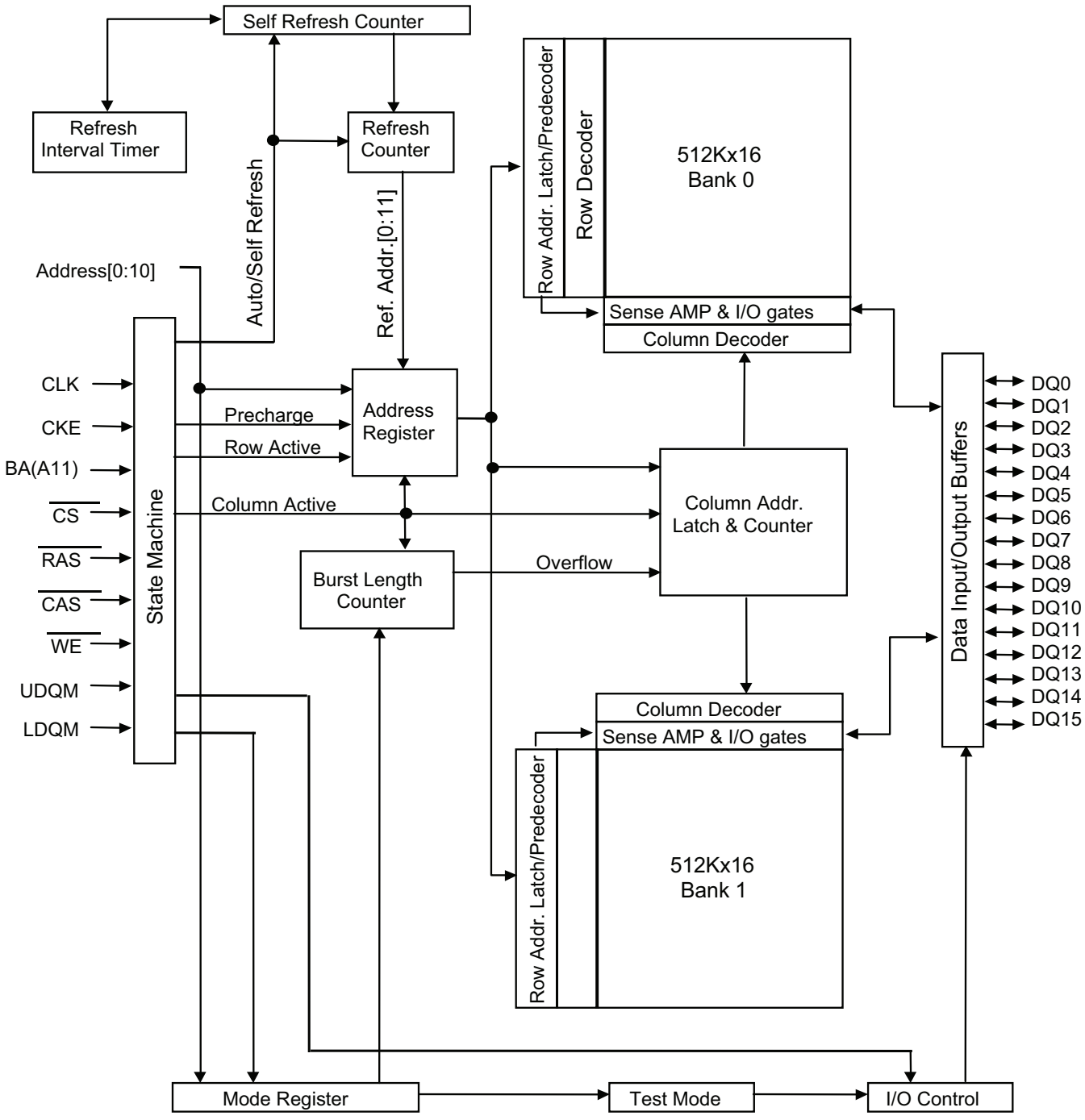


PIN DESCRIPTION

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

FUNCTIONAL BLOCK DIAGRAM

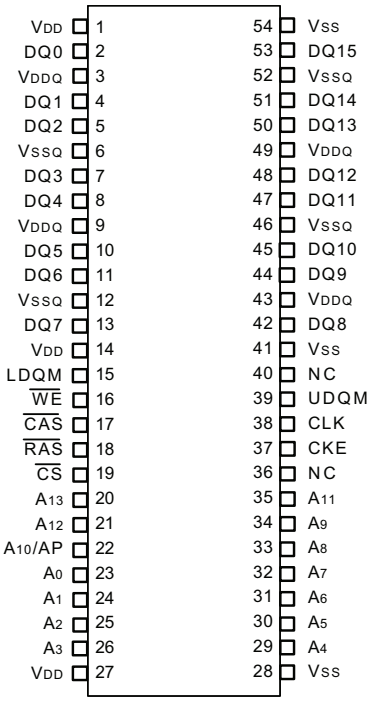
1Mx16 Synchronous DRAM



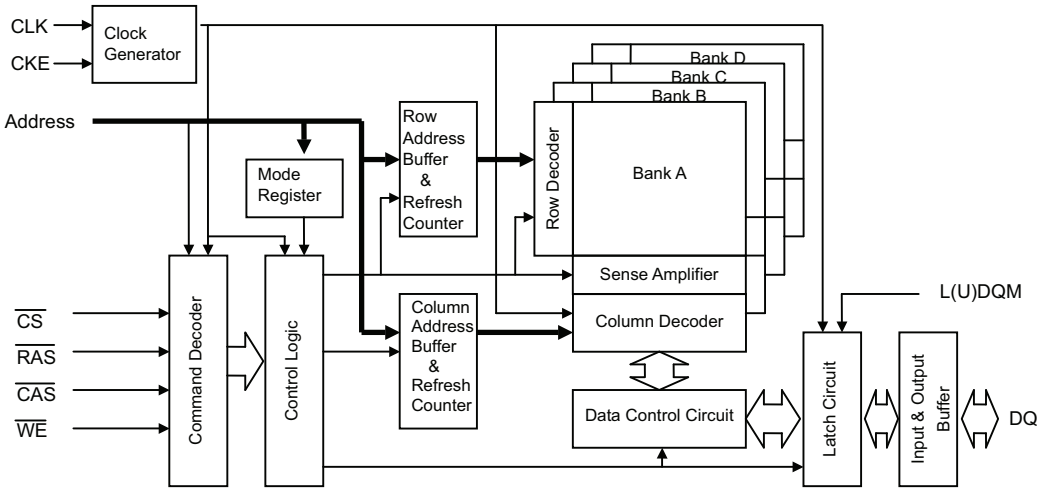
64M SDRAM (M12L64164A) : IC12

PIN ASSIGNMENT

Top View



FUNCTIONAL BLOCK DIAGRAM

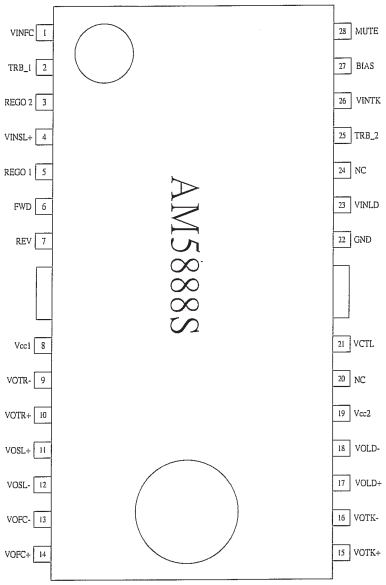


PIN FUNCTION DESCRIPTION

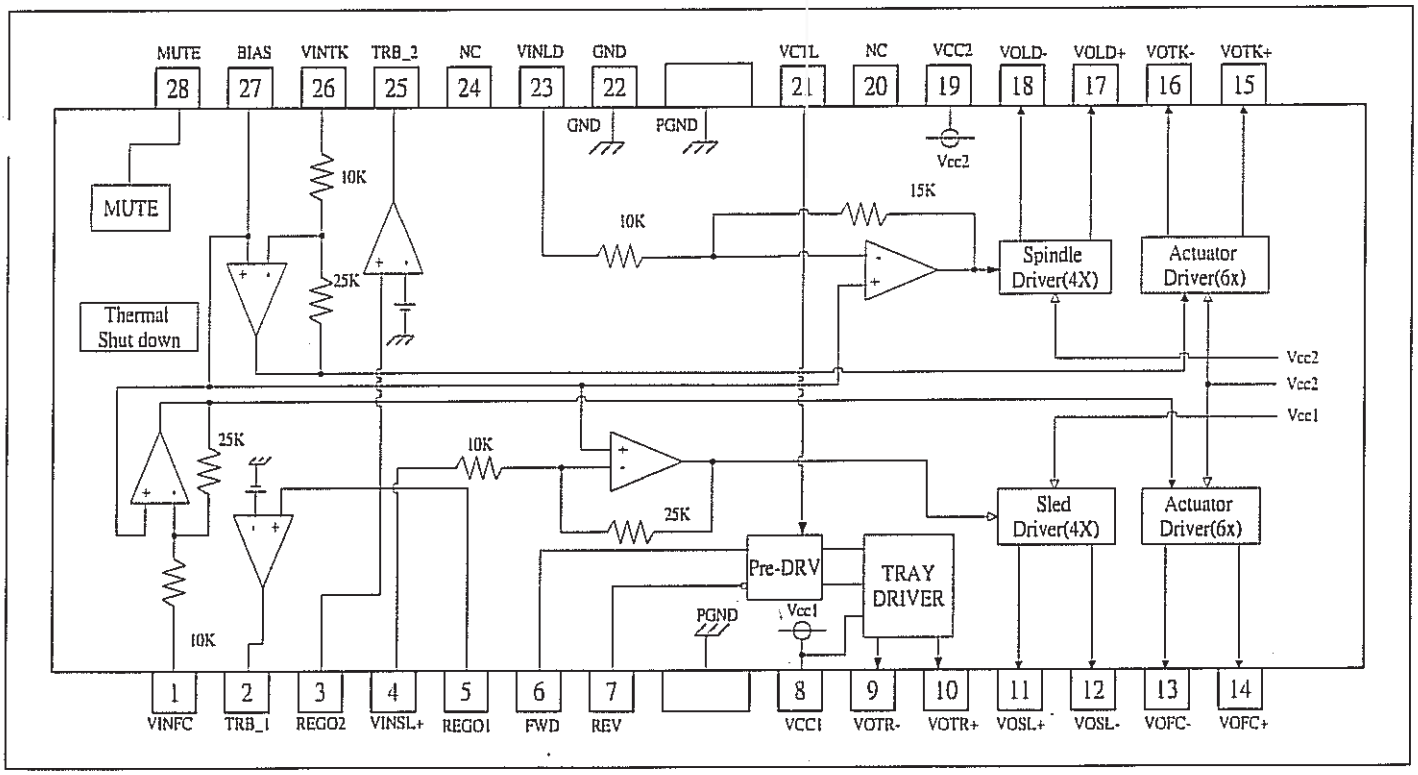
PIN	NAME	INPUT FUNCTION
CLK	System Clock	Active on the positive going edge to sample all inputs
$\overline{CS}$	Chip Select	Disables or enables device operation by masking or enabling all inputs except CLK , CKE and L(U)DQM
CKE	Clock Enable	Masks system clock to freeze operation from the next clock cycle. CKE should be enabled at least one cycle prior new command. Disable input buffers for power down in standby.
A0 ~ A11	Address	Row / column address are multiplexed on the same pins. Row address : RA0~RA11, column address : CA0~CA7
A12 , A13	Bank Select Address	Selects bank to be activated during row address latch time. Selects bank for read / write during column address latch time.
$\overline{RAS}$	Row Address Strobe	Latches row addresses on the positive going edge of the CLK with $\overline{RAS}$ low. Enables row access & precharge.
$\overline{CAS}$	Column Address Strobe	Latches column address on the positive going edge of the CLK with $\overline{CAS}$ low. Enables column access.
$\overline{WE}$	Write Enable	Enables write operation and row precharge. Latches data in starting from $\overline{CAS}$, $\overline{WE}$ active.
L(U)DQM	Data Input / Output Mask	Makes data output Hi-Z, t_{SHZ} after the clock and masks the output. Blocks data input when L(U)DQM active.
DQ0 ~ DQ15	Data Input / Output	Data inputs / outputs are multiplexed on the same pins.
VDD / VSS	Power Supply / Ground	Power and ground for the input buffers and the core logic.
VDDQ / VSSQ	Data Output Power / Ground	Isolated power supply and ground for the output buffers to provide improved noise immunity.
NC	No Connection	This pin is recommended to be left No Connection on the device.

Motor Driver IC (AM5888) : IC16

PIN ASSIGNMENT



Block diagram



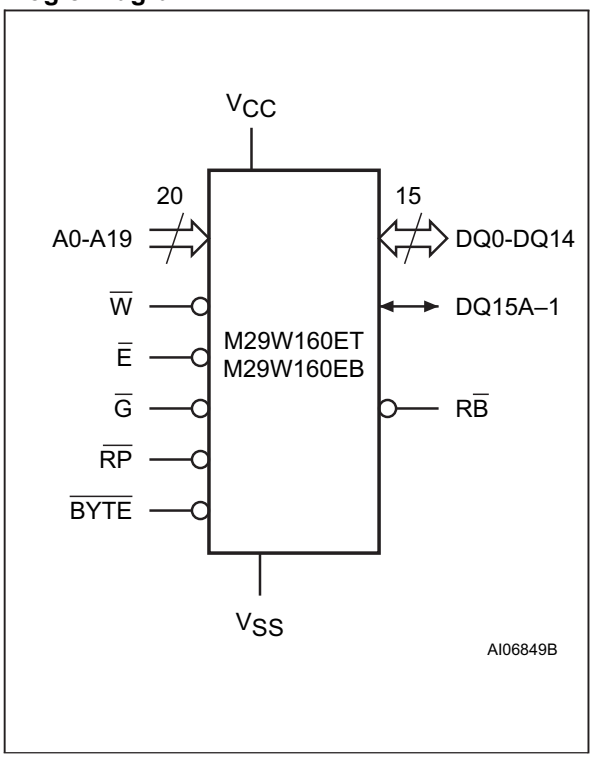
● Pin description

PIN No	Pin Name	Function
1	VINFC	Input for focus driver
2	TRB_1	Connect to external transistor base
3	REGO2	Regulator voltage output, connect to external transistor collector
4	VINSL+	Input for the sled driver
5	REGO1	Regulator voltage output, connect to external transistor collector
6	FWD	Tray driver forward input
7	REV	Tray driver reverse input
8	Vcc1	Vcc for pre-drive block and power block of sled and tray
9	VOTR-	Tray driver output (-)
10	VOTR+	Tray driver output (+)
11	VOSL+	Sled driver output (+)
12	VOSL-	Sled driver output (-)
13	VOFC-	Focus driver output (-)
14	VOFC+	Focus driver output (+)
15	VOTK+	Tracking driver output (+)
16	VOTK-	Tracking driver output (-)
17	VOLD+	Spindle driver output (+)
18	VOLD-	Spindle driver output (-)
19	Vcc2	Vcc for power block of spindle, tracking and focus
20	NC	No Connection
21	VCTL	Speed control input of tray driver
22	GND	Ground
23	VINLD	Input for spindle driver
24	NC	No Connection
25	TRB_2	Connect to external transistor base
26	VINTK	Input for tracking driver
27	BIAS	Input for reference voltage
28	MUTE	Input for mute control

Notes) Symbol of + and – (output of drivers) means polarity to input pin.
(For example, if voltage of pin1 is high, pin14 is high.)

Flash Memory (M29W160ET) : IC11

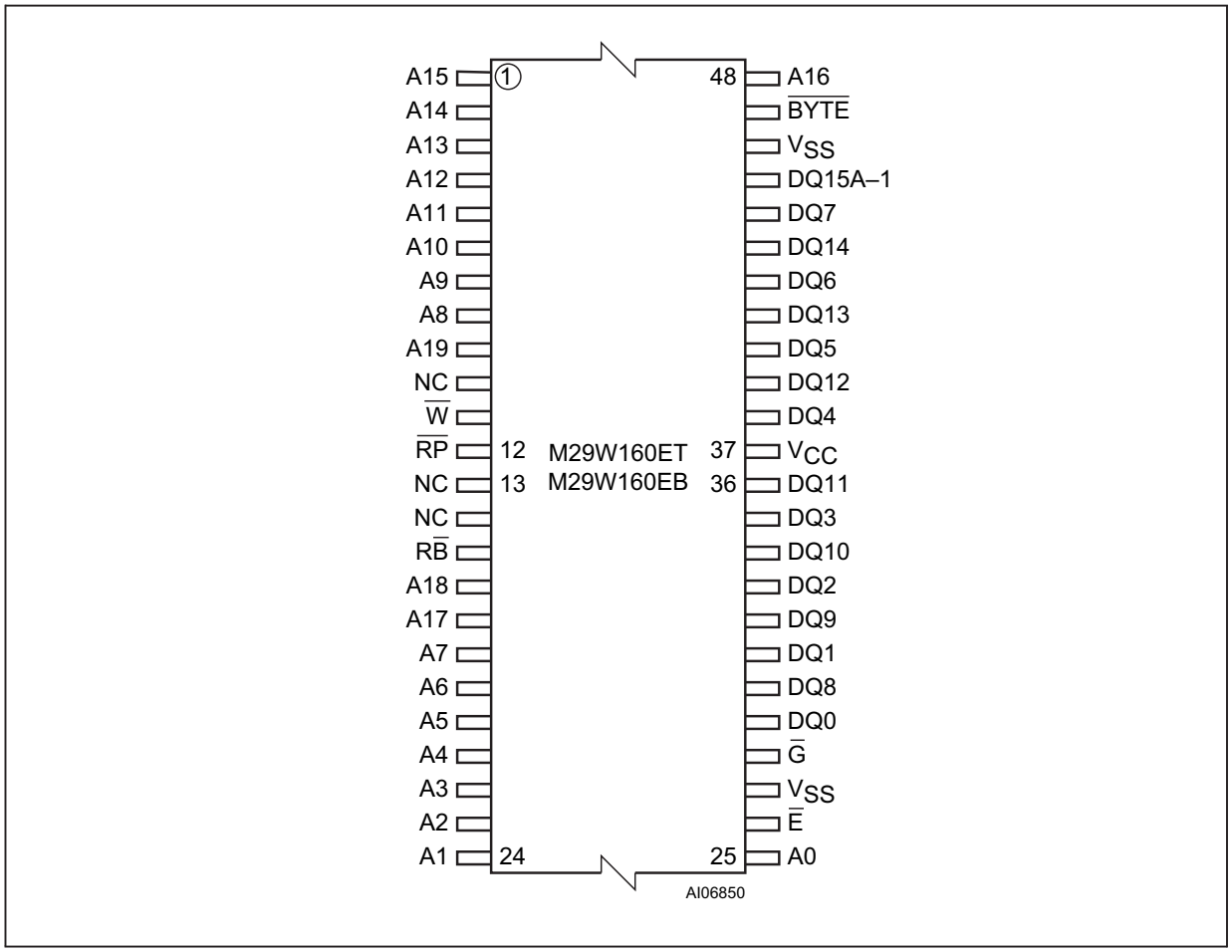
Logic Diagram



Signal Names

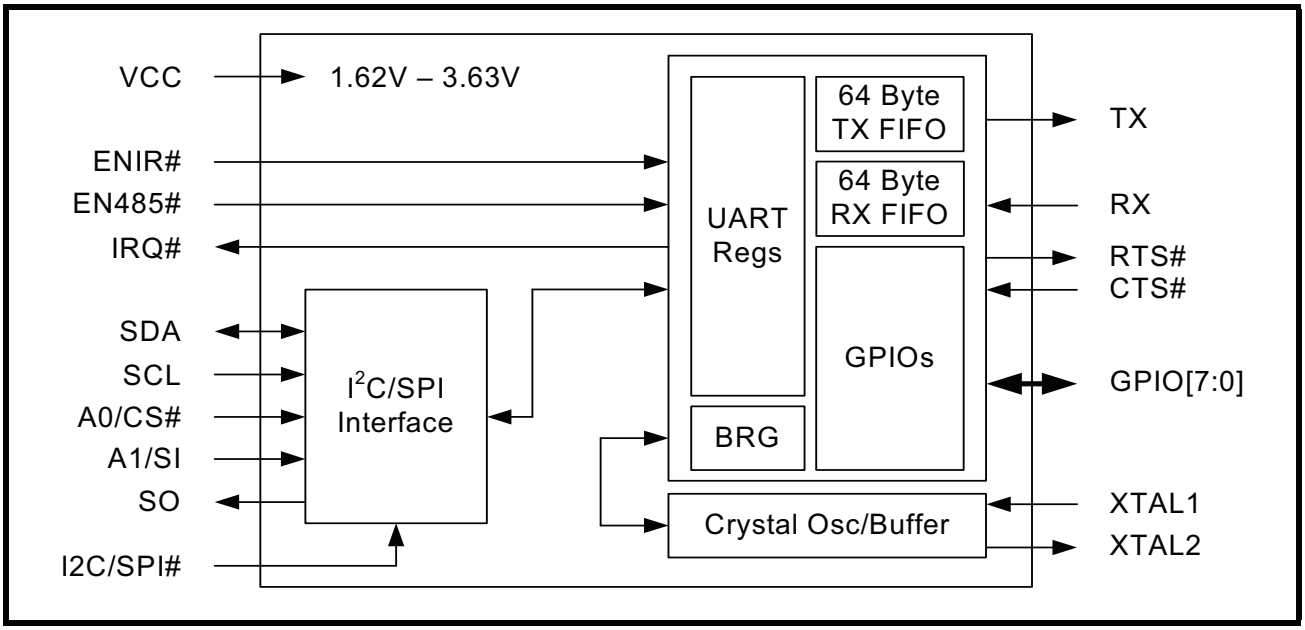
A0-A19	Address Inputs
DQ0-DQ7	Data Inputs/Outputs
DQ8-DQ14	Data Inputs/Outputs
DQ15A–1	Data Input/Output or Address Input
$\overline{E}$	Chip Enable
$\overline{G}$	Output Enable
$\overline{W}$	Write Enable
$\overline{RP}$	Reset/Block Temporary Unprotect
$R\overline{B}$	Ready/Busy Output
$\overline{BYTE}$	Byte/Word Organization Select
V_{CC}	Supply Voltage
V_{SS}	Ground
NC	Not Connected Internally

TSOP Connections



UART IC : IC70

XR20M1170 BLOCK DIAGRAM

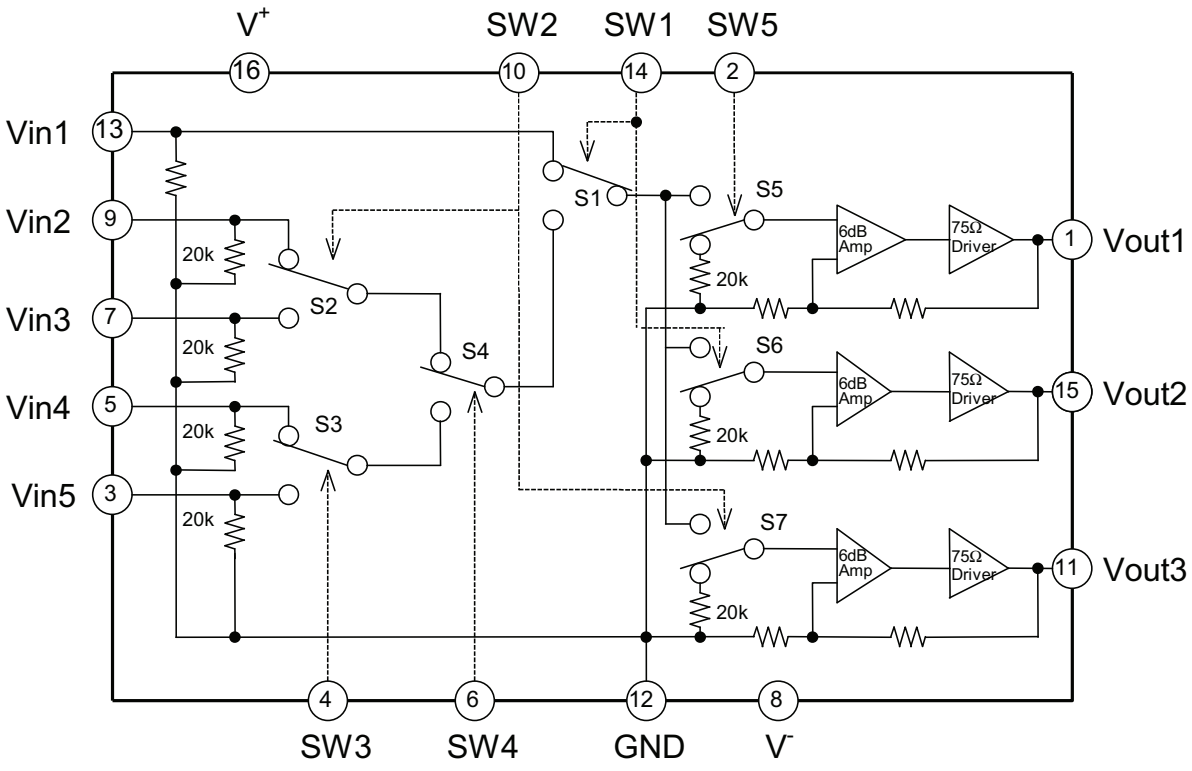


VIDEO SW IC (NJM2595) : IC51, IC52, IC53

5-INPUT 3-OUTPUT VIDEO SWITCH

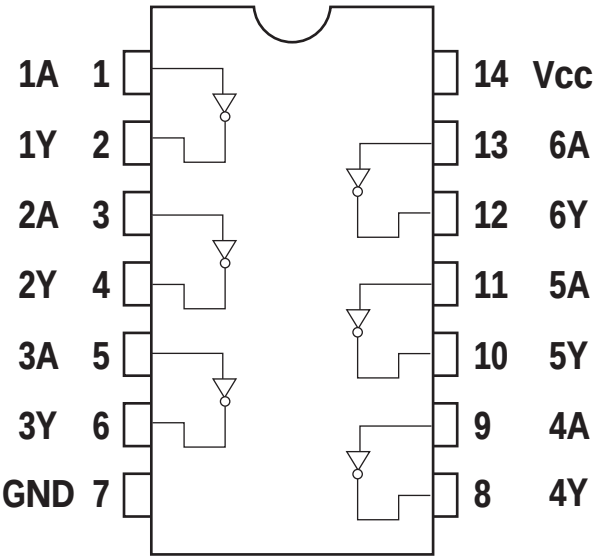
- FEATURES
  - 5-input 3-output
  - Operating Voltage ±4.0 to ±6.5V
  - Operating current ±15mAtyp. at Vcc=±5V
  - Crosstalk -65dBtyp.
  - Internal 6dB Amplifier
  - Internal 75Ω Driver
  - Bipolar Technology
  - Package Outline DIP16,DMP16

- PIN CONFIGURATION and BLOCK DIAGRAM

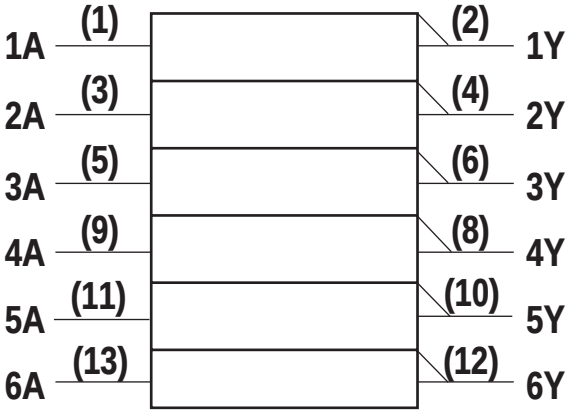


INVERTER IC (TC74HCU04AFN) : IC36

PIN ASSIGNMENT



LOGIC SYMBOL



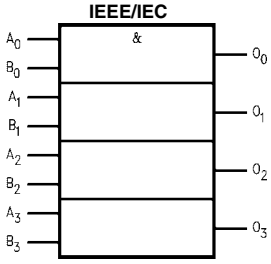
TRUTH TABLE

A	Y
L	H
H	L

LOGIC IC : IC88(74LCX08MX)

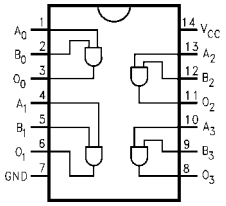
Logic Symbol

IEEE/IEC

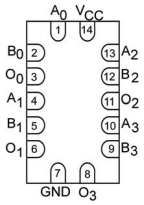


Connection Diagrams

Pin Assignments for SOIC, SOP, and TSSOP



Pad Assignments for DQFN

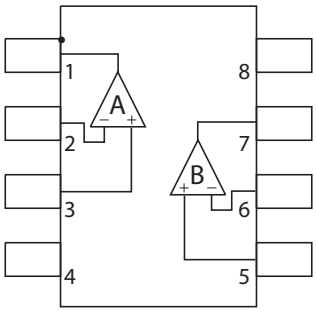


(Top View)

Pin Descriptions

Pin Names	Description
A_n, B_n	Inputs
O_n	Outputs

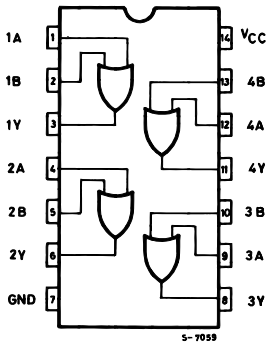
OPA2134UA / NJM 2068MD (OP AMP)

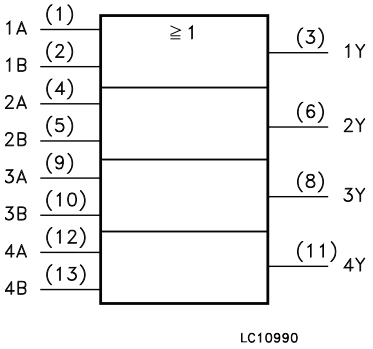


PIN FUNCITON
1. A OUTPUT
2. A-INPUT
3. A+INPUT
4. V^-
5. B+INPUT
6. B-INPUT
7. B OUTPUT
8. V^+

OR GATE : IC48(74LCX32TTR)

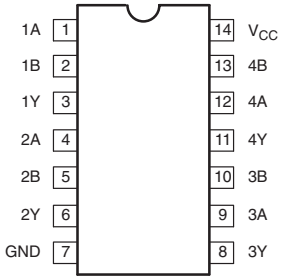
Pin Connection And IEC Logic Symbols



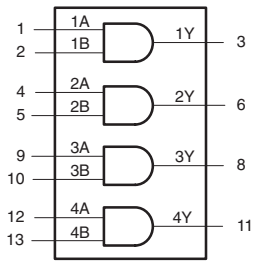


AND GATE : IC80(74LVC08ADR)

PIN CONFIGURATION



LOGIC SYMBOL



PIN DESCRIPTION

PIN NUMBER	SYMBOL	NAME AND FUNCTION
1, 4, 9, 12	1A – 4A	Data inputs
2, 5, 10, 13	1B – 4B	
3, 6, 8, 11	1Y – 4Y	Data outputs
7	GND	Ground (0 V)
14	V_{CC}	Positive supply voltage

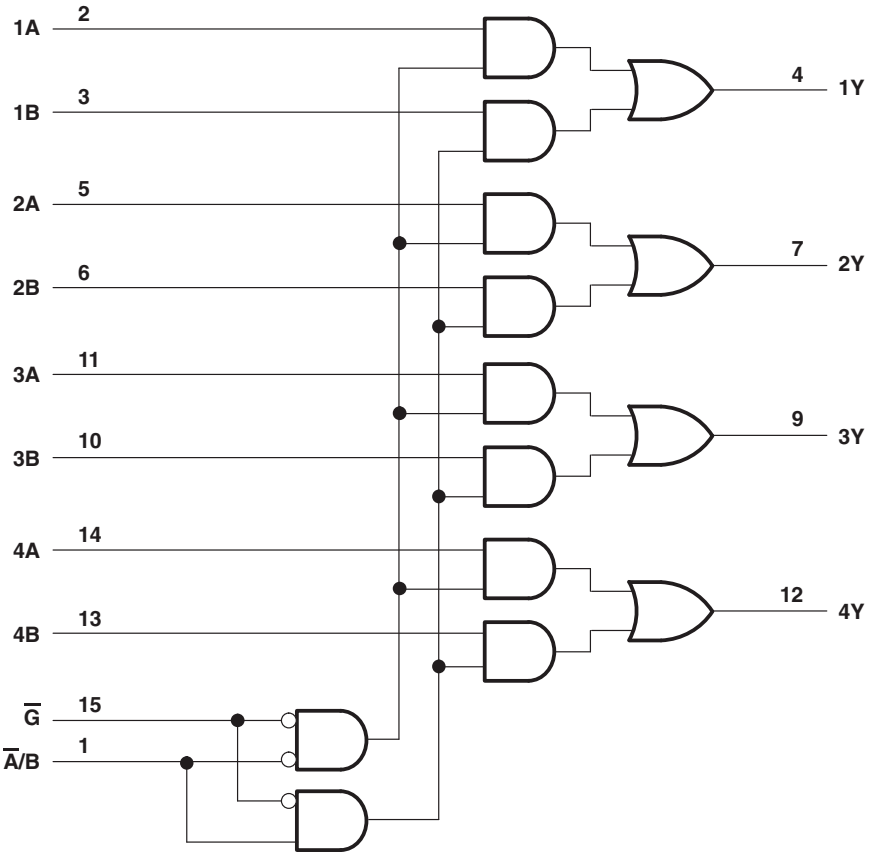
MULTIPLEXERS : IC35(74LVC157ADBR)

Inputs can be driven from either 3.3-V or 5-V devices. This feature allows the use of these devices as translators in a mixed 3.3-V/5-V system environment.

FUNCTION TABLE

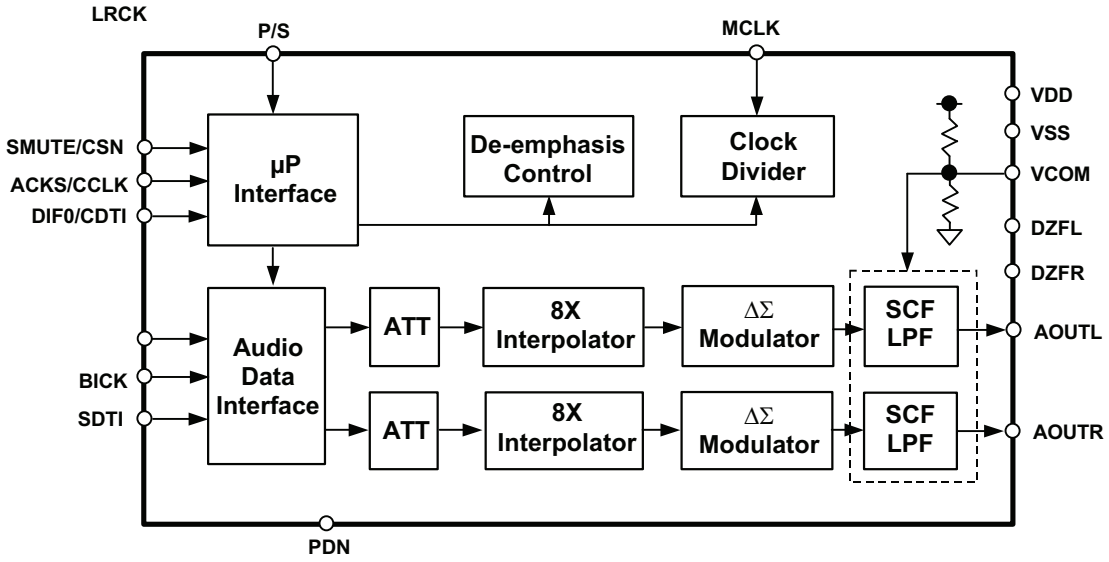
INPUTS				OUTPUT
$\overline{G}$	$\overline{A}$/B	A	B	Y
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

logic diagram (positive logic)

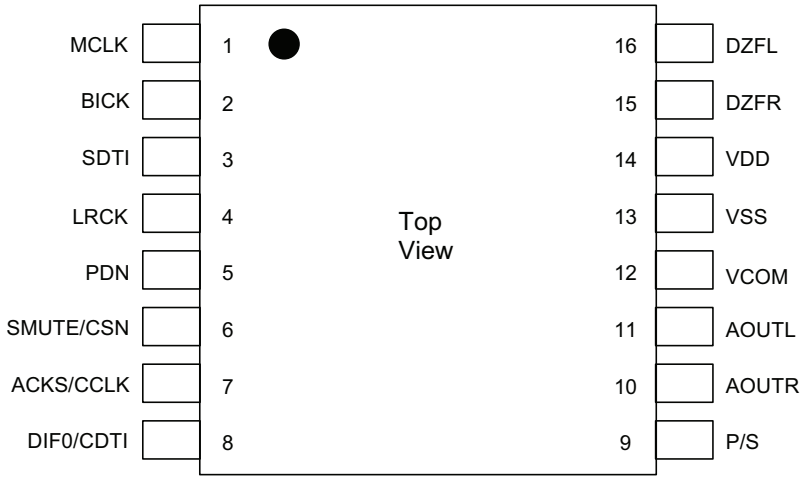


Pin numbers shown are for the D, DB, J, NS, PW, RGY, and W packages.

2CH DAC : IC71(AK4384)



■ **Pin Layout**

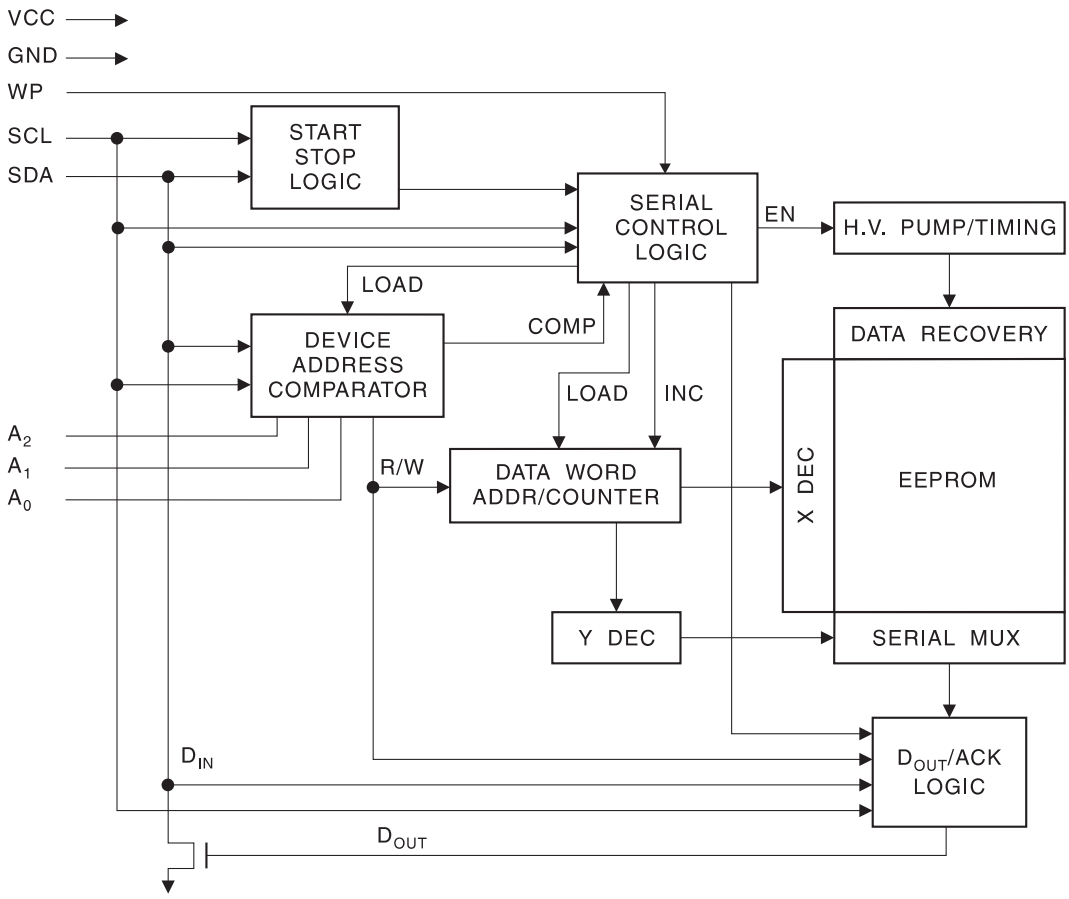


PIN/FUNCTION

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 AK4384 is in the power-down mode and is held in reset. The AK4384 should always be reset upon power-up.
6	SMUTE	I	Soft Mute Pin in parallel mode "H": Enable, "L": Disable
	CSN	I	Chip Select Pin in serial mode
7	ACKS	I	Auto Setting Mode Pin in parallel mode "L": Manual Setting Mode, "H": Auto Setting Mode
	CCLK	I	Control Data Clock Pin in serial mode
8	DIF0	I	Audio Data Interface Format Pin in parallel mode
	CDTI	I	Control Data Input Pin in serial mode
9	P/S	I	Parallel/Serial Select Pin (Internal pull-up pin) "L": Serial control mode, "H": Parallel control mode
10	AOUTR	O	Rch Analog Output Pin
11	AOUTL	O	Lch Analog Output Pin
12	VCOM	O	Common Voltage Pin, VDD/2 Normally connected to VSS with a 0.1μF ceramic capacitor in parallel with a 10μF electrolytic cap.
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

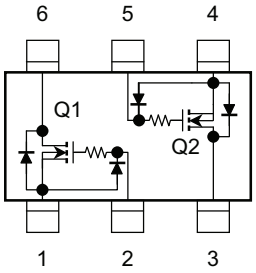
Note: All input pins except pull-up pin should not be left floating.

EEPROM : IC13(AT24C08N10SC)

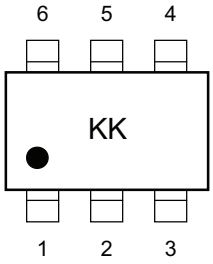


FET : IC14(HN1K05FU)

Equivalent Circuit (top view)



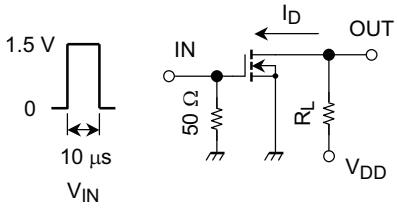
Marking



(Q1, Q2 common)

Switching Time Test Circuit

(a) Test circuit



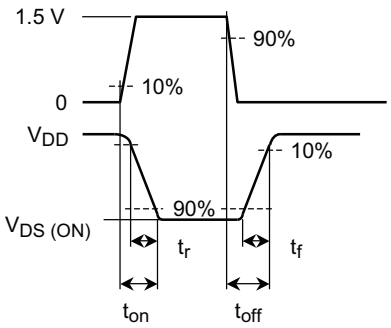
V_{DD} = 1.5 V
D.U. ≦ 1%
V_{IN}: t_r, t_f < 5 ns
(Z_{out} = 50 Ω)
Common Source
Ta = 25°C

(b) V_{IN}

V_{GS}

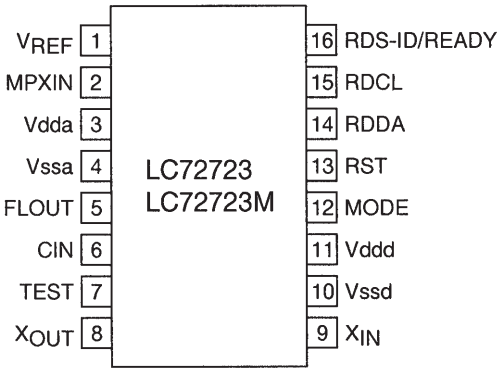
(c) V_{OUT}

V_{DS}

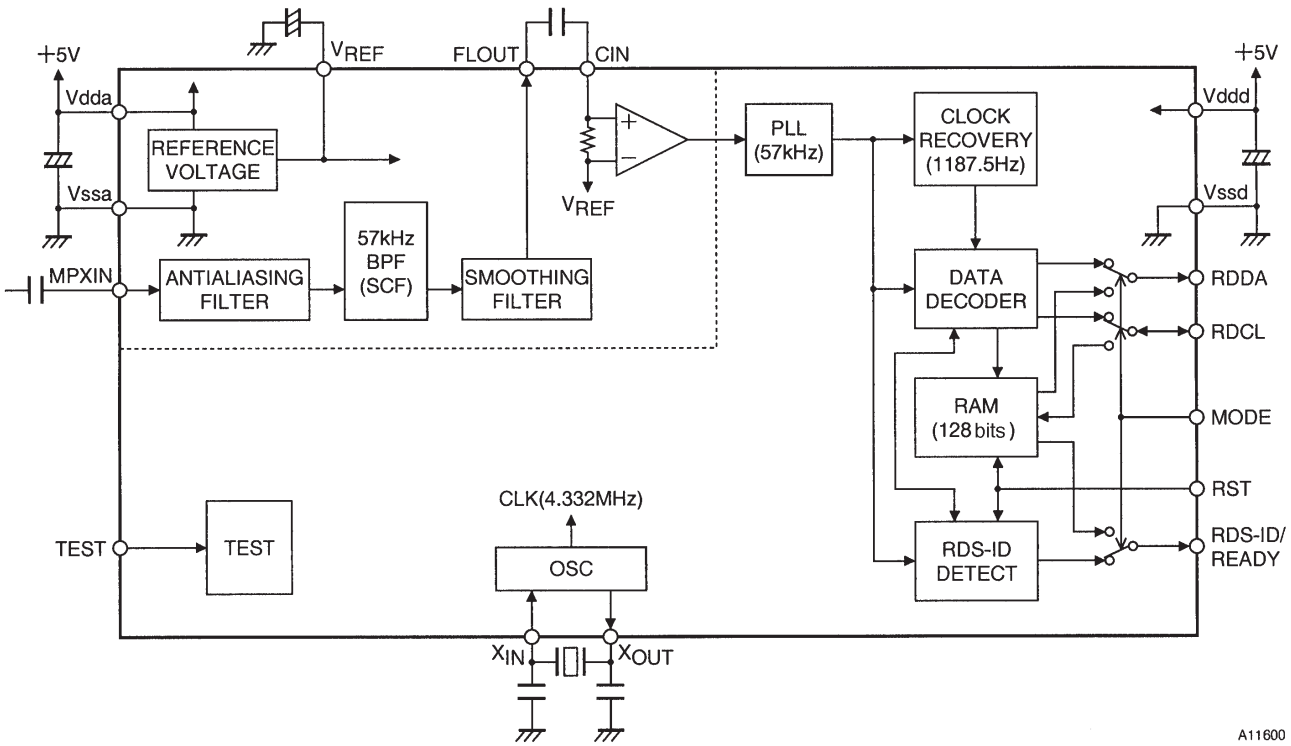


RDS DEMODULATION IC(LC72723M) : IC89

Pin Assignment



Block Diagram



VIDEO SW IC(PI5V330) : IC56, IC59

Low On-Resistance Wideband/Video Quad 2-Channel Mux/DeMux

Features

- High-performance solution to switch between video sources
- Wide bandwidth: 200 MHz
- Low On-Resistance: 3Ω
- Low crosstalk at 10 MHz: –58dB
- Ultra-low quiescent power (0.1µA typical)
- Single supply operation: +5.0V
- Fast switching: 10ns
- High-current output: 100mA
- Packaging (Pb-free & Green Available):
  – 16-pin 300-mil wide plastic SOIC (S)
  – 16-pin 150-mil wide plastic SOIC (W)
  – 16-pin 150-mil wide plastic QSOP (Q)

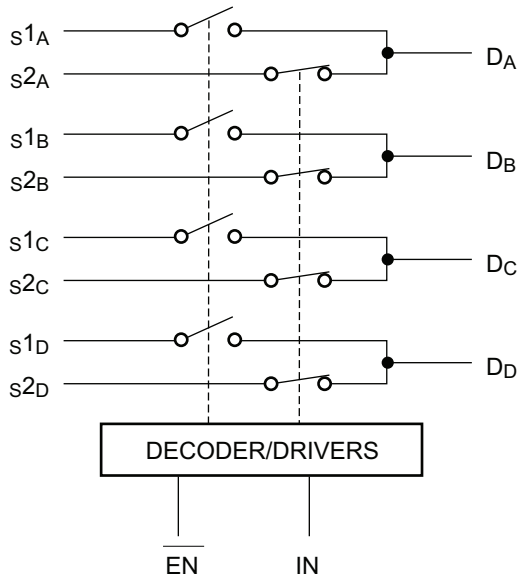
Description

Pericom Semiconductor's PI5V330 is a true bidirectional Quad 2-channel multiplexer/demultiplexer recommended for both RGB and composite video switching applications. The video switch can be driven from a current output RAMDAC or voltage output composite video source.

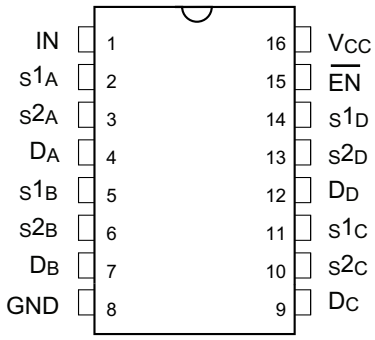
Low On-Resistance and wide bandwidth make it ideal for video and other applications. Also this device has exceptionally high current capability which is far greater than most analog switches offered today. A single 5V supply is all that is required for operation.

The PI5V330 offers a high-performance, low-cost solution to switch between video sources. The application section describes the PI5V330 replacing the HC4053 multiplier and buffer/amplifier.

Block Diagram



Pin Configuration



Truth Table

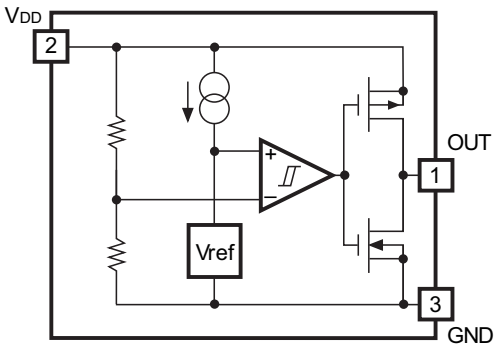
$\overline{EN}$	IN	ON Switch
0	0	$S1_A$, $S1_B$, $S1_C$, $S1_D$
0	1	$S2_A$, $S2_B$, $S2_C$, $S2_D$
1	X	Disabled

Pin Description

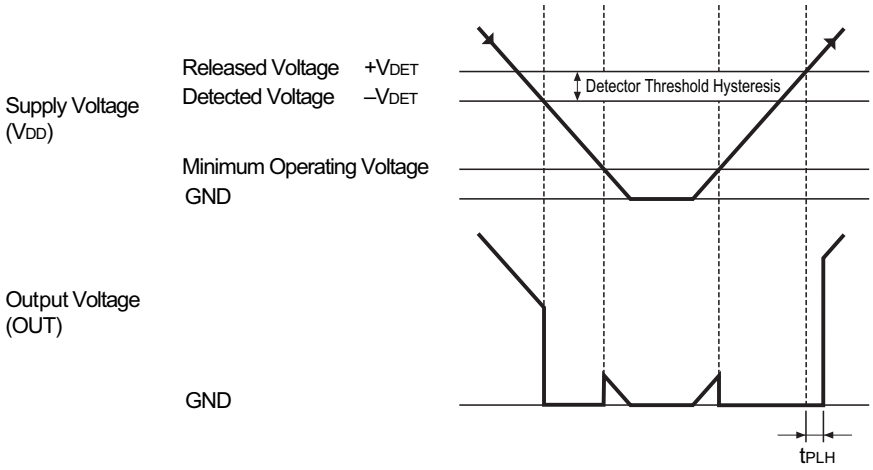
Pin Name	Description
$S1_A$, $S1_B$, $S1_C$, $S1_D$ $S2_A$, $S2_B$, $S2_C$, $S2_D$	Analog Video I/O
IN	Select Input
$\overline{EN}$	Enable
D_A, D_B D_C, D_D	Analog Video I/O
GND	Ground
V_{CC}	Power

RESET IC(RH5VT18C) : IC85

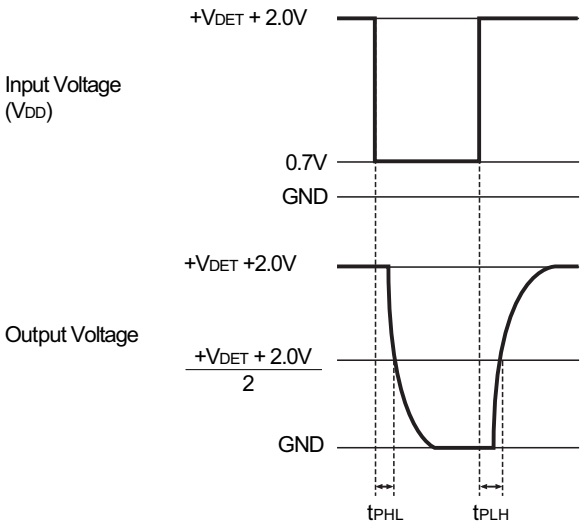
BLOCK DIAGRAMS



TIME CHART

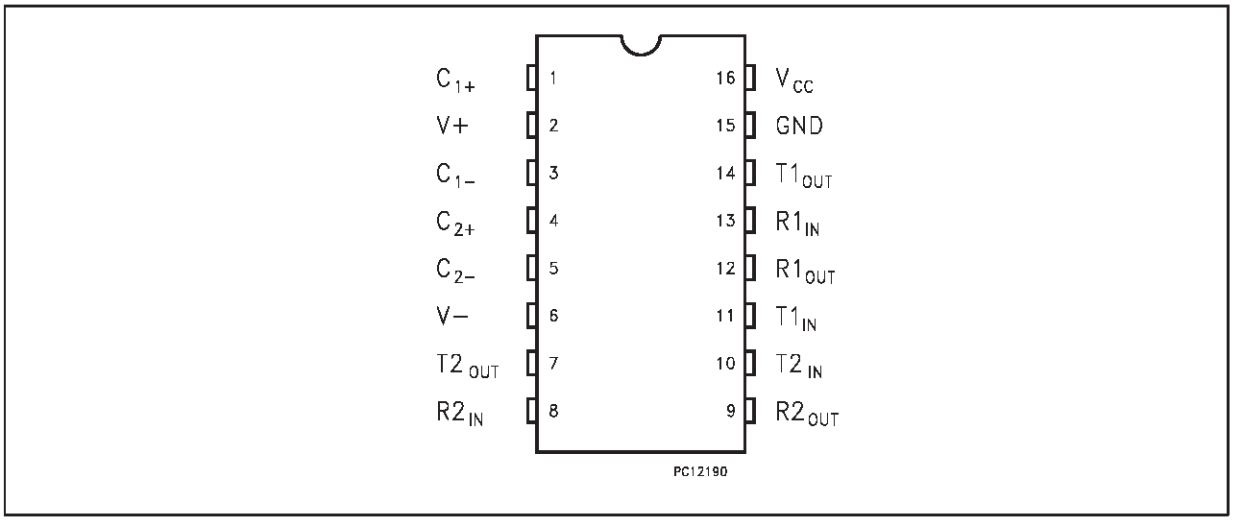


DEFINITION OF OUTPUT DELAY TIME t_{PLH}



RS232 TRANSCEIVER : IC21

PIN CONFIGURATION

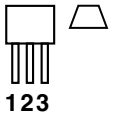


PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	C_1+	Positive Terminal for the first Charge Pump Capacitor
2	V+	Doubled Voltage Terminal
3	C_1-	Negative Terminal for the first Charge Pump Capacitor
4	C_2+	Positive Terminal for the second Charge Pump Capacitor
5	C_2-	Negative Terminal for the second Charge Pump Capacitor
6	V-	Inverted Voltage Terminal
7	$T2_{OUT}$	Second Transmitter Output Voltage
8	$R2_{IN}$	Second Receiver Input Voltage
9	$R2_{OUT}$	Second Receiver Output Voltage
10	$T2_{IN}$	Second Transmitter Input Voltage
11	$T1_{IN}$	First Transmitter Input Voltage
12	$R1_{OUT}$	First Receiver Output Voltage
13	$R1_{IN}$	First Receiver Input Voltage
14	$T1_{OUT}$	First Transmitter Output Voltage
15	GND	Ground
16	V_{CC}	Supply Voltage

■ TRANSISTOR, REGULATOR IC BLOCK DIAGRAM

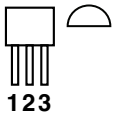
TO-92S



1. Emitter
2. Collector
3. Base

KRA102M KRC102M
KSC2785Y
KSA1175Y

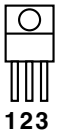
TO-92



1. Emitter
2. Collector
3. Base

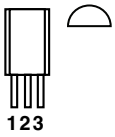
KTC3200GR KSB811Y
KTA1271Y
KTA1268GR

TO-220



1. INPUT
2. OUTPUT
3. GND

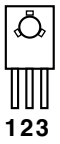
TO-92L



1. Emitter
2. Collector
3. Base

KSC2316Y

TO-126



1. Emitter
2. Collector
3. Base

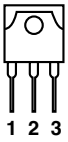
KTC3114A
KTA1360Y
KTC3423Y

TO-220

1. INPUT
2. GND
3. OUTPUT

MC7806C

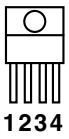
TO-3P



1. Base
2. Collector
3. Emitter

2SB1559
2SD2389

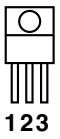
TO-220



1. INPUT
2. OUTPUT
3. GND
4. CONTROL

KIA78R05 KIA278R05
KIA278R12 KIA278R08

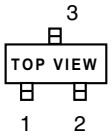
TO-220



1. Base
2. Collector
3. Emitter

KTB1369Y
KTD2061Y

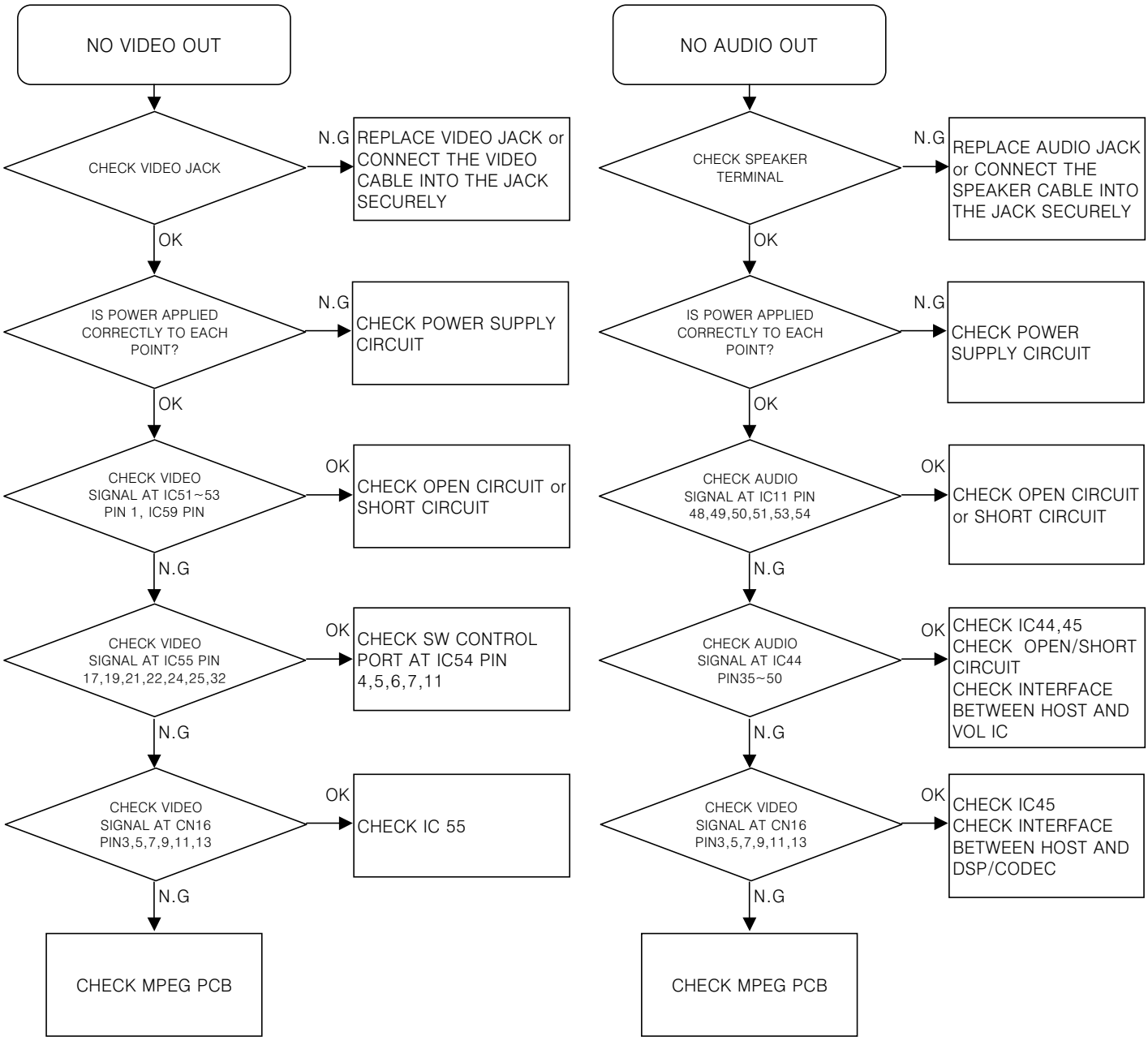
SOT-23

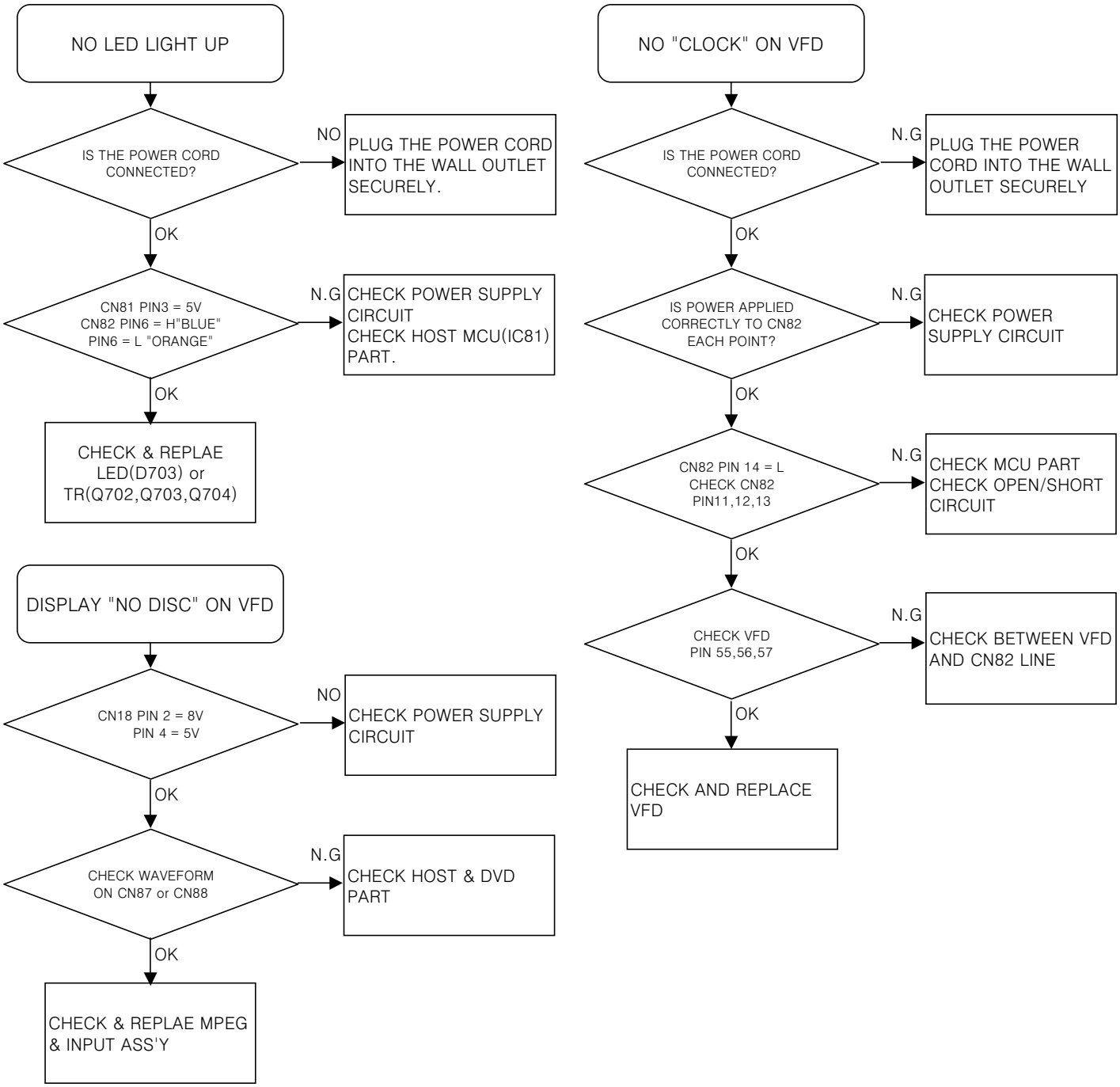


1. Base
2. Emitter
3. Collecfor

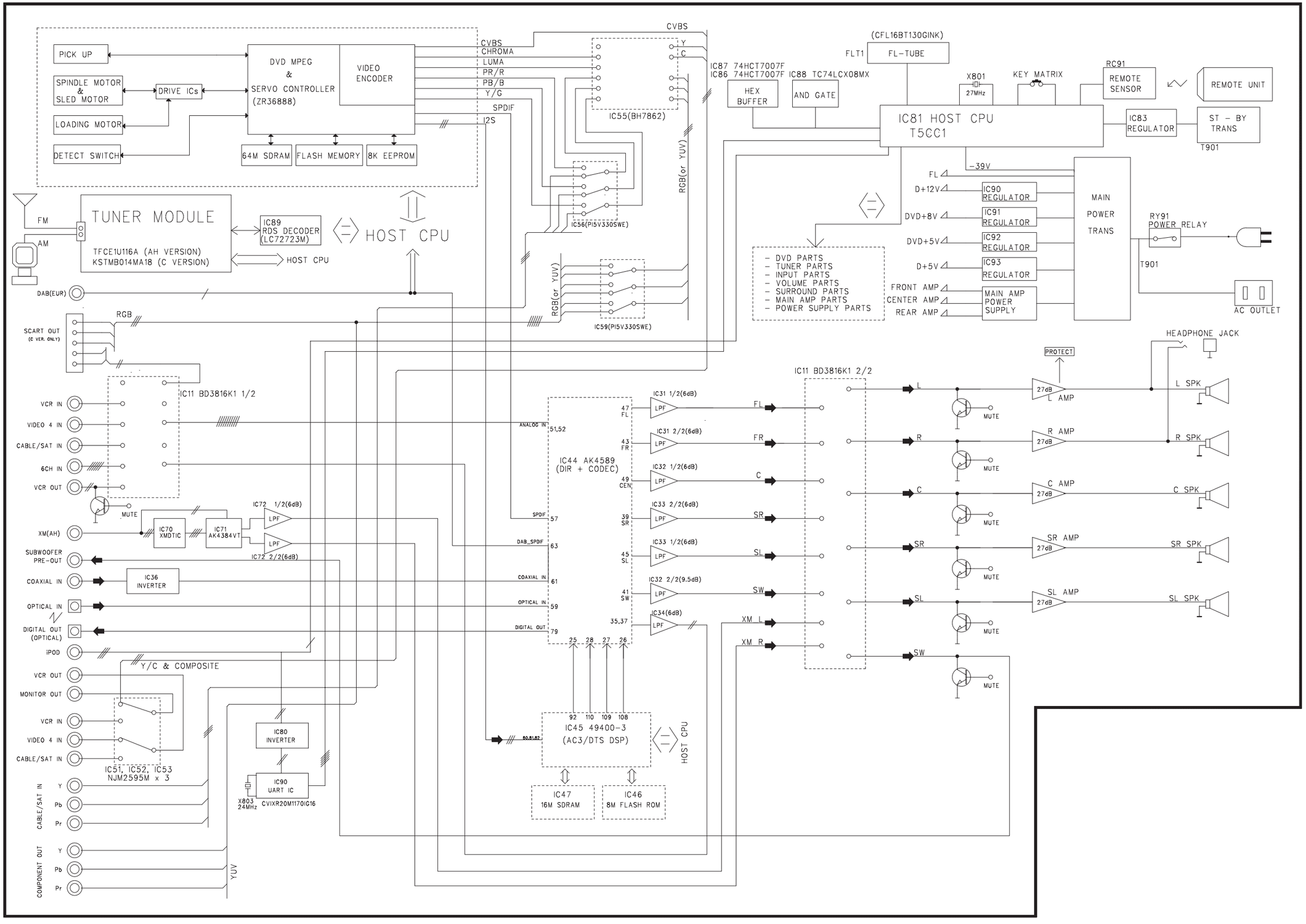
KRA102S
KRC102S
KTD1304

TROUBLESHOOTING

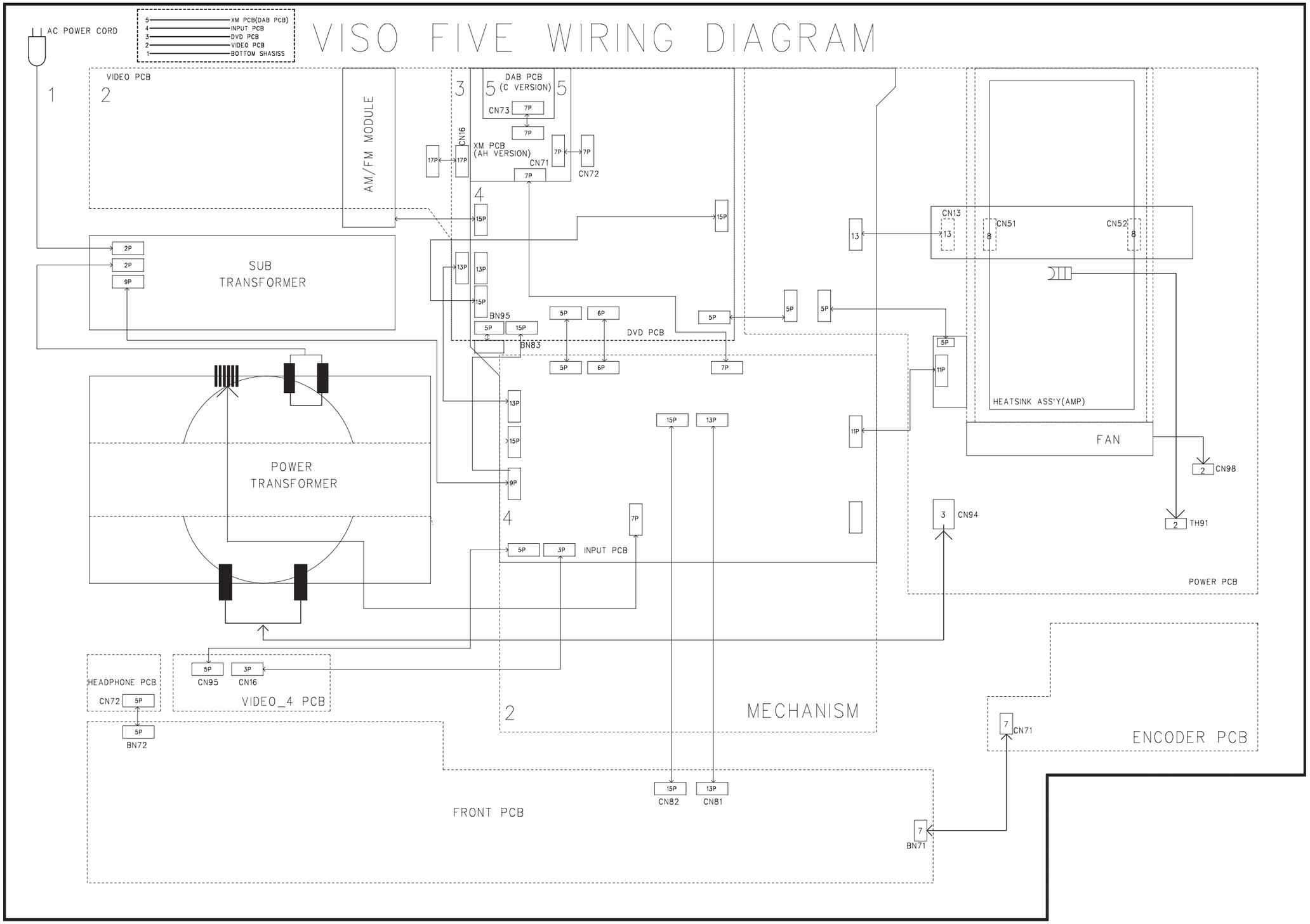



NO LED LIGHT UP
IS THE POWER CORD CONNECTED?
NO
PLUG THE POWER CORD INTO THE WALL OUTLET SECURELY.
OK
CN81 PIN3 = 5V
CN82 PIN6 = H"BLUE"
PIN6 = L "ORANGE"
N.G
CHECK POWER SUPPLY CIRCUIT
CHECK HOST MCU(IC81) PART.
OK
CHECK & REPLAE LED(D703) or TR(Q702,Q703,Q704)
NO "CLOCK" ON VFD
IS THE POWER CORD CONNECTED?
N.G
PLUG THE POWER CORD INTO THE WALL OUTLET SECURELY
OK
IS POWER APPLIED CORRECTLY TO CN82 EACH POINT?
N.G
CHECK POWER SUPPLY CIRCUIT
OK
CN82 PIN 14 = L
CHECK CN82
PIN11,12,13
N.G
CHECK MCU PART
CHECK OPEN/SHORT CIRCUIT
OK
CHECK VFD
PIN 55,56,57
N.G
CHECK BETWEEN VFD AND CN82 LINE
OK
CHECK AND REPLACE VFD
DISPLAY "NO DISC" ON VFD
CN18 PIN 2 = 8V
PIN 4 = 5V
NO
CHECK POWER SUPPLY CIRCUIT
OK
CHECK WAVEFORM ON CN87 or CN88
N.G
CHECK HOST & DVD PART
OK
CHECK & REPLAE MPEG & INPUT ASS'Y

1. BLOCK DIAGRAM

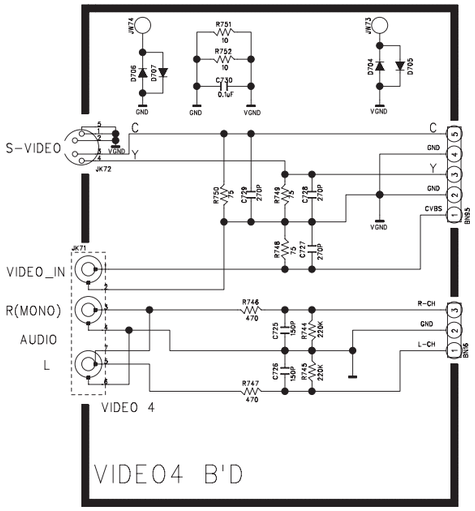


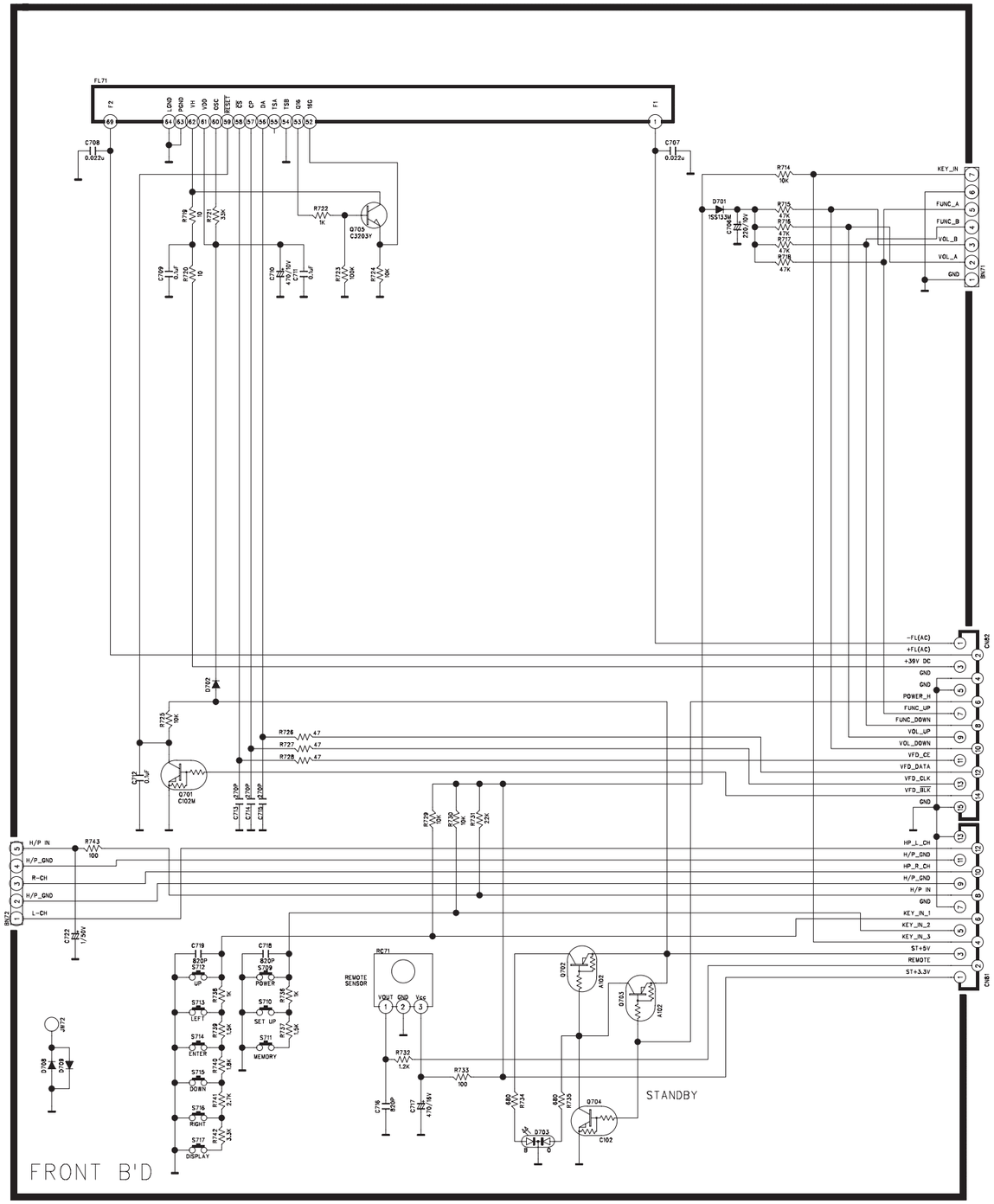
2. WIRING DIAGRAM

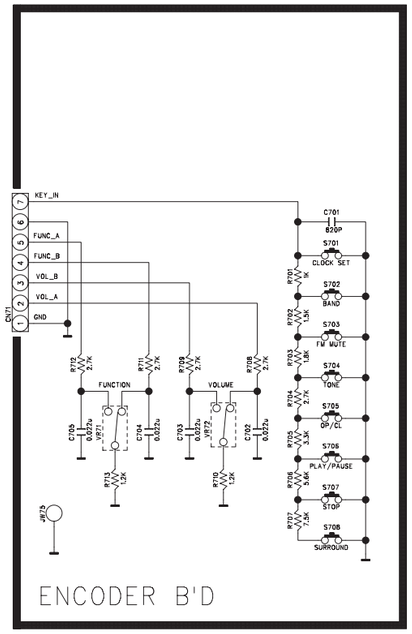


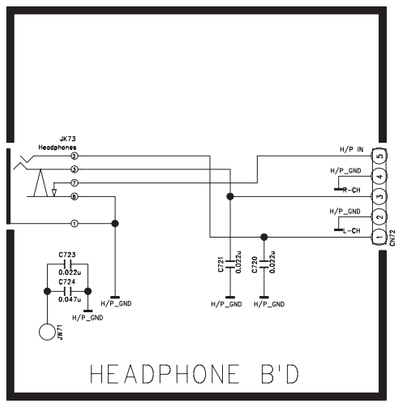
3. SCHEMATIC DIAGRAM

FRONT PART



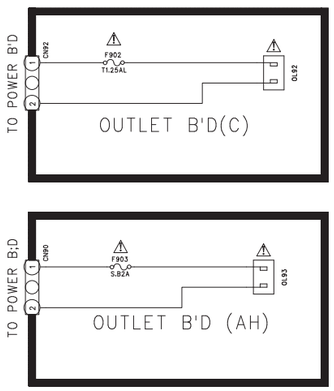


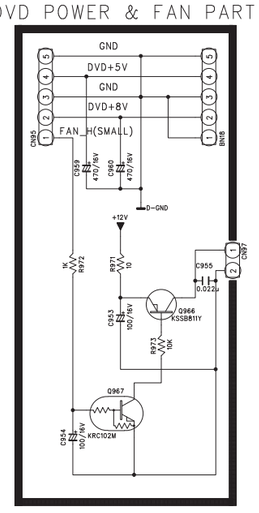


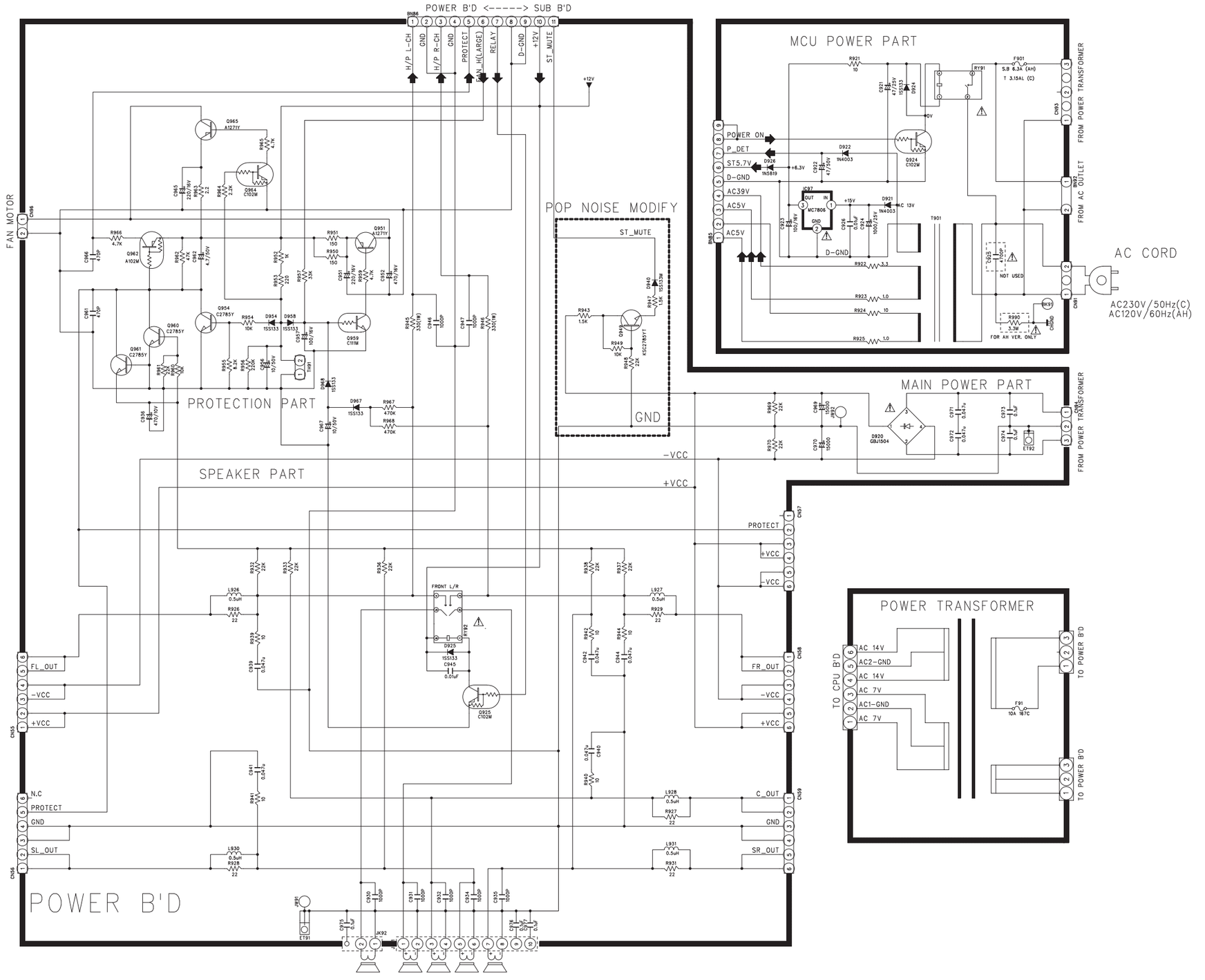


FRONT B'D <------> MCU B'D

POWER PART







2-51a

2-51b

PAGE#1 INPUT & VOLUME PART

INPUT PART

MPEG PCB & DSP PART

DSP PART

DSP PART

*XM
(For AH Version Only)

*DAB
(For C Version Only)

*IPOD PART

* OPTION TABLE

VER.	AH	C
R821	OPEN	10K
R822	OPEN	10K
R823	JUMPER	OPEN
R824	JUMPER	OPEN

*MODEL OPTION

VISO 5	
R898	OPEN
R899	100K

VISO 2	
R898	10K
R899	OPEN

Option

T5CC1

INPUT PART

FRONT PCB

VIDEO PCB

TUNER MODULE

INPUT PART

REGULARTOR PCB

MAIN TRANSFORMER

PAGE #2 DSP & CODEC PART

IC45
CS494003
AUDIO DSP

DIR+CODEC
(AK4589)

* DVD MECHA CONNECTOR BOARD

VCR_OUT

VCR_IN

CABLE/
SAT_IN

FL_IN

FR_IN

SL_IN

SR_IN

C_IN

SW_IN

FROM AK4589(DIR+CODEC)

IC11
BD3816K1
MASTER VR &
FUNCTION SELECTOR

* XM (for AH version only)

VIDEO 4 (VIDEO)

PAGE#3 INPUT & VOLUME PART

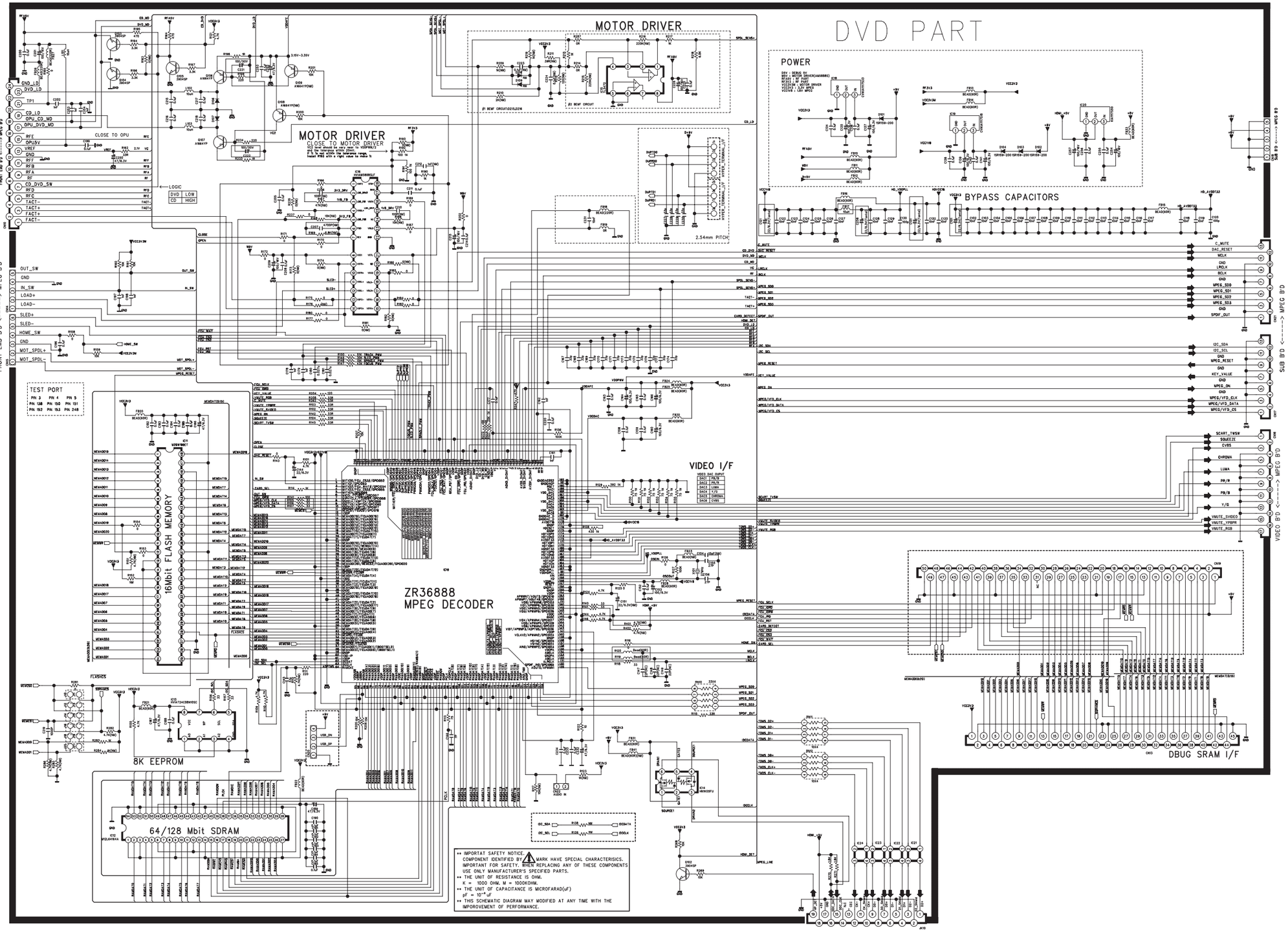
*RS-232 PART

ST202EBW

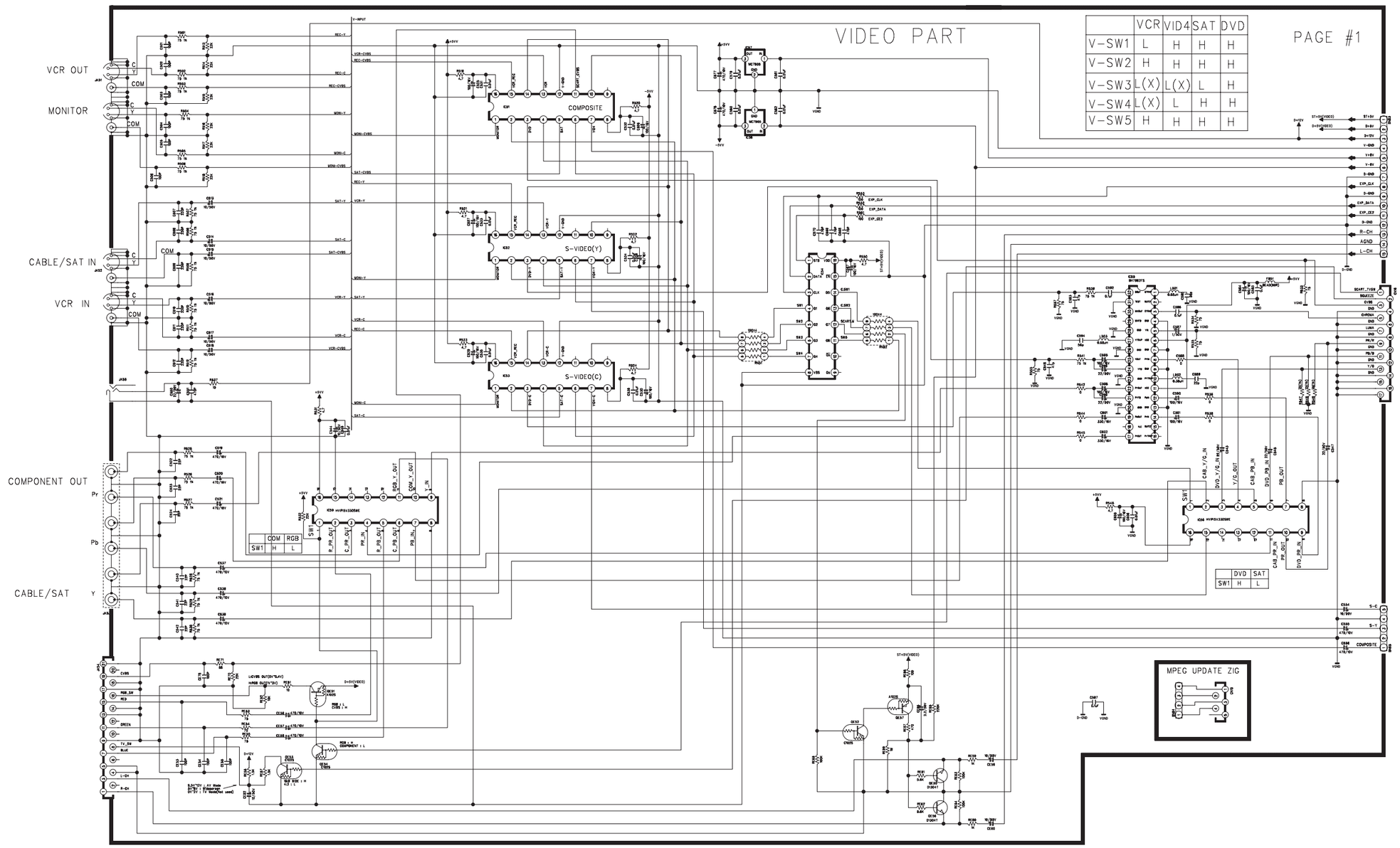
SUB
PRE_OUT

52c

MPEG PART

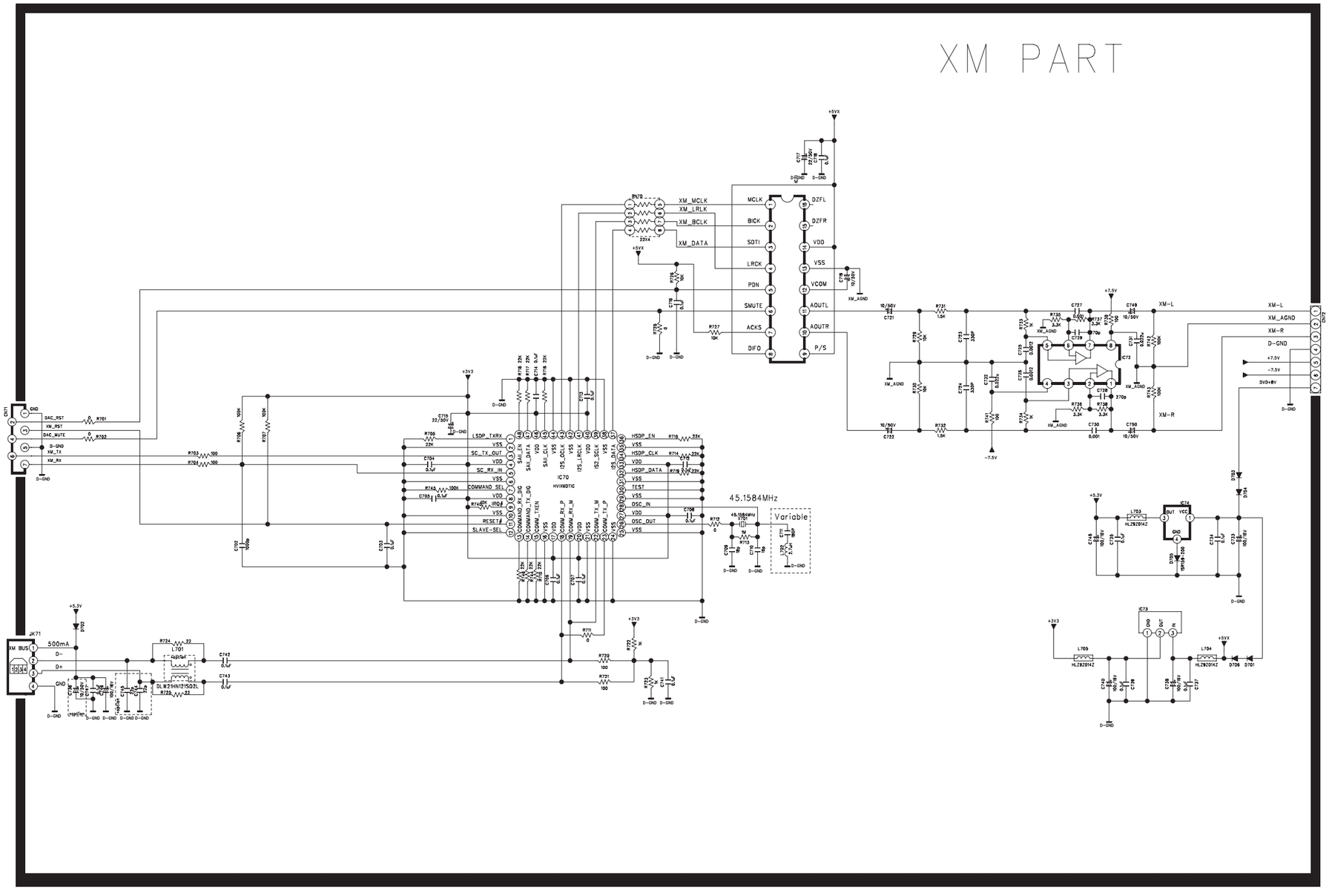

MOTOR DRIVER
MOTOR DRIVER
CLOSE TO MOTOR DRIVER
DVD PART
POWER
BYPASS CAPACITORS
VIDEO I/F
ZR36888
MPEG DECODER
16Mbit FLASH MEMORY
64/128 Mbit SDRAM
8K EEPROM
DBUG SRAM I/F
2.54mm PITCH
TEST PORT
PIN 3 PIN 4 PIN 5
PIN 138 PIN 150 PIN 151
PIN 152 PIN 153 PIN 248
FRONT END B/D <-----> MPEG B/D
SUB B/D <-----> MPEG B/D
VIDEO B/D <-----> MPEG B/D
** IMPORTAT SAFETY NOTICE.
COMPONENT IDENTIFIED BY ⚠ MARK HAVE SPECIAL CHARACTERISICS.
IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS
USE ONLY MANUFACTURER'S SPECIFIED PARTS.
** THE UNIT OF RESISTANCE IS OHM.
K = 1000 OHM, M = 1000KOHM.
** THE UNIT OF CAPACITANCE IS MICROFARAD(uF)
pF = 10⁻⁶ uF
** THIS SCHEMATIC DIAGRAM MAY MODIFIED AT ANY TIME WITH THE
IMPOROVEMENT OF PERFORMANCE.

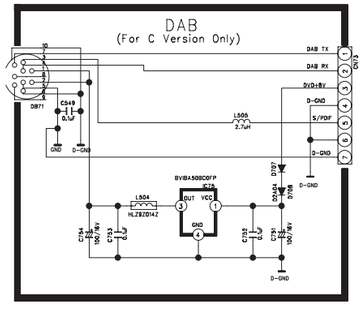
VIDEO&XM&DAB PART



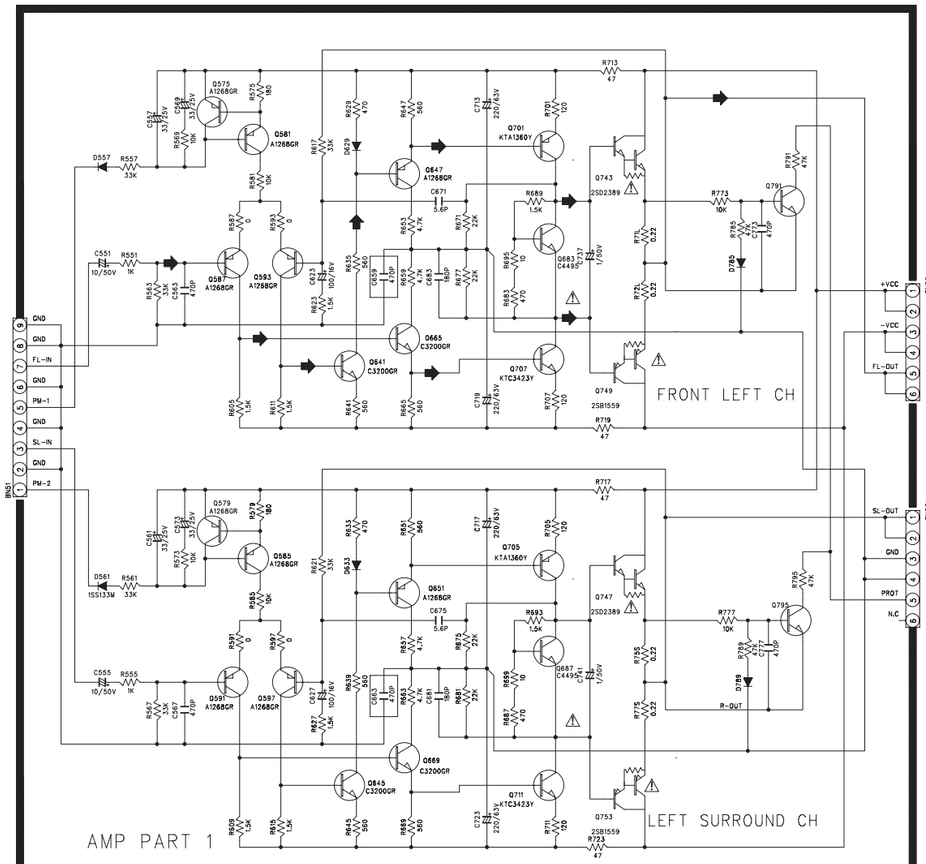
	VCR	VID4	SAT	DVD
V-SW1	L	H	H	H
V-SW2	H	H	H	H
V-SW3	L(X)	L(X)	L	H
V-SW4	L(X)	L	H	H
V-SW5	H	H	H	H

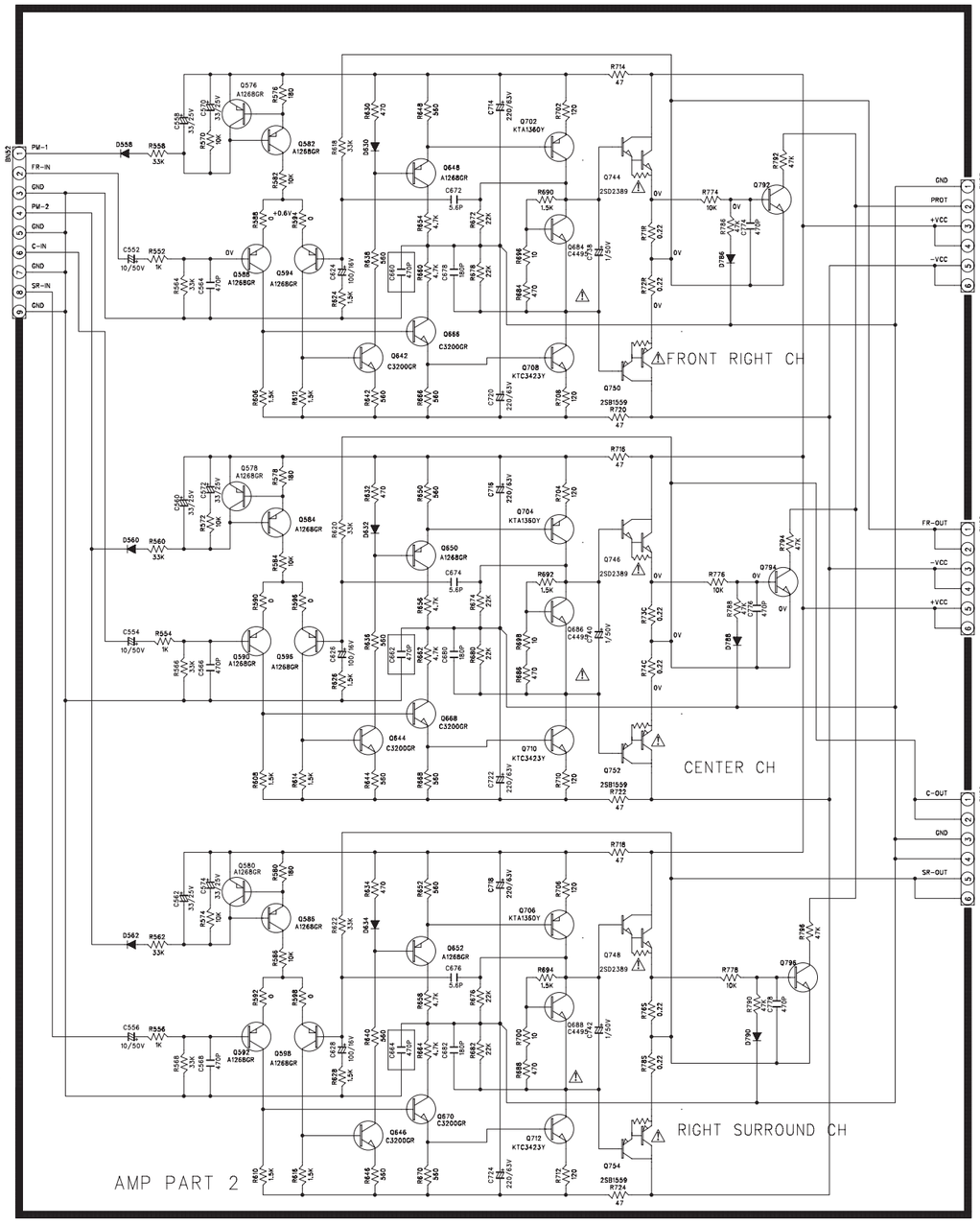
VIDEO&XM&DAB PART

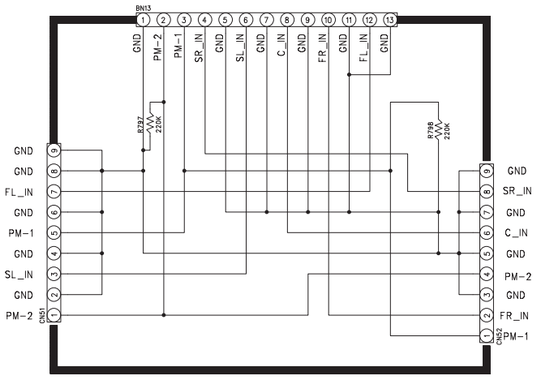


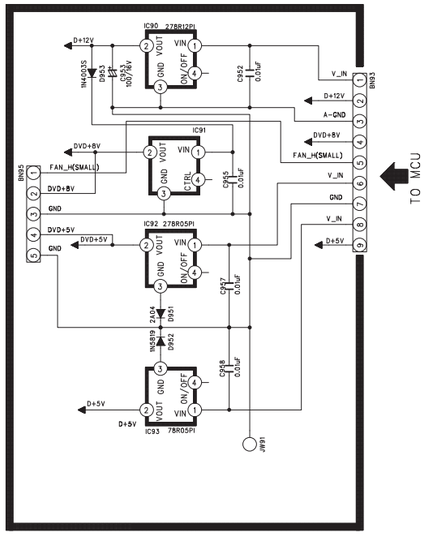


AMP PART





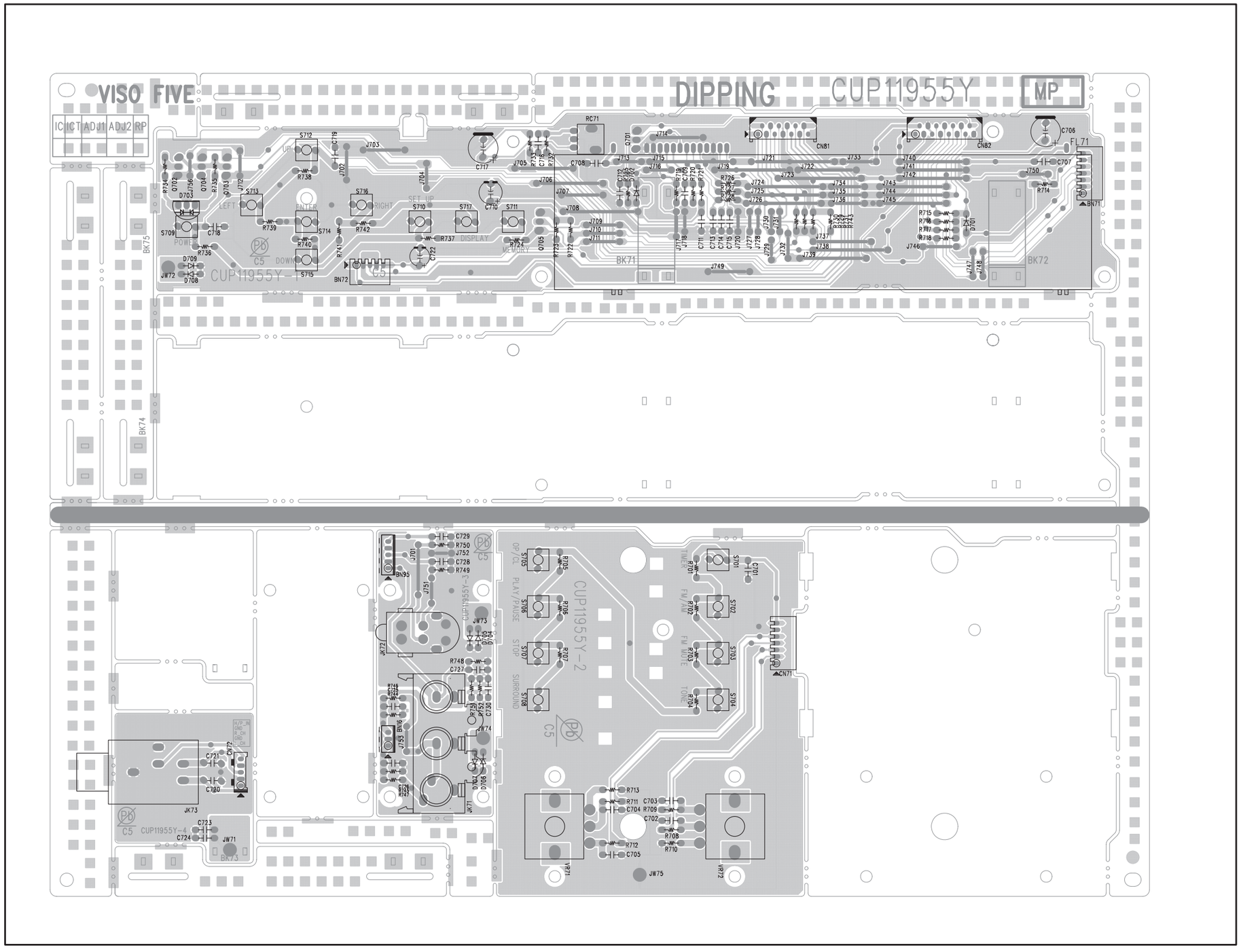




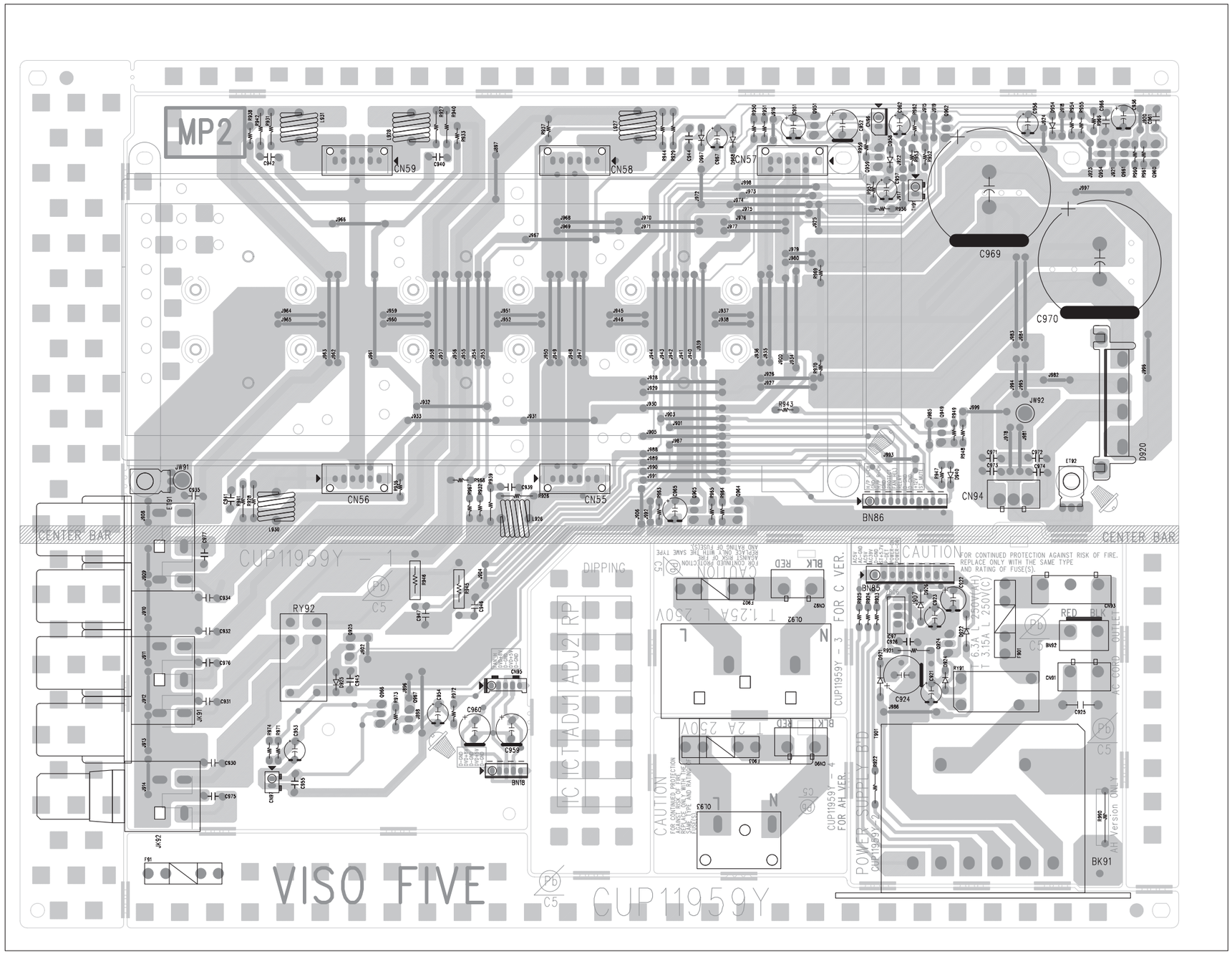
TO MCU

4. PRINTED CIRCUIT BOARDS

FRONT PCB DATA VIEW

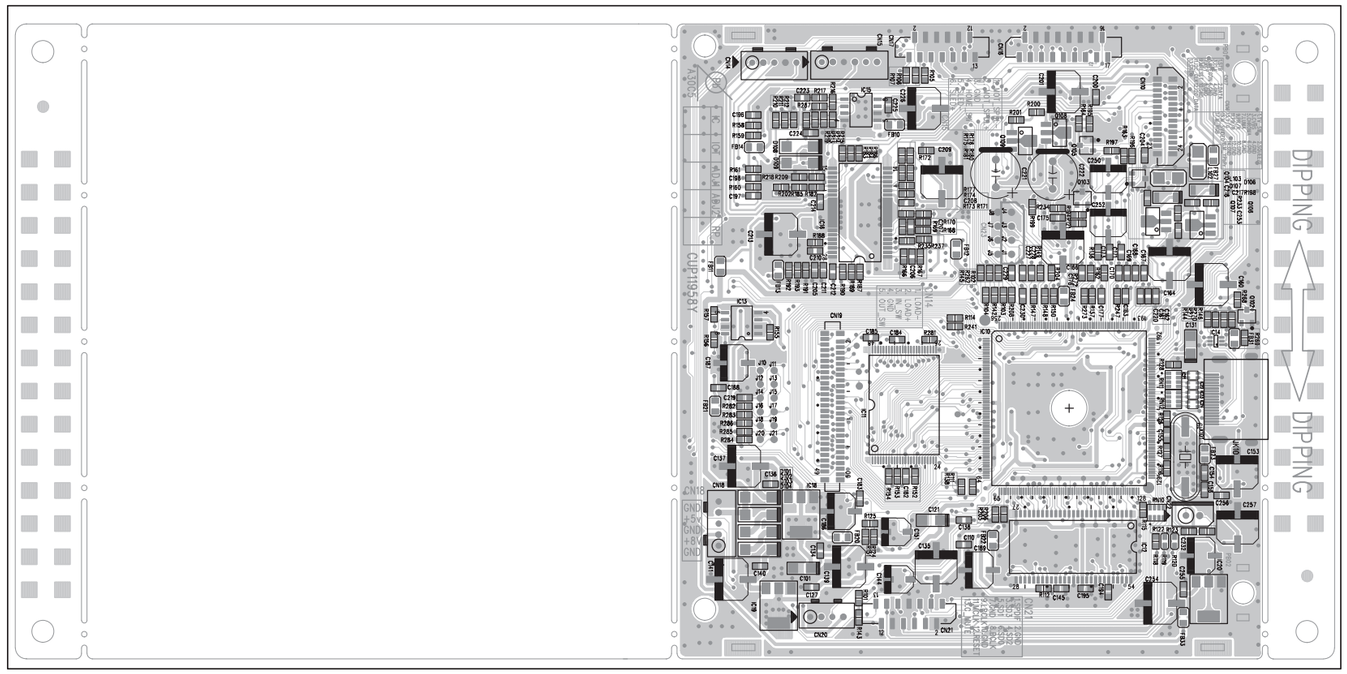


POWER PCB DATA VIEW

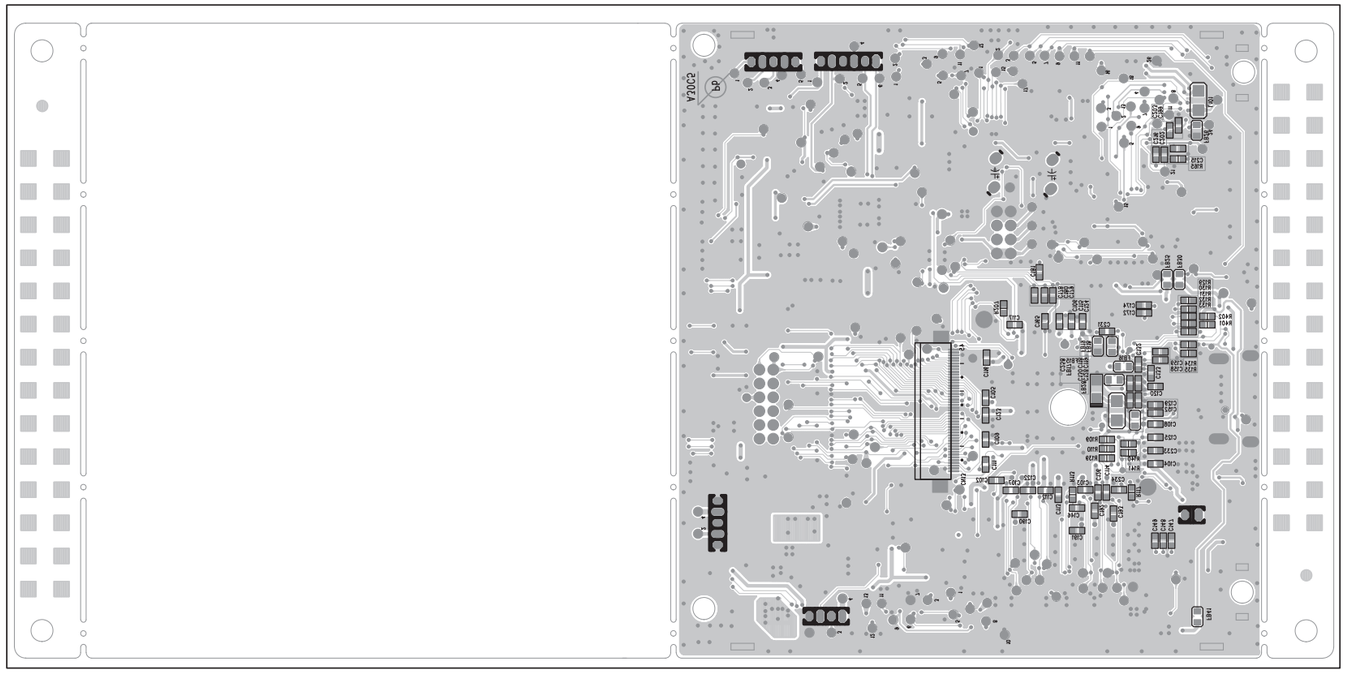


MPEG & HDMI PCB DATA VIEW

TOP VIEW

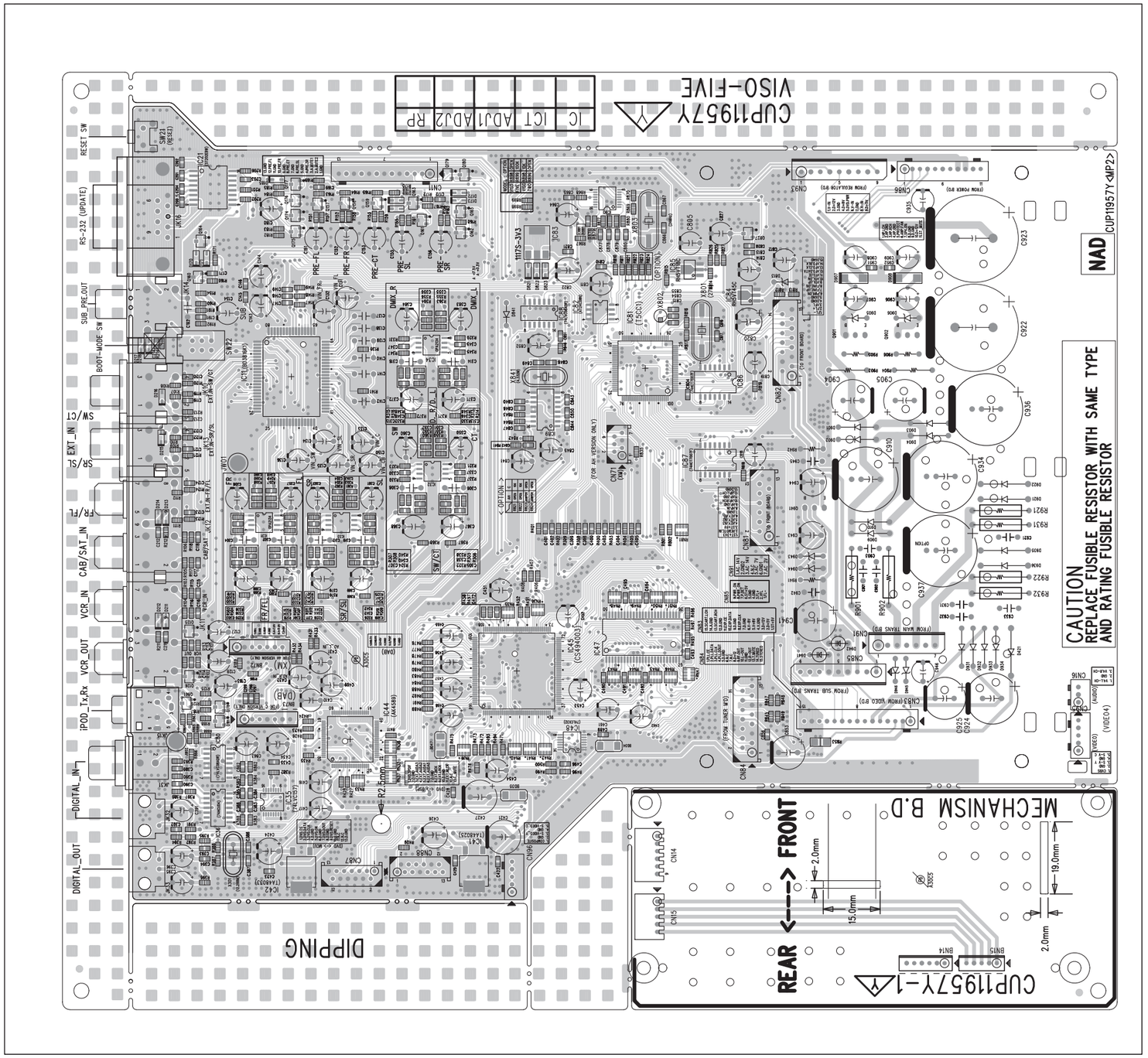


BOTTOM VIEW



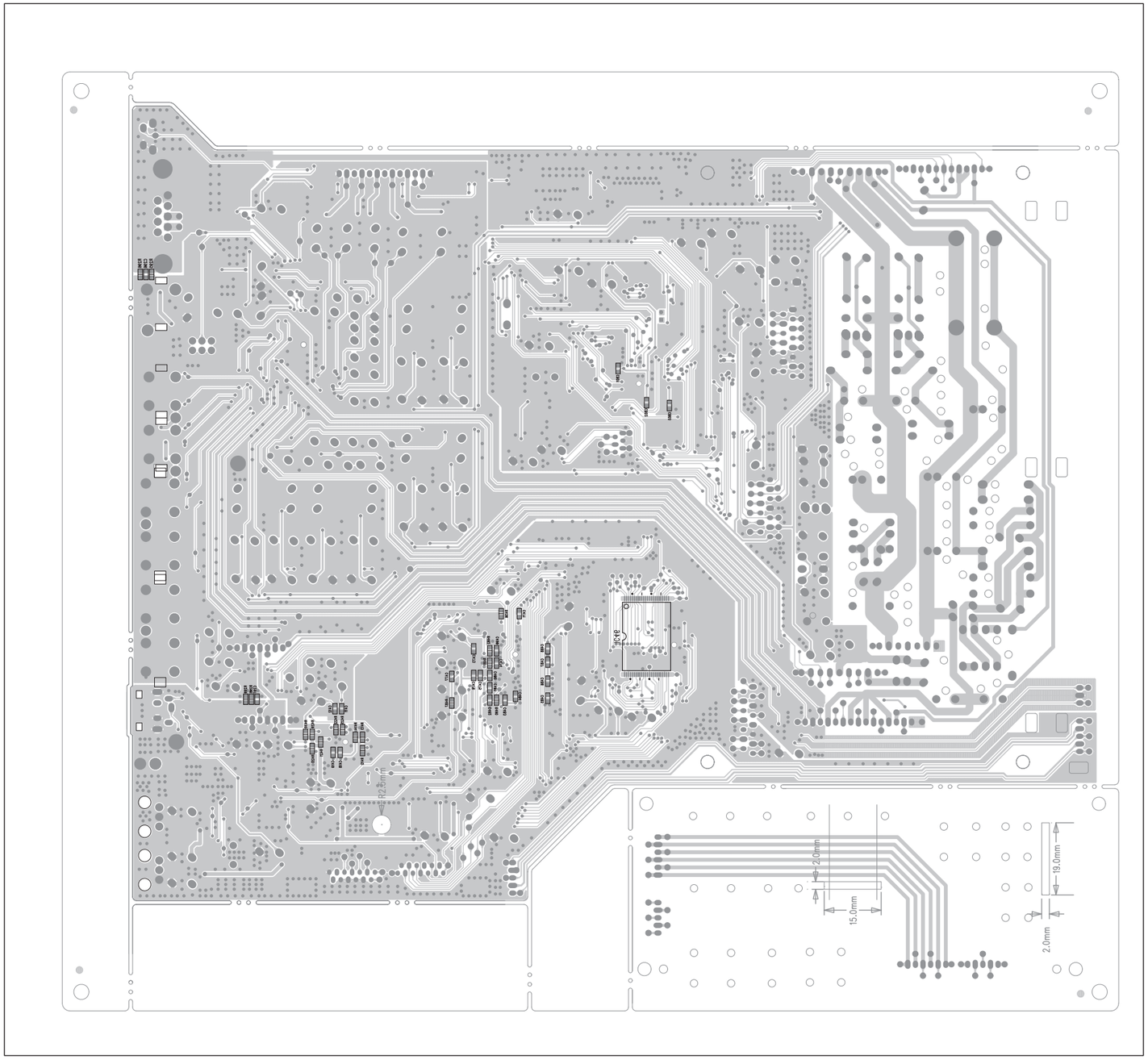
MAIN AUDIO & MICOM PCB DATA VIEW

TOP VIEW



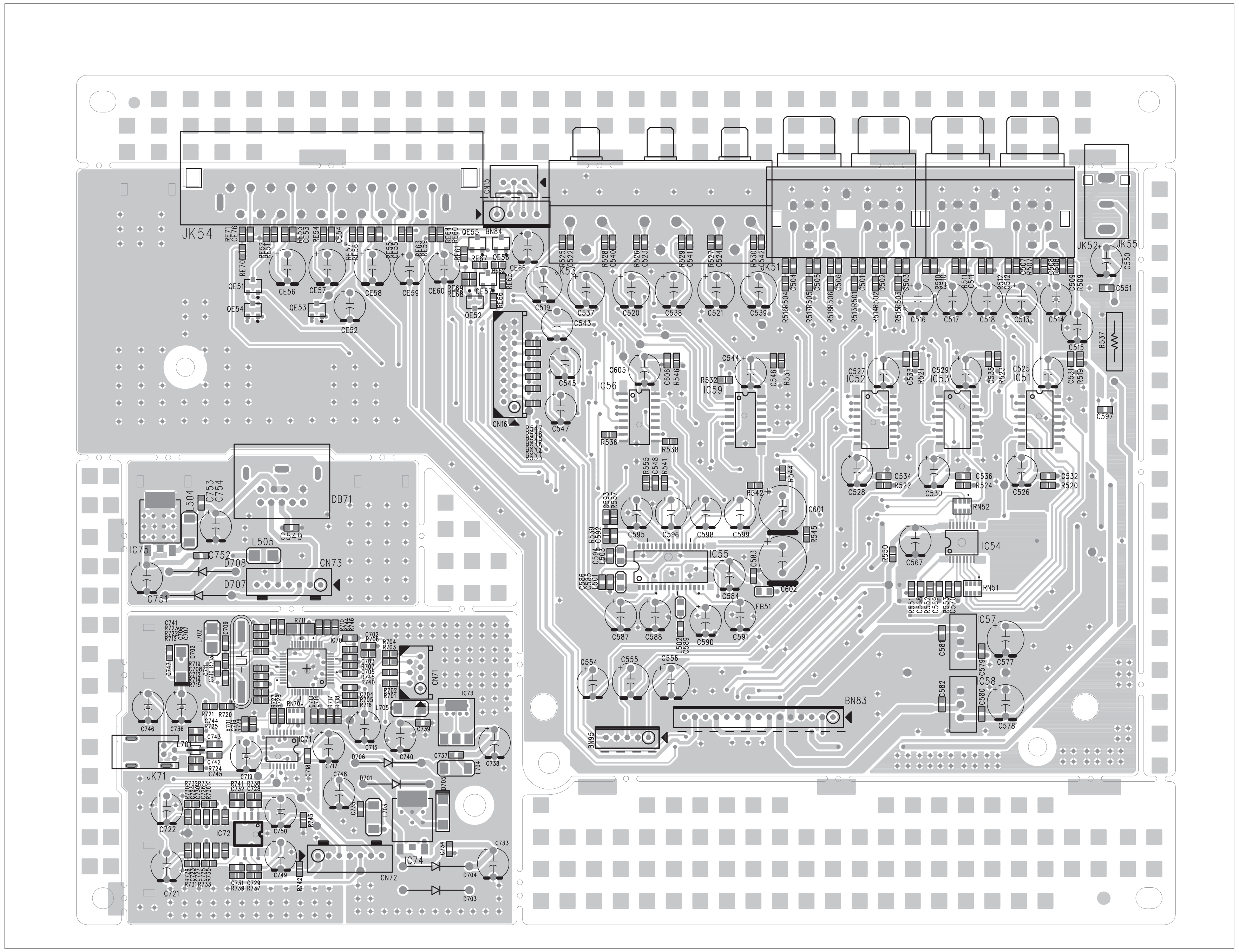
MAIN AUDIO & MICOM PCB DATA VIEW

BOTTOM VIEW



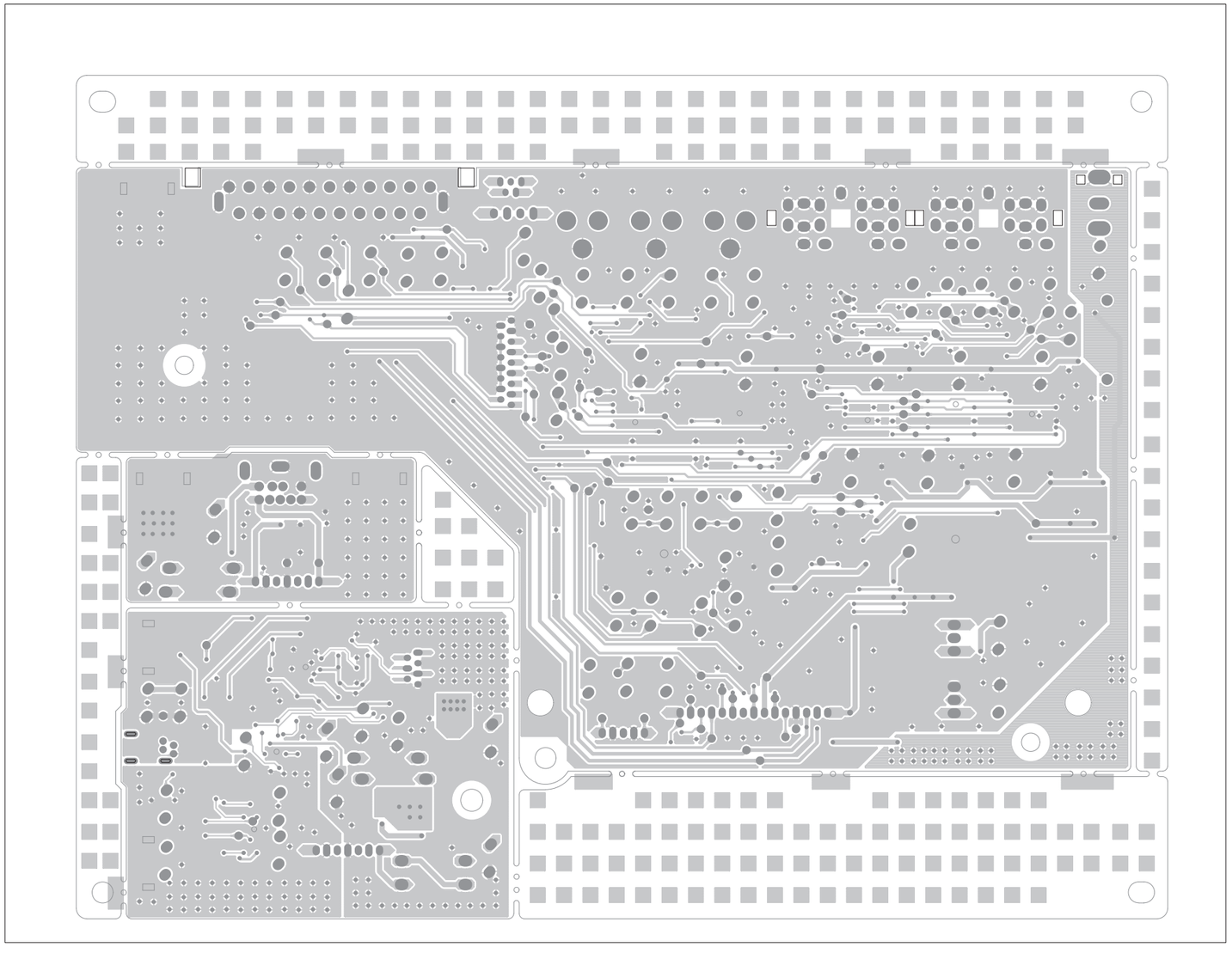
VIDEO XM (AH) DAB (C) PCB DATA VIEW

TOP VIEW

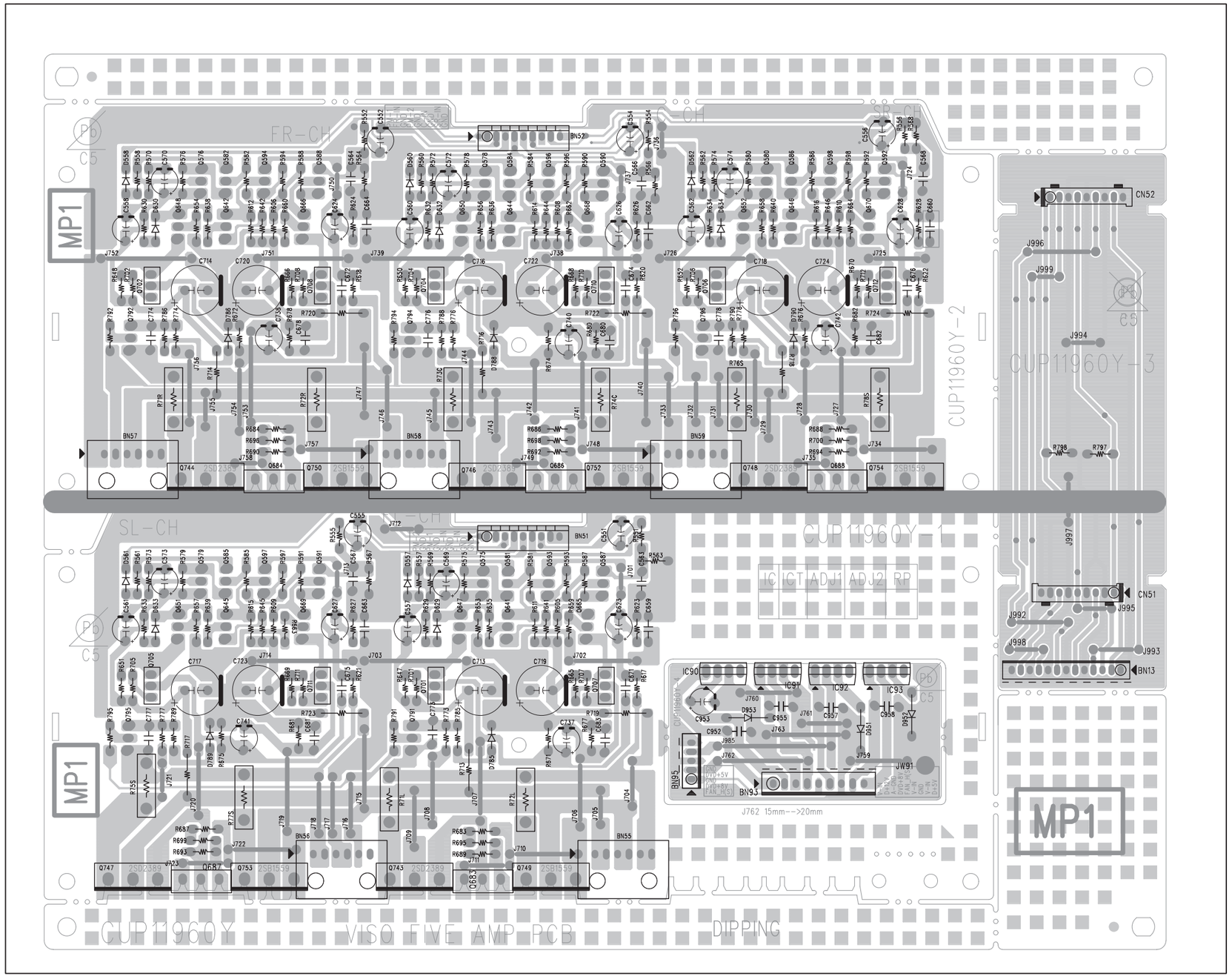


VIDEO EX (AH) XM (C) PCB DATA VIEW

BOTTOM VIEW



AMP PCB DATA VIEW



SECTION 3

ELECTRICAL PARTS LIST

■ RESISTORS AND CAPACITORS

Notes : * Please use this part number for parts order.

* IMPORTANT SAFETY NOTICE.
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacture's specified parts.
* The unit of resistance is ohm(Ω)
  k=1000Ω , M=1000kΩ
* The unit of capacitance is microfarad(μF)
  p=10-6 μF

■ Numbering System of Resistor

example

CRD 25 F J 101
Type Wattage Shape Tolerance Value

RESISTOR TYPE		WATTAGE	TOLERANCE
K(C)RD	CARBON	10 : 1/10 W	F : ±1 %
K(C)RJ	CARBON CHIP	14 : 1/4 W	J : ±10 %
K(C)RG	METAL OXIDE	20 : 1/5 W	K : ±20 %
K(C)RF	METAL CEMENT	25 : 1/4 W	
K(C)RQ	FUSIBLE	1 : 1 W	
		2 : 2 W	
		3 : 3 W	

■ Numbering System of Capacitor

example

CCC T 1H 101 K B
Type Voltage Value Tolerance Peculiarity

Capacitor Type	VOLTAGE		Tolerance
	HCEA Type	Other	
HCB CERAMIC	0J : 6.3V	1H : 50V DC	C : ±0.25pF
CCC CERAMIC	1A : 10V	1 : 125V DC	G : ±2 %
CCK CERAMIC	1C : 16V	KC : 400V AC	J: ±5 %
HCQ MYLAR	1E : 25V		K : ±10 %
HCU CERAMIC CHIP	1H : 50V		Z : +80%,-20%
HCE ELECT.	1V : 35V		

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
	CUP11955Y	FRONT PCB	
C701	HCBS1H821KBT	CAP , CERAMIC	820pF
C702	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C703	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C704	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C705	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C706	CCEA1AKS221T	CAP , ELECT	220uF 10V
C707	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C708	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C709	HCBS1H104ZFT	CAP , CERAMIC	0.1uF
C710	CCEA1AH471T	CAP , ELECT	470uF 10V
C711	HCBS1H104ZFT	CAP , CERAMIC	0.1uF
C712	HCBS1H104ZFT	CAP , CERAMIC	0.1uF
C713	HCBS1H271KBT	CAP , CERAMIC	270pF
C714	HCBS1H271KBT	CAP , CERAMIC	270pF
C715	HCBS1H271KBT	CAP , CERAMIC	270pF
C716	HCBS1H821KBT	CAP , CERAMIC	820pF
C717	CCEA1CH471T	CAP , ELECT	470uF 16V
C718	HCBS1H821KBT	CAP , CERAMIC	820pF
C719	HCBS1H821KBT	CAP , CERAMIC	820pF
C720	HCQI1H223JZT	CAP , MYLAR	0.022uF
C721	HCQI1H223JZT	CAP , MYLAR	0.022uF
C722	CCEA1HH1R0T	CAP , ELECT	1uF
C723	HCBS1H223ZFT	CAP , CERAMIC	0.022uF
C724	HCBS1H473ZFT	CAP , CERAMIC	0.047uF
C725	HCBS1H151KBT	CAP , CERAMIC	150pF
C726	HCBS1H151KBT	CAP , CERAMIC	150pF
C727	HCBS1H271KBT	CAP , CERAMIC	270pF
C728	HCBS1H271KBT	CAP , CERAMIC	270pF
C729	HCBS1H271KBT	CAP , CERAMIC	270pF
C730	HCBS1H104ZFT	CAP , CERAMIC	0.1uF
D701	CVD1SS133MT	DIODE	1SS133
D702	CVD1SS133MT	DIODE	1SS133
D704	CVD1SS133MT	DIODE	1SS133
D705	CVD1SS133MT	DIODE	1SS133
D706	CVD1SS133MT	DIODE	1SS133
D707	CVD1SS133MT	DIODE	1SS133
D708	CVD1SS133MT	DIODE	1SS133
D709	CVD1SS133MT	DIODE	1SS133
Q701	HVTKRC102MT	T.R	KRC102M
Q702	HVTKRA102MT	T.R	KRA102M
Q703	HVTKRA102MT	T.R	KRA102M
Q704	HVTKRC102MT	T.R	KRC102M
Q705	HVTKTC3203YT	T.R	KTC3203Y
R701	CRD20TF1001T	RES , CARBON	1K 1/5W F
R702	CRD20TF1501T	RES , CARBON	1.5K 1/5W F
R703	CRD20TF1801T	RES , CARBON	1.8K 1/5W F
R704	CRD20TF2701T	RES , CARBON	2.7K 1/5W F
R705	CRD20TF3301T	RES , CARBON	3.3K 1/5W F

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R706	CRD20TF5601T	RES , CARBON(5.6K/F)	
R707	CRD20TF7501T	RES , CARBON (7.5K/F)	
R708	CRD20TJ272T	RES , CARBON	2.7K ohm 1/5W
R709	CRD20TJ272T	RES , CARBON	2.7K ohm 1/5W
R710	CRD20TJ122T	RES , CARBON	1.2K ohm 1/5W
R711	CRD20TJ272T	RES , CARBON	2.7K ohm 1/5W
R712	CRD20TJ272T	RES , CARBON	2.7K ohm 1/5W
R713	CRD20TJ122T	RES , CARBON	1.2K ohm 1/5W
R714	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R715	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R716	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R717	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R718	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R719	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R720	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R721	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R722	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R723	CRD20TJ104T	RES , CARBON	100K ohm 1/5W
R724	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R725	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R726	CRD20TJ470T	RES , CARBON	47 ohm 1/5W
R727	CRD20TJ470T	RES , CARBON	47 ohm 1/5W
R728	CRD20TJ470T	RES , CARBON	47 ohm 1/5W
R729	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R730	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R731	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R732	CRD20TJ122T	RES , CARBON	1.2K ohm 1/5W
R733	CRD20TJ101T	RES , CARBON	100 ohm 1/5W
R734	CRD20TJ681T	RES , CARBON	680 ohm 1/5W
R735	CRD20TJ681T	RES , CARBON	680 ohm 1/5W
R736	CRD20TF1001T	RES , CARBON	1K 1/5W F
R737	CRD20TF1501T	RES , CARBON	1.5K 1/5W F
R738	CRD20TF1001T	RES , CARBON	1K 1/5W F
R739	CRD20TF1501T	RES , CARBON	1.5K 1/5W F
R740	CRD20TF1801T	RES , CARBON	1.8K 1/5W F
R741	CRD20TF2701T	RES , CARBON	2.7K 1/5W/F
R742	CRD20TF3301T	RES , CARBON	3.3K 1/5W/F
R743	CRD20TJ101T	RES , CARBON	100 ohm 1/5W
R744	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
R745	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
R746	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R747	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R748	CRD20TJ750T	RES , CARBON	75 ohm 1/5W
R749	CRD20TJ750T	RES , CARBON	75 ohm 1/5W
R750	CRD20TJ750T	RES , CARBON	75 ohm 1/5W
R751	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R752	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
S701	CST1A012ZT	SW , TACT	SKHV10910G
S702	CST1A012ZT	SW , TACT	SKHV10910G
S703	CST1A012ZT	SW , TACT	SKHV10910G

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
S704	CST1A012ZT	SW , TACT	SKHV10910G
S705	CST1A012ZT	SW , TACT	SKHV10910G
S706	CST1A012ZT	SW , TACT	SKHV10910G
S707	CST1A012ZT	SW , TACT	SKHV10910G
S708	CST1A012ZT	SW , TACT	SKHV10910G
S709	CST1A012ZT	SW , TACT	SKHV10910G
S710	CST1A012ZT	SW , TACT	SKHV10910G
S711	CST1A012ZT	SW , TACT	SKHV10910G
S712	CST1A012ZT	SW , TACT	SKHV10910G
S713	CST1A012ZT	SW , TACT	SKHV10910G
S714	CST1A012ZT	SW , TACT	SKHV10910G
S715	CST1A012ZT	SW , TACT	SKHV10910G
S716	CST1A012ZT	SW , TACT	SKHV10910G
S717	CST1A012ZT	SW , TACT	SKHV10910G
BK71	CMD1A209	BRACKET , FLT	A4-92-1739
BK72	CMD1A209	BRACKET , FLT	A4-92-1739
BK73	CMD1A569	BRACKET , PCB	
BK74	CMD1A629	BRACKET , PCB	
BK75	CMD1A629	BRACKET , PCB	
BN16	CWZL77BN16	SHIELD WIRE ASS'Y	3P, 300MM, 2MM
BN71	CWB1C007080EW	WIRE ASS'Y	7P, 80MM, 2MM
BN72	CWB1C005180EW	WIRE ASS'Y(5P, 180MM. 2.0P)	5PIN, 2.0MM , 180MM
BN95	CWZL77BN95	SHIELD WIRE ASS'Y	5P, 300MM, 2MM
CN71	CJP07GB46ZY	WAFER , ANGLE, 7PIN	
CN72	CJP05GA19ZY	WAFER , STRAIGHT	
CN81	CJP13GA115ZY	WAFER , CARD CABLE	
CN82	CJP15GA115ZY	WAFER , CARD CABLE	
D703	CVD1L0593A2B12M	LED , 2 COLOR (AMBER, BLUE)	1L0593A2B12M402
FL71	CFL16BT130GINK	V.F.D	16-BT-130CINK
JK71	CJJ4S027Z	JACK , RCA(3P, WITH SWITCH)	
JK72	CJJ9M003Y	JACK , S-VIDEO(GOLD)	
JK73	CJJ2E020Z	JACK	
JW72	CWE8102050RV	WIRE , ASS'Y	
JW73	CWE8102100RV	WIRE ASS'Y	
JW74	CWE8102100RV	WIRE ASS'Y	
RC71	CRVKSM603TH2E	SENSOR , REMOCON	KSM603TH2E
VR71	CSR2A034Z	VR, ENCODER	
VR72	CSR2A036Z	ENCODER VR	
	CUP11956Y	VIDEO PCB	
C501	CCUS1H101JA	CAP , CHIP	100pF
C502	CCUS1H101JA	CAP , CHIP	100pF
C503	CCUS1H101JA	CAP , CHIP	100pF
C504	CCUS1H101JA	CAP , CHIP	100pF
C505	CCUS1H101JA	CAP , CHIP	100pF
C506	CCUS1H101JA	CAP , CHIP	100pF
C507	CCUS1H221JA	CAP , CHIP	220pF
C508	CCUS1H221JA	CAP , CHIP	220pF
C509	CCUS1H221JA	CAP , CHIP	220pF
C510	CCUS1H221JA	CAP , CHIP	220pF
C511	CCUS1H221JA	CAP , CHIP	220pF

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C512	CCUS1H221JA	CAP , CHIP	220pF
C522	CCUS1H220JA	CAP , CHIP	22pF
C523	CCUS1H220JA	CAP , CHIP	22pF
C524	CCUS1H220JA	CAP , CHIP	22pF
C531	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C532	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C533	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C534	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C535	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C536	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C540	CCUS1H220JA	CAP , CHIP	22pF
C541	CCUS1H220JA	CAP , CHIP	22pF
C542	CCUS1H220JA	CAP , CHIP	22pF
C546	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C548	CCUS1H470JA	CAP , CHIP	47pF
C551	CCUS1H471JA	CAP , CHIP	470pF
C568	CCUS1H471JA	CAP , CHIP	470pF
C569	CCUS1H471JA	CAP , CHIP	470pF
C570	CCUS1H471JA	CAP , CHIP	470pF
C579	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C580	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C581	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C582	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C583	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C585	CCUS1H560JA	CAP , CHIP	56pF
C586	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C589	CCUS1H220JA	CAP , CHIP	22pF
C592	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C593	CCUS1H470JA	CAP , CHIP	47pF
C594	CCUS1H560JA	CAP , CHIP	56pF
C597	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C606	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C702	CCUS1H102KC	CAP , CHIP	1000pF (only AH VERSION)
C703	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C704	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C705	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C706	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C707	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C708	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C709	CCUS1H180JA	CAP , CHIP(18PF/50V)	18pF (only AH VERSION)
C710	CCUS1H180JA	CAP , CHIP(18PF/50V)	18pF (only AH VERSION)
C711	CCUS1H181JA	CAP , CHIP	180pF (only AH VERSION)
C712	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C713	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C714	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C716	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C718	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C723	CCUS1H331JA	CAP , CHIP	330pF (only AH VERSION)
C724	CCUS1H331JA	CAP , CHIP	330pF (only AH VERSION)
C725	CCUS1H122KC	CAP , CHIP	1200pF (only AH VERSION)

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C726	CCUS1H122KC	CAP , CHIP	1200pF (only AH VERSION)
C727	CCUS1H102KC	CAP , CHIP	1000pF (only AH VERSION)
C728	CCUS1H271JA	CAP , CHIP	270pF (only AH VERSION)
C729	CCUS1H271JA	CAP , CHIP	270pF (only AH VERSION)
C730	CCUS1H102KC	CAP , CHIP	1000pF (only AH VERSION)
C731	CCUS1H223KC	CAP , CHIP	0.022uF 50V (only AH VERSION)
C732	CCUS1H223KC	CAP , CHIP	0.022uF 50V (only AH VERSION)
C734	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C735	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C737	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C739	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C741	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C742	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C743	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
C744	CCUS1H220JA	CAP , CHIP	22pF (only AH VERSION)
C745	CCUS1H220JA	CAP , CHIP	22pF (only AH VERSION)
C747	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only AH VERSION)
CE53	CCUS1H101JA	CAP , CHIP	100pF (only C VERSION)
CE54	CCUS1H101JA	CAP , CHIP	100pF (only C VERSION)
CE55	CCUS1H101JA	CAP , CHIP	100pF (only C VERSION)
CE76	CCUS1H101JA	CAP , CHIP	100pF (only C VERSION)
C549	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only C VERSION)
C752	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only C VERSION)
C753	CCUS1H104KC	CAP , CHIP	0.1uF 50V (only C VERSION)
D702	HVDRB160L60TE25	DIODE , SCHOTTKEY BARRIER	RB160L-60TE25 (only AH VERSION)
D705	HVD1SR159-200	DIODE , SCHOTTKEY BARRIER	1SR159-200 (only AH VERSION)
FB51	CLZ9R001Z	FERRITE , CHIP BEAD(60ohm)	HCB2012KF-600T40
IC51	CVINJM2595MTE1	I.C , VIDEO S/W	
IC52	CVINJM2595MTE1	I.C , VIDEO S/W	
IC53	CVINJM2595MTE1	I.C , VIDEO S/W	
IC54	HVICD4094BPWR	I.C , SHIFT REGISTER	CD4094BPWR(SMD)
IC55	BVIBH7862FS	IC , 6CH VIDEO DRIVER	Rohm (BH7862FS)
IC56	HVIPI5V330SWE	IC , VIDEO SW	
IC59	HVIPI5V330SWE	IC , VIDEO SW	
IC70	CVIXMDTIC	I.C , XM V3B	(only AH VERSION)
IC71	CVIAK4384ET	I.C , ADC	(only AH VERSION)
IC72	HVINJM2068MDTE1	I.C , OP AMP	NJM2068MD-TE1 (only AH VERSION)
IC73	HVILM1117S-3V3	I.C , REGULATOR (3.3V)	1117S-3.3V (only AH VERSION)
IC74	BVIBA50BC0FP	I.C , REGULATOR CHIP (+5V)	BA50BC0FP-E2 (only AH VERSION)
IC75	BVIBA50BC0FP	I.C , REGULATOR CHIP (+5V)	BA50BC0FP-E2 (only C VERSION)
L501	CLQ08ER68KRZ	COIL , CHIP(0.68uH, 2012)	FCI2012F-R68K
L502	CLQ08ER39KRZ	COIL , CHIP(0.39uH, 2012)	FCI2012F-R39K
L503	CLQ08ER68KRZ	COIL , CHIP(0.68uH, 2012)	FCI2012F-R68K
L702	CLQ06E2R7KRZ	INDUCTOR , CHIP	
L703	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
L704	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
L705	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
L504	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60 (only C VERSION
L505	CLQ06E2R7KRZ	INDUCTOR , CHIP	(only C VERSION)
QE51	HVTKRA102S	T.R , CHIP	KRA102S (only C VERSION)

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
QE52	HVTKRC102S	T.R , CHIP	KRC102S (only C VERSION)
QE53	HVTKRC102S	T.R , CHIP	KRC102S (only C VERSION)
QE54	HVTKRC102S	T.R , CHIP	KRC102S (only C VERSION)
QE55	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304 (only C VERSION)
QE56	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304 (only C VERSION)
QE57	HVTKRA102S	T.R , CHIP	KRA102S (only C VERSION)
RE51	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W (only C VERSION)
RE52	CRJ10DJ103T	RES , CHIP	10 ohm 1/10W (only C VERSION)
RE53	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1% (only C VERSION)
RE54	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1% (only C VERSION)
RE55	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1% (only C VERSION)
RE56	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W (only C VERSION)
RE57	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W (only C VERSION)
RE59	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only C VERSION)
RE60	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only C VERSION)
RE61	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W (only C VERSION)
RE62	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W (only C VERSION)
RE63	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only C VERSION)
RE64	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only C VERSION)
RE65	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W (only C VERSION)
RE66	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only C VERSION)
RE67	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W (only C VERSION)
RE68	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only C VERSION)
RE69	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W (only C VERSION)
RE70	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only C VERSION)
RE71	CRJ10DJ680T	RES , CHIP	68 ohm 1/10W (only C VERSION)
RN51	CRJ104DJ101T	RES , CHIP (1608X4)	100 ohm 1/16W , ARRAY
RN52	CRJ104DJ101T	RES , CHIP (1608X4)	100 ohm 1/16W , ARRAY
RN70	CRJ104DJ220T	RES,4ARRAY	22X4/2012 (only AH VERSION)
R501	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R502	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R503	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R504	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R505	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R506	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R507	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R508	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R509	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R510	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R511	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R512	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R513	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R514	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R515	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R516	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R517	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R518	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R519	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R520	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R521	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R522	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R523	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R524	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R525	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R526	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R527	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R528	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R529	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R530	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R531	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R532	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R533	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R534	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R535	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R536	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R538	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R539	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R541	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R542	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R544	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R545	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R546	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R547	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R548	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R549	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R550	CRJ10DJ4R7T	RES , CHIP	75 ohm, 1%
R551	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R552	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R553	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R555	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R557	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R701	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only AH VERSION)
R702	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only AH VERSION)
R703	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)
R704	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)
R705	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R706	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only AH VERSION)
R707	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only AH VERSION)
R710	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R711	CRJ10CJ0R0T	RES , CHIP (1/10W OR)	0 ohm 1/4W (only AH VERSION)
R712	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only AH VERSION)
R713	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W (only AH VERSION)
R714	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R715	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R716	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R717	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R718	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R719	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R720	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)
R721	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R722	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only AH VERSION)
R723	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only AH VERSION)
R724	CRJ10DJ220T	RES , CHIP	22 ohm 1/10W (only AH VERSION)
R725	CRJ10DJ220T	RES , CHIP	22 ohm 1/10W (only AH VERSION)
R726	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R727	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R728	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only AH VERSION)
R729	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R730	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R731	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W (only AH VERSION)
R732	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W (only AH VERSION)
R733	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only AH VERSION)
R734	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W (only AH VERSION)
R735	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W (only AH VERSION)
R736	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W (only AH VERSION)
R737	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W (only AH VERSION)
R738	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W (only AH VERSION)
R739	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)
R740	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R741	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W (only AH VERSION)
R742	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only AH VERSION)
R743	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only AH VERSION)
R744	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
R745	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W (only AH VERSION)
R746	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W (only AH VERSION)
X701	COX45158E180S	X-TAL, 45.1584MHz (SMD)	(only AH VERSION)
C513	CCEA1HH100T	CAP , ELECT	10uF 50V
C514	CCEA1HH100T	CAP , ELECT	10uF 50V
C515	CCEA1HH100T	CAP , ELECT	10uF 50V
C516	CCEA1HH100T	CAP , ELECT	10uF 50V
C517	CCEA1HH100T	CAP , ELECT	10uF 50V
C518	CCEA1HH100T	CAP , ELECT	10uF 50V
C519	CCEA1AH471T	CAP , ELECT	470uF 10V
C520	CCEA1AH471T	CAP , ELECT	470uF 10V
C521	CCEA1AH471T	CAP , ELECT	470uF 10V
C525	CCEA1CH101T	CAP , ELECT	100uF 16V
C526	CCEA1CH101T	CAP , ELECT	100uF 16V
C527	CCEA1CH101T	CAP , ELECT	100uF 16V
C528	CCEA1CH101T	CAP , ELECT	100uF 16V
C529	CCEA1CH101T	CAP , ELECT	100uF 16V
C530	CCEA1CH101T	CAP , ELECT	100uF 16V
C537	CCEA1AH471T	CAP , ELECT	470uF 10V
C538	CCEA1AH471T	CAP , ELECT	470uF 10V
C539	CCEA1AH471T	CAP , ELECT	470uF 10V
C543	CCEA1HH220T	CAP , ELECT	22uF 50V
C544	CCEA1HH100T	CAP , ELECT	10uF 50V
C545	CCEA1HH220T	CAP , ELECT	22uF 50V
C547	CCEA1HH220T	CAP , ELECT	22uF 50V
C550	CCEA1HH220T	CAP , ELECT	22uF 50V
C554	CCEA1HH100T	CAP , ELECT	10uF 50V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C555	CCEA1AH471T	CAP , ELECT	470uF 10V
C556	CCEA1AH471T	CAP , ELECT	470uF 10V
C567	CCEA1CH101T	CAP , ELECT	100uF 16V
C577	CCEA1AH471T	CAP , ELECT	470uF 10V
C578	CCEA1AH471T	CAP , ELECT	470uF 10V
C584	CCEA1CH101T	CAP , ELECT	100uF 16V
C587	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C590	CCEA1CH101T	CAP , ELECT	100uF 16V
C591	CCEA1CH101T	CAP , ELECT	100uF 16V
C595	CCEA1CH101T	CAP , ELECT	100uF 16V
C596	CCEA1HH220T	CAP , ELECT	22uF 50V
C598	CCEA1CH101T	CAP , ELECT	100uF 16V
C599	CCEA1HH220T	CAP , ELECT	22uF 50V
C601	CCEA1CH331T	CAP , ELECT	330uF 16V
C602	CCEA1CH331T	CAP , ELECT	330uF 16V
C605	CCEA1CH101T	CAP , ELECT	100uF 16V
C715	CCEA1HH220T	CAP , ELECT	22uF 50V (only AH VERSION)
C717	CCEA1HH220T	CAP , ELECT	22uF 50V (only AH VERSION)
C719	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C721	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C722	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C733	CCEA1CH101T	CAP , ELECT	100uF 16V (only AH VERSION)
C736	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C738	CCEA1CH101T	CAP , ELECT	100uF 16V (only AH VERSION)
C740	CCEA1CH101T	CAP , ELECT	100uF 16V (only AH VERSION)
C746	CCEA1CH101T	CAP , ELECT	100uF 16V (only AH VERSION)
C748	CCEA1CH101T	CAP , ELECT	100uF 16V (only AH VERSION)
C749	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C750	CCEA1HH100T	CAP , ELECT	10uF 50V (only AH VERSION)
C751	CCEA1CH101T	CAP , ELECT	100uF 16V (only C VERSION)
C754	CCEA1CH101T	CAP , ELECT	100uF 16V (only C VERSION)
D707	HVD2A04H	DIODE , RECT(2A)	(only C VERSION)
D708	HVD2A04H	DIODE , RECT(2A)	(only C VERSION)
BK51	CMD1A569	BRACKET , PCB	(only C VERSION)
BK52	CMD1A569	BRACKET , PCB	(only C VERSION)
D701	HVD2A04H	DIODE , RECT(2A)	(only AH VERSION)
D703	HVD2A04H	DIODE , RECT(2A)	(only AH VERSION)
D704	HVD2A04H	DIODE , RECT(2A)	(only AH VERSION)
BK53	CMD1A569	BRACKET , PCB	(only AH VERSION)
BK54	CMD1A569	BRACKET , PCB	(only AH VERSION)
BK55	CMD1A569	BRACKET , PCB	
BN83	CWB1C015150EN	WIRE ASS'Y	15P, 150MM, 2MM
BN84	CWB1C904100BM	WIRE ASS'Y	
BN95	CWZL77BN96	SHIELD WIRE ASS'Y	5P, 100MM, 2MM
CN15	CJP05GB113ZY	WAFER , ANGLE(5P, 1MM)	
CN16	CJP17GA117ZY	WAFER	
CN71	CJP07GA117ZY	WAFER	7P (only AH VERSION)
CN72	CJP07GA19ZY	WAFER , STRAIGHT(7PIN)	7P (only AH VERSION)
CN73	CJP07GA19ZY	WAFER , STRAIGHT(7PIN)	7P (only C VERSION)
C588	C3A206	WIRE , COPPER	SN95/PB5 , 0.6

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
DB71	CJS6V001Z	JACK , DIN 9P	DIN-901A1 (only C VERSION)
IC57	HVIKIA7805API	REGULATOR, +5V	7805API (KEC)
IC58	CVIKIA7905PI	I.C , REGULATOR(-5V)	
JK51	CJJ9P004Z	JACK , RCA/DIN	
JK52	CJJ9P004Z	JACK , RCA/DIN	
JK53	CJJ4R046Z	JACK , BOARD	
JK54	CJJ6K004Z	JACK , SCART(SHIELD PLATE)	(only C VERSION)
JK55	CJJ2D008Z	JACK , STEREO	
JK71	CJJ9L006Z	JACK , XM	CAM-D96 (only AH VERSION)
R537	CRG1ANJ100H	RES , METAL OXIDE FILM	10 ohm 1W
	CUP11957Y	MAIN PCB	278 X 247 , FR-4
BD34	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
BD35	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
BD47	CLZ9Z014Z	FERRITE , CHIP BEAD(60ohm)	HCB4516KF-600T60
C113	CCUS1H151JA	CAP , CHIP	150pF
C114	CCUS1H151JA	CAP , CHIP	150pF
C115	CCUS1H151JA	CAP , CHIP	150pF
C116	CCUS1H151JA	CAP , CHIP	150pF
C117	CCUS1H151JA	CAP , CHIP	150pF
C118	CCUS1H151JA	CAP , CHIP	150pF
C119	CCUS1H151JA	CAP , CHIP	150pF
C120	CCUS1H151JA	CAP , CHIP	150pF
C121	CCUS1H151JA	CAP , CHIP	150pF
C122	CCUS1H151JA	CAP , CHIP	150pF
C123	CCUS1H151JA	CAP , CHIP	150pF
C124	CCUS1H151JA	CAP , CHIP	150pF
C145	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C146	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C147	CCUS1H471JA	CAP , CHIP	470pF
C148	CCUS1H471JA	CAP , CHIP	470pF
C149	CCUS1H471JA	CAP , CHIP	470pF
C169	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C171	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C172	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C191	CCUS1H471JA	CAP , CHIP	470pF
C201	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C202	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C203	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C204	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C205	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C211	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C212	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C213	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C214	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C296	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C297	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C298	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C299	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C301	CCUS1H471JA	CAP , CHIP	470pF
C303	CCUS1H471JA	CAP , CHIP	470pF

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C305	CCUS1H471JA	CAP , CHIP	470pF
C307	CCUS1H471JA	CAP , CHIP	470pF
C309	CCUS1H471JA	CAP , CHIP	470pF
C311	CCUS1H471JA	CAP , CHIP	470pF
C313	CCUS1H471JA	CAP , CHIP	470pF
C315	CCUS1H471JA	CAP , CHIP	470pF
C333	CCUS1H821JA	CAP , CHIP	820pF
C334	CCUS1H821JA	CAP , CHIP	820pF
C335	CCUS1H821JA	CAP , CHIP	820pF
C336	CCUS1H821JA	CAP , CHIP	820pF
C337	CCUS1H821JA	CAP , CHIP	820pF
C338	CCUS1H821JA	CAP , CHIP	820pF
C339	CCUS1H682KC	CAP , CHIP	6800pF
C340	CCUS1H682KC	CAP , CHIP	6800pF
C341	CCUS1H821JA	CAP , CHIP	820pF
C342	CCUS1H821JA	CAP , CHIP	820pF
C343	CCUS1H821JA	CAP , CHIP	820pF
C344	CCUS1H821JA	CAP , CHIP	820pF
C345	CCUS1H821JA	CAP , CHIP	820pF
C346	CCUS1H821JA	CAP , CHIP	820pF
C347	CCUS1H821JA	CAP , CHIP	820pF
C348	CCUS1H821JA	CAP , CHIP	820pF
C349	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C350	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C351	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C352	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C353	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C354	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C355	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C356	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C383	CCUS1H680JA	CAP , CHIP	68pF
C384	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C385	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C386	CCUS1H330JA	CAP , CHIP	33pF
C387	CCUS1H330JA	CAP , CHIP	33pF
C388	CCUS1H680JA	CAP , CHIP	68pF
C389	CCUS1H471JA	CAP , CHIP	470pF
C390	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C392	CCUS1H330JA	CAP , CHIP	33pF
C393	CCUS1H330JA	CAP , CHIP	33pF
C394	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C398	CCUS1H101JA	CAP , CHIP	100pF
C399	CCUS1H101JA	CAP , CHIP	100pF
C400	CCUS1H101JA	CAP , CHIP	100pF
C401	CCUS1H101JA	CAP , CHIP	100pF
C402	CCUS1H101JA	CAP , CHIP	100pF
C403	CCUS1H101JA	CAP , CHIP	100pF
C404	CCUS1H101JA	CAP , CHIP	100pF
C405	CCUS1H101JA	CAP , CHIP	100pF
C411	CCUS1H104KC	CAP , CHIP	0.1uF 50V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C412	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C418	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C419	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C422	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C423	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C425	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C428	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C435	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C471	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C472	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C473	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C474	CCUS1H680JA	CAP , CHIP	68pF
C475	CCUS1A105KC	CAP , CHIP	1uF 10V
C476	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C477	CCUS1H680JA	CAP , CHIP	68pF
C480	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C481	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C482	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C483	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C484	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C485	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C486	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C487	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C488	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C489	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C490	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C491	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C492	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C493	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C494	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C495	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C496	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C499	CCUS1H122KC	CAP , CHIP	1200pF
C801	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C802	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C803	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C804	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C810	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C813	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C815	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C816	CCUS1H220JA	CAP , CHIP	22pF
C817	CCUS1H220JA	CAP , CHIP	22pF
C821	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C828	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C840	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C842	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C843	CCUS1H561JA	CAP , CHIP	560pF
C844	CCUS1H331JA	CAP , CHIP	330pF
C846	CCUS1H102KC	CAP , CHIP	1000pF
C847	CCUS1H102KC	CAP , CHIP	1000pF

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C848	CCUS1H390JA	CAP , CHIP	39pF
C849	CCUS1H390JA	CAP , CHIP	39pF
C850	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C851	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C854	CCUS1H120JA	CAP , CHIP(12PF/50V/COG)	12pF
C855	CCUS1H120JA	CAP , CHIP(12PF/50V/COG)	12pF
C856	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C862	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C865	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C866	CCUS1H220JA	CAP , CHIP	22pF
C867	CCUS1H220JA	CAP , CHIP	22pF
C877	CCUS1H471JA	CAP , CHIP	470pF
C878	CCUS1H471JA	CAP , CHIP	470pF
C879	CCUS1H471JA	CAP , CHIP	470pF
C880	CCUS1H471JA	CAP , CHIP	470pF
C881	CCUS1H471JA	CAP , CHIP	470pF
C951	CCUS1H223KC	CAP , CHIP	0.022uF 50V
C952	CCUS1H223KC	CAP , CHIP	0.022uF 50V
D168	CVD1SS355T	DIODE , CHIP	1SS355
D169	CVD1SS355T	DIODE , CHIP	1SS355
D170	CVD1SS355T	DIODE , CHIP	1SS355
D171	CVD1SS355T	DIODE , CHIP	1SS355
D172	CVD1SS355T	DIODE , CHIP	1SS355
D173	CVD1SS355T	DIODE , CHIP	1SS355
D185	CVD1SS355T	DIODE , CHIP	1SS355
D211	CVD1SS355T	DIODE , CHIP	1SS355
D212	CVD1SS355T	DIODE , CHIP	1SS355
D213	CVD1SS355T	DIODE , CHIP	1SS355
D214	CVD1SS355T	DIODE , CHIP	1SS355
D215	CVD1SS355T	DIODE , CHIP	1SS355
D216	CVD1SS355T	DIODE , CHIP	1SS355
D217	CVD1SS355T	DIODE , CHIP	1SS355
D218	CVD1SS355T	DIODE , CHIP	1SS355
D821	CVD1SS355T	DIODE , CHIP	1SS355
D822	CVD1SS355T	DIODE , CHIP	1SS355
D823	CVD1SS355T	DIODE , CHIP	1SS355
D907	HVDRB160L60TE25	DIODE , SCHOTTKEY BARRIER	RB160L-60TE25
D908	HVDRB160L60TE25	DIODE , SCHOTTKEY BARRIER	RB160L-60TE25
IC11	HVIBD3816K1	I.C , FUNC + VOL	BD3816K1
IC21	HVIST202EBW	IC , RS232C	ST202EBW
IC31	HVIOPA2134UA	I.C , OP AMP	OPA2134UA
IC32	HVINJM2068MDTE1	I.C , OP AMP	NJM2068MD-TE1
IC33	HVINJM2068MDTE1	I.C , OP AMP	NJM2068MD-TE1
IC34	HVIOPA2134UA	I.C , OP AMP	OPA2134UA
IC35	HVITC74VHC157FT	I.C , 2-CHANNEL MUX	74VHC157ADBR
IC35	HVI74LVC157ADBR	I.C , MULTIPLEXER	SN74LVC157A
IC36	HVI74HCU04AFNG	I.C , INVERTER	TC74HCU04AFNG
IC41	HVITA48025FTE16	I.C , REGULATOR	TA48025FTE16
IC42	HVITA48033FTE16	I.C , REGULATOR	TA48033FTE16
IC44	HVIAK4589VQ-T	I.C , CODEC + DIR	AK4589VQ

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
IC45	HVICS49400-CQ	I.C , DAP	CS49400-CQ
IC46	HVIM29W800DT70N	I.C, 4M FLASH MEMORY	M29W800DT
IC47	HVI57V161610ET7	SDRAM 16M 7NS	HY57V161610ET-7
IC48	HVI74LCX32TTR	I.C , OR-GATE	74LCX32
IC80	CVI74LVC08ADR	I.C , AND GATE	SN74LVC08ADR
IC81	CVIT5CC1	I.C , FLASH U-COM	T5CC1
IC82	HVIAT24C08N10SC	I.C	AT24C08N10SC2.7
IC83	CVIKIA1117S33	I.C , REGULATOR(SOT-223)	KIA1117S/F33
IC84	HVIRH5VT45C	I.C , RESET	RICOH 4.5V
IC85	HVIRH5VT18C	I.C , RESET	RICOH 1.8V
IC86	HVITC74HCT7007F	I.C	TC74HC7007AFEL
IC87	HVITC74HCT7007F	I.C	TC74HC7007AFEL
IC88	CVI74LVC08ADR	I.C , AND GATE	SN74LVC08ADR
IC89	HVILC72723M	IC , PLL (RDS)	LC72723
IC90	CVIXR20M1170IG16	I.C , I2C/SPI UART	XR20M1170IG16
Q125	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q126	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q157	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q158	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q159	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q160	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q161	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q162	HVTKTD1304T	T.R , CHIP (MUTE)	KTD1304
Q163	HVTKRA102S	T.R , CHIP	KRA102S
Q164	HVTKRA102S	T.R , CHIP	KRA102S
Q165	HVTKRA102S	T.R , CHIP	KRA102S
Q174	HVTKRC102S	T.R , CHIP	KRC102S
Q175	HVTKRA102S	T.R , CHIP	KRA102S
Q176	HVTKRC102S	T.R , CHIP	KRC102S
Q177	HVTKRC102S	T.R , CHIP	KRC102S
Q178	HVTKRA102S	T.R , CHIP	KRA102S
Q179	HVTKRC102S	T.R , CHIP	KRC102S
Q180	HVTKRC102S	T.R , CHIP	KRC102S
Q181	HVTKRC102S	T.R , CHIP	KRC102S
Q827	HVTKRC102S	T.R , CHIP	KRC102S
RN32	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN33	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN35	CRJ104DJ103T	RES, ARRAY, 10K (1608)	10K(1608)
RN36	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN37	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN38	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN39	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN40	CRJ104DJ103T	RES, ARRAY, 10K (1608)	10K(1608)
RN41	CRJ104DJ103T	RES, ARRAY, 10K (1608)	10K(1608)
RN42	CRJ104DJ103T	RES, ARRAY, 10K (1608)	10K(1608)
RN43	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN44	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN45	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN46	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN47	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
RN48	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN49	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN50	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN51	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
RN81	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 ohm/1608*4
R101	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R102	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R103	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R104	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R105	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R106	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R107	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R108	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R109	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R110	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R111	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R112	CRJ10DJ331T	RES , CHIP	330 ohm 1/10W
R113	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R114	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R115	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R116	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R117	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R118	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R119	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R120	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R121	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R122	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R123	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R124	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R125	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R126	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R139	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R141	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R147	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R148	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R149	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R151	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R152	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R153	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R154	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R155	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R156	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R157	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R158	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R159	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R160	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R161	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R162	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R163	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R164	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R165	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R166	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R167	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R168	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R169	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W
R170	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W
R171	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W
R172	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W
R182	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R183	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R184	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R186	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R187	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R188	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R189	CRJ10DJ224T	RES , CHIP	220K ohm 1/10W
R191	CRJ10DJ221T	RES , CHIP	220 ohm 1/10W
R192	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R201	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R202	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R206	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R211	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R212	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R213	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R214	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R295	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R296	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R297	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R298	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R299	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R301	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R302	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R303	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R304	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R305	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R306	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R307	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R308	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R309	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R310	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R311	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R312	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R313	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R314	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R315	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R316	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R317	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R318	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R319	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R320	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R321	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R322	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R323	CRJ10DJ333T	RES , CHIP	33K ohm 1/10W
R324	CRJ10DJ333T	RES , CHIP	33K ohm 1/10W
R325	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R326	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R327	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R328	CRJ10DJ562T	RES , CHIP	5.6K ohm 1/10W
R329	CRJ10DJ113T	RES , CHIP	11K ohm 1/10W
R330	CRJ10DJ113T	RES , CHIP	11K ohm 1/10W
R331	CRJ10DJ113T	RES , CHIP	11K ohm 1/10W
R332	CRJ10DJ113T	RES , CHIP	11K ohm 1/10W
R333	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R334	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R335	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R336	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R337	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R338	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R339	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R340	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R341	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R342	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R343	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R344	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R345	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R346	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R347	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R348	CRJ10DJ122T	RES , CHIP	1.2K ohm 1/10W
R349	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R350	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R351	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R352	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R353	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R354	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R355	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R356	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R357	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R358	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R359	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R360	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R361	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R362	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R363	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R364	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R365	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R366	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R367	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R368	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R369	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R370	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R371	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R372	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R382	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R383	CRJ10DJ750T	RES , CHIP	75 ohm 1/10W
R384	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R385	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R386	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R387	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R388	CRJ10DJ750T	RES , CHIP	75 ohm 1/10W
R389	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R390	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R391	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R392	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R393	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 ohm, 1%
R394	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R395	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R396	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R397	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R398	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R399	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R400	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R401	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R402	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R403	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R404	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R405	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R406	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R407	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R408	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R409	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R411	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R412	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R413	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R414	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R420	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R421	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R422	CRJ10DJ123T	RES , CHIP	12K ohm 1/10W
R423	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R424	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R425	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R426	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R427	CRJ10DJ750T	RES , CHIP	75 ohm 1/10W
R428	CRJ10DJ750T	RES , CHIP	75 ohm 1/10W
R429	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R430	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R431	CRJ10DJ272T	RES , CHIP	2.7K ohm 1/10W
R432	CRJ10DJ272T	RES , CHIP	2.7K ohm 1/10W
R433	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R434	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R435	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R451	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R452	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R456	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R457	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R458	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R471	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R472	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R473	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R474	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R475	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R476	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R477	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R478	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R479	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R480	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R481	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W
R482	CRJ10DJ152T	RES , CHIP	1.5K ohm 1/10W
R483	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R484	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R487	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R488	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R489	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R490	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R491	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R492	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R493	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R494	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R495	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R496	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R497	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R498	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R499	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R500	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R801	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R802	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R810	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R811	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R812	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R813	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R814	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R815	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R816	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R817	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R818	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R819	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R821	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R822	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W (only AH VERSION)
R823	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only C VERSION)
R824	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W (only C VERSION)
R825	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R826	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R827	CRJ10DJ223T	RES , CHIP	22K ohm 1/10W
R835	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R841	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R842	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R843	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R844	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R845	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R846	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R847	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R848	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R849	CRJ10DJ473T	RES , CHIP	47K ohm 1/10W
R853	CRJ14CJ4R7T	RES , CHIP 1/4W	4.7 ohm 1/4W
R862	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R865	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R866	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R867	CRJ10DJ4R7T	RES , CHIP	4.7 ohm 1/10W
R868	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R869	CRJ10DJ105T	RES , CHIP	1M ohm 1/10W
R870	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R877	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R878	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R879	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R880	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R881	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R888	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R889	CRJ10DJ153T	RES , CHIP	15K ohm 1/10W
R899	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
X801	HOX27000E180S	CRYSTAL , CHIP(27MHZ)	HC-49/US
X803	COX24000E200S	CRYSTAL , CHIP(24MHZ)	24MHZ, HC-49/SMD
C127	CCEA1HH100T	CAP , ELECT	10uF 50V
C128	CCEA1HH100T	CAP , ELECT	10uF 50V
C131	CCEA1HH100T	CAP , ELECT	10uF 50V
C132	CCEA1HH100T	CAP , ELECT	10uF 50V
C133	CCEA1HH100T	CAP , ELECT	10uF 50V
C134	CCEA1HH100T	CAP , ELECT	10uF 50V
C135	CCEA1HH100T	CAP , ELECT	10uF 50V
C136	CCEA1HH100T	CAP , ELECT	10uF 50V
C137	HCQI1H472JZT	CAP , MYLAR	4700pF
C138	HCQI1H472JZT	CAP , MYLAR	4700pF
C139	HCQI1H104JZT	CAP , MYLAR	0.1UF 50V J
C140	HCQI1H104JZT	CAP , MYLAR	0.1UF 50V J
C141	HCQI1H104JZT	CAP , MYLAR	0.1UF 50V J
C142	HCQI1H104JZT	CAP , MYLAR	0.1UF 50V J
C143	CCEA1CH101T	CAP , ELECT	100uF 16V
C144	CCEA1CH101T	CAP , ELECT	100uF 16V
C150	CCEA1HH100T	CAP , ELECT	10uF 50V
C151	CCEA1HH100T	CAP , ELECT	10uF 50V
C152	CCEA1HH100T	CAP , ELECT	10uF 50V
C153	CCEA1HH100T	CAP , ELECT	10uF 50V
C154	CCEA1HH100T	CAP , ELECT	10uF 50V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C155	CCEA1HH100T	CAP , ELECT	10uF 50V
C156	CCEA1HH100T	CAP , ELECT	10uF 50V
C180	CCEA1HH2R2T	CAP , ELECT	2.2uF 50V
C183	CCEA1HH2R2T	CAP , ELECT	2.2uF 50V
C192	HCQI1H103JZT	CAP , MYLAR	0.01UF 50V J
C302	HCQI1H272JZT	CAP , MYLAR	2700pF
C304	HCQI1H272JZT	CAP , MYLAR	2700pF
C306	HCQI1H272JZT	CAP , MYLAR	2700pF
C308	HCQI1H473JZT	CAP , MYLAR	0.047UF 50V J
C310	HCQI1H272JZT	CAP , MYLAR	2700pF
C312	HCQI1H272JZT	CAP , MYLAR	2700pF
C314	HCQI1H272JZT	CAP , MYLAR	2700pF
C316	HCQI1H272JZT	CAP , MYLAR	2700pF
C357	CCEA1HH100T	CAP , ELECT	10uF 50V
C358	CCEA1HH100T	CAP , ELECT	10uF 50V
C359	CCEA1HH100T	CAP , ELECT	10uF 50V
C360	CCEA1HH100T	CAP , ELECT	10uF 50V
C361	CCEA1HH100T	CAP , ELECT	10uF 50V
C362	CCEA1HH100T	CAP , ELECT	10uF 50V
C363	CCEA1HH100T	CAP , ELECT	10uF 50V
C364	CCEA1HH100T	CAP , ELECT	10uF 50V
C365	CCEA1HH100T	CAP , ELECT	10uF 50V
C366	CCEA1HH100T	CAP , ELECT	10uF 50V
C367	CCEA1HH100T	CAP , ELECT	10uF 50V
C368	CCEA1HH100T	CAP , ELECT	10uF 50V
C369	CCEA1HH100T	CAP , ELECT	10uF 50V
C370	CCEA1HH100T	CAP , ELECT	10uF 50V
C371	CCEA1HH100T	CAP , ELECT	10uF 50V
C372	CCEA1HH100T	CAP , ELECT	10uF 50V
C391	CCEA1CH101T	CAP , ELECT	100uF 16V
C395	CCEA1CH101T	CAP , ELECT	100uF 16V
C396	CCEA1CH101T	CAP , ELECT	100uF 16V
C409	CCEA1HH2R2T	CAP , ELECT	2.2uF 50V
C410	CCEA1CH101T	CAP , ELECT	100uF 16V
C416	CCEA1CH101T	CAP , ELECT	100uF 16V
C417	CCEA1CH101T	CAP , ELECT	100uF 16V
C421	CCEA0JH102T	CAP , ELECT	1000uF 6.3V
C424	CCEA1AH471T	CAP , ELECT	470uF 10V
C426	CCEA1AH471T	CAP , ELECT	470uF 10V
C427	CCEA0JH102T	CAP , ELECT	1000uF 6.3V
C431	CCEA1HH100T	CAP , ELECT	10uF 50V
C432	CCEA1HH100T	CAP , ELECT	10uF 50V
C434	CCEA1CH101T	CAP , ELECT	100uF 16V
C451	CCEA1HH220T	CAP , ELECT	22uF 50V
C452	CCEA1HH220T	CAP , ELECT	22uF 50V
C453	CCEA1HH220T	CAP , ELECT	22uF 50V
C454	CCEA1HH220T	CAP , ELECT	22uF 50V
C455	CCEA1HH220T	CAP , ELECT	22uF 50V
C456	CCEA1HH4R7T	CAP , ELECT	4.7uF 50V
C457	CCEA1CH101T	CAP , ELECT	100uF 16V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C458	CCEA1HH220T	CAP , ELECT	22uF 50V
C461	CCEA1CH101T	CAP , ELECT	100uF 16V
C462	CCEA1CH101T	CAP , ELECT	100uF 16V
C805	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C811	CCEA1CH101T	CAP , ELECT	100uF 16V
C812	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C814	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C818	CCEA1CH101T	CAP , ELECT	100uF 16V
C819	CCEA1CH101T	CAP , ELECT	100uF 16V
C822	CCEA1AH471T	CAP , ELECT	470uF 10V
C827	CCEA1HH2R2T	CAP , ELECT	2.2uF 50V
C841	CCEA1CH101T	CAP , ELECT	100uF 16V
C845	CCEA1HH100T	CAP , ELECT	10uF 50V
C852	CCEA1CH101T	CAP , ELECT	100uF 16V
C853	CCEA1CH471T	CAP , ELECT	470uF 16V
C863	CCEA1CH101T	CAP , ELECT	100uF 16V
C864	CCEA1CH101T	CAP , ELECT	100uF 16V
C901	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C902	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C903	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C906	CCEA1EH470T	CAP , ELECT	47UF 25V
C907	CCEA1EH470T	CAP , ELECT	47UF 25V
C908	CCEA1CH101T	CAP , ELECT	100uF 16V
C909	CCEA1CH101T	CAP , ELECT	100uF 16V
C921	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C931	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C932	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C933	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C935	CCEA1CH101T	CAP , ELECT	100uF 16V
C942	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C943	CCEA1HH470T	CAP , ELECT	47uF 50V
C944	CCEA1HH470T	CAP , ELECT	47uF 50V
C945	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C946	CCEA1HH4R7T	CAP , ELECT	4.7uF 50V
D421	HVD2A04H	DIODE , RECT(2A)	D2A04
D813	CVDZJ6.8BT	DIODE , ZENER	ZJ6.8B 1/2W
D841	CVD1SS133MT	DIODE	1SS133
D901	CVD1N4003ST	DIODE , RECT	1N4003
D902	CVD1N4003ST	DIODE , RECT	1N4003
D903	CVD1N4003ST	DIODE , RECT	1N4003
D904	CVD1N4003ST	DIODE , RECT	1N4003
D905	CVDZJ8.2BT	DIODE , ZENER	ZJ8.2B 1/2W
D906	CVDZJ8.2BT	DIODE , ZENER	ZJ8.2B 1/2W
D909	CVD1N4003ST	DIODE , RECT	1N4003
D910	CVD1N4003ST	DIODE , RECT	1N4003
D921	HVD2A04H	DIODE , RECT(2A)	D2A04
D922	HVD2A04H	DIODE , RECT(2A)	D2A04
D931	CVD1N4003ST	DIODE , RECT	1N4003
D932	CVD1N4003ST	DIODE , RECT	1N4003
D933	CVD1N4003ST	DIODE , RECT	1N4003

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
D934	CVD1N4003ST	DIODE , RECT	1N4003
D935	HVD2A04H	DIODE , RECT(2A)	D2A04
D936	HVD2A04H	DIODE , RECT(2A)	D2A04
D941	CVD1N4003SRT	DIODE , RECT	1N4003
D942	CVD1N4003SRT	DIODE , RECT	1N4003
D943	CVDZJ15BT	DIODE , ZENER	ZJ15B 1/2W
D944	CVDZJ27BT	DIODE , ZENER	ZJ27B 1/2W
D945	CVDZJ6.8BT	DIODE , ZENER	ZJ6.8B 1/2W
D946	CVDZJ6.8BT	DIODE , ZENER	ZJ6.8B 1/2W
Q901	HVTKSC2316YT	T.R	KSC2316Y
Q902	HVTKSA916YT	T.R	KSA916Y
Q941	HVTKSC2316YT	T.R	KSC2316Y
R903	CRD25FJ2R2T	RES , CARBON	2.2 ohm 1/4W
R904	CRD25FJ2R2T	RES , CARBON	2.2 ohm 1/4W
R905	CRD20TJ332T	RES , CARBON	3.3K ohm 1/5W
R906	CRD20TJ332T	RES , CARBON	3.3K ohm 1/5W
R941	CRD20TJ122T	RES , CARBON	1.2K ohm 1/5W
R942	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
BN14	CWB1B006150EN	WIRE ASS'Y	6P, 150MM, 2.5MM
BN15	CWB1C005150EN	WIRE ASS'Y	5P, 150MM, 2MM
BN72	CWB1C007100EN	WIRE ASS'Y	7P, 100MM, 2MM
CN11	CJP13GA19ZY	WAFER, STRAIGHT, 13PIN	
CN14	CJP06GB46ZY	WAFER , ANGLE(6PIN)	
CN15	CJP05GB46ZY	WAFER	
CN16	CJP03GA19ZY	WAFER , STRAIGHT(3PIN)	
CN71	CJP07GA117ZY	WAFER	
CN81	CJP13GA115ZY	WAFER , CARD CABLE	
CN82	CJP15GA115ZY	WAFER , CARD CABLE	
CN83	CJP15GA19ZY	WAFER	
CN84	CJP15GA115ZY	WAFER , CARD CABLE	
CN85	CJP09GA01ZY	CON WAFER YMW025-09R	
CN86	CJP11GA19ZY	WAFER , STRAIGHT	
CN87	CJP13GA117ZY	WAFER , CARD CABLE	
CN88	CJP13GA117ZY	WAFER , CARD CABLE	
CN91	CJP07GA01ZY	WAFER , STRAIGHT(7PIN)	
CN93	CJP09GA01ZY	CON WAFER YMW025-09R	
CN95	CJP05GA19ZY	WAFER , STRAIGHT	
CN96	CJP05GA19ZY	WAFER , STRAIGHT	
C904	CCEA1EH102E	CAP , ELECT	1000uF 25V
C905	CCEA1EH102E	CAP , ELECT	1000uF 25V
C910	CCEA1EH332E	CAP , ELECT	3300uF 25V
C922	CCEA1CKL5123E	CAP , ELECT	12000uF 16V
C923	CCEA1CKL5123E	CAP , ELECT	12000uF 16V
C924	CCEA1CH332E	CAP , ELECT	3300uF 16V
C925	CCEA1CH102E	CAP , ELECT	1000uF 16V
C934	CCEA1CH103E	CAP , ELECT	10000uF 16V
C936	CCEA1CH103E	CAP , ELECT	10000uF 16V
C937	CCEA1CH103E	CAP , ELECT	10000uF 16V
C941	CCEA1JH101E	CAP , ELECT	100uF 63V
JK10	CJJ4N081Z	JACK , BOARD(2P, BK/BK)	RCA-207AEGG-06

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
JK11	CJJ4P058Z	JACK , IN/OUT	
JK12	CJJ4P058Z	JACK , IN/OUT	
JK13	CJJ4N060Z	JACK , BOARD 2P (GOLD)	
JK14	CJJ4M056W	JACK , BOARD	
JK15	CJJ2D012Z	JACK , PHONE(3.5mm/GREEN)	PJ-350(GN)
JK16	CJJ9W001Z	JACK , (RS-232C)	9P D-SUB FEMALE
JK31	CJJ4M044Z	JACK , BOARD	GOLD PLATE
JK32	HJSTORX177L	MODULE , OPTICAL(RX)	TORX177L
JK33	HJSTOTX177L	MODULE , OPTICAL(TX)	TOTX177L
R901	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
R902	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
R921	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
R922	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
R931	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
R932	KRQ1AJR15H	RES , FUSE	0.15 ohm , 1W J
SW21	CST1A010Z	SW , TACT	
SW22	HSH2B018Z	SW , PUSH	SPUJ19XSM011
X301	HOX12288E320C	CRYSTAL 12.288MHz	12.288MHz
X802	HOX00032K120I	CRYSTAL , 32.768KHZ	32.768KHZ
X841	HOX04332A200C	CRYSTAL	4.332KHz
	CUP11958Y	MPEG PCB	
C102	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C103	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C104	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C105	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C106	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C107	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C108	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C109	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C111	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C112	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C113	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C114	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C115	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C116	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C117	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C118	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C119	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C120	CCUS1H101JA	CAP , CHIP	100pF
C122	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C123	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C124	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C125	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C126	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C128	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C129	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C130	CCUS1H101JA	CAP , CHIP	100pF
C132	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C133	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C146	CCUS1H070DA	CAP , CHIP	7pF

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C152	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C158	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C159	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C165	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C172	CCUS1H330JA	CAP , CHIP	33pF
C174	CCUS1H330JA	CAP , CHIP	33pF
C178	CCUS1H102KC	CAP , CHIP	1000pF
C179	CCUS1H102KC	CAP , CHIP	1000pF
C180	CCUS1H273KC	CAP , CHIP	0.027uF 50V
C181	CCUS1H273KC	CAP , CHIP	0.027uF 50V
C190	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C191	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C192	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C193	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C199	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C202	CCUS1H102KC	CAP , CHIP	1000pF
C203	CCUS1H102KC	CAP , CHIP	1000pF
C215	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C216	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C231	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C233	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C234	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C258	CCSJA0J220B	CAP , CHIP TANTAL	22uF/6.3V(TANTAL)
FB15	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB16	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB17	HLQ06E100KRZ	INDUCTOR , CHIP	10uH
FB18	HLZ9R006Z	BEAD , CHIP	BEAD
FB19	CRJ18AJ0R0T	RES , CHIP	0 ohm
FB25	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB26	HLZ9R006Z	BEAD , CHIP	BEAD
FB28	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB30	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
L101	HLQ06E100KRZ	INDUCTOR , CHIP	10uH
R109	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R110	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R113	CRJ10DJ750T	RES , CHIP	75 ohm 1/10W
R129	CRJ10DF3920T	RES. CHIP (392R 1%)	3.9K ohm 1%
R130	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R131	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R132	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R133	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R134	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R135	CRJ10DF75R0T	RES, CHIP 1% 75 OHM	75 OHM, 1%
R140	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R141	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R165	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R207	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
CN10	CJP24GA195ZM	SMT FFC/FPC WAFER	52559-2472
CN16	CJP17GA193ZY	WAFER, CARD CABLE	17P
CN17	CJP13GA193ZY	WAFER , CARD CABLE	13P
CN21	CJP13GA193ZY	WAFER , CARD CABLE	13P
C101	CCSJA0J220B	CAP , CHIP TANTAL	22uF/6.3V(TANTAL)
C110	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C121	CCSJA0J220B	CAP , CHIP TANTAL	22uF/6.3V(TANTAL)
C127	CCUS1H103KC	CAP , CHIP	0.01uF 50V
C131	CCSJA0J220B	CAP , CHIP TANTAL	22uF/6.3V(TANTAL)
C134	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C135	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C136	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C137	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C138	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C139	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C140	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C141	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C144	HCEC0JRV2220T	CAP , CHIP ELECT	22uF/6.3V
C145	CCUS1H330JA	CAP , CHIP	33pF
C153	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C155	CCUS1H270JA	CAP , CHIP	27pF
C156	CCUS1H270JA	CAP , CHIP	27pF
C160	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C161	CCUS1H102KC	CAP , CHIP	1000pF
C162	CCUS1H102KC	CAP , CHIP	1000pF
C163	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C164	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C166	HCEC0JRV2101T	CAP , CHIP ELECT	100uF/6.3V
C167	CCUS1H330JA	CAP , CHIP	33pF
C168	CCUS1H330JA	CAP , CHIP	33pF
C169	CCUS1H330JA	CAP , CHIP	33pF
C170	CCUS1H330JA	CAP , CHIP	33pF
C171	CCUS1H330JA	CAP , CHIP	33pF
C173	CCUS1H330JA	CAP , CHIP	33pF
C175	CCUS1H330JA	CAP , CHIP	33pF
C176	CCUS1H330JA	CAP , CHIP	33pF
C177	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C182	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C183	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C184	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C185	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C186	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C187	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C188	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C189	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C194	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C195	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C196	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C197	CCUS1H102KC	CAP , CHIP	1000pF

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C198	CCUS1H102KC	CAP , CHIP	1000pF
C200	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C201	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
C204	CCUS1H102KC	CAP , CHIP	1000pF
C205	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C208	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C209	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
C211	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C213	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
C214	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C217	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C218	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C219	CCUS1H102KC	CAP , CHIP	1000pF
C220	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C225	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C226	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
C227	CCUS1H330JA	CAP , CHIP	33pF
C228	CCUS1H330JA	CAP , CHIP	33pF
C229	CCUS1H330JA	CAP , CHIP	33pF
C230	CCUS1H330JA	CAP , CHIP	33pF
C232	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C250	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C252	HCEC0JRV2470T	CAP , CHIP ELECT	47uF/6.3V
C253	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C254	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
C255	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C256	CCUS1H104KC	CAP , CHIP	0.1uF 50V
C257	HCEC1CRV2101T	CAP , CHIP ELECT	100uF 16V(TANTAL)
D101	HVD1SR159-200	DIODE , SCHOTTKEY BARRIER	SR159-200
D102	HVD1SR159-200	DIODE , SCHOTTKEY BARRIER	SR159-200
D103	HVD1SR159-200	DIODE , SCHOTTKEY BARRIER	SR159-200
D104	HVD1SR159-200	DIODE , SCHOTTKEY BARRIER	SR159-200
D106	HVDRLS4148SR	DIODE, SWITCHING, SMD	RLS4148 TE-11
D107	HVDRLS4148SR	DIODE, SWITCHING, SMD	RLS4148 TE-11
FB10	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB11	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB12	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB13	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB14	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB20	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB21	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB22	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB24	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB27	HLZ9R006Z	BEAD , CHIP	BEAD
FB31	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
FB33	HLZ9R001Z	FB, 2012(0805)600E, 1.5A	600E, 1.5A
IC10	CVIZR36888HLCG	I.C , MPEG	ZR36888HLCG
IC11	HVIM29W160ET70N	IC,16M FLASH (ST)	M29W160ET-70N6
IC12	HVIM12L64164A7T	IC, 64M SDRAM (4X16)	M12L64164A7T
IC13	HVIAT24C08N10SC	I.C	AT24C08N10SC2.7

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
IC14	HVTHN1K05FU	MOS FET	HN1K05FU
IC15	HVITL3472IDR	IC,OP AMP 8-SOIC (TI)	TL3472IDR
IC16	HVIAM5888SLF	I. C , Motor Driver(AMtek,Pb free)	AM5888S L/F
IC18	CVIKIA1117S33	I.C , REGULATOR(SOT-223)	KIA1117S/F33
IC19	CVIKIA1117S18	I.C , REGULATOR(SOT-223)	KIA1117S/F18
IC20	CVIKIA1117S50	I.C , REGULATOR(SOT-223)	KIA1117S50-RTK/P
IC21	BLZ9R004Z	BEAD CHIP 90 OHM (2012 SIZE)	ACM2012H-900
IC22	BLZ9R004Z	BEAD CHIP 90 OHM (2012 SIZE)	ACM2012H-900
IC23	BLZ9R004Z	BEAD CHIP 90 OHM (2012 SIZE)	ACM2012H-900
IC24	BLZ9R004Z	BEAD CHIP 90 OHM (2012 SIZE)	ACM2012H-900
JK10	HJJ9H003Z	JACK , HDMI(JALCO)	YKF45-7009
L102	HLQ06E100KRZ	INDUCTOR , CHIP	10uH
L103	HLQ06E100KRZ	INDUCTOR , CHIP	10uH
Q102	HVT2N3904SP	TR, CHIP (KEC)	2N3904S-RTK/PS
Q103	HVT2N3904SP	TR, CHIP (KEC)	2N3904S-RTK/PS
Q104	HVT2N3904SP	TR, CHIP (KEC)	2N3904S-RTK/PS
Q105	HVT2N3904SP	TR, CHIP (KEC)	2N3904S-RTK/PS
Q106	HVTKTA1664YP	T.R	KTA1664Y
Q107	HVTKTA1664YP	T.R	KTA1664Y
RN10	CRJ104DJ330T	RES , 4ARRAY (1608*4)	33 OHM/1608*4
RN11	CRJ104DJ100T	RES, ARRAY, 10R (1608)	10R(1608)
RN12	CRJ104DJ100T	RES, ARRAY, 10R (1608)	10R(1608)
R101	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R102	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R103	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R104	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R105	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R106	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R107	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R111	CRJ10DJ221T	RES , CHIP	220 ohm 1/10W
R114	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R115	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R116	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R118	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R119	HLZ9R005Z	BEAD CHIP 60(1608 SIZE)	HH-1M1608-600
R120	HLZ9R005Z	BEAD CHIP 60(1608 SIZE)	HH-1M1608-600
R121	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R122	CRJ10DJ100T	RES , CHIP	10 ohm 1/10W
R124	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R125	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R126	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R127	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R128	CRJ10DF4300T	RES	430 ohm 1%
R136	CRJ10DJ104T	RES , CHIP	100K ohm 1/10W
R137	CRJ10DF2002T	RES , CHIP 1%	2K ohm 1%
R142	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R143	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R144	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R145	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R146	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R147	CRJ10DJ433T	RES , CHIP	43K ohm 1/10W
R148	CRJ10DJ153T	RES , CHIP	15K ohm 1/10W
R149	CRJ10DJ303T	RES , CHIP	30K ohm 1/10W
R150	CRJ10DJ513T	RES , CHIP	51K ohm 1/10W
R153	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R154	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R155	CRJ10DJ472T	RES , CHIP	4.7K ohm 1/10W
R156	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R157	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R158	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R159	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R160	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R161	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R162	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R164	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R166	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R170	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R171	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R172	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R175	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R177	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R180	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R183	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R184	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R185	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R187	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R189	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R190	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R191	CRJ10DF1000T	RES , CHIP 1%	100 ohm 1%
R192	CRJ10DF1000T	RES , CHIP 1%	100 ohm 1%
R194	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R195	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R196	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R197	CRJ10DJ332T	RES , CHIP	3.3K ohm 1/10W
R198	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R199	CRJ10DJ221T	RES , CHIP	220 ohm 1/10W
R200	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R201	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R202	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R204	CRJ10DJ121T	RES , CHIP	120 ohm 1/10W
R205	CRJ10DJ153T	RES , CHIP	15K ohm 1/10W
R206	CRJ10DJ153T	RES , CHIP	15K ohm 1/10W
R208	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R213	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R214	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R217	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R218	CRJ10DJ682T	RES , CHIP	6.8K ohm 1/10W
R233	CRJ10DJ1R0T	RES , CHIP	1 ohm 1/10W
R234	CRJ10DJ221T	RES , CHIP	220 ohm 1/10W
R237	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R241	CRJ10DJ101T	RES , CHIP	100 ohm 1/10W
R247	CRJ10DJ471T	RES , CHIP	470 ohm 1/10W
R262	CRJ10DJ330T	RES , CHIP	33 ohm 1/10W
R268	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R269	CRJ10DJ103T	RES , CHIP	10K ohm 1/10W
R270	CRJ10DJ182T	RES , CHIP	1.8K ohm 1/10W
R271	CRJ10DJ182T	RES , CHIP	1.8K ohm 1/10W
R272	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R273	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R281	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
R283	CRJ10DJ102T	RES , CHIP	1K ohm 1/10W
R287	CRJ10DJ0R0T	RES , CHIP	0 ohm 1/10W
X101	HOX27000E180S	CRYSTAL , CHIP(27MHZ,SMD)	HC-49/US
	CUP11958Y	PCB , MPEG	
CN14	CJP05GA19ZY	WAFER , STRAIGHT	5P
CN15	CJP06GA19ZY	WAFER , STRAIGHT	6P
CN18	CJP05GA19ZY	WAFER , STRAIGHT	5P
CN23	CJP04GA01ZY	WAFER , STRAIGHT(4PIN)	4P
C221	CCEA1HH101T	CAP , ELECT	100uF 50V
C222	CCEA1HH101T	CAP , ELECT	100uF 50V
PB01	CMD1A569	BRACKET , PCB	
PB02	CMD1A569	BRACKET , PCB	
	CMY2A280	HEAT SINK	
	CUP11959Y	POWER PCB	
C921	CCEA1EH470T	CAP , ELECT	47uF 25V
C922	CCEA1HH470T	CAP , ELECT	47uF 50V
C923	CCEA1CH101T	CAP , ELECT	100uF 16V
C926	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C930	CCKT1H102KB	CAP , CERAMIC	1000pF
C931	CCKT1H102KB	CAP , CERAMIC	1000pF
C932	CCKT1H102KB	CAP , CERAMIC	1000pF
C934	CCKT1H102KB	CAP , CERAMIC	1000pF
C935	CCKT1H102KB	CAP , CERAMIC	1000pF
C936	CCEA1AH471T	CAP , ELECT	470uF 10V
C939	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C940	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C941	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C942	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C944	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C945	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C946	CCKT1H102KB	CAP , CERAMIC	1000pF
C947	CCKT1H102KB	CAP , CERAMIC	1000pF
C951	CCEA1CH221T	CAP , ELECT	220uF 16V
C952	CCEA1CH471T	CAP , ELECT	470uF 16V
C953	CCEA1CH101T	CAP , ELECT	100uF 16V
C954	CCEA1CH101T	CAP , ELECT	100uF 16V
C955	CCFT1H223ZF	CAP , CERAMIC	0.022uF 50V
C956	CCEA1HH100T	CAP , ELECT	10uF 50V
C957	CCEA1CH101T	CAP , ELECT	100uF 16V
C959	CCEA1CH471T	CAP , ELECT	470uF 16V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C960	CCEA1CH471T	CAP , ELECT	470uF 16V
C961	CCKT1H471KB	CAP , CERAMIC	470pF
C962	CCEA1HH4R7T	CAP , ELECT	4.7uF 50V
C965	CCEA1CH221T	CAP , ELECT	220uF 16V
C966	CCKT1H471KB	CAP , CERAMIC	470pF
C967	CCEA1HH100T	CAP , ELECT	10uF 50V
C971	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C972	CCFT1H473ZF	CAP , CERAMIC	0.047uF 50V
C973	CCFT1H104ZF	CAP , SEMICONDUCTOR	0.1uF 50V
C974	CCFT1H104ZF	CAP , SEMICONDUCTOR	0.1uF 50V
C975	CCFT1H104ZF	CAP , SEMICONDUCTOR	0.1uF 50V
C976	CCFT1H104ZF	CAP , SEMICONDUCTOR	0.1uF 50V
C977	CCFT1H104ZF	CAP , SEMICONDUCTOR	0.1uF 50V
D921	CVD1N4003ST	DIODE , RECT	1N4003
D922	CVD1N4003ST	DIODE , RECT	1N4003
D924	CVD1SS133MT	DIODE	1SS133
D925	CVD1SS133MT	DIODE	1SS133
D940	CVD1SS133MT	DIODE	1SS133
D954	CVD1SS133MT	DIODE	1SS133
D958	CVD1SS133MT	DIODE	1SS133
D967	CVD1SS133MT	DIODE	1SS133
D968	CVD1SS133MT	DIODE	1SS133
ET91	HJT1A025	PALTE , EARTH	MET37-0002
ET92	HJT1A025	PALTE , EARTH	MET37-0002
F901	KJCFC5S	HOLDER , FUSE	
F903	KJCFC5S	HOLDER , FUSE	
Q924	HVTKRC102MT	T.R	KRC102M
Q925	HVTKRC102MT	T.R	KRC102M
Q949	HVTKSC2785YT	T.R	KSC2785Y
Q951	HVTKTA1271YT	T.R	KTA1271Y
Q954	HVTKSC2785YT	T.R	KSC2785Y
Q959	HVTKRC111MT	T.R	KRC111M
Q960	HVTKSC2785YT	T.R	KSC2785Y
Q961	HVTKSC2785YT	T.R	KSC2785Y
Q962	HVTKRA102MT	T.R	KRA102M
Q964	HVTKRC102MT	T.R	KRC102M
Q965	HVTKTA1271YT	T.R	KTA1271Y
Q966	HVTKSB811YT	T.R	KSB811Y
Q967	HVTKRC102MT	T.R	KRC102M
R921	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R922	CRD25FJ3R3T	RES , CARBON	3.3 ohm1/4W
R923	CRD20TJ1R0T	RES , CARBON	1 ohm1/5W
R924	CRD20TJ100T	RES , CARBON	10 ohm1/5W
R925	CRD20TJ1R0T	RES , CARBON	1 ohm1/5W
R926	CRD25FJ220T	RES , CARBON	22 ohm1/4W
R927	CRD25FJ220T	RES , CARBON	22 ohm1/4W
R928	CRD25FJ220T	RES , CARBON	22 ohm1/4W
R929	CRD25FJ220T	RES , CARBON	22 ohm1/4W
R931	CRD25FJ220T	RES , CARBON	22 ohm1/4W
R932	CRD20TJ223T	RES , CARBON	22K ohm1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R933	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R936	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R937	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R938	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R939	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R940	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R941	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R942	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R943	CRD20TJ152T	RES , CARBON	1.5K ohm1/5W
R944	CRD25TJ100T	RES , CARBON	10 ohm1/4W
R947	CRD20TJ152T	RES , CARBON	1.5K ohm1/5W
R948	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R949	CRD20TJ103T	RES , CARBON	10K ohm1/5W
R950	CRD20TJ151T	RES , CARBON	150 ohm1/5W
R951	CRD20TJ151T	RES , CARBON	150 ohm1/5W
R952	CRD20TJ102T	RES , CARBON	1K ohm1/5W
R953	CRD20TJ221T	RES , CARBON	220 ohm1/5W
R954	CRD20TJ103T	RES , CARBON	10K ohm1/5W
R955	CRD20TF8001T	RES , CARBON	8K ohm 1%
R956	CRD20TJ224T	RES , CARBON	220 Kohm1/5W
R957	CRD20TJ333T	RES , CARBON	33K ohm1/5W
R959	CRD20TJ472T	RES , CARBON	4.7K ohm1/5W
R960	CRD20TJ103T	RES , CARBON	10K ohm1/5W
R961	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R962	CRD20TJ473T	RES , CARBON	47K ohm1/5W
R963	CRD20TJ2R2T	RES , CARBON	2.2 ohm1/5W
R964	CRD20TJ222T	RES , CARBON	2.2K ohm1/5W
R965	CRD20TJ472T	RES , CARBON	4.7K ohm1/5W
R966	CRD20TJ472T	RES , CARBON	4.7K ohm1/5W
R967	CRD20TJ474T	RES , CARBON	470K ohm1/5W
R968	CRD20TJ474T	RES , CARBON	470K ohm1/5W
R969	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R970	CRD20TJ223T	RES , CARBON	22K ohm1/5W
R971	CRD20TJ121T	RES , CARBON	120 ohm1/5W
R972	CRD20TJ102T	RES , CARBON	1K ohm1/5W
R973	CRD20TJ103T	RES , CARBON	10K ohm1/5W
R974	CRD20TJ151T	RES , CARBON	150 ohm1/5W
BK91	CMD1A569	BRACKET , PCB	
BN18	CWB1C005100EN	WIRE ASS'Y	5P, 100MM, 2MM
BN85	CWB1D009150BM	WIRE ASS'Y	9P, 2.5MM, 150MM
BN86	CWB1C011120EN	WIRE ASS'Y	11P, 120MM, 2MM
BN92	CWB4DA32130PU	WIRE ASS'Y	
CN55	HJP06GA130ZK	CONNECTOR(SOCKET)	6P
CN56	HJP06GA130ZK	CONNECTOR(SOCKET)	6P
CN57	HJP06GA130ZK	CONNECTOR(SOCKET)	6P
CN58	HJP06GA130ZK	CONNECTOR(SOCKET)	6P
CN59	HJP06GA130ZK	CONNECTOR(SOCKET)	6P
CN90	CJP02GA89ZY	WAFER	2P
CN91	CJP02GA89ZY	WAFER	2P
CN93	CJP03GA89ZY	WAFER	3P

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
CN94	CJP03GA90ZY	WAFER	3P
CN95	CJP05GA19ZY	WAFER , STRAIGHT	5P
CN96	CJP02GA01ZY	WAFER , STRAIGHT, 2PIN	2P
CN97	CJP02GA68ZY	WAFER , 2P MOTOR	2P
C924	CCEA1EH102E	CAP , ELECT	1000uF 25V
C925	KCKDKS472ME	CAP , CERAMIC(X1/Y2/SC)	0.0047uF/2.5KV
C969	CCET63VKL5153NK	CAP , ELECT	15000uF 63V
C970	CCET63VKL5153NK	CAP , ELECT	15000uF 63V
D920	CMY1A138XA	HEAT SINK ASS'Y	
	CMY1A138	HEAT SINK , DIODE	
	HVDGBJ1504	DIODE , BRIDGE	GB1504
	K8AYG6260	COMPOUND , SILICONE	
D926	HVD1N5819T	DIODE , SCHOTTKY	1N5819
IC97	HVIKIA7806API	I.C , REGULATOR +6V	
JK91	CJJ5Q007Y	SPEAKER TERMINAL(8P)	
JK92	CJJ5N005Y	SPEAKER TERMINAL(2P)	
JW92	CWE8202150RV	WIRE ASS'Y	2P
L926	CLEY0R5KAK	COIL , SPEAKER	0.5uH
L927	CLEY0R5KAK	COIL , SPEAKER	0.5uH
L928	CLEY0R5KAK	COIL , SPEAKER	0.5uH
L930	CLEY0R5KAK	COIL , SPEAKER	0.5uH
L931	CLEY0R5KAK	COIL , SPEAKER	0.5uH
OL92	CJJ7A021Z	JACK , AC OUTLET	A202D0030P (only C VERSION)
OL93	CJJ7A012Z	JACK , AC OUTLET	A202D0030P (only AH VERSION)
RY91	CSL1E002ZE	RELAY , POWER	G5PA-1 (DC 6V)
RY92	CSL3A017ZU	RELAY	G5PA-28
R945	CRG1ANJ331H	RES , METAL OXIDE FILM	330 ohm1W
R946	CRG1ANJ331H	RES , METAL OXIDE FILM	330 ohm1W
R990	HRDERC12UGK335T	RES , CARBON	ERC12UGK 3.3Mohm(only AH VERSION)
TH91	CRTSYPSX10850JD	POSISTOR ASS'Y(120 degree)	CYPSX10850D
T901	CLT5L057ZU	TRANS , SUB	(only AH VERSION)
T901	CLT5L057ZE	TRANS , SUB	(only C VERSION)
	CUP11960Y	AMP PCB	Assembly with heatsink & fan is CMYL77
C551	CCEA1HH100T	CAP , ELECT	10uF 50V
C552	CCEA1HH100T	CAP , ELECT	10uF 50V
C554	CCEA1HH100T	CAP , ELECT	10uF 50V
C555	CCEA1HH100T	CAP , ELECT	10uF 50V
C556	CCEA1HH100T	CAP , ELECT	10uF 50V
C557	CCEA1EH330T	CAP , ELECT	33uF 25V
C558	CCEA1EH330T	CAP , ELECT	33uF 25V
C560	CCEA1EH330T	CAP , ELECT	33uF 25V
C561	CCEA1EH330T	CAP , ELECT	33uF 25V
C562	CCEA1EH330T	CAP , ELECT	33uF 25V
C563	CCKT1H471KB	CAP , CERAMIC	470pF
C564	CCKT1H471KB	CAP , CERAMIC	470pF
C566	CCKT1H471KB	CAP , CERAMIC	470pF
C567	CCKT1H471KB	CAP , CERAMIC	470pF
C568	CCKT1H471KB	CAP , CERAMIC	470pF
C569	CCEA1EH330T	CAP , ELECT	33uF 25V
C570	CCEA1EH330T	CAP , ELECT	33uF 25V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C572	CCEA1EH330T	CAP , ELECT	33uF 25V
C573	CCEA1EH330T	CAP , ELECT	33uF 25V
C574	CCEA1EH330T	CAP , ELECT	33uF 25V
C623	CCEA1CH101T	CAP , ELECT	100uF 16V
C624	CCEA1CH101T	CAP , ELECT	100uF 16V
C626	CCEA1CH101T	CAP , ELECT	100uF 16V
C627	CCEA1CH101T	CAP , ELECT	100uF 16V
C628	CCEA1CH101T	CAP , ELECT	100uF 16V
C671	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	UP025CH5R6K-A-B Z
C672	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	UP025CH5R6K-A-B Z
C674	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	UP025CH5R6K-A-B Z
C675	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	UP025CH5R6K-A-B Z
C676	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	UP025CH5R6K-A-B Z
C678	CCKT1H181KB	CAP , CERAMIC	180pF
C680	CCKT1H181KB	CAP , CERAMIC	180pF
C681	CCKT1H181KB	CAP , CERAMIC	180pF
C682	CCKT1H181KB	CAP , CERAMIC	180pF
C683	CCKT1H181KB	CAP , CERAMIC	180pF
C737	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C738	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C740	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C741	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C742	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C773	CCKT1H471KB	CAP , CERAMIC	470pF
C774	CCKT1H471KB	CAP , CERAMIC	470pF
C776	CCKT1H471KB	CAP , CERAMIC	470pF
C777	CCKT1H471KB	CAP , CERAMIC	470pF
C778	CCKT1H471KB	CAP , CERAMIC	470pF
C952	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C953	CCEA1CH101T	CAP , ELECT	100uF 16V
C955	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C957	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C958	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
D557	CVD1SS133MT	DIODE	1SS133
D558	CVD1SS133MT	DIODE	1SS133
D560	CVD1SS133MT	DIODE	1SS133
D561	CVD1SS133MT	DIODE	1SS133
D562	CVD1SS133MT	DIODE	1SS133
D629	CVD1SS133MT	DIODE	1SS133
D630	CVD1SS133MT	DIODE	1SS133
D632	CVD1SS133MT	DIODE	1SS133
D633	CVD1SS133MT	DIODE	1SS133
D634	CVD1SS133MT	DIODE	1SS133
D785	CVD1SS133MT	DIODE	1SS133
D786	CVD1SS133MT	DIODE	1SS133
D788	CVD1SS133MT	DIODE	1SS133
D789	CVD1SS133MT	DIODE	1SS133
D790	CVD1SS133MT	DIODE	1SS133
D952	CVD1N4003ST	DIODE , RECT	1N4003
D953	CVD1N4003ST	DIODE , RECT	1N4003

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
J701	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
J702	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
J703	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
J704	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
J705	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
Q575	HVTKTA1268GRT	T.R	KTA1268GR
Q576	HVTKTA1268GRT	T.R	KTA1268GR
Q578	HVTKTA1268GRT	T.R	KTA1268GR
Q579	HVTKTA1268GRT	T.R	KTA1268GR
Q580	HVTKTA1268GRT	T.R	KTA1268GR
Q581	HVTKTA1268GRT	T.R	KTA1268GR
Q582	HVTKTA1268GRT	T.R	KTA1268GR
Q584	HVTKTA1268GRT	T.R	KTA1268GR
Q585	HVTKTA1268GRT	T.R	KTA1268GR
Q586	HVTKTA1268GRT	T.R	KTA1268GR
Q587	HVTKTA1268GRT	T.R	KTA1268GR
Q588	HVTKTA1268GRT	T.R	KTA1268GR
Q590	HVTKTA1268GRT	T.R	KTA1268GR
Q591	HVTKTA1268GRT	T.R	KTA1268GR
Q592	HVTKTA1268GRT	T.R	KTA1268GR
Q593	HVTKTA1268GRT	T.R	KTA1268GR
Q594	HVTKTA1268GRT	T.R	KTA1268GR
Q596	HVTKTA1268GRT	T.R	KTA1268GR
Q597	HVTKTA1268GRT	T.R	KTA1268GR
Q598	HVTKTA1268GRT	T.R	KTA1268GR
Q641	HVTKTC3200GRT	T.R	KTC3200GR
Q642	HVTKTC3200GRT	T.R	KTC3200GR
Q644	HVTKTC3200GRT	T.R	KTC3200GR
Q645	HVTKTC3200GRT	T.R	KTC3200GR
Q646	HVTKTC3200GRT	T.R	KTC3200GR
Q647	HVTKTA1268GRT	T.R	KTA1268GR
Q648	HVTKTA1268GRT	T.R	KTA1268GR
Q650	HVTKTA1268GRT	T.R	KTA1268GR
Q651	HVTKTA1268GRT	T.R	KTA1268GR
Q652	HVTKTA1268GRT	T.R	KTA1268GR
Q665	HVTKTC3200GRT	T.R	KTC3200GR
Q666	HVTKTC3200GRT	T.R	KTC3200GR
Q668	HVTKTC3200GRT	T.R	KTC3200GR
Q669	HVTKTC3200GRT	T.R	KTC3200GR
Q670	HVTKTC3200GRT	T.R	KTC3200GR
Q791	HVTKTC3200GRT	T.R	KTC3200GR
Q792	HVTKTC3200GRT	T.R	KTC3200GR
Q794	HVTKTC3200GRT	T.R	KTC3200GR
Q795	HVTKTC3200GRT	T.R	KTC3200GR
Q796	HVTKTC3200GRT	T.R	KTC3200GR
R551	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R552	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R554	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R555	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R556	CRD20TJ102T	RES , CARBON	1K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R557	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R558	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R560	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R561	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R562	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R563	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R564	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R566	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R567	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R568	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R569	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R570	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R572	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R573	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R574	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R575	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R576	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R578	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R579	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R580	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R581	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R582	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R584	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R585	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R586	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R587	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R588	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R590	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R591	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R592	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R593	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R594	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R596	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R597	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R598	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R605	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R606	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R608	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R609	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R610	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R611	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R612	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R614	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R615	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R616	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R617	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R618	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R620	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R621	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R622	CRD20TJ333T	RES , CARBON	33K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R623	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R624	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R626	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R627	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R628	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R629	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R630	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R632	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R633	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R634	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R635	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R636	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R638	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R639	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R640	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R641	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R642	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R644	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R645	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R646	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R647	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R648	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R650	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R651	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R652	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R653	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R654	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R656	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R657	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R658	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R659	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R660	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R662	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R663	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R664	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R665	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R666	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R668	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R669	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R670	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R671	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R672	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R674	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R675	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R676	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R677	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R678	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R680	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R681	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R682	CRD20TJ223T	RES , CARBON	22K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R683	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R684	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R686	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R687	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R688	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R689	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R690	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R692	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R693	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R694	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R695	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R696	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R698	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R699	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R700	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R701	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R702	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R704	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R705	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R706	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R707	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R708	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R710	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R711	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R712	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R713	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R714	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R716	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R717	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R718	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R719	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R720	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R722	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R723	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R724	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R773	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R774	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R776	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R777	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R778	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R785	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R786	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R788	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R789	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R790	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R791	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R792	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R794	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R795	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R796	CRD20TJ473T	RES , CARBON	47K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R797	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
R798	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
BN13	CWB1C013080EN	WIRE ASS'Y	13P, 80MM, 2MM
BN51	CJP09GB99ZM	WAFER	9P
BN52	CJP09GB99ZM	WAFER	9P
BN55	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN56	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN57	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN58	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN59	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN93	CWB1D009080BM	WIRE ASS'Y	9P
BN95	CWB1C005100EN	WIRE ASS'Y	5P
CN51	CJP09GA98ZM	WAFER	9P
CN52	CJP09GA98ZM	WAFER	9P
C713	CCEA1JH221E	CAP , ELECT	220uF 63V
C714	CCEA1JH221E	CAP , ELECT	220uF 63V
C716	CCEA1JH221E	CAP , ELECT	220uF 63V
C717	CCEA1JH221E	CAP , ELECT	220uF 63V
C718	CCEA1JH221E	CAP , ELECT	220uF 63V
C719	CCEA1JH221E	CAP , ELECT	220uF 63V
C720	CCEA1JH221E	CAP , ELECT	220uF 63V
C722	CCEA1JH221E	CAP , ELECT	220uF 63V
C723	CCEA1JH221E	CAP , ELECT	220uF 63V
C724	CCEA1JH221E	CAP , ELECT	220uF 63V
D951	HVD21DQ10T	DIODE , SCHOTTKY	21DQ10
IC90	HVIKIA78R12PI	REGULATOR	(12V OUTPUT LOW DROP)
IC91	CVIKIA78R08PI	I.C , REGULATOR	78R08
IC92	HVIKIA278R05PI	REGULATOR	(5V OUTPUT LOW DROP)
IC93	HVIKIA278R05PI	REGULATOR	(5V OUTPUT LOW DROP)
JW91	CWE8202110RV	WIRE ASS'Y	2P
Q701	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q702	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q704	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q705	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q706	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q707	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q708	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q710	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q711	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q712	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
R71L	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R71R	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R72L	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R72R	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R73C	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R74C	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R75S	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R76S	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R77S	CRF5EKR22	RES , CEMENT	0.22ohm 5W
R78S	CRF5EKR22	RES , CEMENT	0.22ohm 5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
	CUP11960Y	PCB , AMP	
C551	CCEA1HH100T	CAP , ELECT	10uF 50V
C552	CCEA1HH100T	CAP , ELECT	10uF 50V
C554	CCEA1HH100T	CAP , ELECT	10uF 50V
C555	CCEA1HH100T	CAP , ELECT	10uF 50V
C556	CCEA1HH100T	CAP , ELECT	10uF 50V
C557	CCEA1EH330T	CAP , ELECT	33uF 25V
C558	CCEA1EH330T	CAP , ELECT	33uF 25V
C560	CCEA1EH330T	CAP , ELECT	33uF 25V
C561	CCEA1EH330T	CAP , ELECT	33uF 25V
C562	CCEA1EH330T	CAP , ELECT	33uF 25V
C563	CCKT1H471KB	CAP , CERAMIC	470pF
C564	CCKT1H471KB	CAP , CERAMIC	470pF
C566	CCKT1H471KB	CAP , CERAMIC	470pF
C567	CCKT1H471KB	CAP , CERAMIC	470pF
C568	CCKT1H471KB	CAP , CERAMIC	470pF
C569	CCEA1EH330T	CAP , ELECT	33uF 25V
C570	CCEA1EH330T	CAP , ELECT	33uF 25V
C572	CCEA1EH330T	CAP , ELECT	33uF 25V
C573	CCEA1EH330T	CAP , ELECT	33uF 25V
C574	CCEA1EH330T	CAP , ELECT	33uF 25V
C623	CCEA1CH101T	CAP , ELECT	100uF 16V
C624	CCEA1CH101T	CAP , ELECT	100uF 16V
C626	CCEA1CH101T	CAP , ELECT	100uF 16V
C627	CCEA1CH101T	CAP , ELECT	100uF 16V
C628	CCEA1CH101T	CAP , ELECT	100uF 16V
C671	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	CH UP025CH5R6K-A-B Z
C672	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	CH UP025CH5R6K-A-B Z
C674	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	CH UP025CH5R6K-A-B Z
C675	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	CH UP025CH5R6K-A-B Z
C676	CCBS1H5R6KCT	CAP , CERAMIC(5.6PF/50V)	CH UP025CH5R6K-A-B Z
C678	CCKT1H181KB	CAP , CERAMIC	180pF
C680	CCKT1H181KB	CAP , CERAMIC	180pF
C681	CCKT1H181KB	CAP , CERAMIC	180pF
C682	CCKT1H181KB	CAP , CERAMIC	180pF
C683	CCKT1H181KB	CAP , CERAMIC	180pF
C737	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C738	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C740	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C741	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C742	CCEA1HH1R0T	CAP , ELECT	1uF 50V
C773	CCKT1H471KB	CAP , CERAMIC	470pF
C774	CCKT1H471KB	CAP , CERAMIC	470pF
C776	CCKT1H471KB	CAP , CERAMIC	470pF
C777	CCKT1H471KB	CAP , CERAMIC	470pF
C778	CCKT1H471KB	CAP , CERAMIC	470pF
C952	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C953	CCEA1CH101T	CAP , ELECT	100uF 16V
C955	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
C957	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
C958	CCFT1H103ZF	CAP , CERAMIC	0.01uF 50V
D557	CVD1SS133MT	DIODE	1SS133
D558	CVD1SS133MT	DIODE	1SS133
D560	CVD1SS133MT	DIODE	1SS133
D561	CVD1SS133MT	DIODE	1SS133
D562	CVD1SS133MT	DIODE	1SS133
D629	CVD1SS133MT	DIODE	1SS133
D630	CVD1SS133MT	DIODE	1SS133
D632	CVD1SS133MT	DIODE	1SS133
D633	CVD1SS133MT	DIODE	1SS133
D634	CVD1SS133MT	DIODE	1SS133
D785	CVD1SS133MT	DIODE	1SS133
D786	CVD1SS133MT	DIODE	1SS133
D788	CVD1SS133MT	DIODE	1SS133
D789	CVD1SS133MT	DIODE	1SS133
D790	CVD1SS133MT	DIODE	1SS133
D952	CVD1N4003ST	DIODE , RECT	1N4003
D953	CVD1N4003ST	DIODE , RECT	1N4003
Q575	HVTKTA1268GRT	T.R	KTA1268GR
Q576	HVTKTA1268GRT	T.R	KTA1268GR
Q578	HVTKTA1268GRT	T.R	KTA1268GR
Q579	HVTKTA1268GRT	T.R	KTA1268GR
Q580	HVTKTA1268GRT	T.R	KTA1268GR
Q581	HVTKTA1268GRT	T.R	KTA1268GR
Q582	HVTKTA1268GRT	T.R	KTA1268GR
Q584	HVTKTA1268GRT	T.R	KTA1268GR
Q585	HVTKTA1268GRT	T.R	KTA1268GR
Q586	HVTKTA1268GRT	T.R	KTA1268GR
Q587	HVTKTA1268GRT	T.R	KTA1268GR
Q588	HVTKTA1268GRT	T.R	KTA1268GR
Q590	HVTKTA1268GRT	T.R	KTA1268GR
Q591	HVTKTA1268GRT	T.R	KTA1268GR
Q592	HVTKTA1268GRT	T.R	KTA1268GR
Q593	HVTKTA1268GRT	T.R	KTA1268GR
Q594	HVTKTA1268GRT	T.R	KTA1268GR
Q596	HVTKTA1268GRT	T.R	KTA1268GR
Q597	HVTKTA1268GRT	T.R	KTA1268GR
Q598	HVTKTA1268GRT	T.R	KTA1268GR
Q641	HVTKTC3200GRT	T.R	KTC3200GR
Q642	HVTKTC3200GRT	T.R	KTC3200GR
Q644	HVTKTC3200GRT	T.R	KTC3200GR
Q645	HVTKTC3200GRT	T.R	KTC3200GR
Q646	HVTKTC3200GRT	T.R	KTC3200GR
Q647	HVTKTA1268GRT	T.R	KTA1268GR
Q648	HVTKTA1268GRT	T.R	KTA1268GR
Q650	HVTKTA1268GRT	T.R	KTA1268GR
Q651	HVTKTA1268GRT	T.R	KTA1268GR
Q652	HVTKTA1268GRT	T.R	KTA1268GR
Q665	HVTKTC3200GRT	T.R	KTC3200GR
Q666	HVTKTC3200GRT	T.R	KTC3200GR

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
Q668	HVTKTC3200GRT	T.R	KTC3200GR
Q669	HVTKTC3200GRT	T.R	KTC3200GR
Q670	HVTKTC3200GRT	T.R	KTC3200GR
Q791	HVTKTC3200GRT	T.R	KTC3200GR
Q792	HVTKTC3200GRT	T.R	KTC3200GR
Q794	HVTKTC3200GRT	T.R	KTC3200GR
Q795	HVTKTC3200GRT	T.R	KTC3200GR
Q796	HVTKTC3200GRT	T.R	KTC3200GR
R551	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R552	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R554	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R555	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R556	CRD20TJ102T	RES , CARBON	1K ohm 1/5W
R557	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R558	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R560	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R561	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R562	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R563	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R564	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R566	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R567	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R568	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R569	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R570	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R572	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R573	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R574	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R575	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R576	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R578	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R579	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R580	CRD20TJ181T	RES , CARBON	180 ohm 1/5W
R581	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R582	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R584	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R585	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R586	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R587	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R588	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R590	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R591	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R592	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R593	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R594	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R596	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R597	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R598	C3A206	WIRE , COPPER	SN95/PB5 , 0.6
R605	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R606	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R608	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R609	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R610	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R611	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R612	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R614	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R615	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R616	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R617	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R618	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R620	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R621	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R622	CRD20TJ333T	RES , CARBON	33K ohm 1/5W
R623	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R624	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R626	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R627	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R628	CRD20TJ152T	RES , CARBON	1.5K ohm 1/5W
R629	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R630	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R632	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R633	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R634	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R635	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R636	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R638	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R639	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R640	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R641	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R642	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R644	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R645	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R646	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R647	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R648	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R650	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R651	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R652	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R653	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R654	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R656	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R657	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R658	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R659	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R660	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R662	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R663	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R664	CRD20TJ472T	RES , CARBON	4.7K ohm 1/5W
R665	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R666	CRD20TJ561T	RES , CARBON	560 ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R668	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R669	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R670	CRD20TJ561T	RES , CARBON	560 ohm 1/5W
R671	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R672	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R674	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R675	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R676	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R677	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R678	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R680	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R681	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R682	CRD20TJ223T	RES , CARBON	22K ohm 1/5W
R683	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R684	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R686	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R687	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R688	CRD20TJ471T	RES , CARBON	470 ohm 1/5W
R689	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R690	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R692	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R693	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R694	CRD20TF1501T	RES , CARBON	1.5K /1/5W /F
R695	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R696	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R698	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R699	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R700	CRD20TJ100T	RES , CARBON	10 ohm 1/5W
R701	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R702	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R704	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R705	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R706	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R707	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R708	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R710	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R711	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R712	CRD20TJ121T	RES , CARBON	120 ohm 1/5W
R713	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R714	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R716	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R717	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R718	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R719	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R720	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R722	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R723	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R724	CRD25FJ470T	RES , CARBON	47 OHM 1/4W J
R773	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R774	CRD20TJ103T	RES , CARBON	10K ohm 1/5W

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
R776	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R777	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R778	CRD20TJ103T	RES , CARBON	10K ohm 1/5W
R785	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R786	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R788	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R789	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R790	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R791	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R792	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R794	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R795	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R796	CRD20TJ473T	RES , CARBON	47K ohm 1/5W
R797	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
R798	CRD20TJ224T	RES , CARBON	220 Kohm 1/5W
BN13	CWB1C013080EN	WIRE ASS'Y	13P, 80MM, 2MM
BN51	CJP09GB99ZM	WAFER	9P
BN52	CJP09GB99ZM	WAFER	9P
BN55	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN56	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN57	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN58	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN59	HJP06GB131ZK	CONNECTOR(PLUG)	6P
BN93	CWB1D009080BM	WIRE ASS'Y	9P, 2.5MM, 80MM
BN95	CWB1C005100EN	WIRE ASS'Y	5P, 100MM, 2MM
CN51	CJP09GA98ZM	WAFER	9P
CN52	CJP09GA98ZM	WAFER	9P
C713	CCEA1JH221E	CAP , ELECT	220uF 63V
C714	CCEA1JH221E	CAP , ELECT	220uF 63V
C716	CCEA1JH221E	CAP , ELECT	220uF 63V
C717	CCEA1JH221E	CAP , ELECT	220uF 63V
C718	CCEA1JH221E	CAP , ELECT	220uF 63V
C719	CCEA1JH221E	CAP , ELECT	220uF 63V
C720	CCEA1JH221E	CAP , ELECT	220uF 63V
C722	CCEA1JH221E	CAP , ELECT	220uF 63V
C723	CCEA1JH221E	CAP , ELECT	220uF 63V
C724	CCEA1JH221E	CAP , ELECT	220uF 63V
D951	HVD21DQ10T	DIODE , SCHOTTKY	21DQ10
IC90	HVIKIA78R12PI	REGULATOR(12V OUTPUT LOW DRO	KIA78R12PI
IC91	CVIKIA78R08PI	I.C , REGULATOR(TO220IS-4)	
IC92	HVIKIA278R05PI	REGULATOR (5V OUTPUT LOW DRO	KIA278R05PI
IC93	HVIKIA278R05PI	REGULATOR (5V OUTPUT LOW DRO	KIA278R05PI
JW91	CWE8202110RV	WIRE ASS'Y	
Q701	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q702	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q704	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q705	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q706	HVTKTA1360Y	T.R , PRE DRIVE	KTA1360Y
Q707	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q708	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
Q710	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q711	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
Q712	HVTKTC3423Y	T.R , PRE DRIVE	KTC3423Y
R71L	CRF5EKR22	RES , CEMENT	
R71R	CRF5EKR22	RES , CEMENT	
R72L	CRF5EKR22	RES , CEMENT	
R72R	CRF5EKR22	RES , CEMENT	
R73C	CRF5EKR22	RES , CEMENT	
R74C	CRF5EKR22	RES , CEMENT	
R75S	CRF5EKR22	RES , CEMENT	
R76S	CRF5EKR22	RES , CEMENT	
R77S	CRF5EKR22	RES , CEMENT	
R78S	CRF5EKR22	RES , CEMENT	
FAN1	CFNCF12615S	FAN , DC 12V	CF-12615S
Q683	CVT2SC4495	T.R(FM20-TO220F)	FM20(TO-220F)
Q684	CVT2SC4495	T.R(FM20-TO220F)	FM20(TO-220F)
Q686	CVT2SC4495	T.R(FM20-TO220F)	FM20(TO-220F)
Q687	CVT2SC4495	T.R(FM20-TO220F)	FM20(TO-220F)
Q688	CVT2SC4495	T.R(FM20-TO220F)	FM20(TO-220F)
Q743	HVT2SD2389P-OKM	TR , POWER (DARLINGTON TYPE)	
Q744	HVT2SD2389P-OKM	TR , POWER (DARLINGTON TYPE)	
Q746	HVT2SD2389P-OKM	TR , POWER (DARLINGTON TYPE)	
Q747	HVT2SD2389P-OKM	TR , POWER (DARLINGTON TYPE)	
Q748	HVT2SD2389P-OKM	TR , POWER (DARLINGTON TYPE)	
Q749	HVT2SB1559P-OKM	TR , POWER (DARLINGTON TYPE)	
Q750	HVT2SB1559P-OKM	TR , POWER (DARLINGTON TYPE)	
Q752	HVT2SB1559P-OKM	TR , POWER (DARLINGTON TYPE)	
Q753	HVT2SB1559P-OKM	TR , POWER (DARLINGTON TYPE)	
Q754	HVT2SB1559P-OKM	TR , POWER (DARLINGTON TYPE)	
	CUAVISOFIVEAH	BOTTOM ASS'Y	
	CJDL77ZA	DVD ROM DRIVE WITH SERVO	INDICATE WHEN ORDERING AH OR C VERSION
	CADL77ZA	DVD MECHANISM ONLY	
	CADSDL003VA	DVD LOADER ASS'Y	
	CADSDL003Z	LOADER	
	CJDDM3481A	ASA TRAVERSE PICK UP ASS'Y	SF-HD850G
	CWB1B005120EE	WIRE ASS'Y	5P, 120MM, 2MM
	CWB5A906120SE	WIRE ASS'Y	5P, 120MM, 2MM
	CUP11957Y-1	PCB , MECHANISM (VISOFIVE)	
	CWC6G2A24G350B	CABLE , CARD (24PIN , 350MM)	24PIN , 0.5MM PITCH , 350MM
	CLZ9Z070Z	FERRITE , CORE	
	CWC4C4A13B300B	CABLE , CARD	13P, 300MM, 1.25MM
	CWC4C4A15B200B	CABLE , CARD	15P, 200MM, 1.25MM
	CWC4C4A15B300B	CABLE , CARD	15P, 300MM, 1.25MM
	CWC4F4A07A150B	CABLE , CARD	7P, 150MM, 1MM
	CWC4F4A13A050B	CABLE , CARD(13P, 50MM)	
	CWC4F4A17A080B	CABLE , CARD 17P, 80mm	CWC4F4A17A080B
	CWC6F4A13A180B	CABLE , SHIELD (13PIN ,180MM)	13PIN , 1.0MM PITCH , 180MM
	CWZVISOFIVEBN91A	AC OUTLET WIRE ASS'Y	AC INLET
	CJJ8A006ZW	RECEPTACLE , AC(15A/250V)	R-301(B21)
	CLZ9W003Z	FERRITE , RING	29X7.7X19

LOAD NO.	PARTS NO.	DESCRIPTION	SPECIFICATION
	CWZVISOFIVEBN91	WIRE ASS'Y	VISOFIVE
	C2K26161	SOLDER, WIRE	
FAN2	HDMF410T12L1C01	FAN , MOTOR	BFQ-1
F901	KBA2C6300TLEY	FUSE	(only AH VERSION)
F901	KBA2C3150TLEY	FUSE	(only C VERSION)
F902	KBA2C1250TLEY	FUSE	(only C VERSION)
F903	KBA2C2000TLEY	FUSE	(only AH VERSION)
TRS1	CLT5V046ZE	TRANS , MAIN	(only C VERSION)
TRS1	CLT5V046ZU	TRANS , MAIN	(only AH VERSION)
TUN1	CNVMB014MA0J8LS	MODULE , TUNER USA	KST-MB014MA0-J8LS

SERVICE MANUAL

VISO FIVE

DVD Surround Sound Receiver

NAD ELECTRONICS INTERNATIONAL
TORONTO