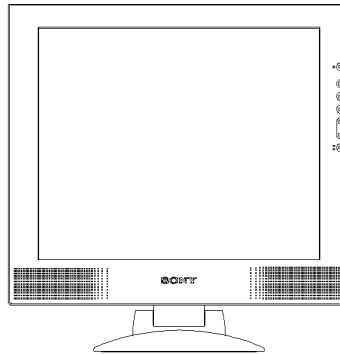


SDM-M51D

SERVICE MANUAL

US Model
Canadian Model
AEP Model



SPECIFICATIONS

LCD panel	Panel type: a-Si TFT Active Matrix Picture size: 15.1 inch	Power requirements	100-240 V, 50-60 Hz, 0.4 - 0.2A (including AC adapter)
Input signal format	RGB operating frequency* Horizontal: 28-64 kHz Vertical: 48-75 Hz	Power consumption	Max. 22W (including AC adapter)
Resolution	Horizontal: Max. 1024 dots Vertical: Max. 768 lines	Operating temperature	5-35 °C
Video input connector	Analog RGB: HD15 Digital/Analog RGB: DVI-I 29 pins	Dimensions (width/height/depth)	Display (upright): Approx. 387 x 345 x 180 mm (15¼ x 13⅝ x 7⅞ inches) (with stand)
Input signal levels	Analog RGB video signal: 0.7 Vp-p, 75Ω, positive SYNC signal: TTL level, 2.2kΩ, Positive or negative (Separate horizontal and vertical, or composite sync) 0.3 Vp-p, 75Ω, negative (Sync on green) Digital RGB video signal: TMDS (single link)		Approx. 387 x 296 x 48 mm (15¼ x 11¾ x 1⅝ inches) (without stand)
Audio output	1W x 2	Mass	Approx. 4.6 kg (10 lb 14 oz) (with stand)
Headphones jack	Stereo minijack Accepts impedance of 16-48 Ω	Plug & Play	DDC2B
Audio in jack	Stereo minijack Accepts impedance of 47 kΩ Accepts level 0.5 Vrms		

- * Recommended horizontal and vertical timing condition
- Horizontal sync width duty should be more than 4.8% of total horizontal time or 0.8 μs, whichever is larger.
 - Horizontal blanking width should be more than 2.5 μsec.
 - Vertical blanking width should be more than 450μsec.

Design and specifications are subject to change without notice.

TFT LCD COLOR COMPUTER DISPLAY
SONY®

Power saving function

This monitor meets the power-saving guidelines set by VESA, ENERGY STAR, and NUTEK. If the monitor is connected to a computer or video graphics board that is DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below.

Power mode	Power consumption*	⏻ (power) indicator
normal operation	22 W (max.)	green
active off** (deep sleep)*	2 W (max.)	orange***
power off	2 W (max.)	off

* “deep sleep” is the power saving mode defined by the Environmental Protection Agency.

** When your computer enters the “active off” mode, the input signal is cut and NO INPUT SIGNAL appears on the screen. After 20 seconds, the monitor enters the power saving mode.

*** If the horizontal or vertical sync signal is received by the monitor, the power indicator may alternately blink green and orange.

Automatic picture quality adjustment function

When the monitor receives an input signal, it automatically matches the signal to one of the factory preset modes stored in the monitor’s memory to provide a high quality picture at the center of the screen. (See Appendix for a list of the factory preset modes.)

For input signals that do not match one of the factory preset modes, the automatic picture quality adjustment function of this monitor automatically adjusts the picture position, phase, and pitch, and ensures that a clear picture appears on the screen for any timing within the monitor’s frequency range (horizontal: 28 – 64 kHz, vertical: 48 – 75 Hz).

Consequently, the first time the monitor receives input signals that do not match one of the factory preset modes, the monitor may take a longer time than normal for displaying the picture on the screen. This adjustment data is automatically stored in memory so that next time, the monitor will function in the same way as when the monitor receives the signals that match one of the factory preset modes.

In all modes as above, if the picture is adjusted, the adjustment data is stored as a user mode and automatically recalled whenever the same input signal is received.

Note

While the automatic picture quality adjustment function is activated, only the ⏻ (power) switch will operate.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.

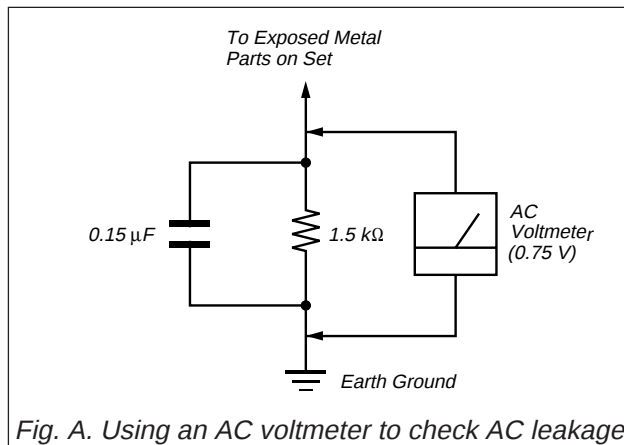


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK $\triangle$ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!

NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVÉE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE $\triangle$ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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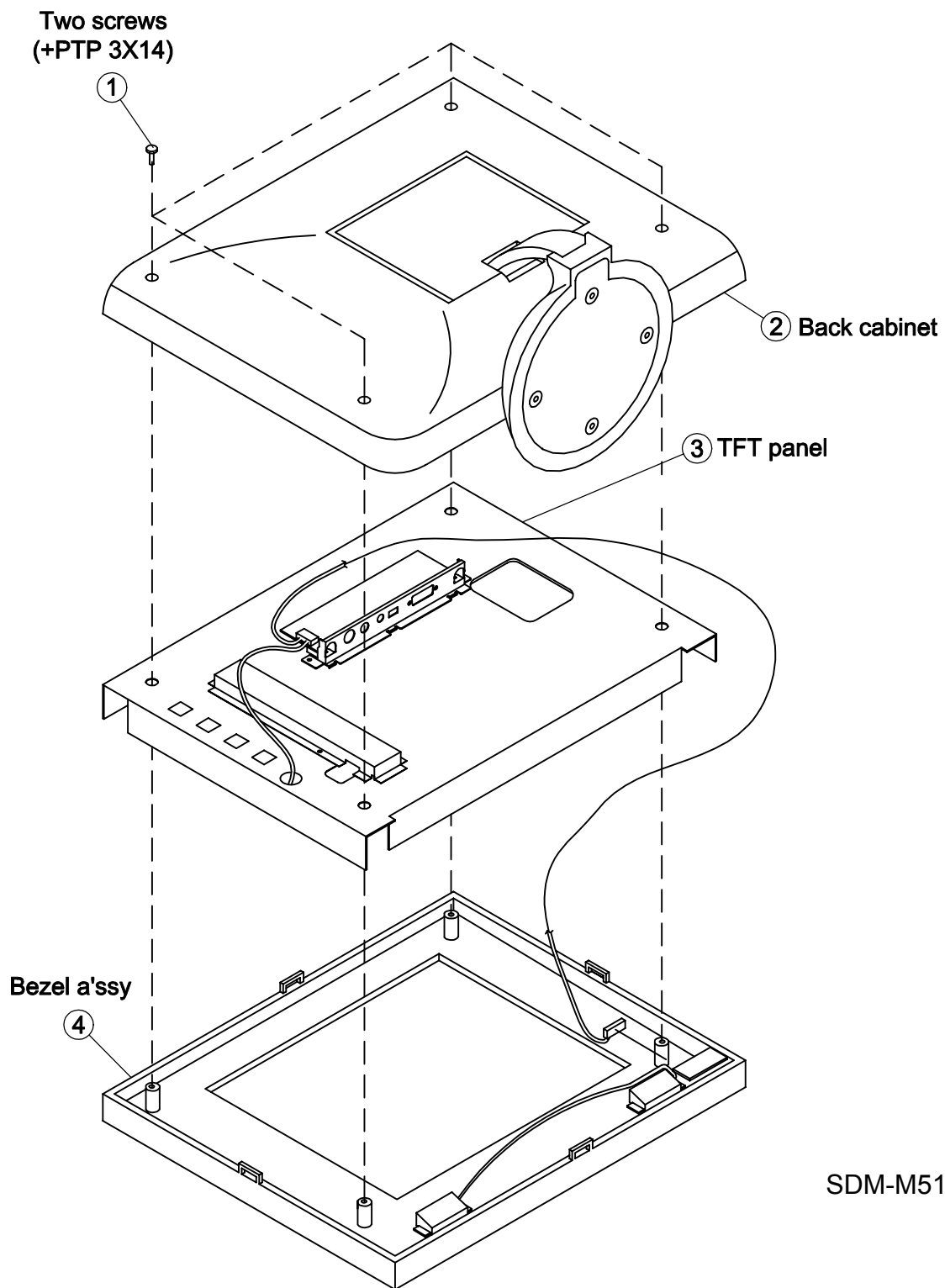
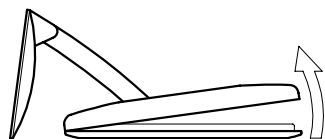
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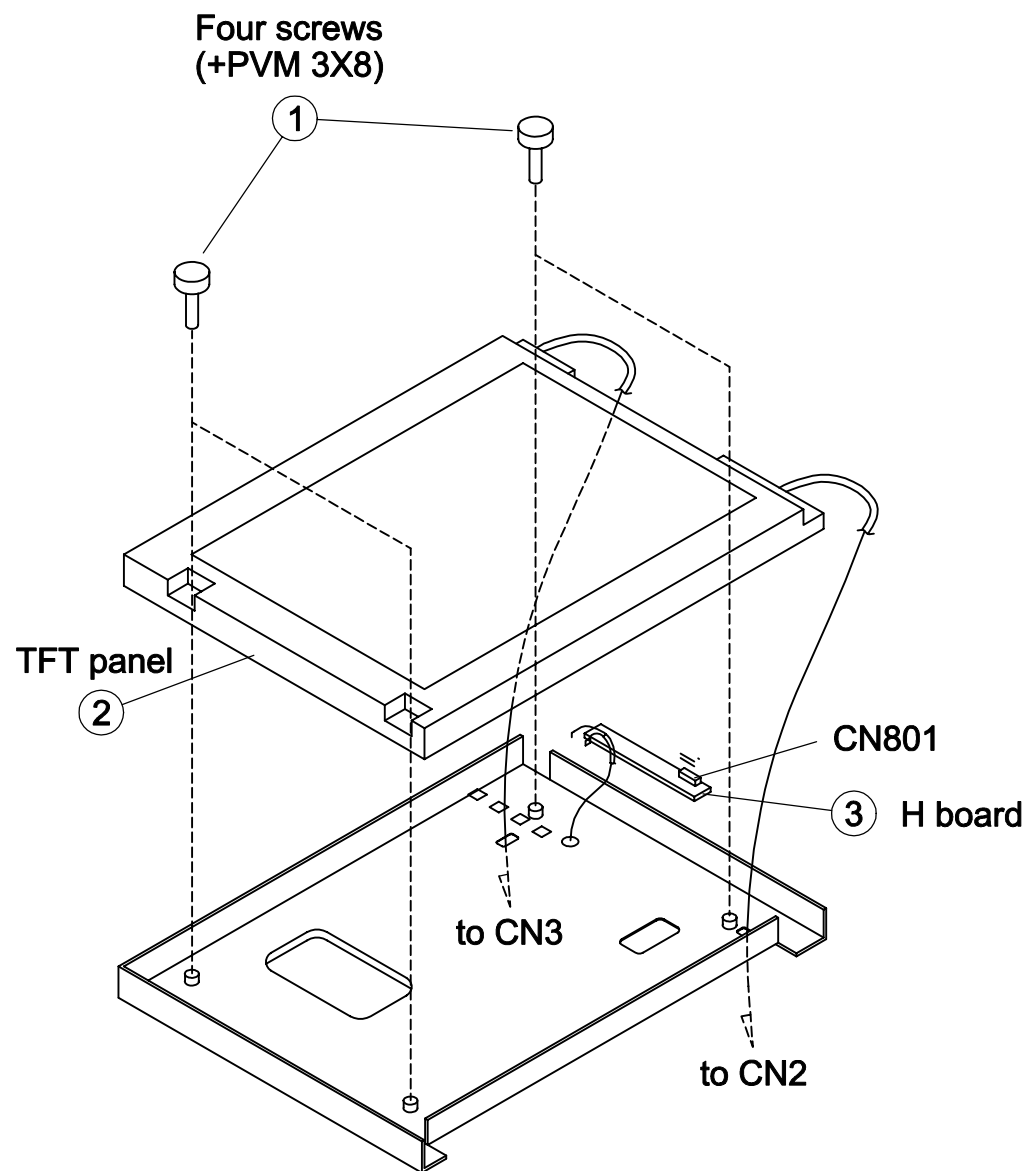
SECTION 1
DISASSEMBLY

1-1 BEZEL ASSY AND BACK CABINET REMOVAL

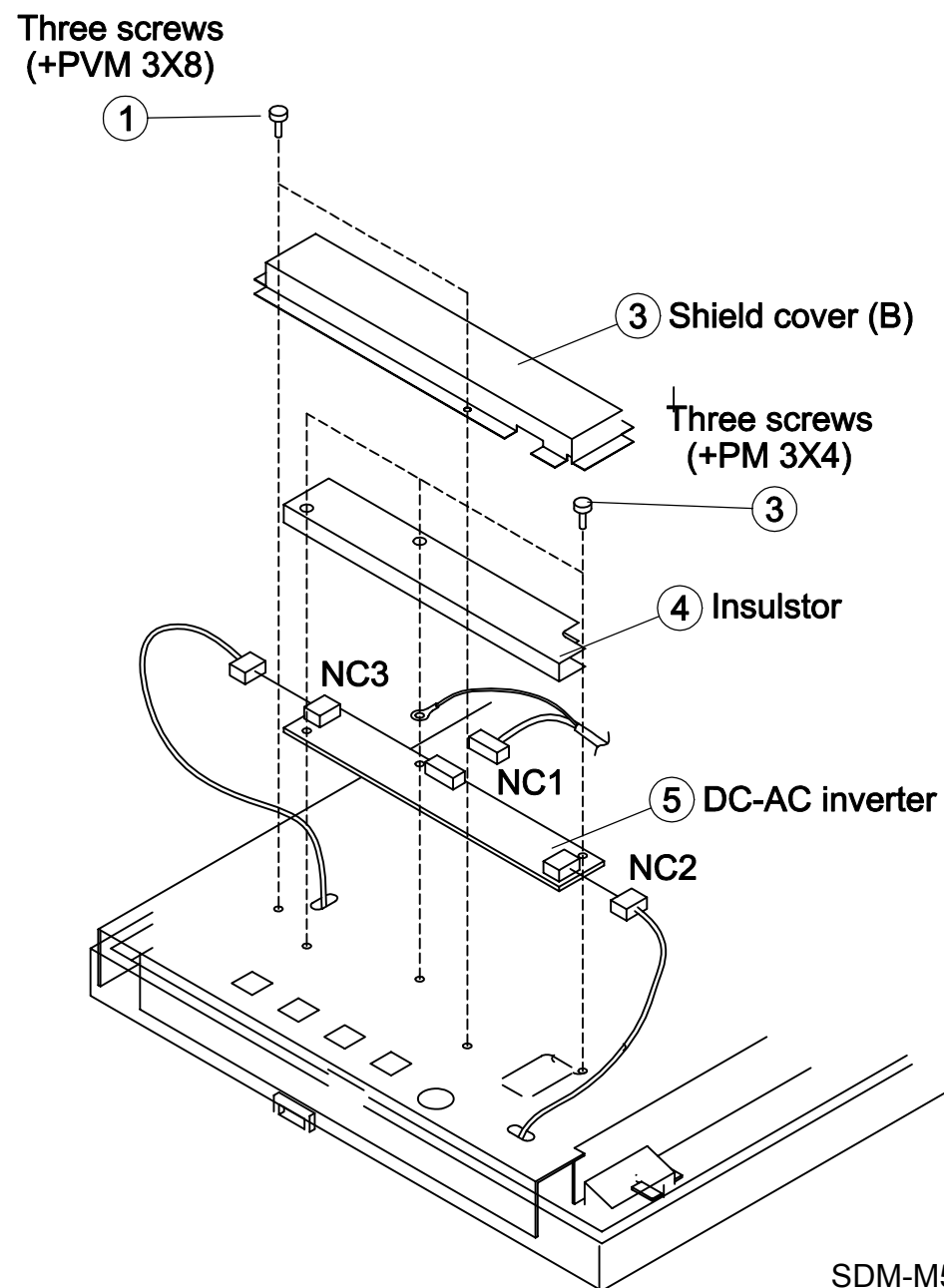
CAUTION:

When remove the back cabinet , please open top side first in order not to interfere connector/switch and cabinet.

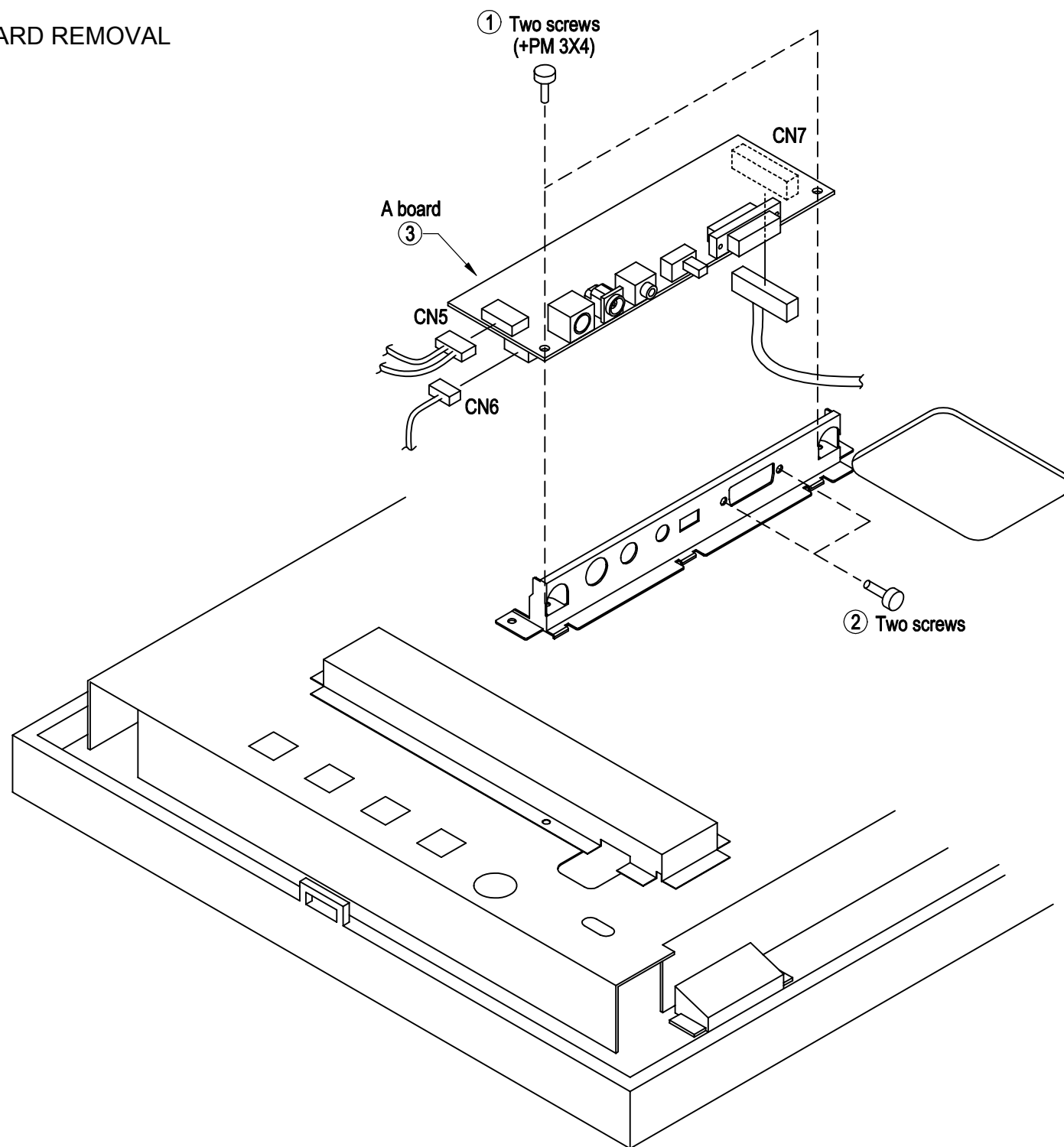




-- INVERTER BOARD REMOVAL --



1-3 A BOARD REMOVAL



SECTION 2

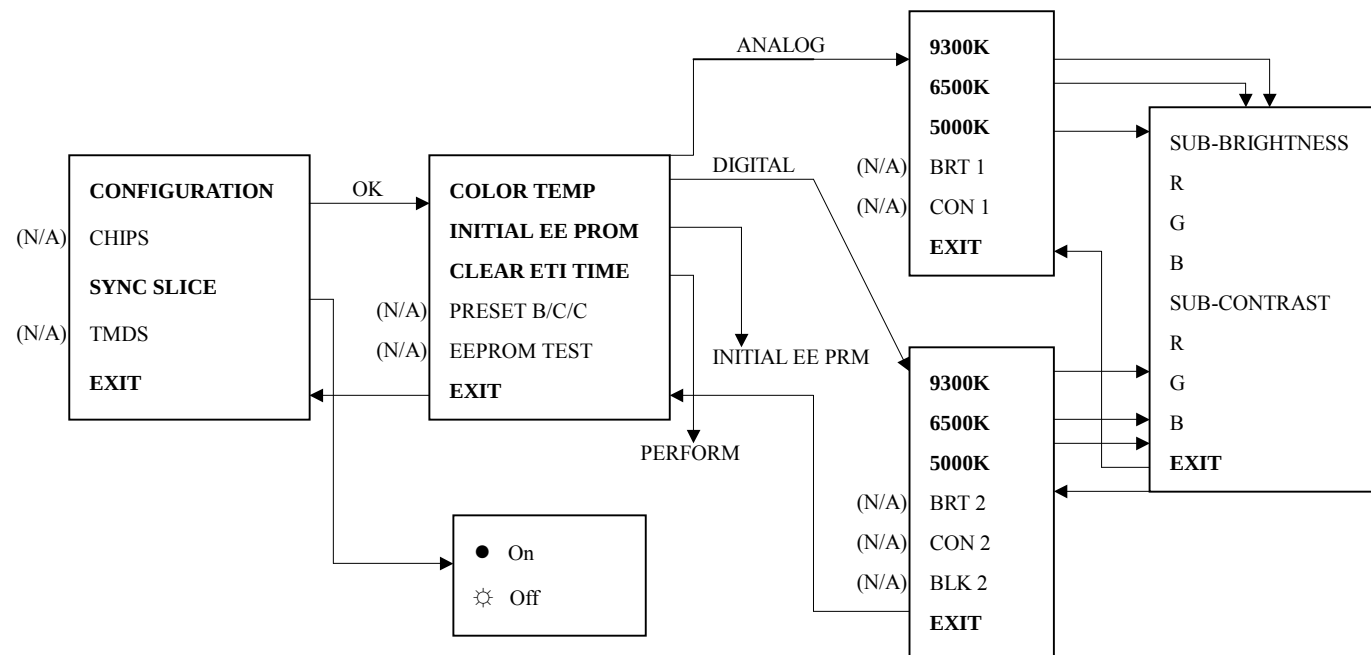
ADJUSTMENTS

2-1. FUNCTIONAL ALIGNMENT (1)

• Procedures of how to go to service mode.

1. Hold “+” and “-” key power on, SDM-M81 goes into service mode.
2. Press “MENU” key-----ODS display.
3. Press “-” key to go to second page’s late icon.
4. Press “OK” key-----service menu display.
5. Select one of features.
6. Press “MENU” key to exit OSD.
7. Power OFF then ON again, monitor go to normal mode.

If you would like to enter service mode again, performing the above procedures cycle.



Note

1. N/A means “Not applied”.
2. This service menu only provides both Configuration & Sync slice functions.
This other were used for design engineering. There is no guarantee of using those N/A functions.

SDM-M51D(E)

2-2. FUNCTIONAL ALIGNMENT (2)

This paper documents the functional alignment (Used Color meter) procedure of Sony LCD monitor SDM-M51D.

• Equipment

Computer: PC workstation with Windows 95
Installed PS/2 mouse is required
Software: KSi Engineering alignment software tool
Color meter: Option
Signal generator: Option
Cable: Special RS232 interface cable

• Setup

1. Copy ECS software <ALIGN.EXE> into a new PC directory.
2. Prepare timing & pattern data for signal generator according to Sony's timing specifications.
3. Prepare timing files for <ALIGN.EXE>.
4. Connect monitor interface cable between flat panel monitor and PC com port.
5. Connect monitor video cable to signal generator.
6. Put Topcon 50cm from the monitor; Point it perpendicularly at the center of the display; Achieve the best focus through the eyepiece.
7. Enclose the monitor and Topcon in a light-shield chamber.
8. Set up [SERVICE MODE] of the monitor.

• Download

In order to enhance productivity, a software utility is provided to download default data to LCD monitor. The default data includes color balance data and geometry timing data.

• Operation

1. Execute software <ALIGN.EXE>.
2. Click on 'Setup' menu.
3. Select 'Monitor' type as 'Sony SDM-M51D'.
4. Select 'COM PORT' according to hardware connection.
5. Click <OK> to save the new setup configuration.
6. Quit this application and Re-enter to make the new settings effective.

• On Screen Adjustment

1. Click on the 'Monitor' icon; an virtual monitor panel would show up.
2. On entry, the software tries to establish a communication link with the monitor. The monitor internal DACs are read and shown on screen sliders. A 'CONNECT' icon would show up on the lower left corner of the dialog screen.
3. An error message would pop up should communication fail. A 'BREAK' icon would show up on the dialog screen. If this happens, check the hardware setup, communication cable, and the connection.

• Warm up time

Allow 30 minutes warm up time before doing any adjustment.

• Color Adjustment

1. 9300K color adjustment
--Center adjustment--
 - a. Click 'Color Temperature' as '9300'.
 - b. Apply 40% IRE white video field, primary mode.
 - c. Make sure 'backlight' register data is 0 (100%).

- d. Click 'Refresh'.

Refer to table 1 for default data for color adjustment.

- e. Adjust 'sub_brt_B' to achieve color temperature. Refer to table 2 for specification.

- f. Click 'Save this color' for a 9300K color save.

2. 5000K color adjustment

- a. Click 'Color Temperature' as '5000'.

- b. Repeat alignment procedure as 9300 steps b-f.

3. 6500K color adjustment

- a. Click 'Color Temperature' as '6500'.

- b. Repeat alignment procedure as 9300 steps b-f.

• Geometry Adjustment

1. Connect the personal computer which has alignment data.
2. Click 'Refresh' (inside Geometry Register Box).
3. Adjust 'Pitch' for optimum screen performance.
4. Adjust 'Phase' for optimum screen performance.
5. Adjust 'H position' to make the screen center horizontally.
6. Adjust 'V position' to make the screen center vertically.
7. Repeat steps 3-6 for best picture performance.
8. Click 'Save Geometry' to perform a user timing mode save.
9. Repeat step 1-7 for each of the user present timings.

SDM-M51D(E)

2-3. Table 1 & 2

Table 1: Default data for analog color adjustment

Color	9300K	6500K	5000K
Brightness (G)	108	108	108
Contrast (G)	162	162	162
Sub-Brtn-R	208	218	232
Sub-Brtn-B	200	200	200
Sub-Brtn-G	202	170	144
Sub-Cont-R	70	70	70
Sub-Cont-B	70	70	70
Sub-Cont-G	70	70	70

Table 2: Specifications for color adjustment

Color	x	y	Y (40% IRE)
9300	283	298	35
6500	314	328	35
5000	345	358	35
Tole	10	10	10

Y: Luminance measurements are in cd/m²

2-4. TIMING SPECIFICATION

PRESET MODE	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	MODE 6	MODE 7	MODE 8
SIGNAL MODE	VESA 60Hz	MAC 66Hz	VESA 75Hz	VESA 70Hz	VESA 56Hz	VESA 60Hz	VESA 72Hz	VESA 75Hz
RESOLUTION	640 X 480	640 X 480	640 X 480	720 X 400	800 X 600	800 X 600	800 X 600	800 X 600
DOT CLOCK	25.175 MHz	30.240 MHz	31.500 MHz	28.350 MHz	36.000 MHz	40.000 MHz	50.000 MHz	49.500 MHz
HORIZONTAL	usec	usec	usec	usec	usec	usec	usec	usec
H. TOATL	31.778	28.571	26.667	31.746	28.444	26.400	20.800	20.110
H. SYNC	3.813	2.116	2.032	3.810	0.889	3.200	2.400	1.616
H. BP	1.907	3.175	3.810	1.905	4.667	2.200	1.280	3.232
H. ACTIV	25.422	21.164	20.317	25.397	22.222	20.000	16.000	16.162
VERTICAL	msec	msec	msec	msec	msec	msec	msec	msec
V. TOTAL	16.683	15.000	13.333	14.254	17.778	16.579	13.853	13.333
V. SYNC	0.064	0.086	0.080	0.095	0.057	0.106	0.125	0.064
V. BP	1.049	1.114	0.427	1.079	0.626	0.607	0.478	0.448
V. ACTIV	15.253	13.714	12.800	12.698	17.067	15.840	12.480	12.800
H/V POLARITY	N/N	N/N	N/N	N/P	N/N	P/P	N/N	P/P

PRESET MODE	MODE 9	MODE 10	MODE 11	MODE 12	MODE 13
SIGNAL MODE	PMAC 16"	VESA 60Hz	VESA 70Hz	VESA 75Hz	MAC 768 75Hz
RESOLUTION	832 X 624	1024 X 768	1024 X 768	1024 X 768	1024 X 768
DOT CLOCK	57.285 MHz	65.000 MHz	75.000 MHz	78.750 MHz	80.000 MHz
HORIZONTAL	usec	usec	usec	usec	usec
H. TOATL	20.110	20.677	17.707	16.660	16.600
H. SYNC	1.117	2.092	1.813	1.219	1.200
H. BP	3.910	2.462	1.920	2.235	2.200
H. ACTIV	14.524	15.754	13.653	13.003	12.800
VERTICAL	msec	msec	msec	msec	msec
V. TOTAL	13.413	16.666	14.272	13.328	13.346
V. SYNC	0.060	0.124	0.106	0.050	0.050
V. BP	0.744	0.600	0.513	0.466	0.498
V. ACTIV	12.549	15.880	13.599	12.795	12.749
H/V POLARITY	N/N	N/N	N/N	P/P	N/N

SECTION 3

SCHEMATIC DIAGRAMS

NOTE:

*All capacitors are in uF unless otherwise noted.(pF:uuF)

Capacitors without voltage indication are all 50V.

*Indication of resistance, which does not have one for rating electrical power, is as follows.

Chip resistor type 0603 1/16W

*All resistor are in ohms.

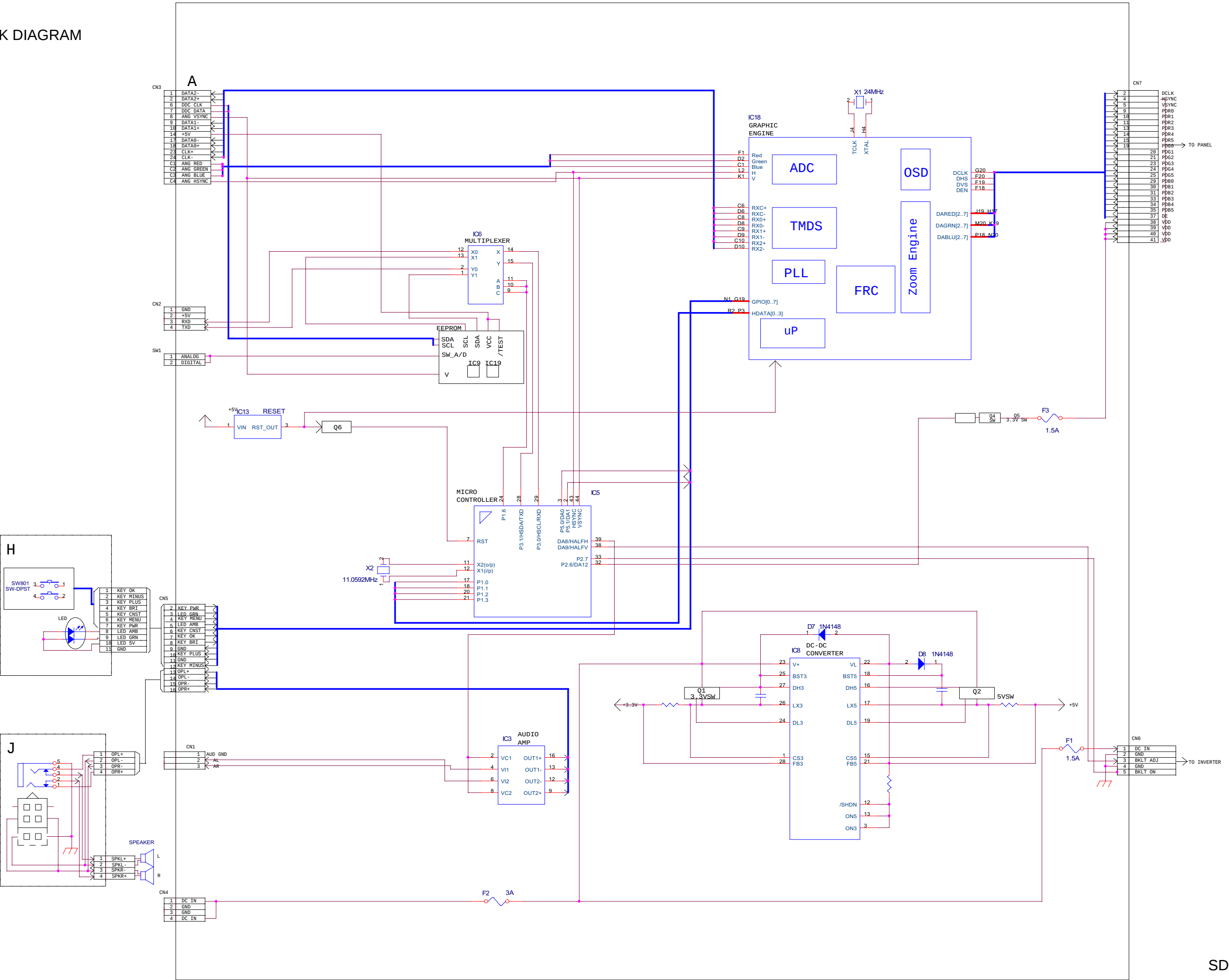
*Resistors with # mark are not mounted.

*the circuit diagram of the A mount is splitted to 6 sheets.(A-a,A-b,>>A-e)

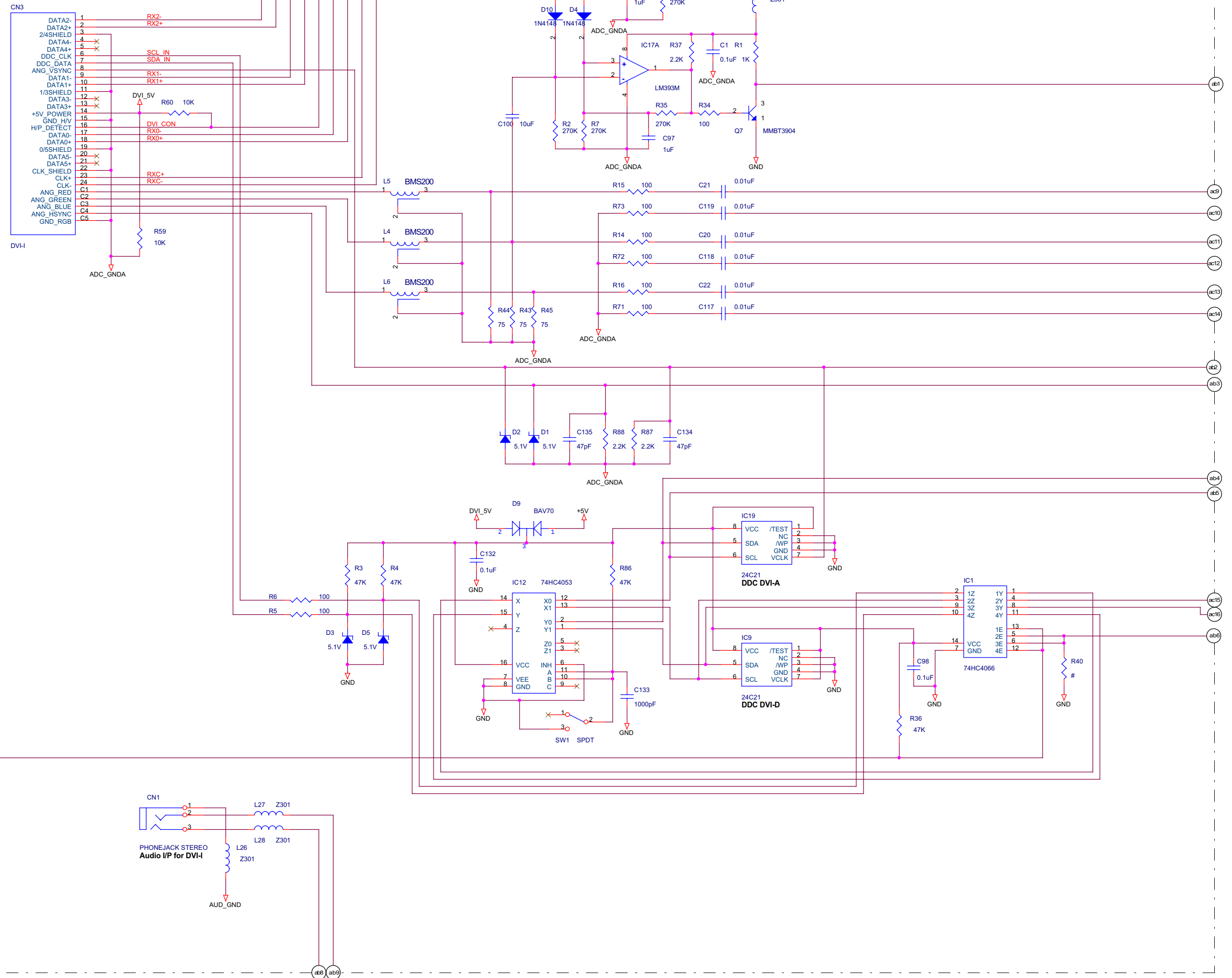
*Circled number shown at edge of each circuit diagrams indicate connections between different sheets.

(Example;  indicate connection between same marking points of sheet A-a and A-b)

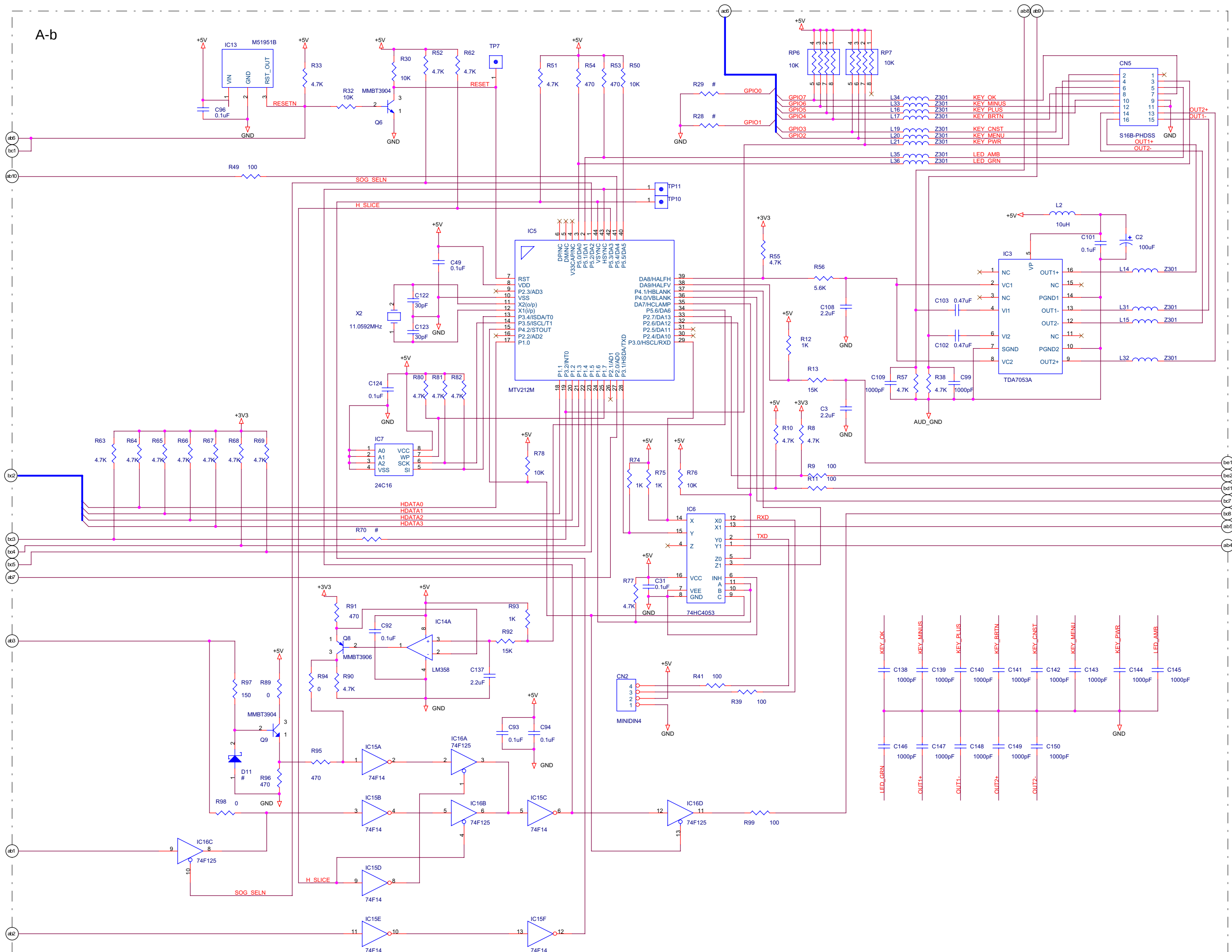
3-2 BLOCK DIAGRAM

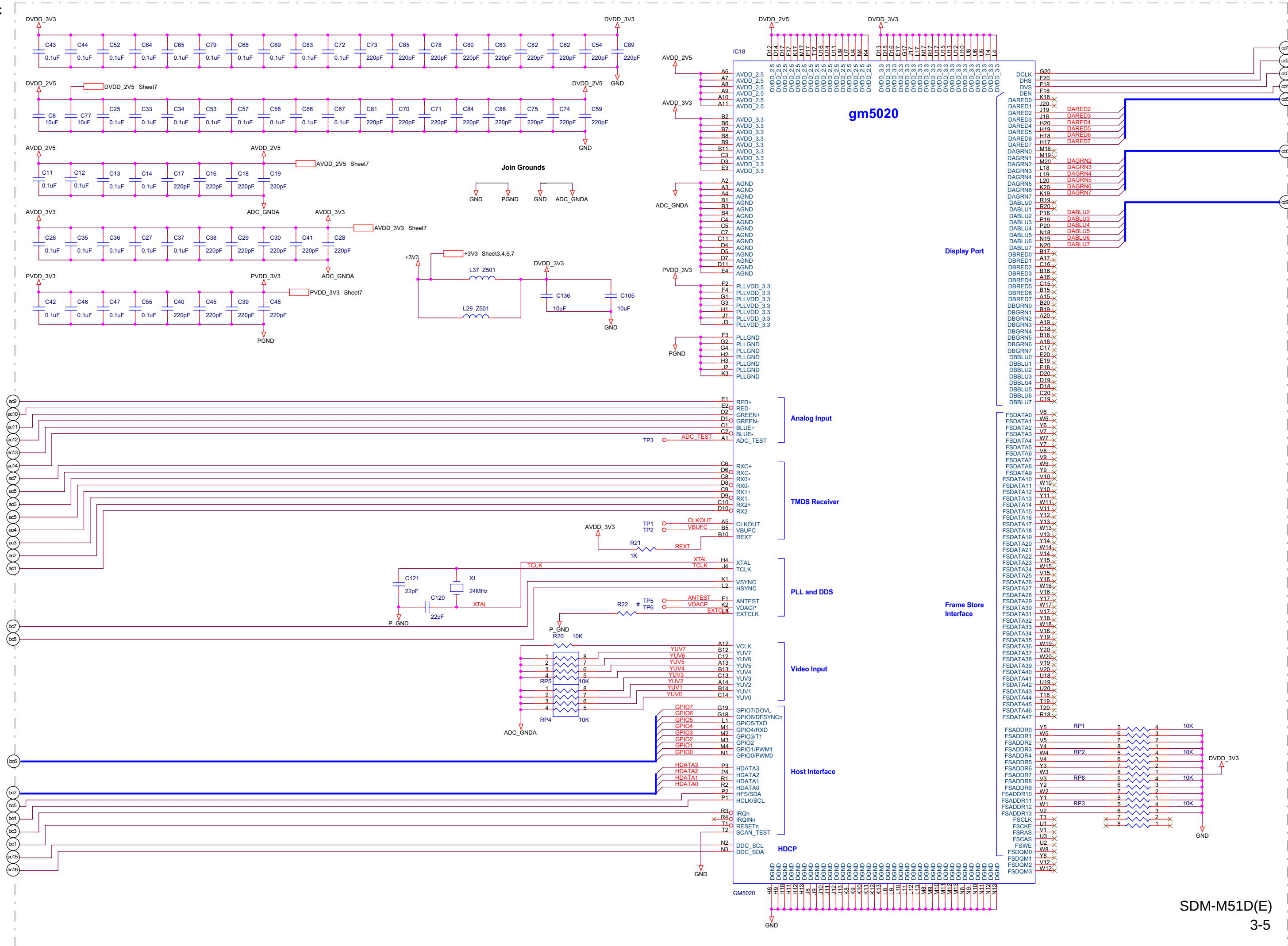


A-a

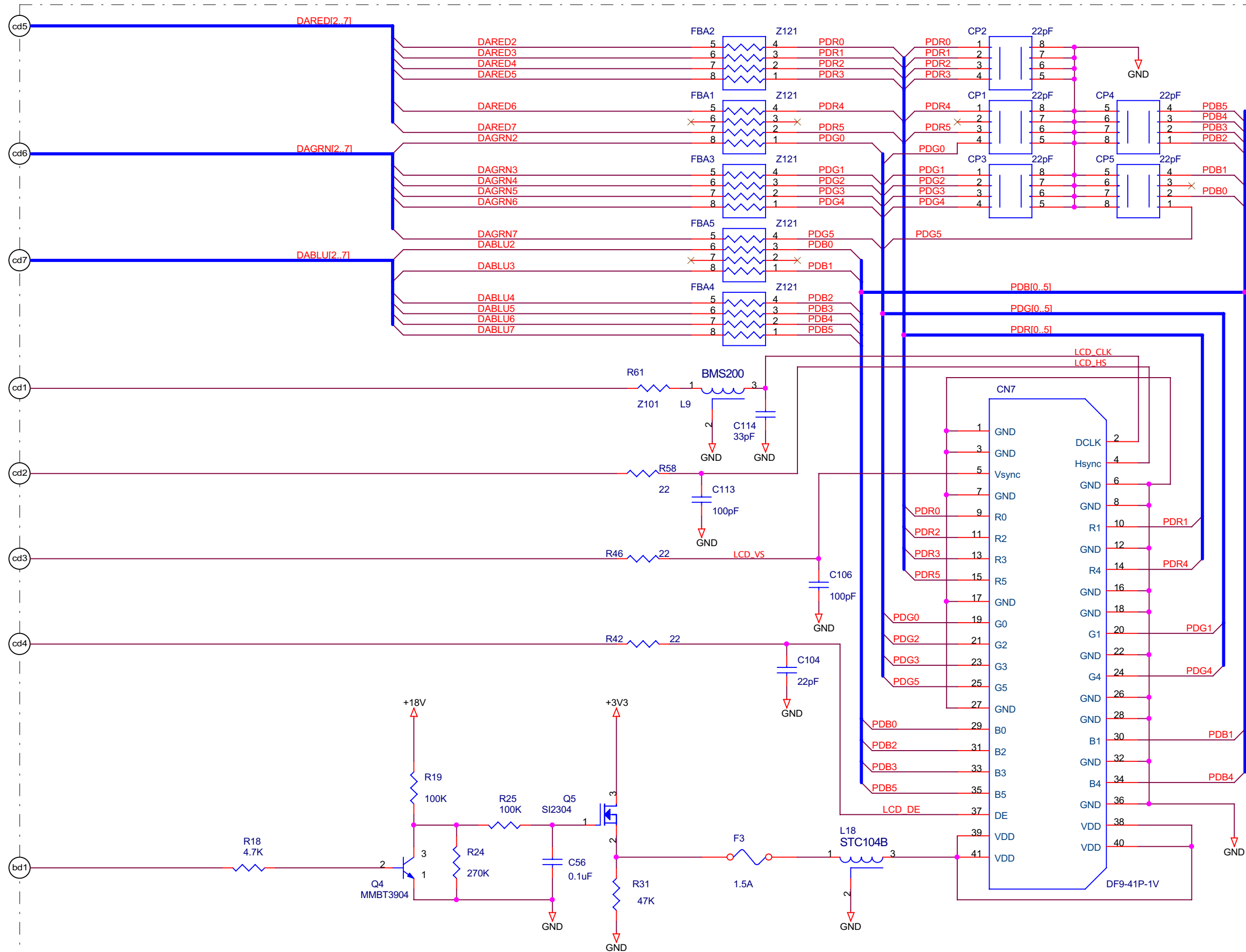


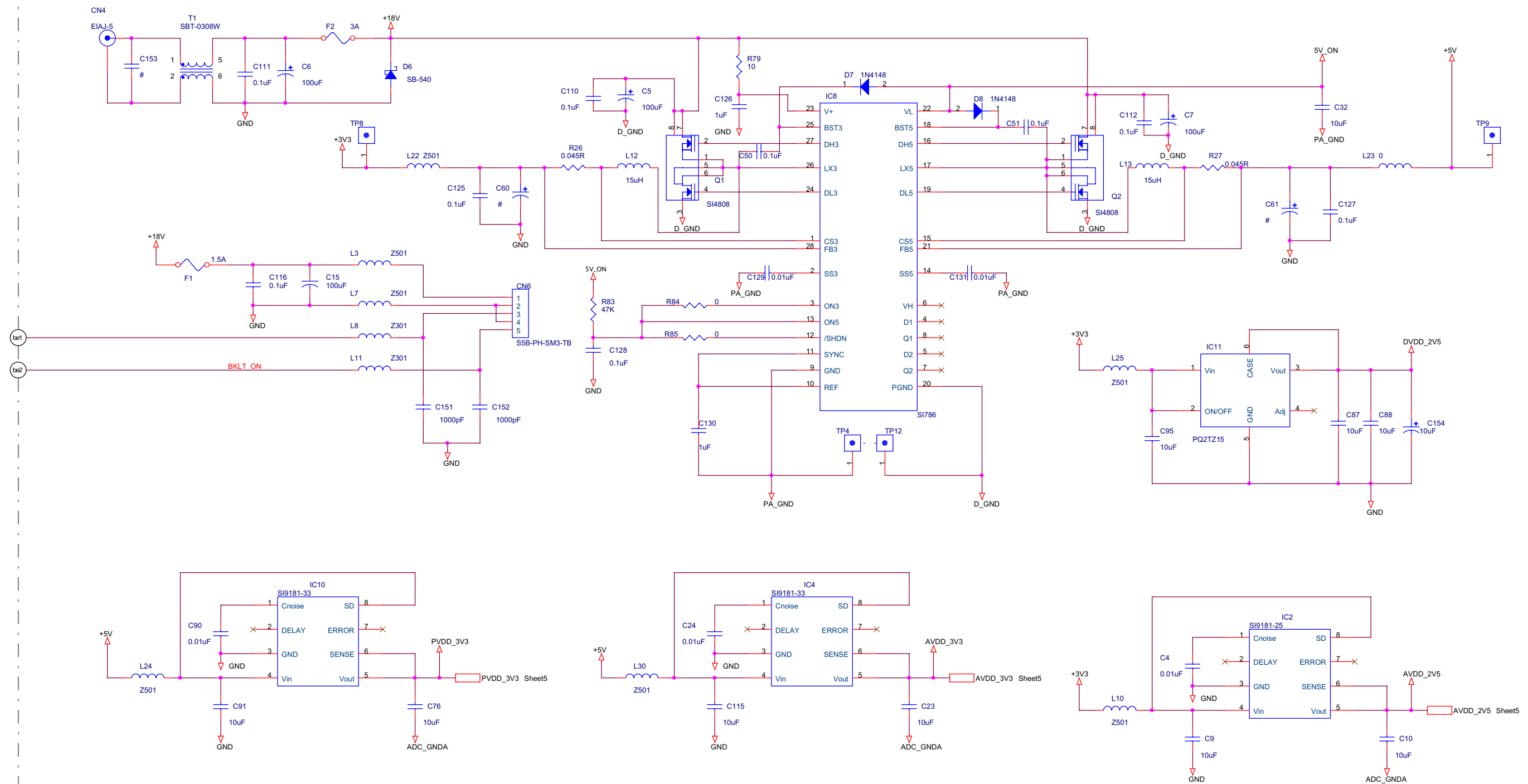
A-b



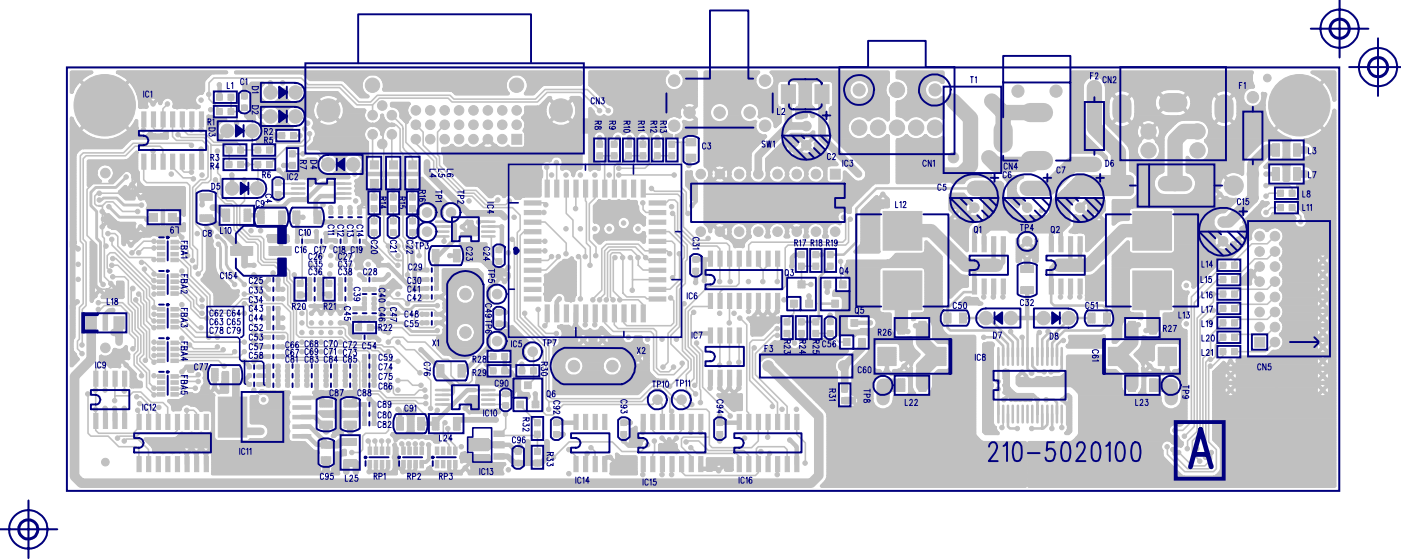


A-d

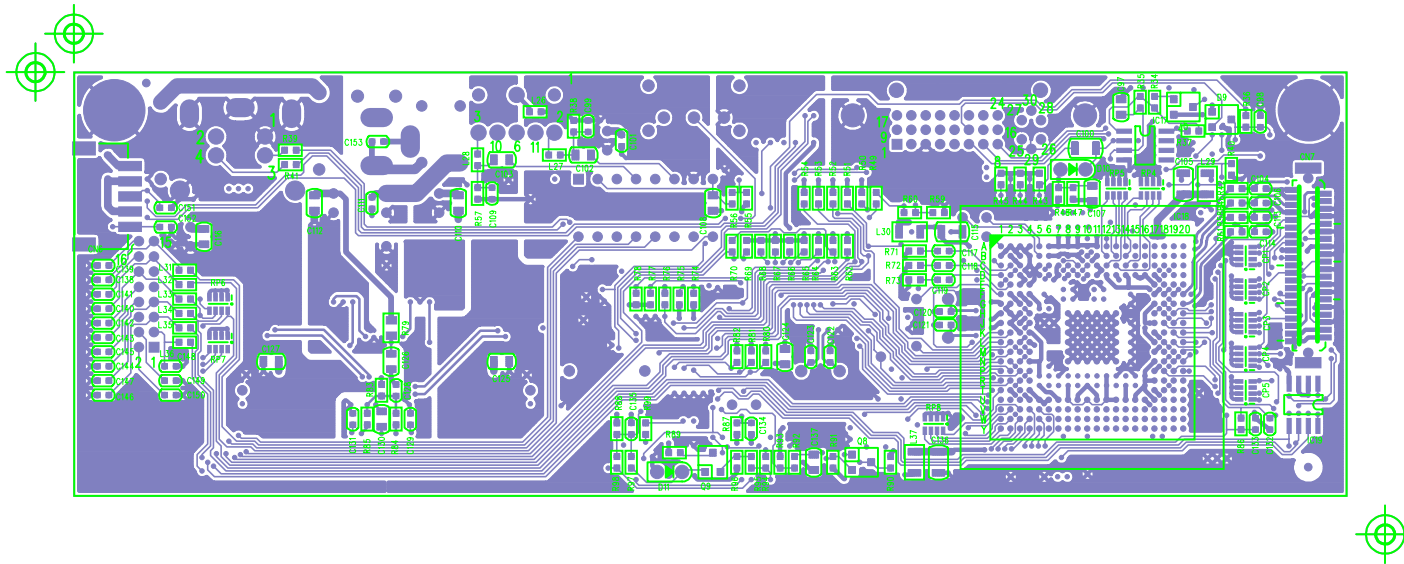




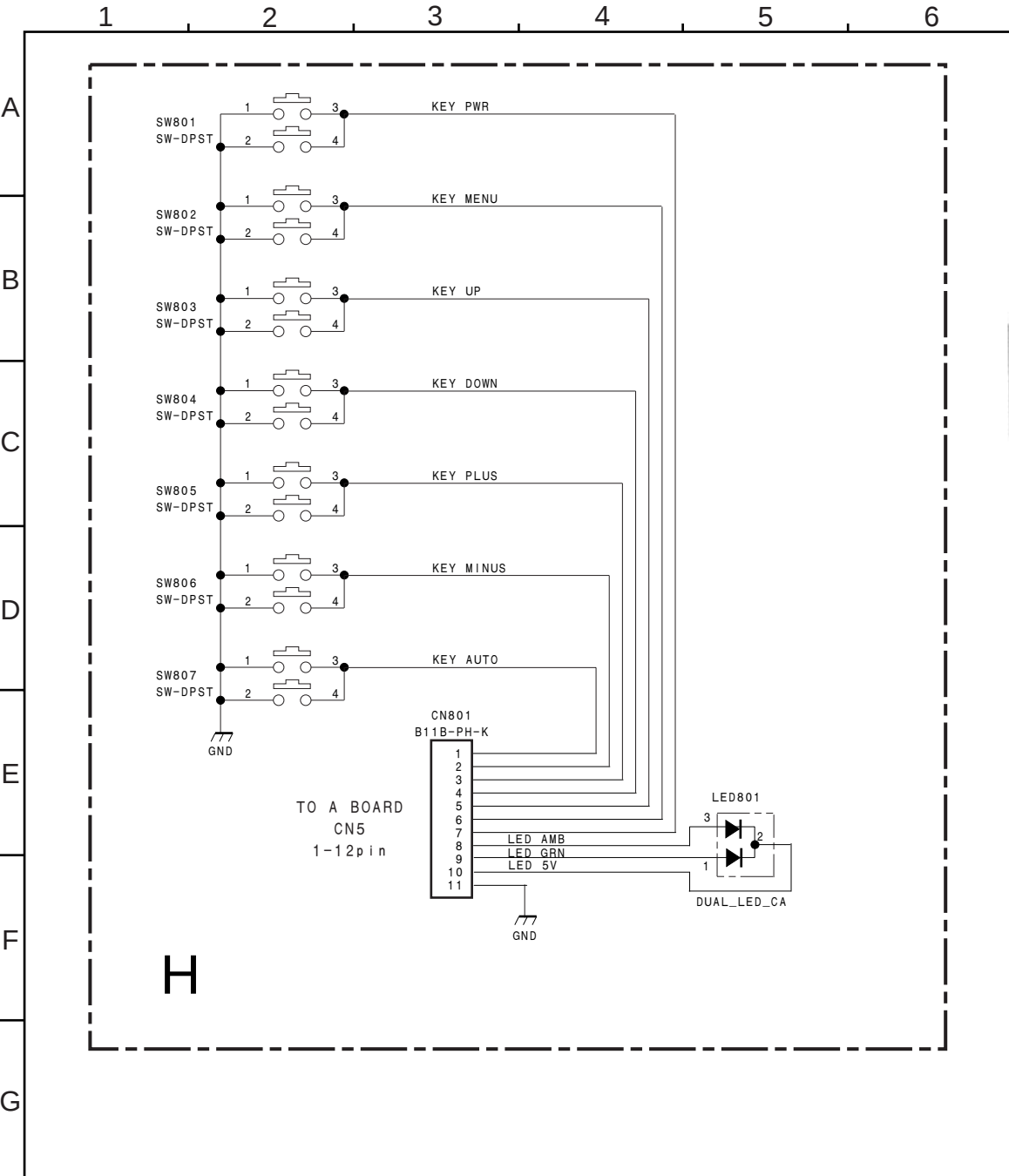
3-8 A Board Top Side



3-9 A Board Bottom Side



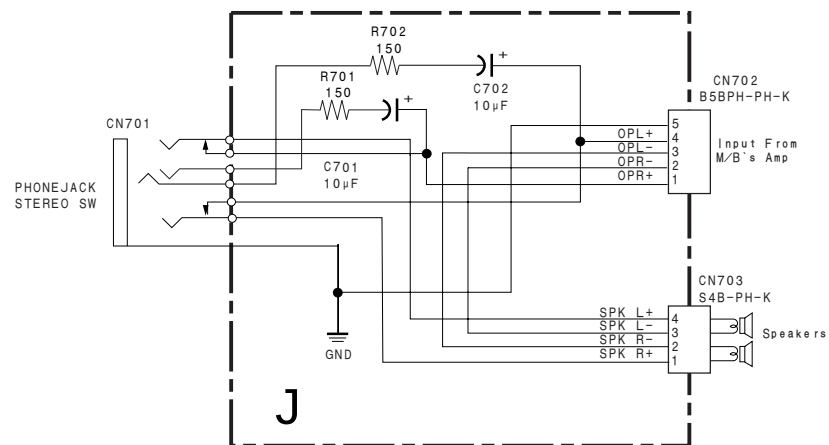
-- Schematic Diagram of H Board --



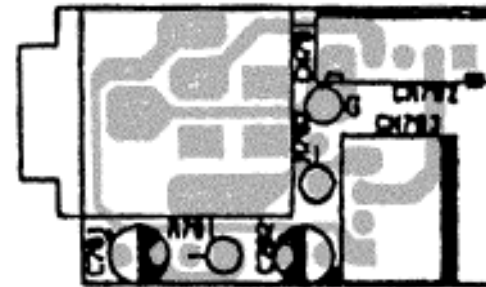
-- H BOARD (Conductor Side) --



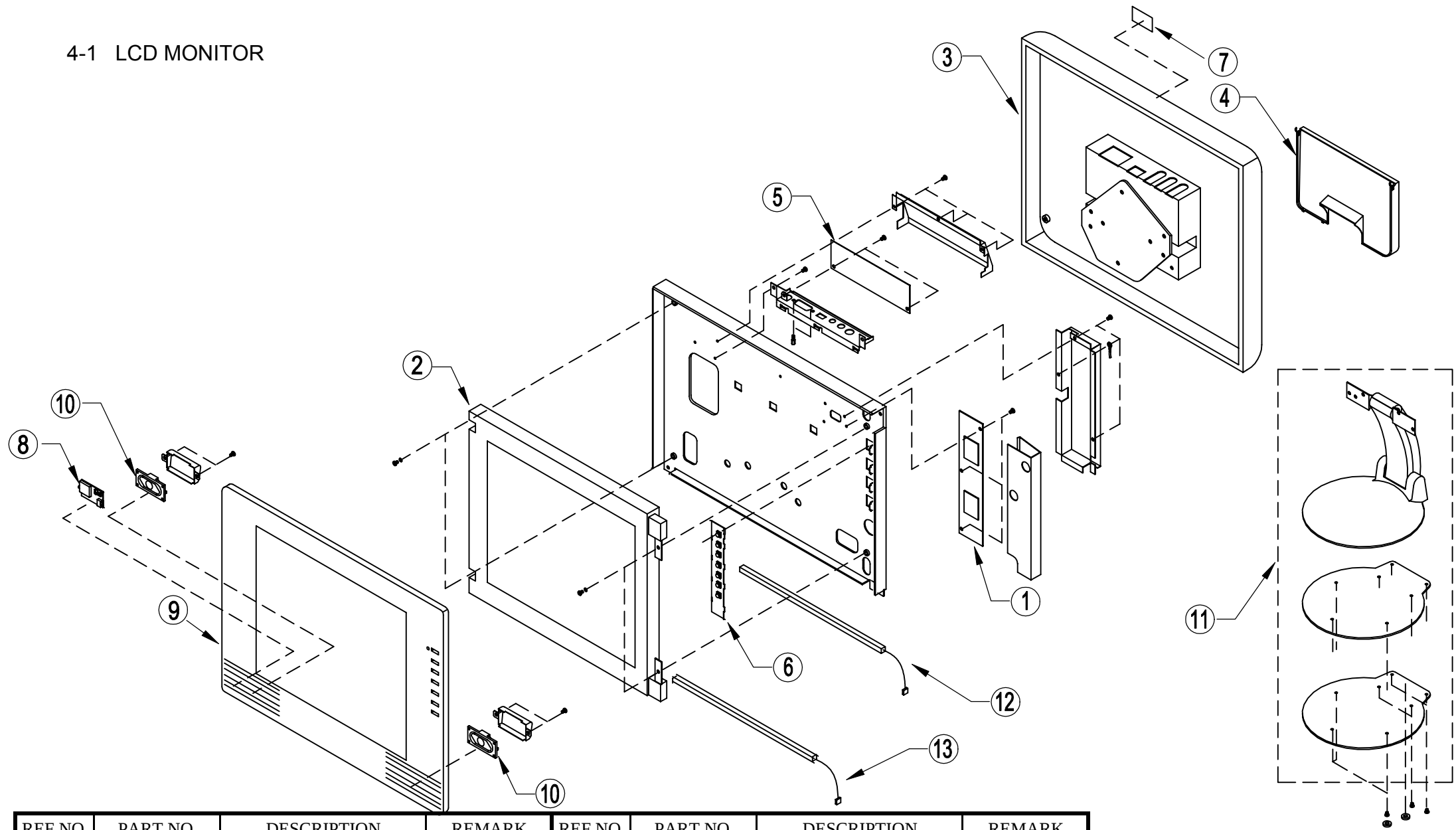
-- Schematic Diagram of J Board --



-- J BOARD (Conductor Side) --

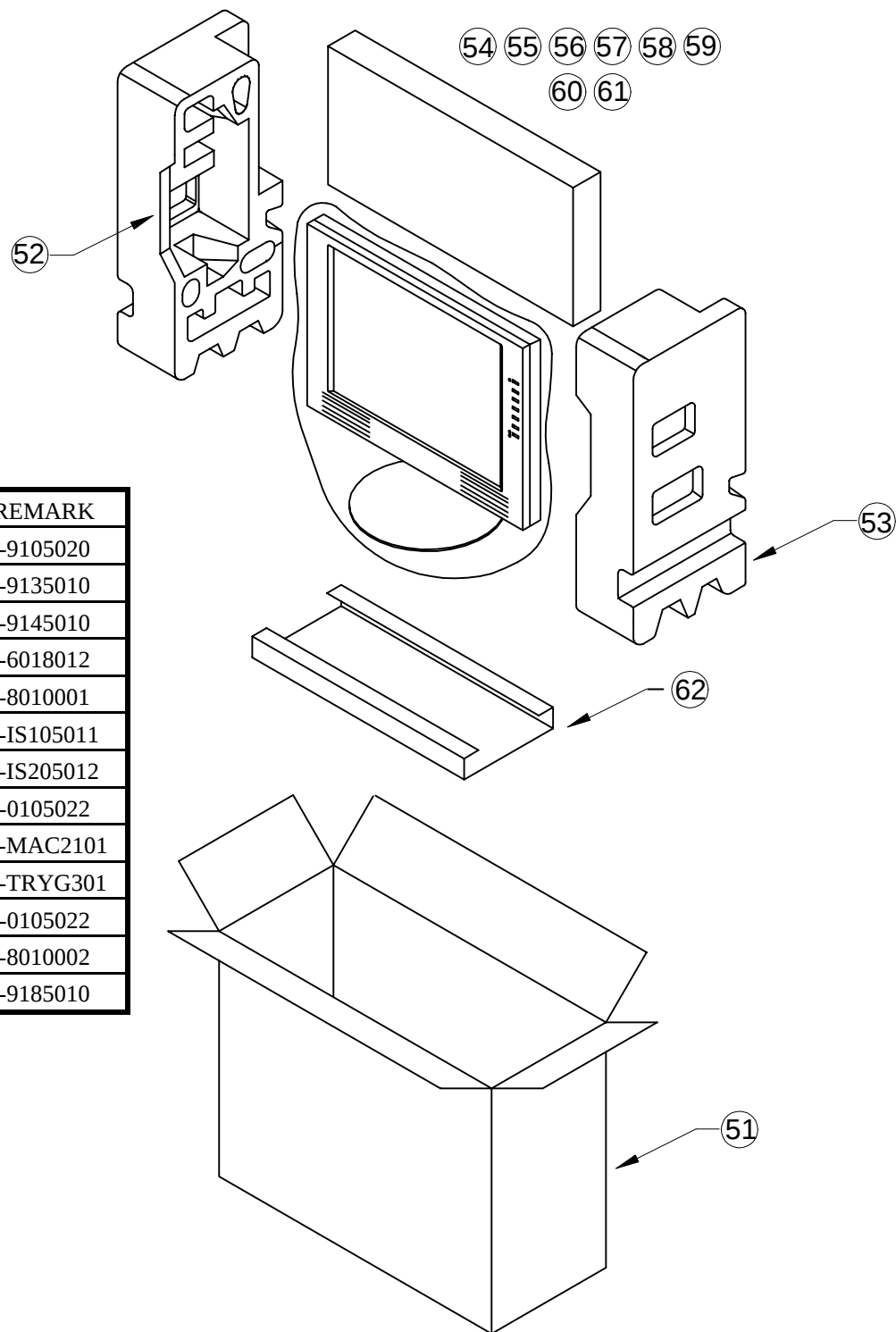


4-1 LCD MONITOR



REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
1	1-476-422-11	INVERTER	241-SM15012	8	A-1388-294-A	J MOUNT	209-5010040
2	1-803-808-11	PANEL, LCD	245-151LG01	9	X-4038-369-1	BEZEL ASSY	422-S-0105010
3	X-4038-946-1	CABINET ASSY, BACK	422-S-0305020	10	1-529-902-11	SPEAKER (20x40mm)	KSI40X20
4	4-079-642-21	COVER, REAR	422-0145020	11	X-4038-370-1	STAND ASSY	422-S-0205010
5	A-1272-429-A	A MOUNT	209-5020010	12	1-518-777-11	LAMP ASSY (UPPER)	N/A
6	A-1372-905-A	H MOUNT	209-5010030	13	1-518-777-21	LAMP ASSY (LOWER)	N/A
7	4-082-985-01	LABEL, INFORMATION	610-0605022				

REF NO.	PART NO.	DESCRIPTION	REMARK
51	4-082-376-01	INDIVIDUAL CARTON	600-9105020
52	4-079-619-01	CUSHION (LEFT)	404-9135010
53	4-079-620-01	CUSHION (RIGHT)	404-9145010
54	1-476-397-11	ADAPTOR, AC	201-6018012
55	1-823-049-11	CABLE, RGB (HD15-DVI)	186-8010001
56	1-765-720-21	CORD SET, POWER (U/C)	181-IS105011
	1-765-719-21	CORD SET, POWER (AEP)	181-IS205012
57	Pending	DISK, INFORMATION(CD-ROM)	617-0105022
58	1-778-967-21	ADAPTOR, CONVERSION (U/C)	204-MAC2101
59	1-785-512-31	CONNECTOR, D SUB (15P CHANGER) (AEP)	204-TRYG301
60	4-082-179-11	MANUAL, INSTRUCTION	612-0105022
61	1-757-372-11	CORD, CONNECTION (WITH PLUG)	186-8010002
62	4-080-078-01	BOARD, SPACER	604-9185010



SECTION 5

ELECTRICAL PARTS LIST

NOTE:

The components identified ! Marked are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque !
sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant
le numéro spécifié.

When indicating parts by reference
number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

RESISTORS

- All resistors are in ohms
- F: nonflammable

CAPACITOR

- MF: μ F

COIL

- UH: μ H

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
1		A	CAPACITOR		C001	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
2		A	CAPACITOR		C002	1-128-126-11	CAP-EC 100UF 25V 6.3*7.0 SAX	162-SAX101M25	
3		A	CAPACITOR		C003	1-164-505-11	CAP- Y5V 2.2UFZ 16V CHIP 0805	122-CY225Z16TX	
4		A	CAPACITOR		C004	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
5		A	CAPACITOR		C005	1-128-126-11	CAP-EC 100UF 25V 6.3*7.0 SAX	162-SAX101M25	
6		A	CAPACITOR		C006	1-128-126-11	CAP-EC 100UF 25V 6.3*7.0 SAX	162-SAX101M25	
7		A	CAPACITOR		C007	1-128-126-11	CAP-EC 100UF 25V 6.3*7.0 SAX	162-SAX101M25	
8		A	CAPACITOR		C008	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
9		A	CAPACITOR		C009	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
10		A	CAPACITOR		C010	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
11		A	CAPACITOR		C011	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
12		A	CAPACITOR		C012	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
13		A	CAPACITOR		C013	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
14		A	CAPACITOR		C014	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
15		A	CAPACITOR		C015	1-128-126-11	CAP-EC 100UF 25V 6.3*7.0 SAX	162-SAX101M25	
16		A	CAPACITOR		C016	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
17		A	CAPACITOR		C017	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
18		A	CAPACITOR		C018	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
19		A	CAPACITOR		C019	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
20		A	CAPACITOR		C020	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
21		A	CAPACITOR		C021	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
22		A	CAPACITOR		C022	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
23		A	CAPACITOR		C023	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
24		A	CAPACITOR		C024	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
25		A	CAPACITOR		C025	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
26		A	CAPACITOR		C026	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
27		A	CAPACITOR		C027	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
28		A	CAPACITOR		C028	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
29		A	CAPACITOR		C029	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
30		A	CAPACITOR		C030	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
31		A	CAPACITOR		C031	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
32		A	CAPACITOR		C032	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
33		A	CAPACITOR		C033	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
34		A	CAPACITOR		C034	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
35		A	CAPACITOR		C035	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
36		A	CAPACITOR		C036	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
37		A	CAPACITOR		C037	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
38		A	CAPACITOR		C038	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
39		A	CAPACITOR		C039	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
40		A	CAPACITOR		C040	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
41		A	CAPACITOR		C041	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
42		A	CAPACITOR		C042	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
43		A	CAPACITOR		C043	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
44		A	CAPACITOR		C044	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
45		A	CAPACITOR		C045	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
46		A	CAPACITOR		C046	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
47		A	CAPACITOR		C047	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
48		A	CAPACITOR		C048	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
49		A	CAPACITOR		C049	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
50		A	CAPACITOR		C050	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
51		A	CAPACITOR		C051	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
52		A	CAPACITOR		C052	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
53		A	CAPACITOR		C053	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
54		A	CAPACITOR		C054	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
55		A	CAPACITOR		C055	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
56		A	CAPACITOR		C056	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
57		A	CAPACITOR		C057	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
58		A	CAPACITOR		C058	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
59		A	CAPACITOR		C059	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
60		A	CAPACITOR		C060	Pending	CAP-POS 150UFM 6.3V TPB Series	164-TPB150M06	
61		A	CAPACITOR		C061	Pending	CAP-POS 150UFM 6.3V TPB Series	164-TPB150M06	
62		A	CAPACITOR		C062	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
63		A	CAPACITOR		C063	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
64		A	CAPACITOR		C064	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
65		A	CAPACITOR		C065	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
66		A	CAPACITOR		C066	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
67		A	CAPACITOR		C067	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
68		A	CAPACITOR		C068	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
69		A	CAPACITOR		C069	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
70		A	CAPACITOR		C070	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
71		A	CAPACITOR		C071	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
72		A	CAPACITOR		C072	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
73		A	CAPACITOR		C073	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
74		A	CAPACITOR		C074	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
75		A	CAPACITOR		C075	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
76		A	CAPACITOR		C076	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
77		A	CAPACITOR		C077	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
78		A	CAPACITOR		C078	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
79		A	CAPACITOR		C079	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
80		A	CAPACITOR		C080	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
81		A	CAPACITOR		C081	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
82		A	CAPACITOR		C082	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
83		A	CAPACITOR		C083	1-107-820-11	CAP-Y5V 0.1UFZ 16V CHIP 0402	122-CC104Z16TZ	
84		A	CAPACITOR		C084	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
85		A	CAPACITOR		C085	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
86		A	CAPACITOR		C086	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
87		A	CAPACITOR		C087	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
88		A	CAPACITOR		C088	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
89		A	CAPACITOR		C089	1-164-933-11	CAP-X7R 220PFJ 50V CHIP 0402	122-CX221J50TZ	
90		A	CAPACITOR		C090	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
91		A	CAPACITOR		C091	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
92		A	CAPACITOR		C092	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
93		A	CAPACITOR		C093	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
94		A	CAPACITOR		C094	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
95		A	CAPACITOR		C095	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
96		A	CAPACITOR		C096	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
97		A	CAPACITOR		C097	1-164-004-11	CAP- Y5V 1UFZ 25V CHIP 0805	122-CY105Z25TX	
98		A	CAPACITOR		C098	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
99		A	CAPACITOR		C099	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
100		A	CAPACITOR		C100	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
101		A	CAPACITOR		C101	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
102		A	CAPACITOR		C102	1-104-760-11	CAP- Y5V 0.47UFZ 50V CHIP 0805	122-CY474Z50TX	
103		A	CAPACITOR		C103	1-104-760-11	CAP- Y5V 0.47UFZ 50V CHIP 0805	122-CY474Z50TX	
104		A	CAPACITOR		C104	1-162-919-11	CAP-COG 22PFJ 50V CHIP 0603	122-CC220J50TV	
105		A	CAPACITOR		C105	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
106		A	CAPACITOR		C106	1-162-927-11	CAP-COG 100PFJ 50V CHIP 0603	122-CC101J50TV	
107		A	CAPACITOR		C107	1-164-004-11	CAP- Y5V 1UFZ 25V CHIP 0805	122-CY105Z25TX	
108		A	CAPACITOR		C108	1-164-505-11	CAP- Y5V 2.2UFZ 16V CHIP 0805	122-CY225Z16TX	
109		A	CAPACITOR		C109	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
110		A	CAPACITOR		C110	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
111		A	CAPACITOR		C111	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
112		A	CAPACITOR		C112	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
113		A	CAPACITOR		C113	1-162-927-11	CAP-COG 100PFJ 50V CHIP 0603	122-CC101J50TV	
114		A	CAPACITOR		C114	1-162-921-11	CAP-COG 33PFJ 50V CHIP 0603	122-CC330J50TV	
115		A	CAPACITOR		C115	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
116		A	CAPACITOR		C116	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
117		A	CAPACITOR		C117	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
118		A	CAPACITOR		C118	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
119		A	CAPACITOR		C119	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
120		A	CAPACITOR		C120	1-162-919-11	CAP-COG 22PFJ 50V CHIP 0603	122-CC220J50TV	
121		A	CAPACITOR		C121	1-162-919-11	CAP-COG 22PFJ 50V CHIP 0603	122-CC220J50TV	
122		A	CAPACITOR		C122	1-164-457-51	CAP-COG 30PFJ 50V CHIP 0603	122-CC300J50TV	
123		A	CAPACITOR		C123	1-164-457-51	CAP-COG 30PFJ 50V CHIP 0603	122-CC300J50TV	
124		A	CAPACITOR		C124	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
125		A	CAPACITOR		C125	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
126		A	CAPACITOR		C126	1-164-004-11	CAP- Y5V 1UFZ 25V CHIP 0805	122-CY105Z25TX	
127		A	CAPACITOR		C127	1-163-021-11	CAP- Y5V 0.1UFZ 50V CHIP 0805	122-CY104Z50TX	
128		A	CAPACITOR		C128	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
129		A	CAPACITOR		C129	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
130		A	CAPACITOR		C130	1-164-004-11	CAP- Y5V 1UFZ 25V CHIP 0805	122-CY105Z25TX	
131		A	CAPACITOR		C131	1-162-970-21	CAP-X7R 0.01UFK 50V CHIP 0603	122-CX103K50TV	
132		A	CAPACITOR		C132	1-131-992-11	CAP- Y5V 0.1UFZ 25V CHIP 0603	122-CY104Z25TV	
133		A	CAPACITOR		C133	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
134		A	CAPACITOR		C134	1-162-923-11	CAP-COG 47PFJ 50V CHIP 0603	122-CC470J50TV	
135		A	CAPACITOR		C135	1-162-923-11	CAP-COG 47PFJ 50V CHIP 0603	122-CC470J50TV	
136		A	CAPACITOR		C136	1-117-370-11	CAP- Y5V 10UFZ 10V CHIP 1206	122-CY106Z10TW	
137		A	CAPACITOR		C137	1-164-505-11	CAP- Y5V 2.2UFZ 16V CHIP 0805	122-CY225Z16TX	
138		A	CAPACITOR		C138	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
139		A	CAPACITOR		C139	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
140		A	CAPACITOR		C140	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
141		A	CAPACITOR		C141	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
142		A	CAPACITOR		C142	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
143		A	CAPACITOR		C143	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
144		A	CAPACITOR		C144	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
145		A	CAPACITOR		C145	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
146		A	CAPACITOR		C146	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
147		A	CAPACITOR		C147	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
148		A	CAPACITOR		C148	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
149		A	CAPACITOR		C149	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
150		A	CAPACITOR		C150	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
151		A	CAPACITOR		C151	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
152		A	CAPACITOR		C152	1-162-964-11	CAP-X7R 1000PFK 50V CHIP 0603	122-CX102K50TV	
153		A	CAPACITOR		C154	Pending	CAP-EC 47UF 25V 6.3*5.5 SAX	162-RV2470M25	
154		A	CONNECTOR		CN001	1-507-834-31	PHONE-JACK SCJ356M0NXS0B00	203-0235601B	
155		A	CONNECTOR		CN002	1-573-792-11	MINI DIN. 4P MH11041-H1	203-0411041	
156		A	CONNECTOR		CN003	1-793-962-21	CONN, DVI-I QH11121-CP0 W/HEX 5 MM	203-11211CP0	
157		A	CONNECTOR		CN004	1-779-745-21	DC-JACK EIAJ-5 (HEC3900-010110)	203-0139001	
158		A	CONNECTOR		CN005	Pending	CONN, 16P 2.0mm JST:S16B-PHDSS	197-S16BPHD	
159		A	CONNECTOR		CN006	Pending	CONN, 5P 2.0mm JST:S5B-PH-SM3-TB	197-S5BPHM3	
160		A	CONNECTOR		CN007	Pending	CONN,41P SMD DF9-41P-1V	197-DF941P1V	
161		A	CAPACITOR		CP01	1-137-939-11	CAP ARRAY 22PF ISO8P4C 1206	137-010220T	
162		A	CAPACITOR		CP02	1-137-939-11	CAP ARRAY 22PF ISO8P4C 1206	137-010220T	
163		A	CAPACITOR		CP03	1-137-939-11	CAP ARRAY 22PF ISO8P4C 1206	137-010220T	
164		A	CAPACITOR		CP04	1-137-939-11	CAP ARRAY 22PF ISO8P4C 1206	137-010220T	
165		A	CAPACITOR		CP05	1-137-939-11	CAP ARRAY 22PF ISO8P4C 1206	137-010220T	
166		A	DIODE		D001	1-807-635-11	DIODE.ZENER RLZ5.1B	150-RLZ5V1B	
167		A	DIODE		D002	1-807-635-11	DIODE.ZENER RLZ5.1B	150-RLZ5V1B	
168		A	DIODE		D003	1-807-635-11	DIODE.ZENER RLZ5.1B	150-RLZ5V1B	
169		A	DIODE		D004	8-719-976-20	DIODE, RLS4148 --LL-34--	151-RLS4148	
170		A	DIODE		D005	1-807-635-11	DIODE.ZENER RLZ5.1B	150-RLZ5V1B	
171		A	DIODE		D006	1-808-077-11	DIODE.SCHOTTKY SB-540 DO-210AD	150-00SB540	
172		A	DIODE		D007	8-719-976-20	DIODE, RLS4148 --LL-34--	151-RLS4148	
173		A	DIODE		D008	8-719-976-20	DIODE, RLS4148 --LL-34--	151-RLS4148	
174		A	DIODE		D009	8-719-902-49	DIODE, BAV70 SOT-23	170-BAV70T	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
175		A	DIODE		D010	8-719-976-20	DIODE, RLS4148 --LL-34--	151-RLS4148	
176		A	FUSE		F001	1-576-491-11	Micro Fuse 1.5A --MQ1.5--	147-BLMQ015	
177		A	FUSE		F002	Pending	Micro Fuse 3.0A --MQ3.0--	147-BLMQ030	
178		A	FUSE		F003	1-576-491-11	Micro Fuse 1.5A --MQ1.5--	147-BLMQ015	
179		A	INDUCTOR		FBA001	Pending	BEAD ARRAY N3216A4Z121T01	282-1206A4Z121	
180		A	INDUCTOR		FBA002	Pending	BEAD ARRAY N3216A4Z121T01	282-1206A4Z121	
181		A	INDUCTOR		FBA003	Pending	BEAD ARRAY N3216A4Z121T01	282-1206A4Z121	
182		A	INDUCTOR		FBA004	Pending	BEAD ARRAY N3216A4Z121T01	282-1206A4Z121	
183		A	INDUCTOR		FBA005	Pending	BEAD ARRAY N3216A4Z121T01	282-1206A4Z121	
184		A	IC		IC001	8-759-426-55	IC CMOS, 74HC4066 SO-14	160-HC4066T	
185		A	IC		IC002	Pending	IC Regulator, SI9181-25 2.5V TSSOP-8	160-918125T	
186		A	IC		IC003	8-759-478-64	IC, TDA7053A-N2 DIP-16	160-07053A0	
187		A	IC		IC004	Pending	IC Regulator, SI9181-33 3.3V TSSOP-8	160-918133T	
188		A	IC		IC005	8-759-712-43	MTV212M PLCC-44	160-MTV212M	
189		A	IC		IC005	Pending	F/W VER: V010 C/S	610-5020V01	
190		A	IC		IC005	Pending	IC, Socket SMD PLCC-44	197-0448111	
191		A	IC		IC006	8-759-011-65	IC, 74HC4053 SOIC	160-HC4053T	
192		A	IC		IC007	8-759-527-77	IC, EEPROM M24C16-MN6 SOIC	160-024016T	
193		A	IC		IC008	8-759-541-69	IC, SI786CG SSOP-28	160-SI786CG	
194		A	IC		IC009	8-759-442-20	IC, EEPROM 24LC21BT-SN SOIC	160-024021T	
195		A	IC		IC010	Pending	IC Regulator, SI9181-33 3.3V TSSOP-8	160-918133T	
196		A	IC		IC011	8-759-582-37	IC Regulator, PQ2TZ15	160-PQ2TZ15	
197		A	IC		IC012	8-759-011-65	IC, 74HC4053 SOIC	160-HC4053T	
198		A	IC		IC013	8-759-634-77	IC, M51951BML -SOT89-	160-051951T	
199		A	IC		IC014	8-759-467-94	IC, LM358DT SOIC	160-035800T	
200		A	IC		IC015	8-759-033-07	IC, 74F14 SOIC	160-F0140T	
201		A	IC		IC016	8-759-033-19	IC, 74F125 SOIC	160-F1250T	
202		A	IC		IC017	8-759-998-92	IC, LM393DT SOIC	160-039300T	
203		A	IC		IC018	Pending	IC, GM5020 BGA292	160-005020T	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
204		A	IC		IC019	8-759-442-20	IC, EEPROM 24LC21BT-SN SOIC	160-024021T	
205		A	COIL		L001	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
206		A	COIL		L002	1-414-183-11	INDUCTOR-SMD 10UH CSN043B-100M	141-3L043100	
No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
207		A	COIL		L003	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
208		A	COIL		L004	Pending	FILMAC, BMS200	280-NGBMS200	
209		A	COIL		L005	Pending	FILMAC, BMS200	280-NGBMS200	
210		A	COIL		L006	Pending	FILMAC, BMS200	280-NGBMS200	
211		A	COIL		L007	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
212		A	COIL		L008	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
213		A	COIL		L009	Pending	FILMAC, BMS200	280-NGBMS200	
214		A	COIL		L010	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
215		A	COIL		L011	1-469-977-11	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
216		A	COIL		L012	1-469-975-11	INDUCTOR-SMD 15UH CSN105B-150M	141-3L105150	
217		A	COIL		L013	1-469-975-11	INDUCTOR-SMD 15UH CSN105B-150M	141-3L105150	
218		A	COIL		L014	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
219		A	COIL		L015	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
220		A	COIL		L016	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
221		A	COIL		L017	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
222		A	COIL		L018	1-400-044-11	SELMAC, STC104B	280-STC104B	
223		A	COIL		L019	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
224		A	COIL		L020	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
225		A	COIL		L021	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
226		A	COIL		L022	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
227		A	COIL		L023	1-216-296-11	RES, CHIP +-5% 0R 1206	100-CR00JT08	
228		A	COIL		L024	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
229		A	COIL		L025	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
230		A	COIL		L026	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
231		A	COIL		L027	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
232		A	COIL		L028	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
233		A	COIL		L029	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
234		A	COIL		L030	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
235		A	COIL		L031	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
236		A	COIL		L032	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
237		A	COIL		L033	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
238		A	COIL		L034	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
239		A	COIL		L035	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
240		A	COIL		L036	Pending	FERRITE BEAD, FCM1608K-301T03	143-B1608301	
241		A	COIL		L037	1-469-977-11	FERRITE BEAD HCB3216K-501T30	143-NG3216501	
242		A	TRANSISTOR		Q001	8-729-054-62	MOSFET-N,SI4808DY SO-8	160-SI4808DY	
243		A	TRANSISTOR		Q002	8-729-054-62	MOSFET-N,SI4808DY SO-8	160-SI4808DY	
244		A	TRANSISTOR		Q004	8-729-054-61	TRS,SST3904 T-116 SOT-23	170-SST3904	
245		A	TRANSISTOR		Q005	8-729-044-58	MOSFET-N,SI2304DS SOT-23	160-SI2304DS	
246		A	TRANSISTOR		Q006	8-729-054-61	TRS,SST3904 T-116 SOT-23	170-SST3904	
247		A	TRANSISTOR		Q007	8-729-054-61	TRS,SST3904 T-116 SOT-23	170-SST3904	
248		A	TRANSISTOR		Q008	8-729054-60	TRS,SST3906 T-116 SOT-23	170-SST3906	
249		A	TRANSISTOR		Q009	8-729-054-61	TRS,SST3904 T-116 SOT-23	170-SST3904	
250		A	RESISTOR		R001	1-216-821-11	RES,CHIP +-5% 1K 0603	100-C102JT16	
251		A	RESISTOR		R002	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
252		A	RESISTOR		R003	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
253		A	RESISTOR		R004	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
254		A	RESISTOR		R005	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
255		A	RESISTOR		R006	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
256		A	RESISTOR		R007	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
257		A	RESISTOR		R008	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
258		A	RESISTOR		R009	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
259		A	RESISTOR		R010	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
260		A	RESISTOR		R011	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
261		A	RESISTOR		R012	1-216-821-11	RES,CHIP +-5% 1K 0603	100-C102JT16	
262		A	RESISTOR		R013	1-216-835-11	RES,CHIP +-5% 15K 0603	100-C153JT16	
263		A	RESISTOR		R014	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
264		A	RESISTOR		R015	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
265		A	RESISTOR		R016	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
266		A	RESISTOR		R019	1-216-845-11	RES,CHIP +-5% 100K 0603	100-C104JT16	
267		A	RESISTOR		R020	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
268		A	RESISTOR		R021	1-216-821-11	RES,CHIP +-1% 1K 0603	100-C1001IT16	
269		A	RESISTOR		R023	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
270		A	RESISTOR		R024	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
271		A	RESISTOR		R025	1-216-845-11	RES,CHIP +-5% 100K 0603	100-C104JT16	
272		A	RESISTOR		R026	1-244-284-11	RES, CHIP +-5% 0.045R 1206	100-C457JT08	
273		A	RESISTOR		R027	1-244-284-11	RES, CHIP +-5% 0.045R 1206	100-C457JT08	
274		A	RESISTOR		R030	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
275		A	RESISTOR		R031	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
276		A	RESISTOR		R032	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
277		A	RESISTOR		R033	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
278		A	RESISTOR		R034	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
279		A	RESISTOR		R035	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
280		A	RESISTOR		R036	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
281		A	RESISTOR		R037	1-216-825-11	RES,CHIP +-5% 2.2K 0603	100-C222JT16	
282		A	RESISTOR		R038	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
283		A	RESISTOR		R039	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
284		A	RESISTOR		R041	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
285		A	RESISTOR		R042	1-216-801-11	RES,CHIP +-5% 22R 0603	100-C220JT16	
286		A	RESISTOR		R043	1-216-624-11	RES,CHIP +-5% 75R 0603	100-C750JT16	
287		A	RESISTOR		R044	1-216-624-11	RES,CHIP +-5% 75R 0603	100-C750JT16	
288		A	RESISTOR		R045	1-216-624-11	RES,CHIP +-5% 75R 0603	100-C750JT16	
289		A	RESISTOR		R046	1-216-801-11	RES,CHIP +-5% 22R 0603	100-C220JT16	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
290		A	RESISTOR		R047	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
291		A	RESISTOR		R048	1-216-850-11	RES,CHIP +-5% 270K 0603	100-C274JT16	
292		A	RESISTOR		R049	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
293		A	RESISTOR		R050	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
294		A	RESISTOR		R051	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
295		A	RESISTOR		R052	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
296		A	RESISTOR		R053	1-216-817-11	RES,CHIP +-5% 470R 0603	100-C471JT16	
297		A	RESISTOR		R054	1-216-817-11	RES,CHIP +-5% 470R 0603	100-C471JT16	
298		A	RESISTOR		R055	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
299		A	RESISTOR		R056	1-216-830-11	RES,CHIP +-5% 5.6K 0603	100-C562JT16	
300		A	RESISTOR		R057	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
301		A	RESISTOR		R058	1-216-801-11	RES,CHIP +-5% 22R 0603	100-C220JT16	
302		A	RESISTOR		R059	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
303		A	RESISTOR		R060	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
304		A	RESISTOR		R061	Pending	FERRITE BEAD, FCM1608K-101T06	143-B1608101	
305		A	RESISTOR		R062	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
306		A	RESISTOR		R063	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
307		A	RESISTOR		R064	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
308		A	RESISTOR		R065	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
309		A	RESISTOR		R066	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
310		A	RESISTOR		R067	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
311		A	RESISTOR		R068	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
312		A	RESISTOR		R069	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
313		A	RESISTOR		R071	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
314		A	RESISTOR		R072	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
315		A	RESISTOR		R073	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
316		A	RESISTOR		R074	1-216-821-11	RES,CHIP +-5% 1K 0603	100-C102JT16	
317		A	RESISTOR		R075	1-216-821-11	RES,CHIP +-5% 1K 0603	100-C102JT16	
318		A	RESISTOR		R076	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
319		A	RESISTOR		R077	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
320		A	RESISTOR		R078	1-216-833-11	RES,CHIP +-5% 10K 0603	100-C103JT16	
321		A	RESISTOR		R079	1-216-603-11	RES, CHIP +-5% 10R 0805	100-C100JT10	
322		A	RESISTOR		R080	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
323		A	RESISTOR		R081	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
324		A	RESISTOR		R082	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
325		A	RESISTOR		R083	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
326		A	RESISTOR		R084	1-216-864-11	RES, CHIP +-5% 0R 0603	100-CR00JT16	
327		A	RESISTOR		R085	1-216-864-11	RES, CHIP +-5% 0R 0603	100-CR00JT16	
328		A	RESISTOR		R086	1-216-841-11	RES,CHIP +-5% 47K 0603	100-C473JT16	
329		A	RESISTOR		R087	1-216-825-11	RES,CHIP +-5% 2.2K 0603	100-C222JT16	
330		A	RESISTOR		R088	1-216-825-11	RES,CHIP +-5% 2.2K 0603	100-C222JT16	
331		A	RESISTOR		R089	1-216-864-11	RES, CHIP +-5% 0R 0603	100-CR00JT16	
332		A	RESISTOR		R090	1-216-829-11	RES,CHIP +-5% 4.7K 0603	100-C472JT16	
333		A	RESISTOR		R091	1-216-817-11	RES,CHIP +-5% 470R 0603	100-C471JT16	
334		A	RESISTOR		R092	1-216-835-11	RES,CHIP +-5% 15K 0603	100-C153JT16	
335		A	RESISTOR		R093	1-216-821-11	RES,CHIP +-5% 1K 0603	100-C102JT16	
336		A	RESISTOR		R094	1-216-864-11	RES, CHIP +-5% 0R 0603	100-CR00JT16	
337		A	RESISTOR		R095	1-216-817-11	RES,CHIP +-5% 470R 0603	100-C471JT16	
338		A	RESISTOR		R096	1-216-817-11	RES,CHIP +-5% 470R 0603	100-C471JT16	
339		A	RESISTOR		R097	1-216-811-11	RES,CHIP +-5% 150R 0603	100-C151JT16	
340		A	RESISTOR		R098	1-216-864-11	RES, CHIP +-5% 0R 0603	100-CR00JT16	
341		A	RESISTOR		R099	1-216-809-11	RES,CHIP +-5% 100R 0603	100-C101JT16	
342		A	RESISTOR		RP001	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
343		A	RESISTOR		RP002	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
344		A	RESISTOR		RP003	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
345		A	RESISTOR		RP004	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
346		A	RESISTOR		RP005	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
347		A	RESISTOR		RP006	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	

No.	#	Board	Type	! / *	Ref. No.	Part No.	Description	Remarks	Defference
348		A	RESISTOR		RP007	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
349		A	RESISTOR		RP008	1-233-415-11	RN, CHIP ARRAY 10K ISO 8P4R 1206	166-010103T	
350		A	SWITCH		SW001	Pending	SLIDE SW IP2T SK22H09G9	202-K2209G9	
351		A	COIL		T001	Pending	COMMON MODE CHOKE 6.75UH/3A SBJ-0308W	142-TN0308W	
352		A	CRYSTAL		X001	Pending	CRYSTAL 24.000MHZ HC-49/S	131-24000001	
353		A	CRYSTAL		X002	1-795-093-11	CRYSTAL 11.0592MHZ HC-49/S	131-11059201	
354		H	CONNECTOR		CN801	Pending	CONN, 11P 2.0mm JST:B11B-PH-K	197-B11BPHK	
355		H	DIODE		D801	8-719-083-12	LED BI-POLAR 3mm 1259-7GYC/S418	153-12597G418	
356		H	SWITCH		S801	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
357		H	SWITCH		S802	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
358		H	SWITCH		S803	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
359		H	SWITCH		S804	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
360		H	SWITCH		S805	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
361		H	SWITCH		S806	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
362		H	SWITCH		S807	1-571-404-11	TACT SW H:7.0mm TSAC-2	202-HJTSAC2	
363		J2	CAPACITOR		C701	1-115-864-51	CAP- EC 10UFZ 16V SS 4*7 L/L	120-10616SS	
364		J2	CAPACITOR		C702	1-115-864-51	CAP- EC 10UFZ 16V SS 4*7 L/L	120-10616SS	
365		J2	CONNECTOR		CN701	1-815-345-12	PHONE JACK GREEN SCJ-0348P0	203-348P0CS2G	
366		J2	CONNECTOR		CN702	Pending	CONN, 5P 2.0mm JST:B5B-PH-K	197-B5BPHK	
367		J2	CONNECTOR		CN703	Pending	CONN, 4P 2.0mm JST:S4B-PH-K	197-S4BPHK	
368		J2	RESISTOR		R701	1-215-401-12	R/C 150 1/6W J T26	100-151	
369		J2	RESISTOR		R702	1-215-401-13	R/C 150 1/6W J T26	100-151	