SCHEMATIC DIAGRAMS

MONITOR WITH DVD RECEIVER

KW-NSX600A
KW-NSX600E
KW-NSX600EE
KW-NSX600EU
KW-NSX600J
KW-NSX600U
KW-NSX600UI

■ PRECAUTIONS ON SCHEMATIC DIAGRAMS

- Due to the improvement in performance, some part numbers shown in the circuit diagrams may not agree with those indicated in the Parts List.
- The parts numbers, values and rated voltage etc. in the Schematic Diagrams are for reference only.
- Since the circuit diagrams are standard ones, the circuits and circuit constants may be subject to change for improvement without any notice.

■ PRECAUTIONS ON PARTS LIST

- The parts identified by the ⚠ symbol are critical for safety. Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.
- When ordering chips, screws etc., place bulk orders (unit of tens) whenever possible to improve shipping efficiency.
- There are cases where the actual implemented parts in the sets and the service parts are different. When ordering parts, make sure to refer to the Parts List.

■ PRECAUTIONS ON SERVICE

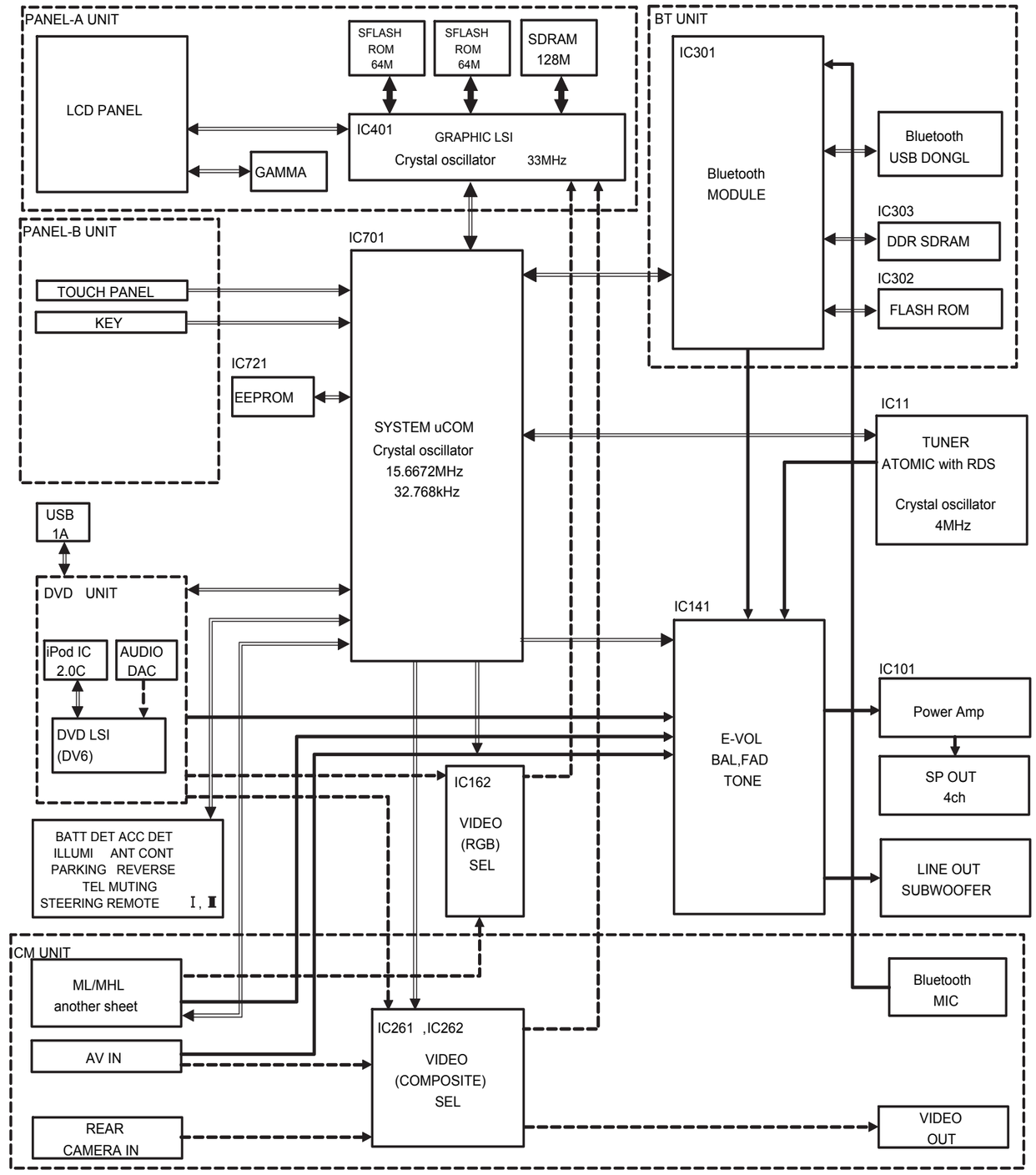
Certain parts of the power circuits and the GNDs differ according to the models. Care must be taken for the following points as the differences are indicated separately in the LIVE GND (⏚) and the ISOLATED (NEUTRAL) GND (⊥).

1. Do not touch the LIVE GND, or do not touch the LIVE GND and the ISOLATED (NEUTRAL) GND at the same time. It may cause an electric shock.
   Before pulling out the chassis or other parts, make sure to pull out the power cord from the wall outlet first.
2. Do not short circuit between the LIVE GND and ISOLATED (NEUTRAL) GND, or never measure the LIVE GND and ISOLATED (NEUTRAL) GND at the same time using measuring instruments (oscilloscope, etc.). It may blow fuses or damage other parts.

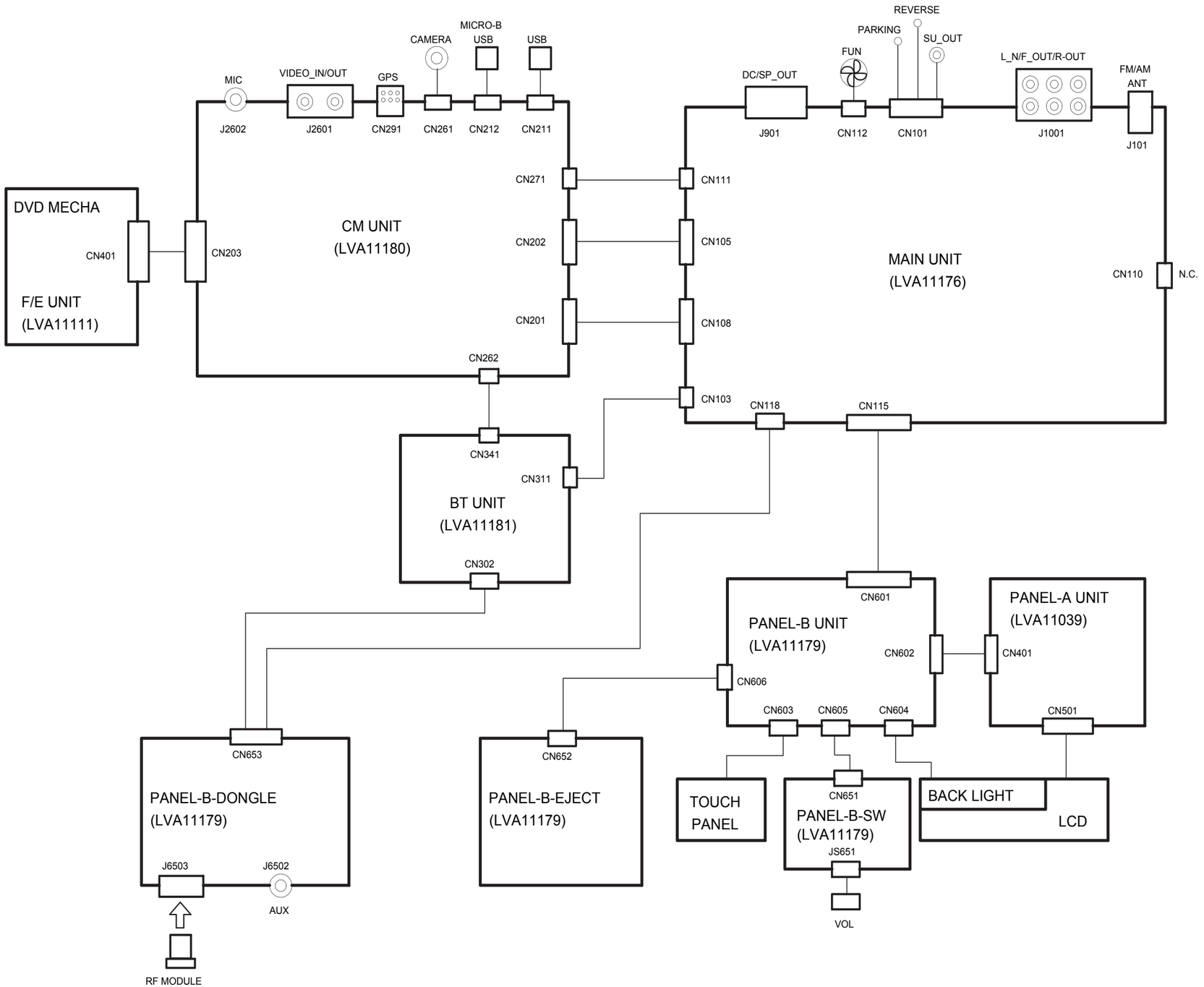
■ DEVIATION TOLERANCE RANGE

DEVIATION TOLERANCE RANGE									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

BLOCK DIAGRAM



WIRING DIAGRAM



MAIN UNIT-1 (LVA11176-xxA)

*19 TUNER RF

	J,Ver	EXcept_J,Ver
R1	NI	NRSA83J-0R0X
K1	NQR0269-026X	NI

*12 FRONT_AV-IN

	KW-NSX600	KW-NSX700
R1161/R1261/R1361 R1162/R1262/R1362	NRSA6AJ-473W	NI
R1602/R1603	NRSA6AJ-103W	NI
C1602	NCBA1HK-102W	NI
C1603/C1604	QEKJ1CM-226Z	NI
IC161	TCR4HCT40S5AF7X	NI
C1164/C1264/C1364	NCB31CK-105X	NI
R1164/R1264/R1364	NI	NRSA6AJ-0R0W
C1165/C1265/C1365	NCB31CK-105X	NI

*2 2nd_Audio

	KW-NSX600	KW-NSX700
J1003	NI	QNS0307-002
C1141/C1241	NI	NDC31HJ-101X
C1142/C1242	NI	NCB2JK-475X
R1141/R1241	NI	NRSA02J-101X
R1142/R1242	NI	NRSA63J-473X
R1143/R1243	NI	NRSA6AJ-222W
R1144/R1244	NI	NRSA6AJ-471W
Q1341	NI	IMX9-W ⇒ KTC8121T-X ⇒ DMC20402-W
D1504	NI	MC2838-X
Q1504	NI	LTA014EEB-X ⇒ DRA9114E-X
Q1508	NI	LTC043ZEB-X ⇒ DRC9143Z-X

*25

	KW-NSX700	KW-NSX600
C1941	NDC31HJ-151X	NI
C1951	NDC31HJ-151X	NI

*14 P.AMP_INPUT

	KW-NSX700	KW-NSX600
C1103 C1203 C1113 C1213	QFVF1HJ-224Z	NI
C1106 C1206 C1116 C1216	NI	NCB31CK-224X

*28 FOR IMMUNITY TEST (FOR UP Ver.)

	KW-NSX700 UP	OTHERS
C1158 C1268	NDC31HJ-221W	NI

*POWER CODE ASSY

	J,UI,U,UP,A	E,EU,EE
CAR CABLE	QAM1351-002	QAM1352-002

*5 AUTO ANTENNA

	J,EU,UI,U,UP,A	E,EE
D1521	MBRX130-TP-X	NI
D1922	MBRX130-TP-X	NI
C1521	NI	NI
R1921	NRSA022J-472X	NI

*20 E-mark

	J,EE,U,UP,A	E,EU,UI
D902	NI	GS1J,LTP-X

*24 C901

	KW-NSX600 KW-NSX700	
C901	QEJ0934-338	

*8 STEERING WHEEL REMOTE (OE REMOTE)

	KW-NSX600 KW-NSX700	
B1971	NRS181J-152X	
D1971	DZ2J062M0-X	

*1C161_LOGIC

A/B/C	
L	0X,0Y,0Z
H	1X,1Y,1Z

NOTES:

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION — DVD PLAYBACK MODE WITH DVD TEST DISC V-537.
   ( ) FM MODE, [ ] AM MODE.
2. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V ±5% CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHMS.
   ALL CAPACITANCE VALUES ARE IN uF(mF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).
   F — FILM CAPACITOR.
3. "M" OR "OPEN" STANDS FOR NOT MOUNTED PARTS

LTC044EEB, RT1N441U	DRC9144E	LTC014EEB, RT1N141U	DRC9114E	LTC043ZEB, RT1N436U	DRC9143Z	LTC014YEB, RT1N144U	DRC9114Y
LTA044EEB, RT1P441U	DRA9144E	LTA014EEB, RT1P141U	DRA9114E	LTA043ZEB, RT1P436U	DRA9143Z	LTA014YEB, RT1P144U	DRA9114Y

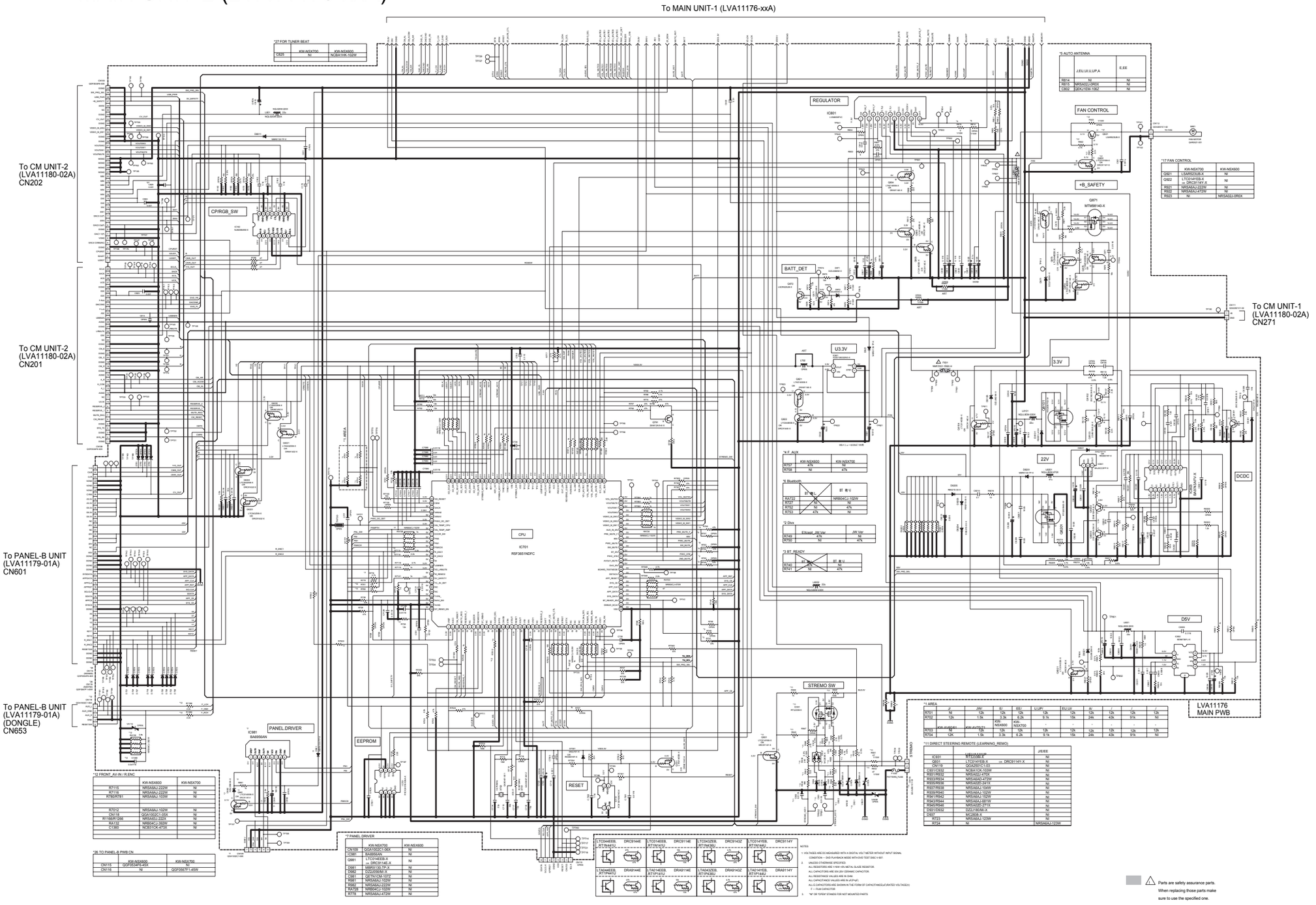
To BT UNIT (LVA11181-02A) CN311

To MAIN UNIT-2 (LVA11176-xxA)

LVA11176 MAIN PWB

Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

MAIN UNIT-2 (LVA11176-xxA)



CM UNIT-1 (LVA11180-02A)

To MAIN UNIT-2 (LVA11176-xxA) CN111

To BT UNIT (LVA11181-02A) CN341

USB 5V

MICRO_USB 5V

D5V

D3.3V

1.25V

GPS MODULE

IC211 MN864779KT HDMI RECEIVER

IC212 SII1292CNUC MHL TO HDMI

IC213 TS3USB3200RSVX Hi-Speed SW

To MICRO-B USB

To USB

To CM UNIT-2 (LVA11180-02A)

To CM UNIT-2 (LVA11180-02A)

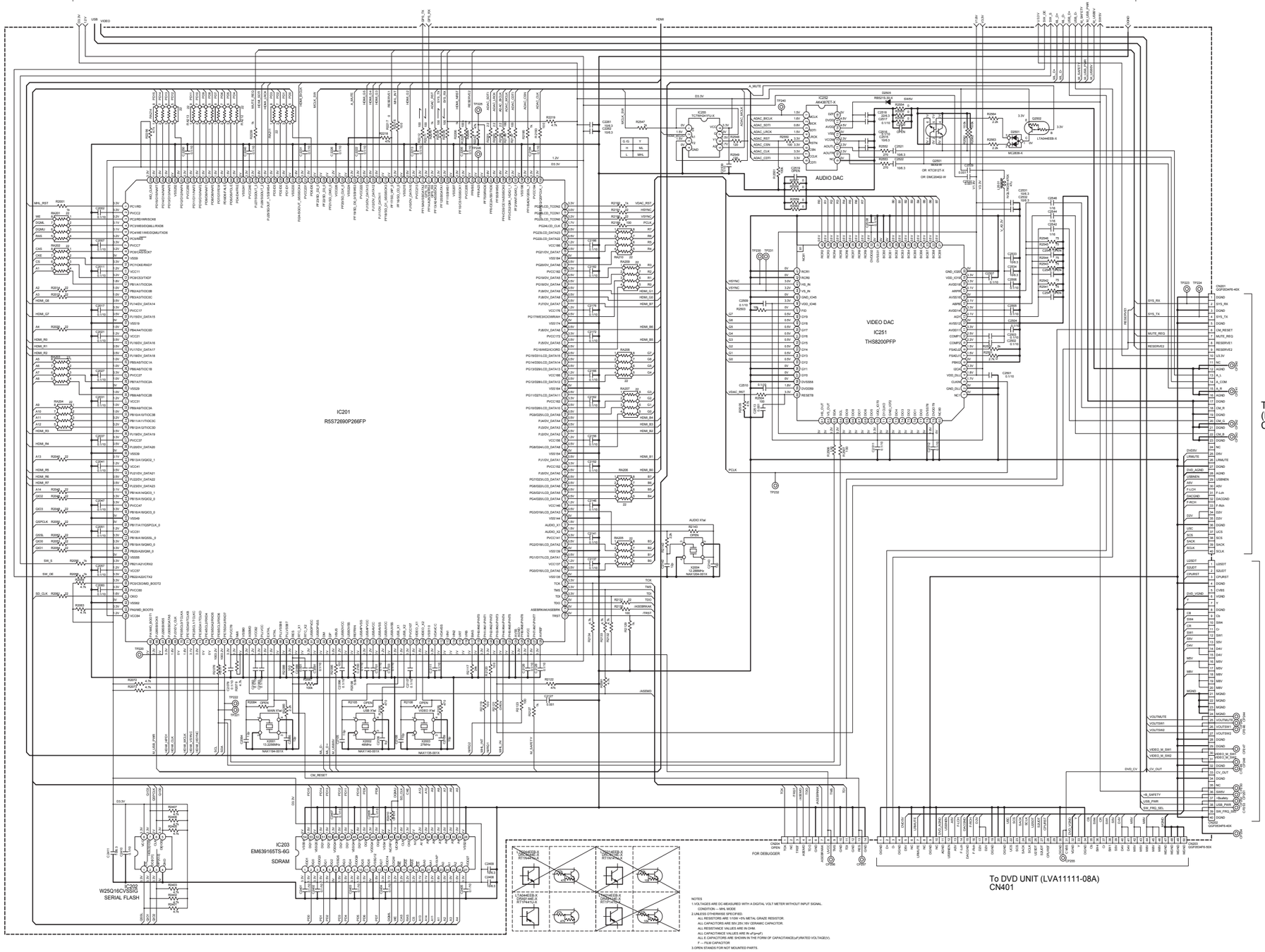
NOTES
1.VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION — MHL MODE
2.UNLESS OTHERWISE SPECIFIED,
ALL RESISTORS ARE 1/16W ±5% METAL GRAZE RESISTOR.
ALL CAPACITORS ARE 50V,20% Y5V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(μF).
ALL E CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).
F — FILM CAPACITOR
3.OPEN STANDS FOR NOT MOUNTED PARTS.

SEL1	SEL2	CONNECTION
L	L	D+/- to USB<-> ID_COM to ID_USB
L	H	D+/- to USB<-> ID_COM to D+/- MHL
H	L	D+/- to MHL<-> ID_COM to ID_USB
H	H	D+/- to MHL<-> ID_COM to ID_MHL

Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

CM UNIT-2 (LVA11180-02A)

To CM UNIT-1 (LVA11180-02A)

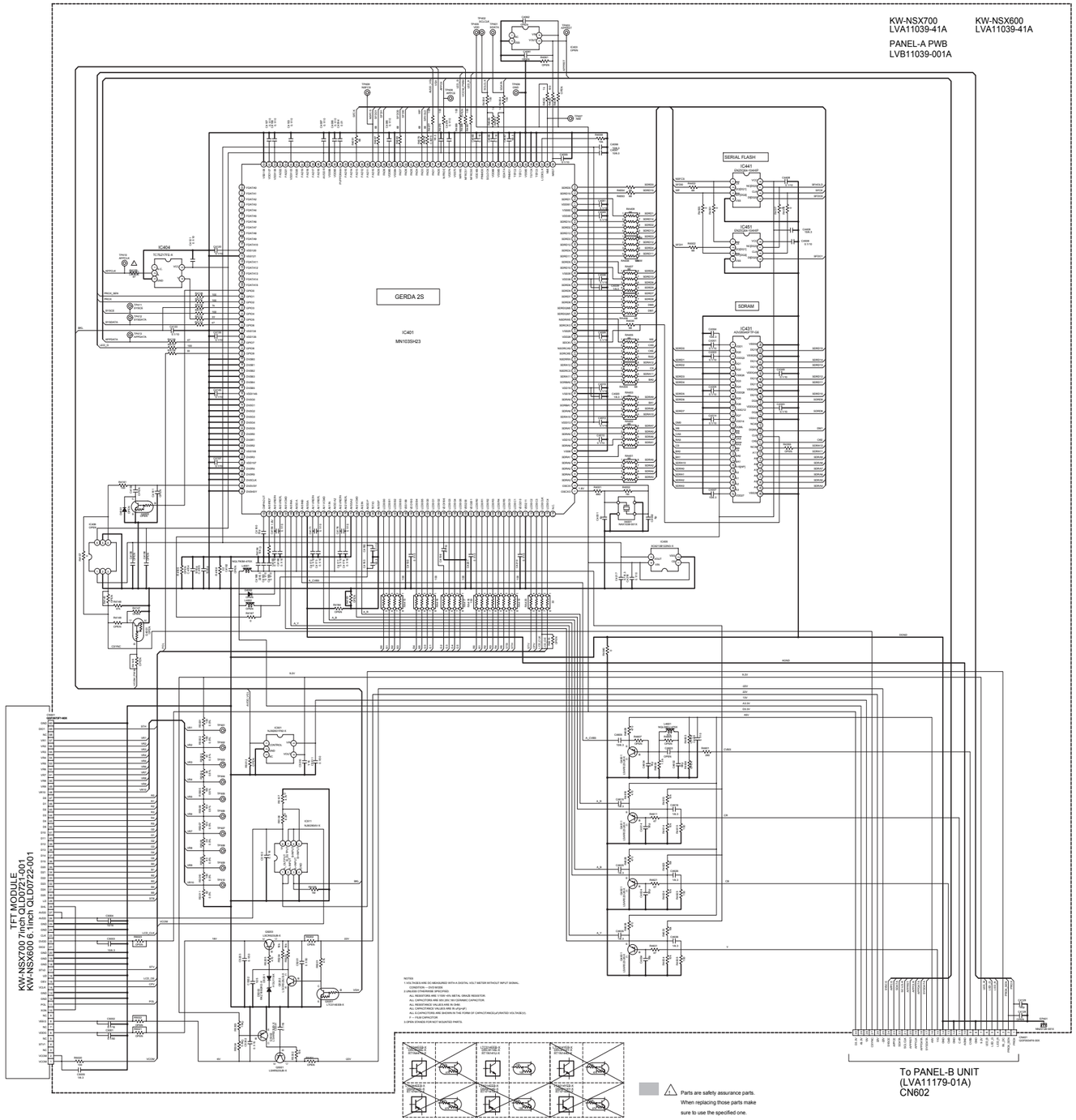


PANEL-A UNIT (LVA11039-42A)

KW-NSX700
LVA11039-41A

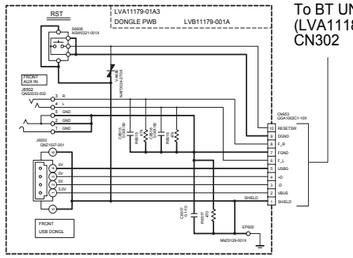
KW-NSX600
LVA11039-41A

PANEL-A PWB
LVB11039-001A



PANEL-B UNIT (LVA11179-01A)

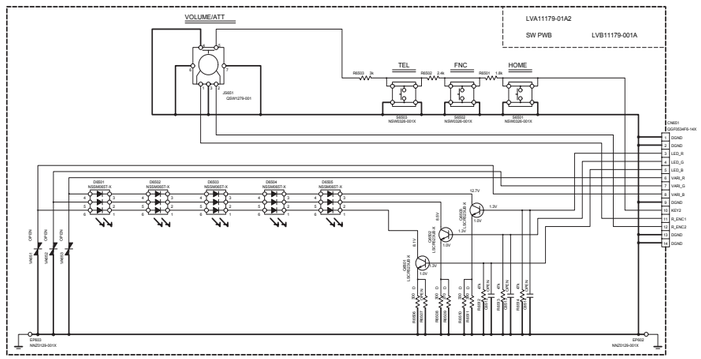
PANEL-B UNIT (LVA11179-01A) (DONGLE)



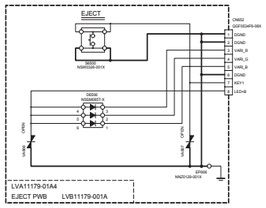
To MAIN UNIT-2 (LVA11176-xxA) CN118

To BT UNIT (LVA11181-02A) CN302

PANEL-B UNIT (LVA11179-01A) (SW)

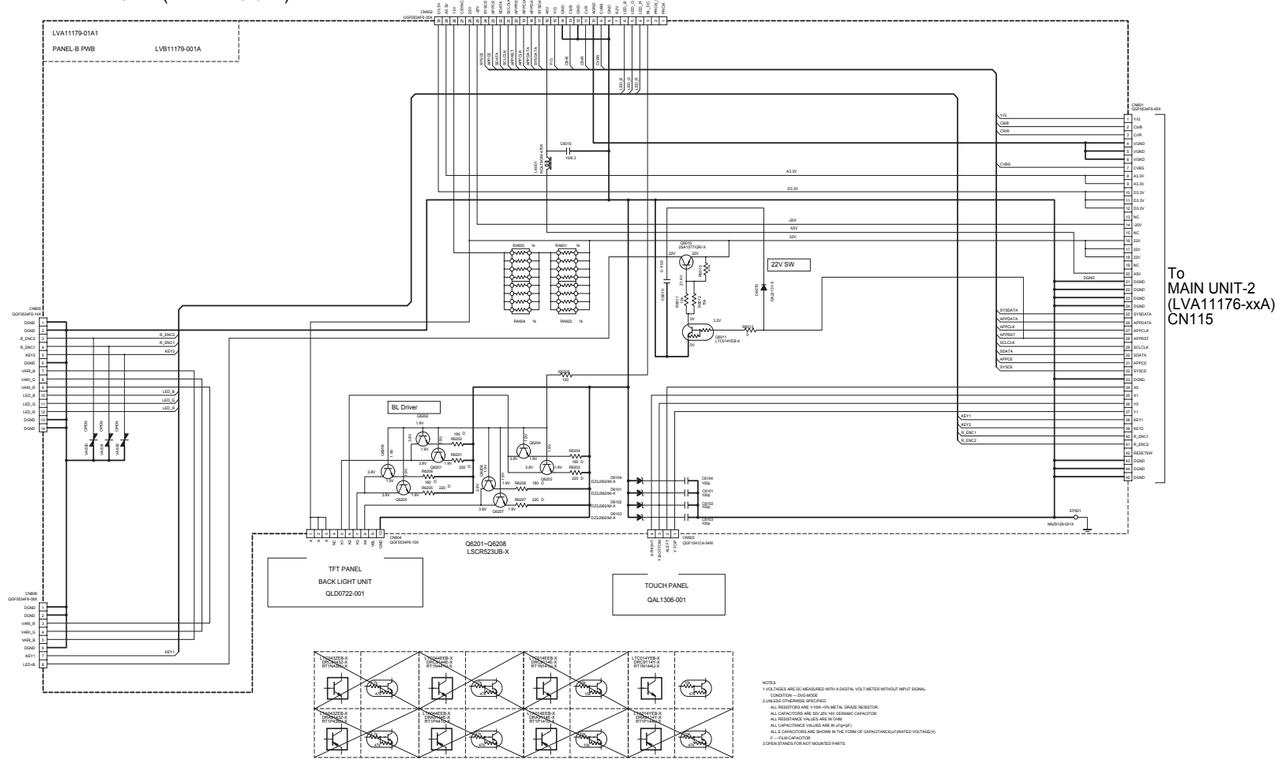


PANEL-B UNIT (LVA11179-01A) (EJECT)



PANEL-B UNIT (LVA11178-01A)

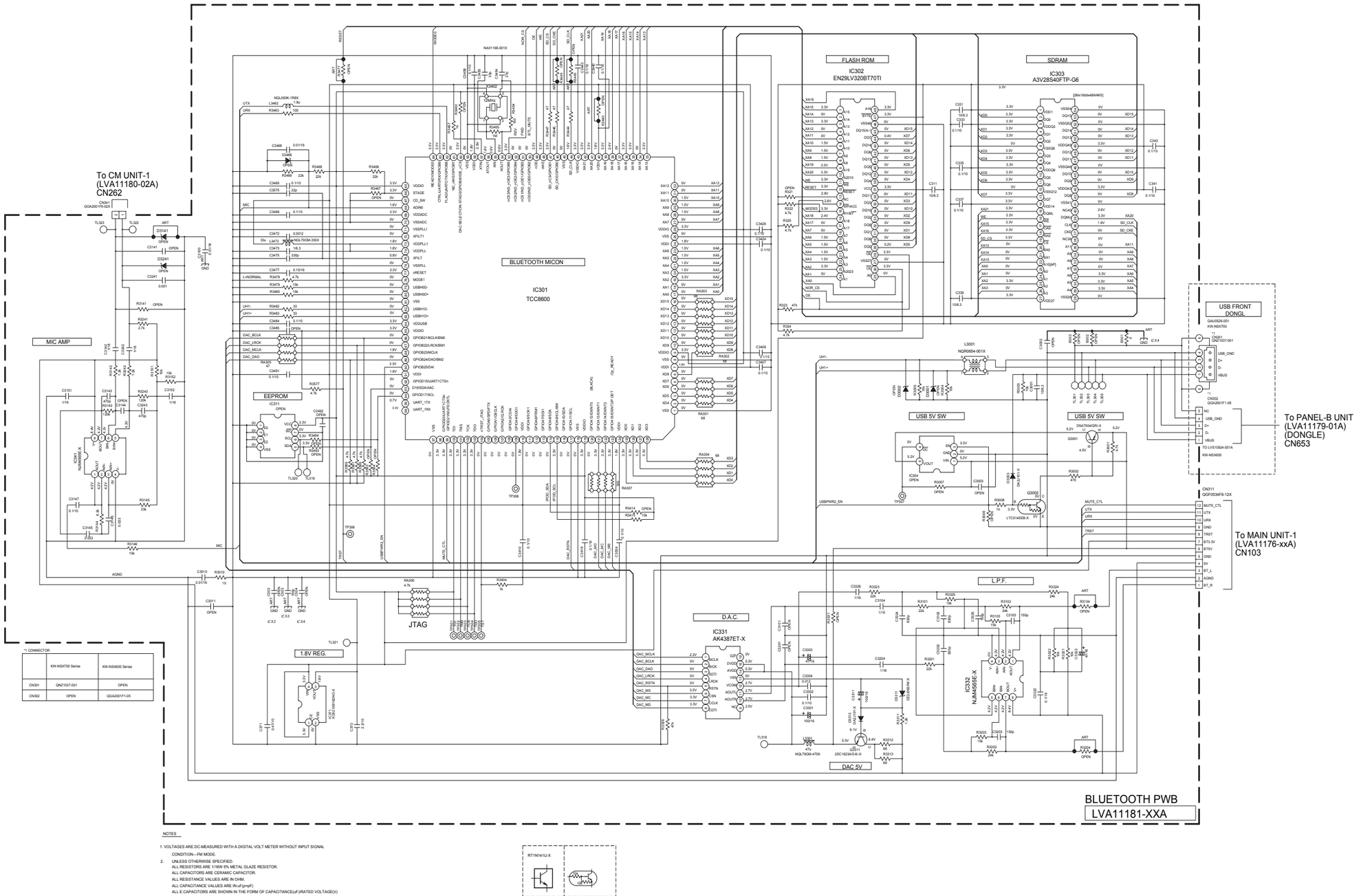
To PANEL-A UNIT (LVA11039-42A) CN401



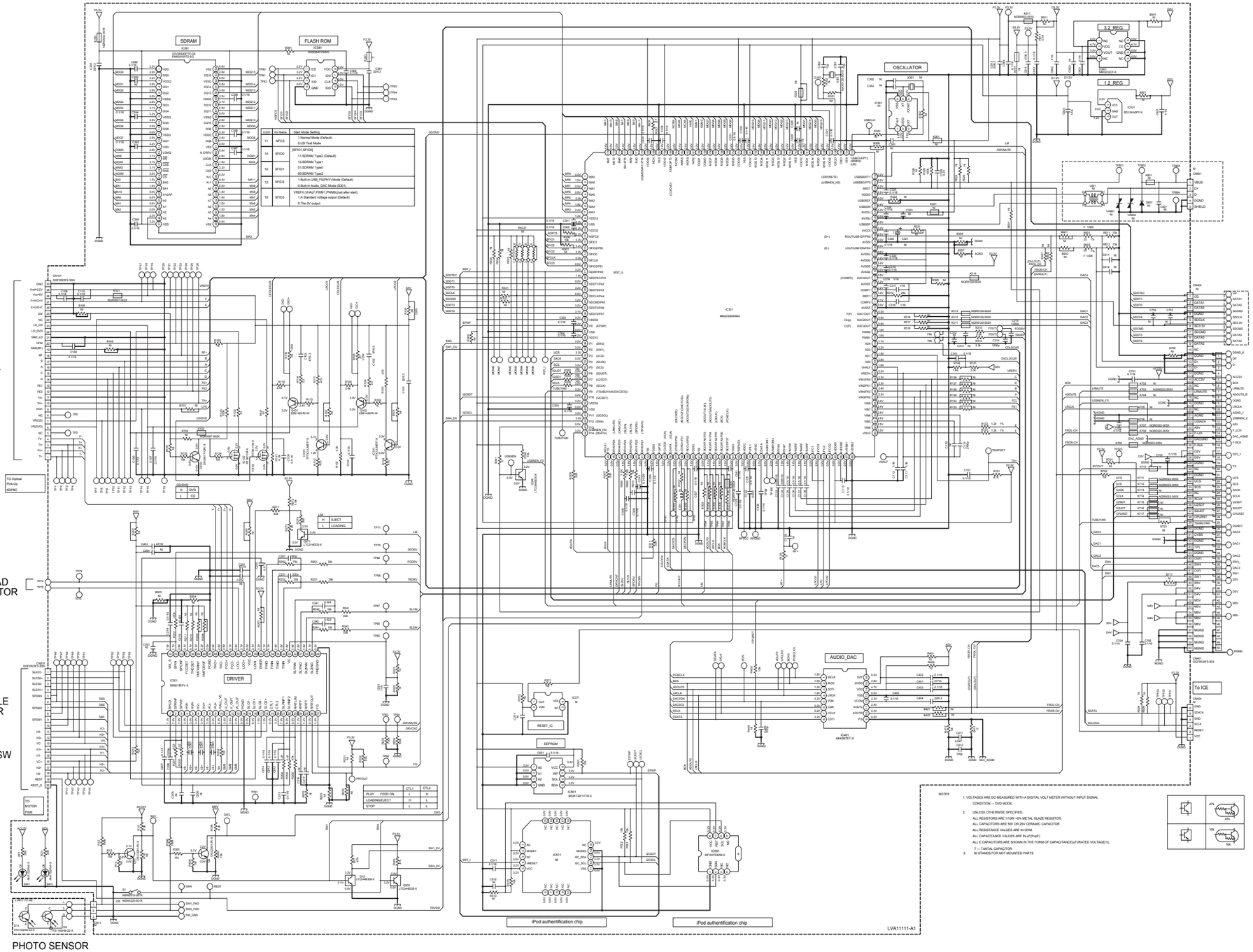
To MAIN UNIT-2 (LVA11176-xxA) CN115

NOTES:
1.VOLTAGES ARE DC MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION — DVD MODE
2.UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GRAZE RESISTOR.
ALL CAPACITORS ARE 50V, 20% X5R CERAMIC CAPACITOR.
ALL INDUCTANCE VALUES ARE IN uH.
ALL CAPACITANCE VALUES ARE IN uF(1uF).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V).
F — FILM CAPACITOR
3.OPEN STANDS FOR NOT MOUNTED PARTS.

BT UNIT (LVA11181-02A)



DVD UNIT (LVA11111-08A)



IC001	Pin Name	Start Mode Setting
11	NFC3	1:Normal Mode (Default) 0:LSI Test Mode
14	SFIO0	[SFIO1,SFIO0] 11:SDRAM Type2 (Default) 10:SDRAM Type1 01:SDRAM Type0 00:SDRAM Type3
12	SFIO1	
13	SFIO2	1:Built-in USB_FS(PHY) Mode (Default) 0:Built-in Audio_DAC Mode (IDE01)
16	SFIO3	VREFH (AVA_PWM) PWM(Low after start) 1:A Standard voltage output (Default) 0:The 0V output

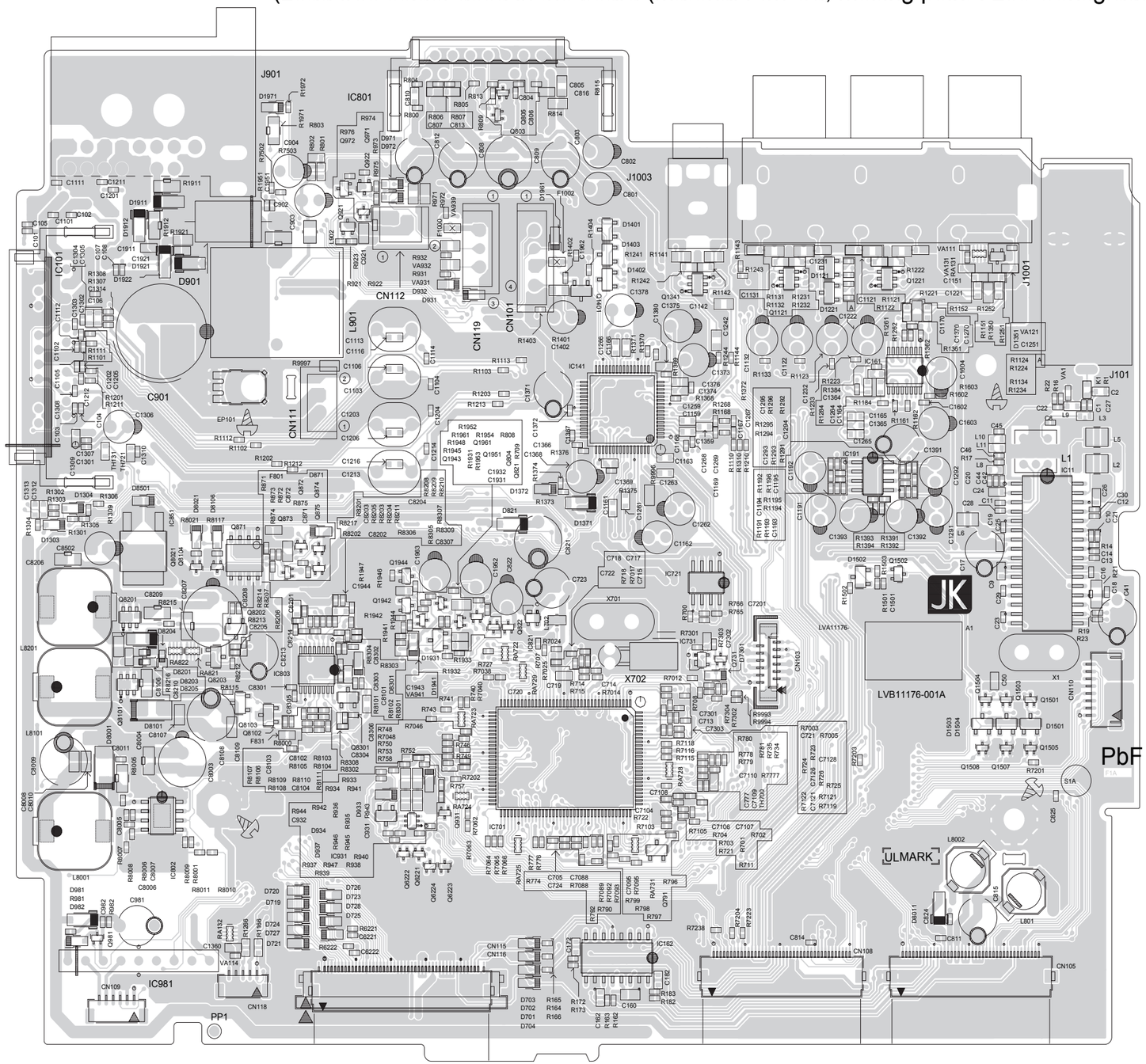
	PLAY	FEED ON	CTL1	CTL2
	LOADING/EJECT		H	L
	STOP		L	L

NOTES

1. VOLTAGES ARE DC MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL
   CONDITION --- DVD MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/10W +5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM.
   ALL CAPACITANCE VALUES ARE IN uF(P=pF)
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
   T --- TANTAL CAPACITOR
3. NI STANDS FOR NOT MOUNTED PARTS

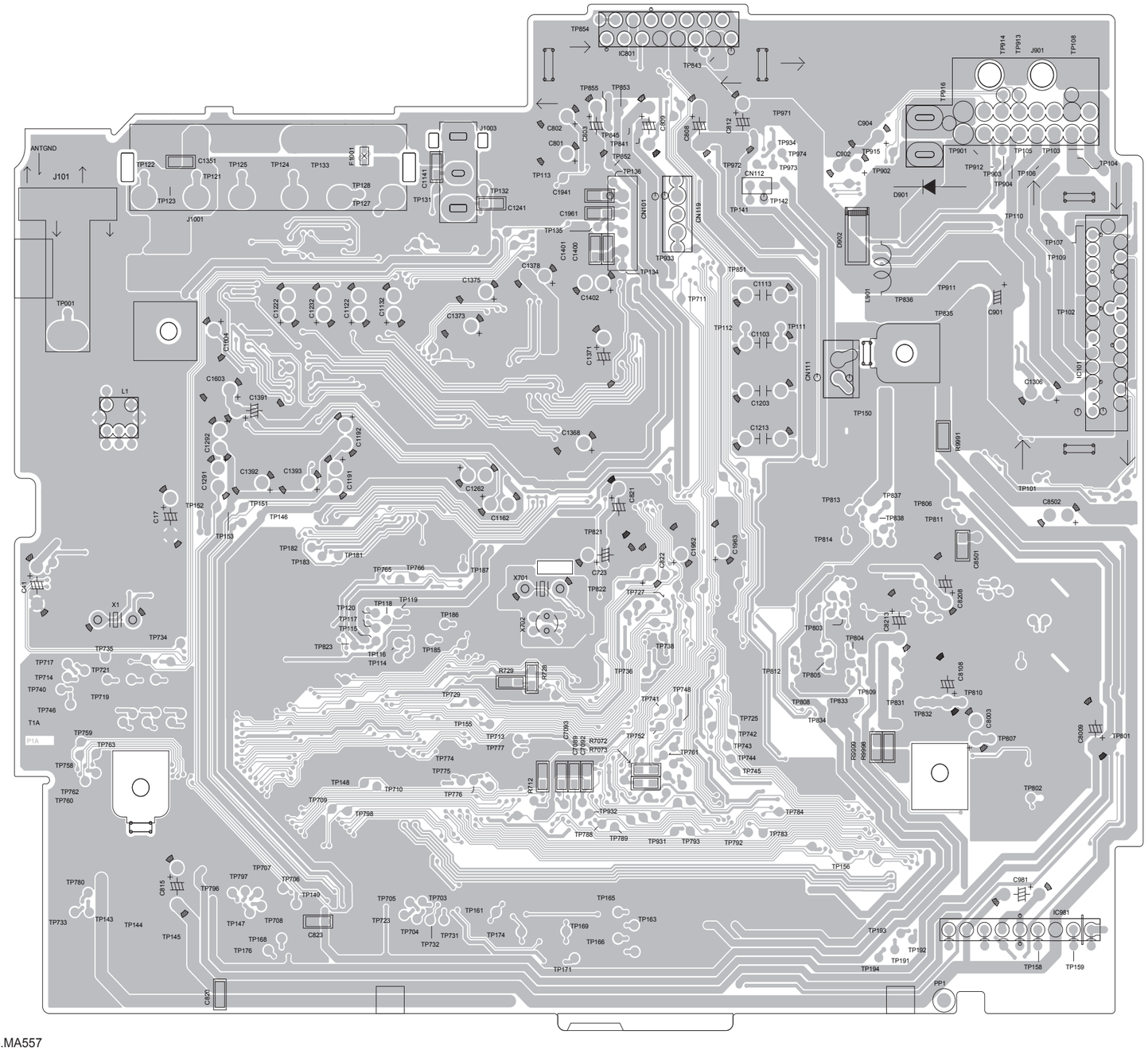
MAIN UNIT LVA11176-xxA (LVB11176-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



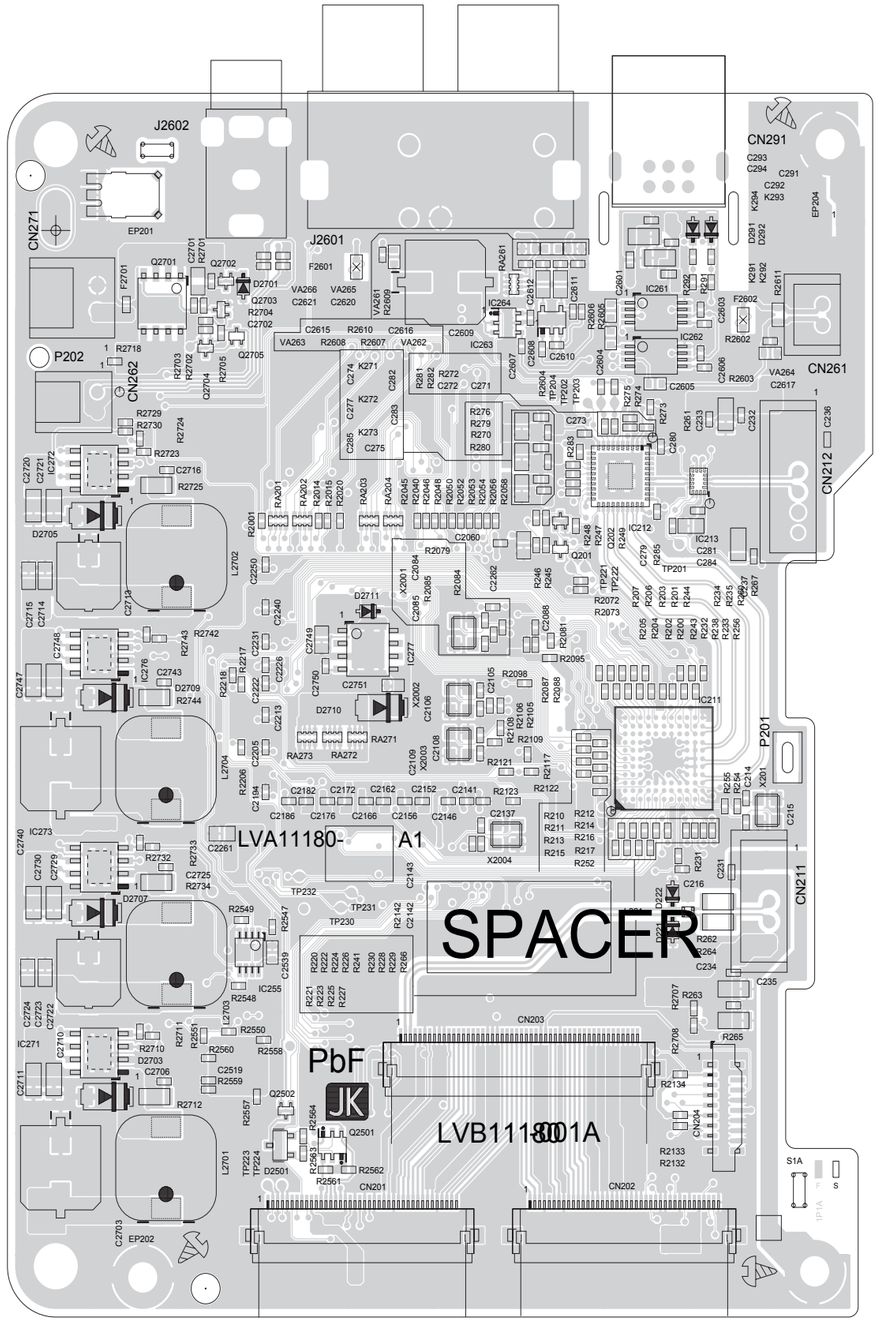
MAIN UNIT LVA11176-xxA (LVB11176-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



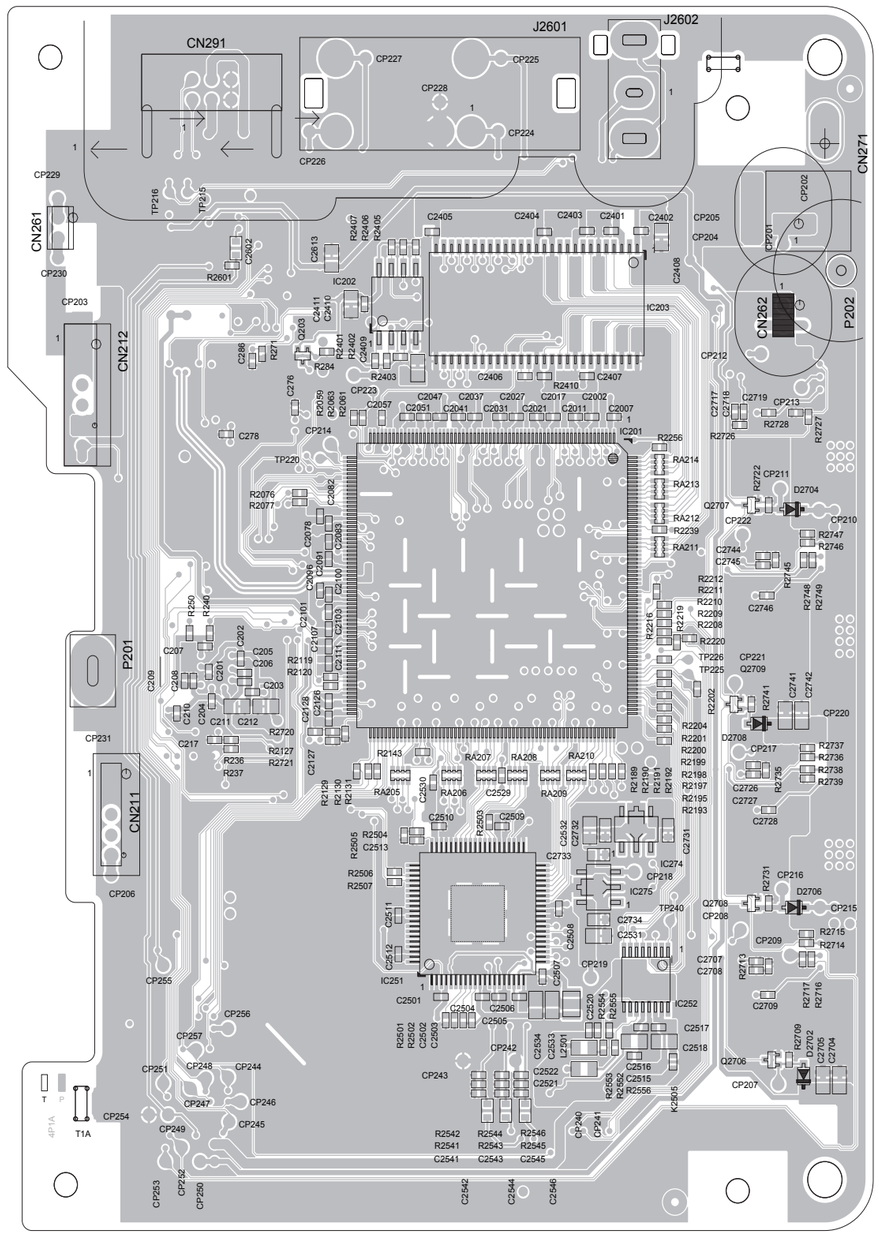
CM UNIT LVA11180-02A (LVB11180-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



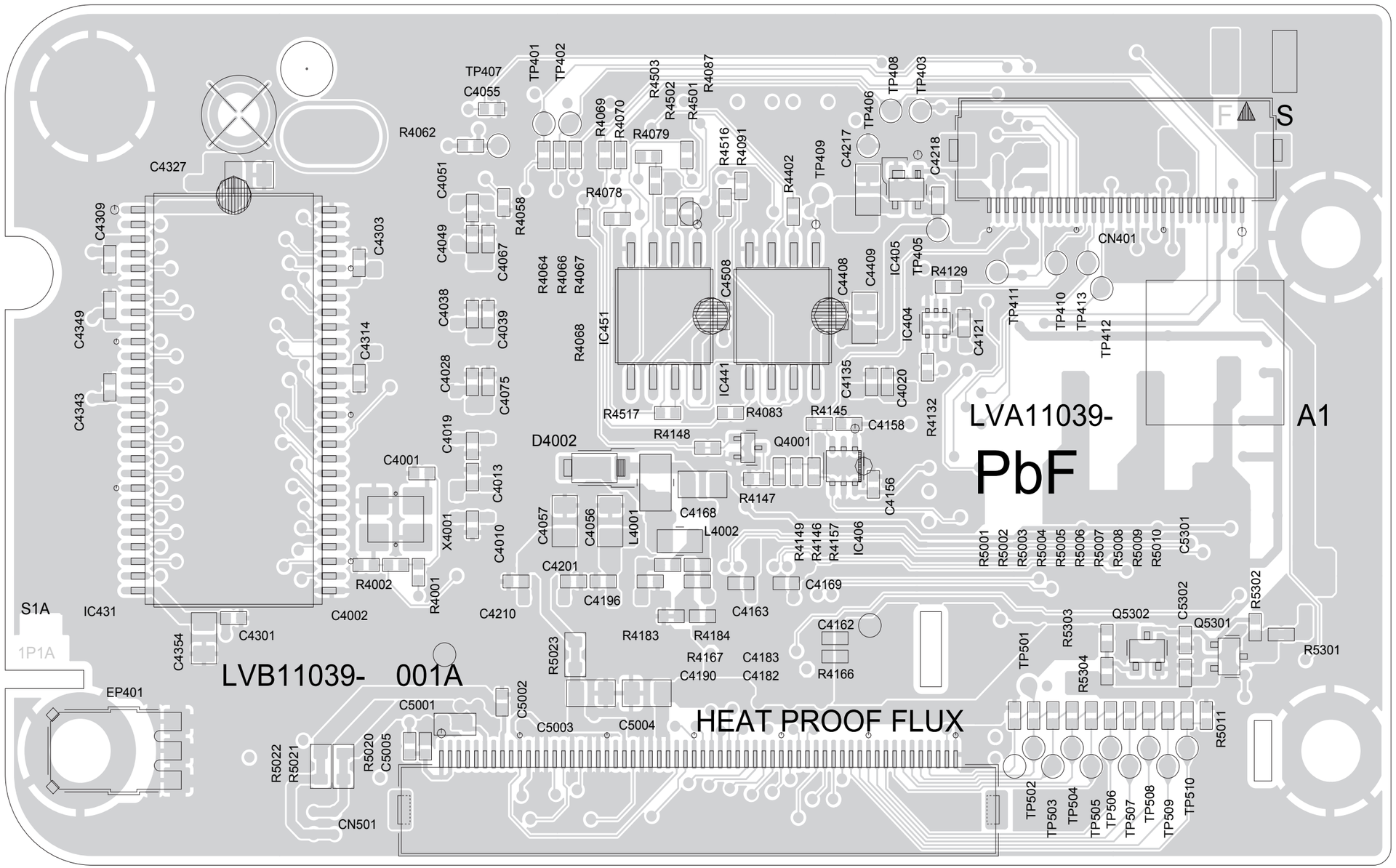
CM UNIT LVA11180-02A (LVB11180-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



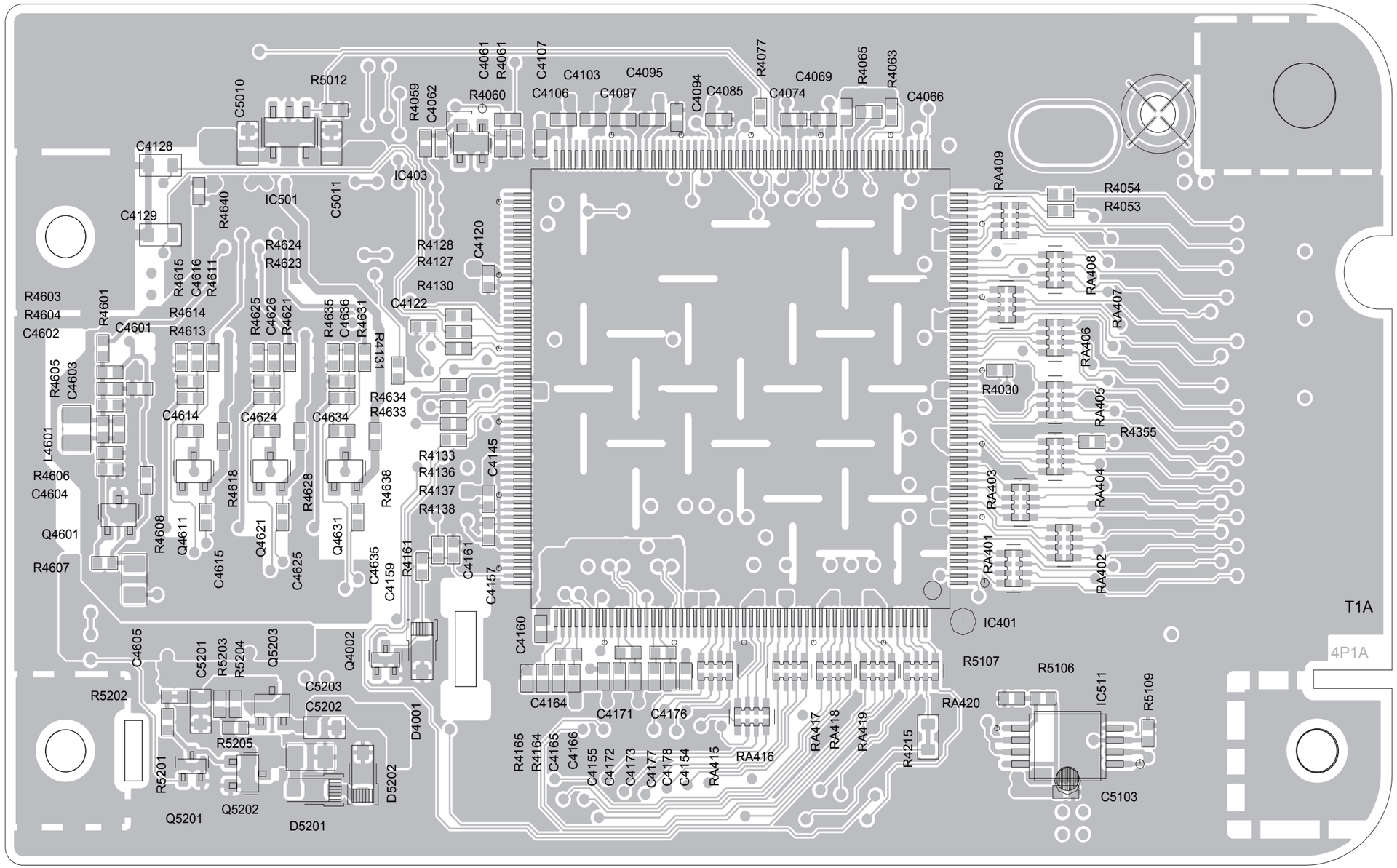
PANEL-A UNIT LVA11039-42A (LVB11039-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



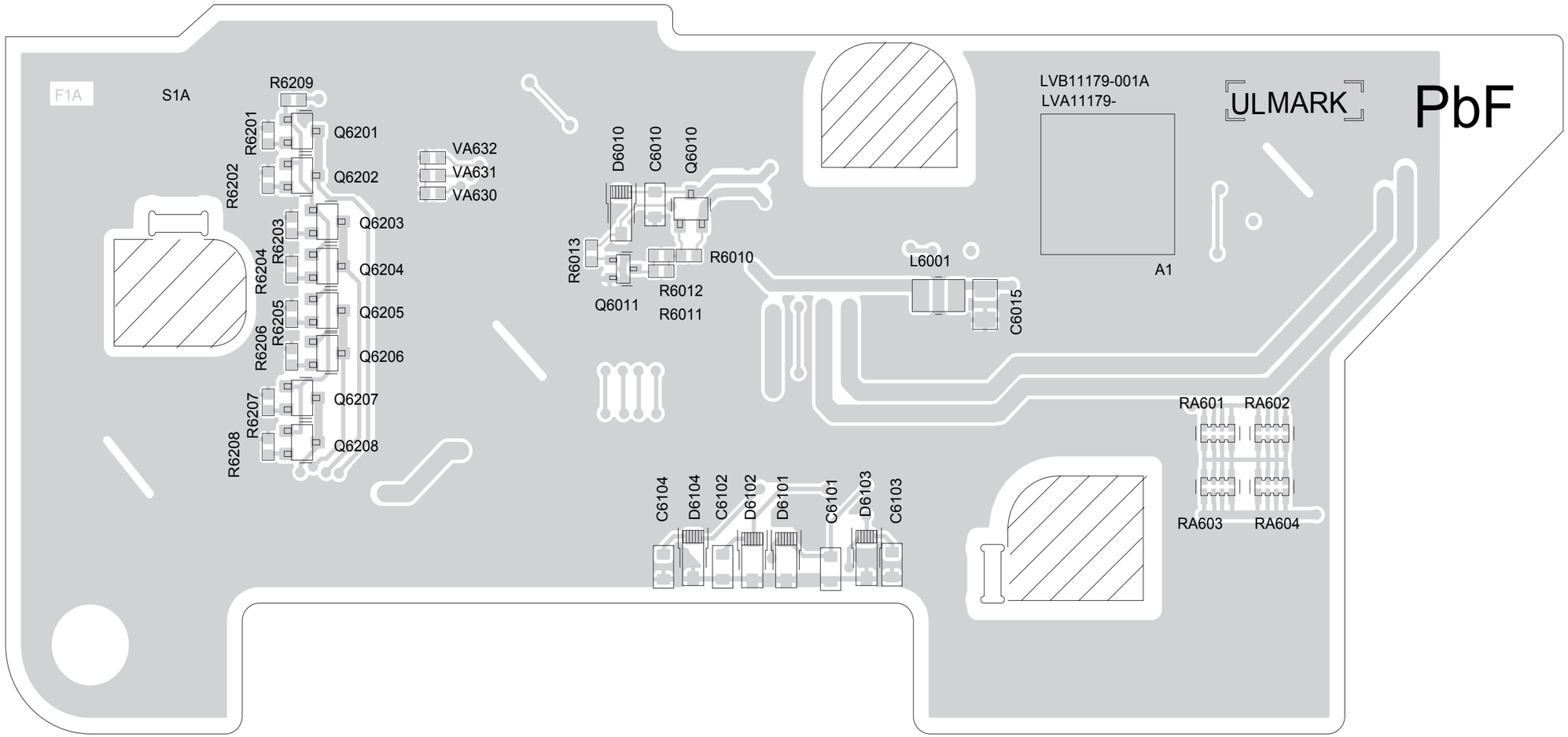
PANEL-A UNIT LVA11039-42A (LVB11039-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



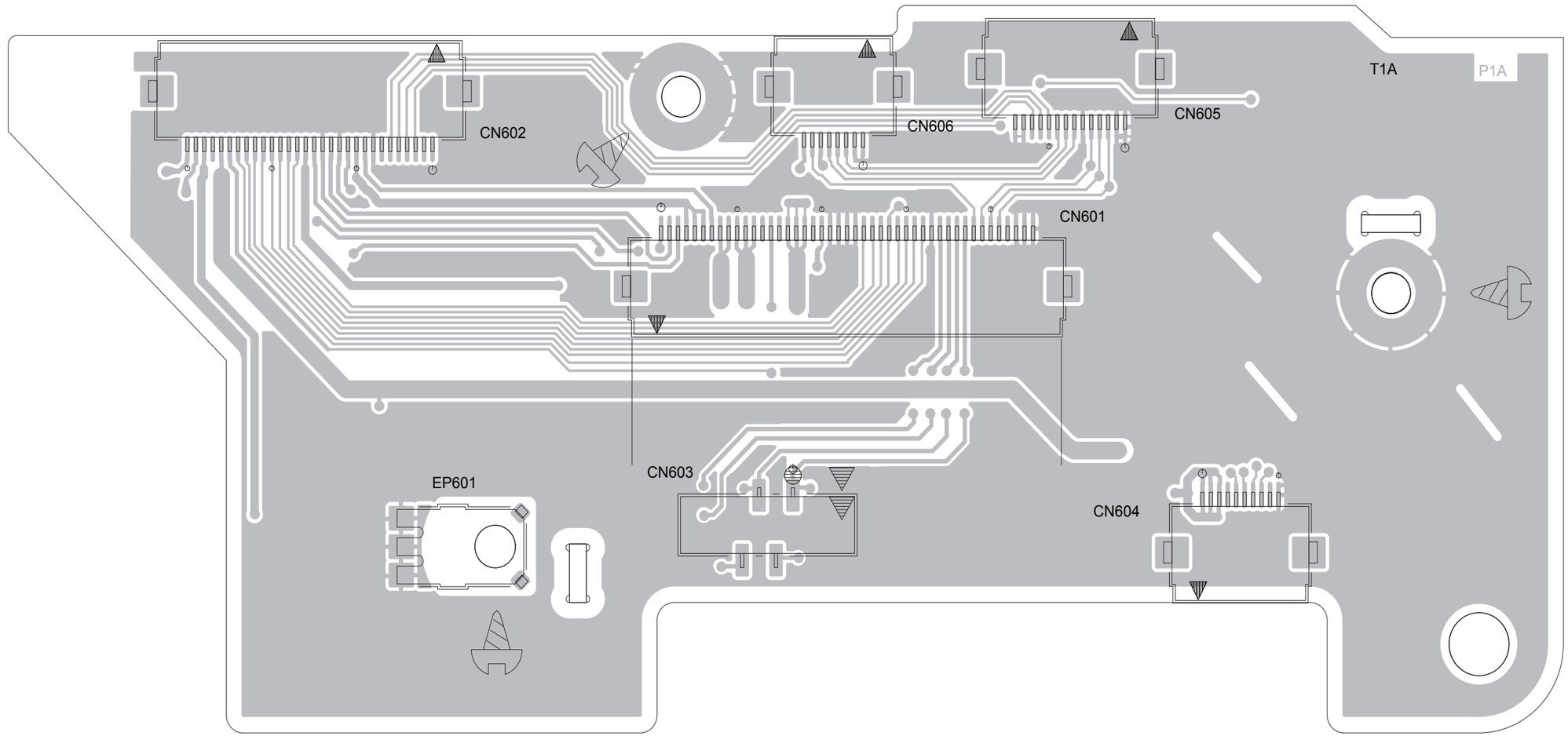
PANEL-B UNIT LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



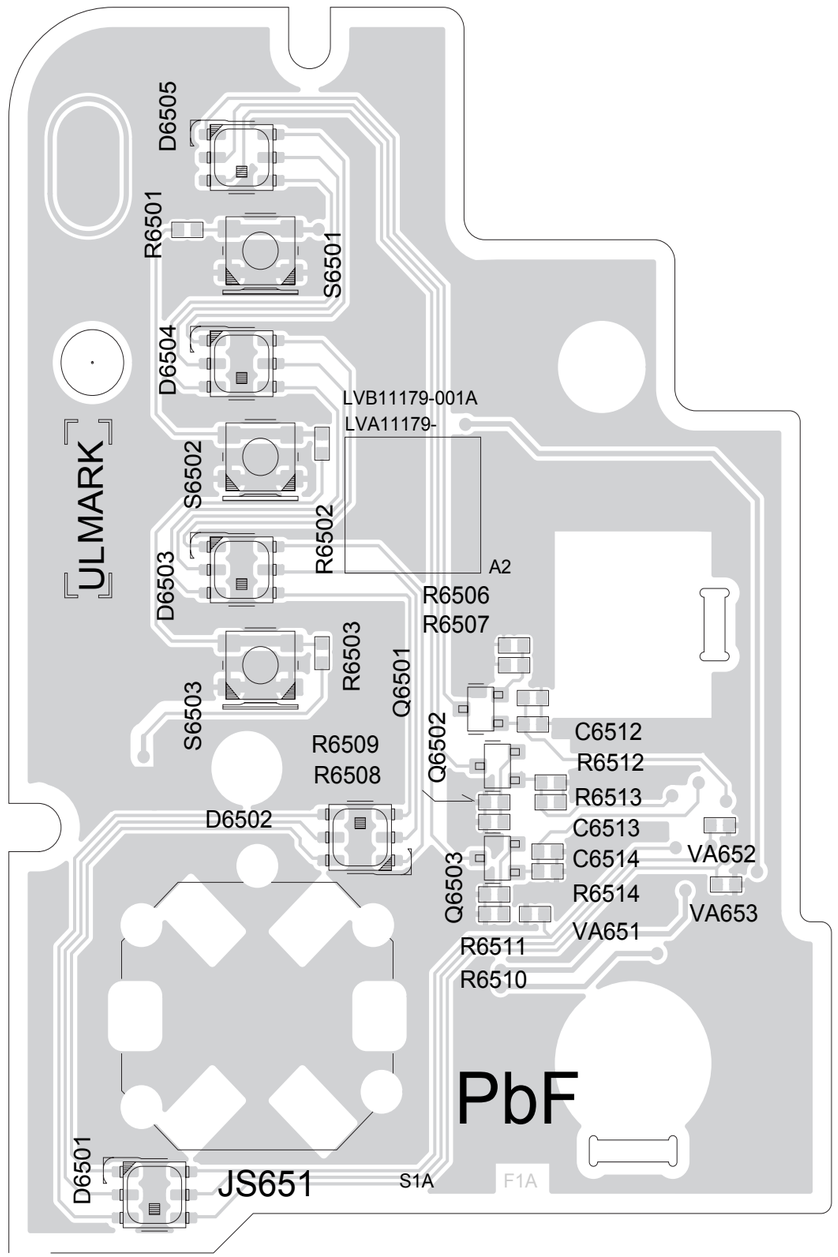
PANEL-B UNIT LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



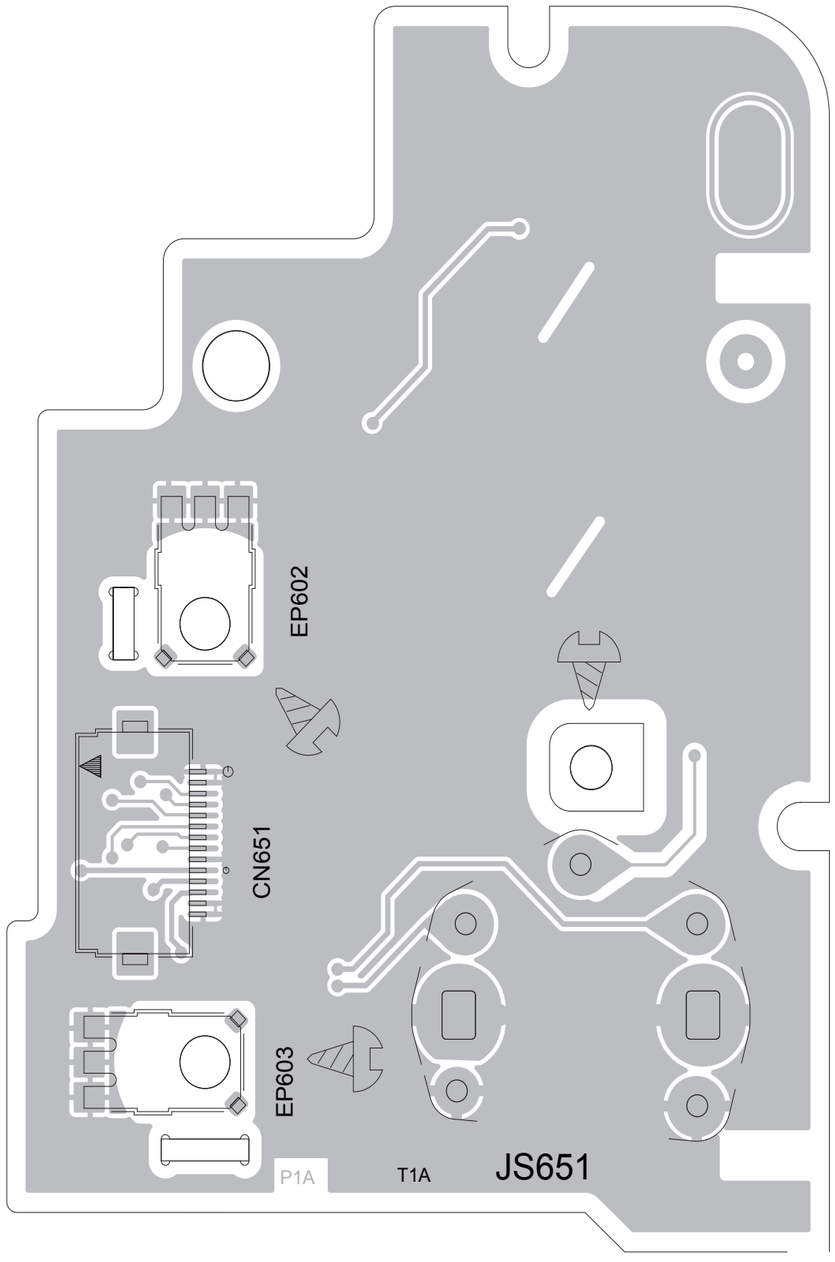
PANEL-B UNIT (SW) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



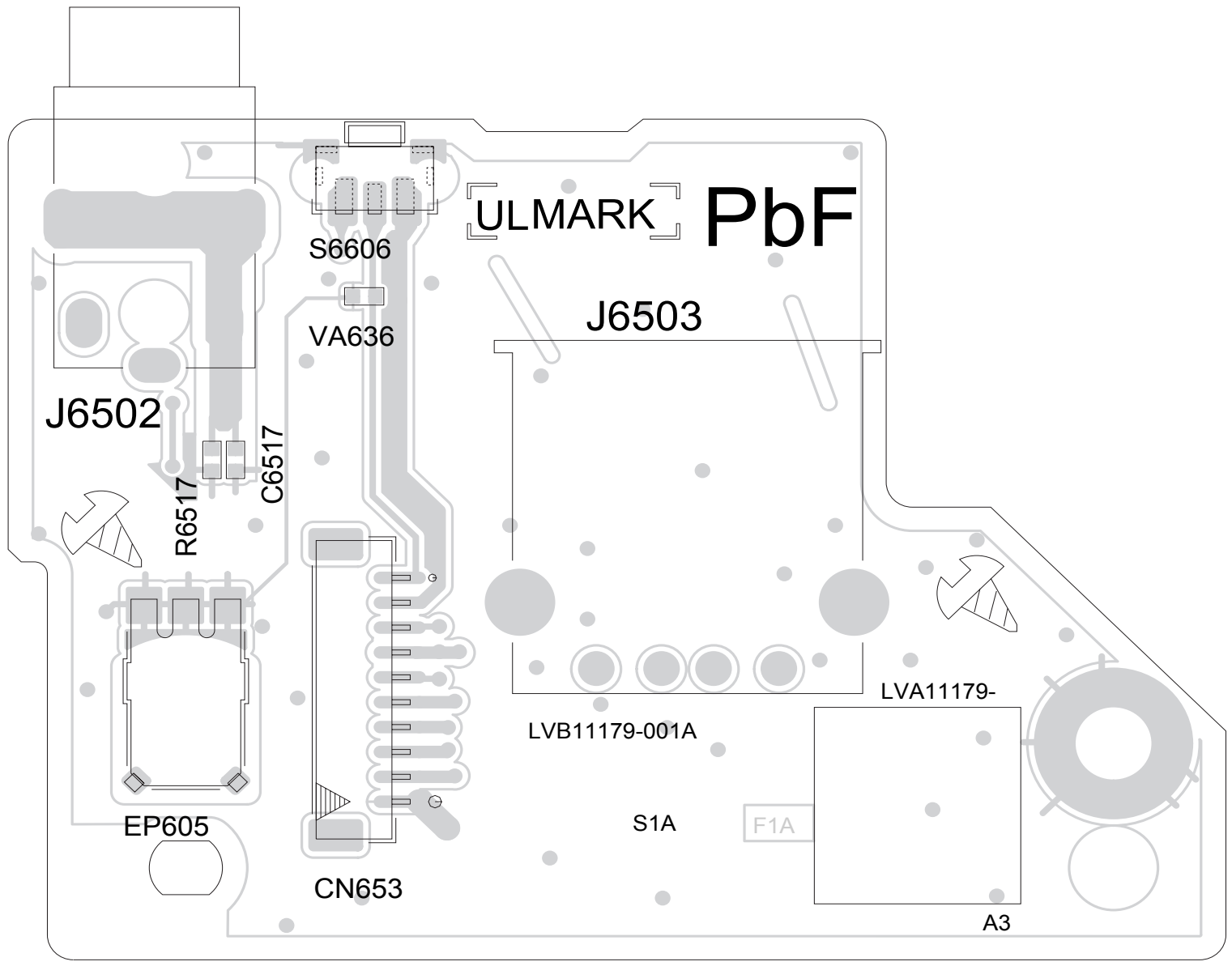
PANEL-B UNIT (SW) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



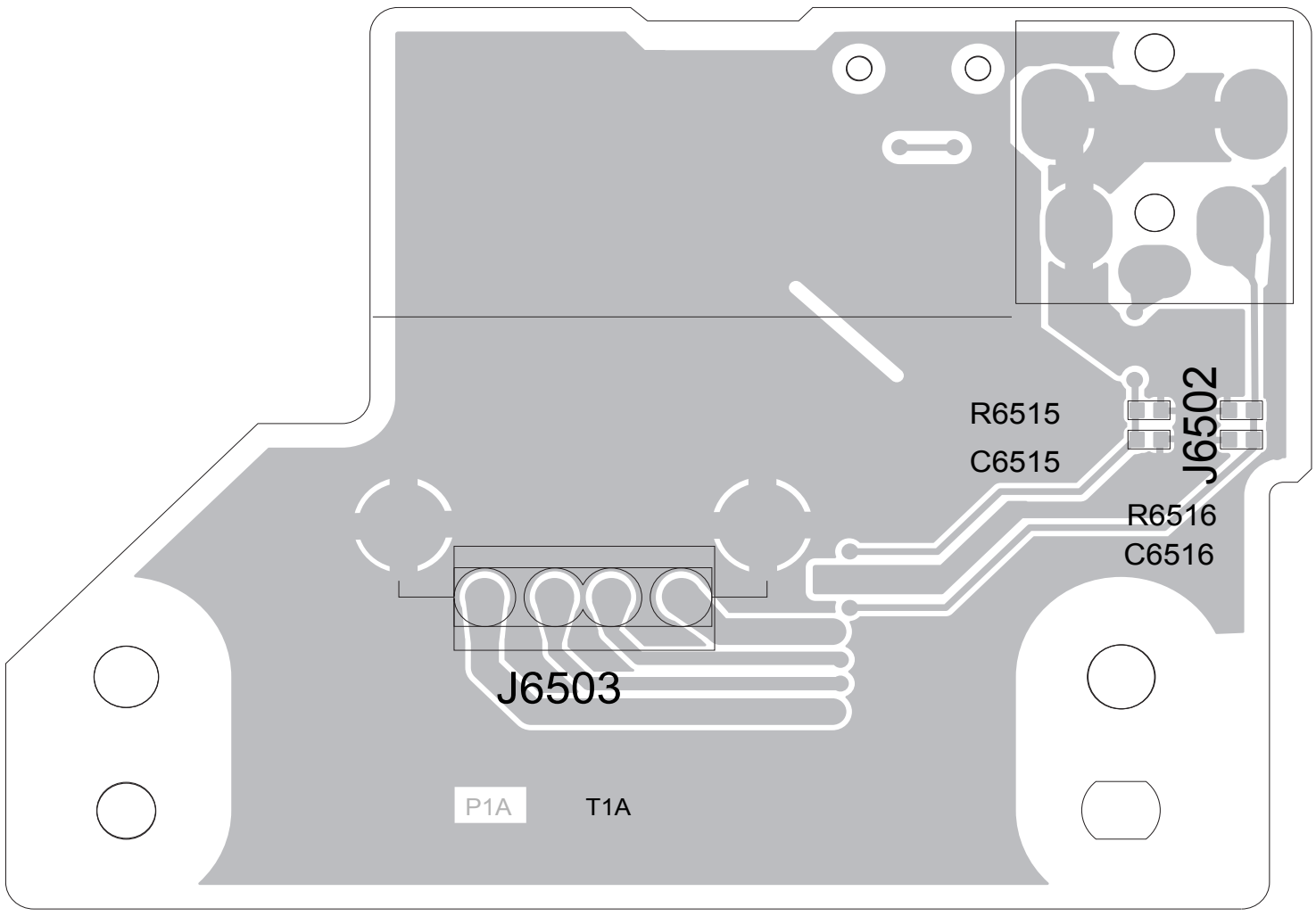
PANEL-B UNIT (DONGLE) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



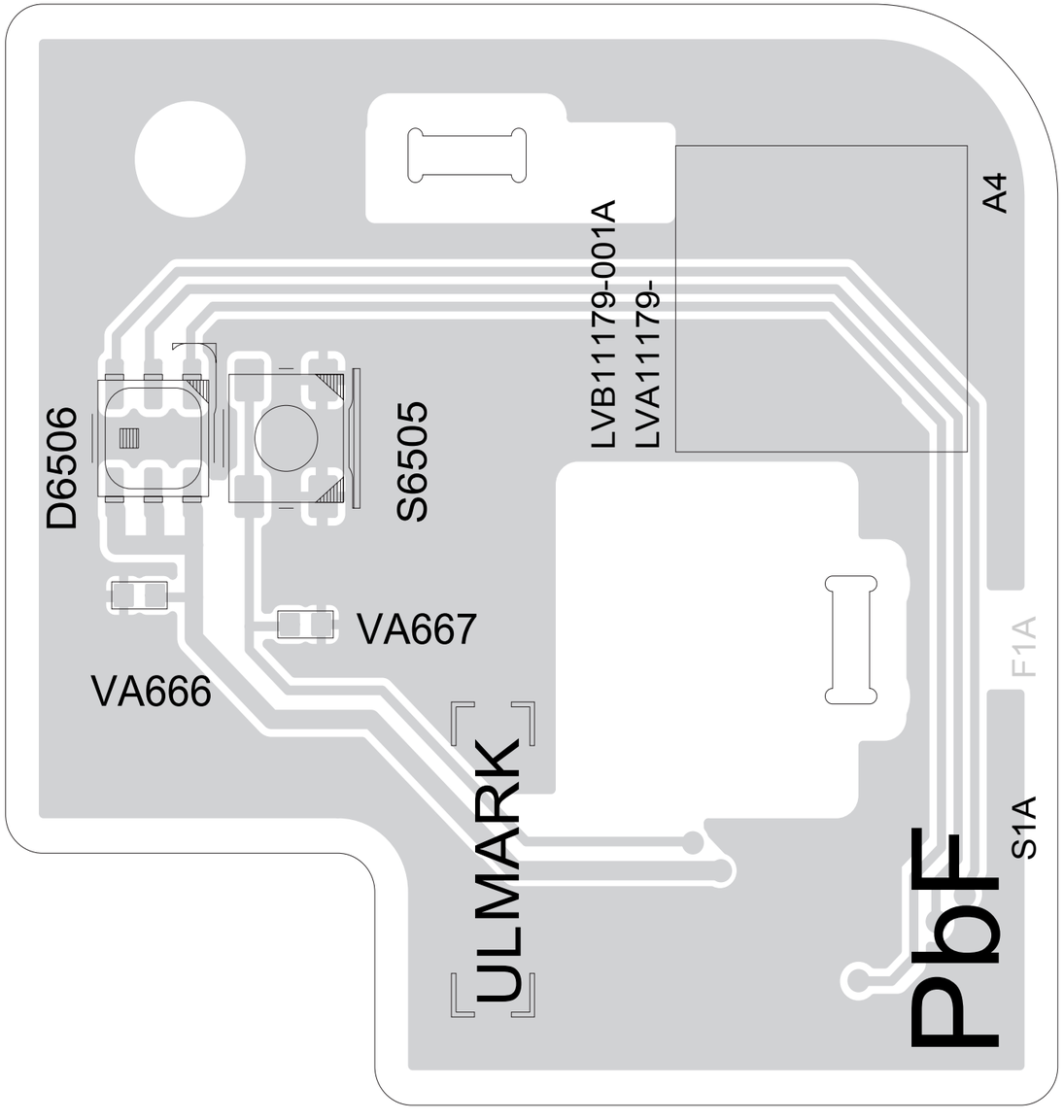
PANEL-B UNIT (DONGLE) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



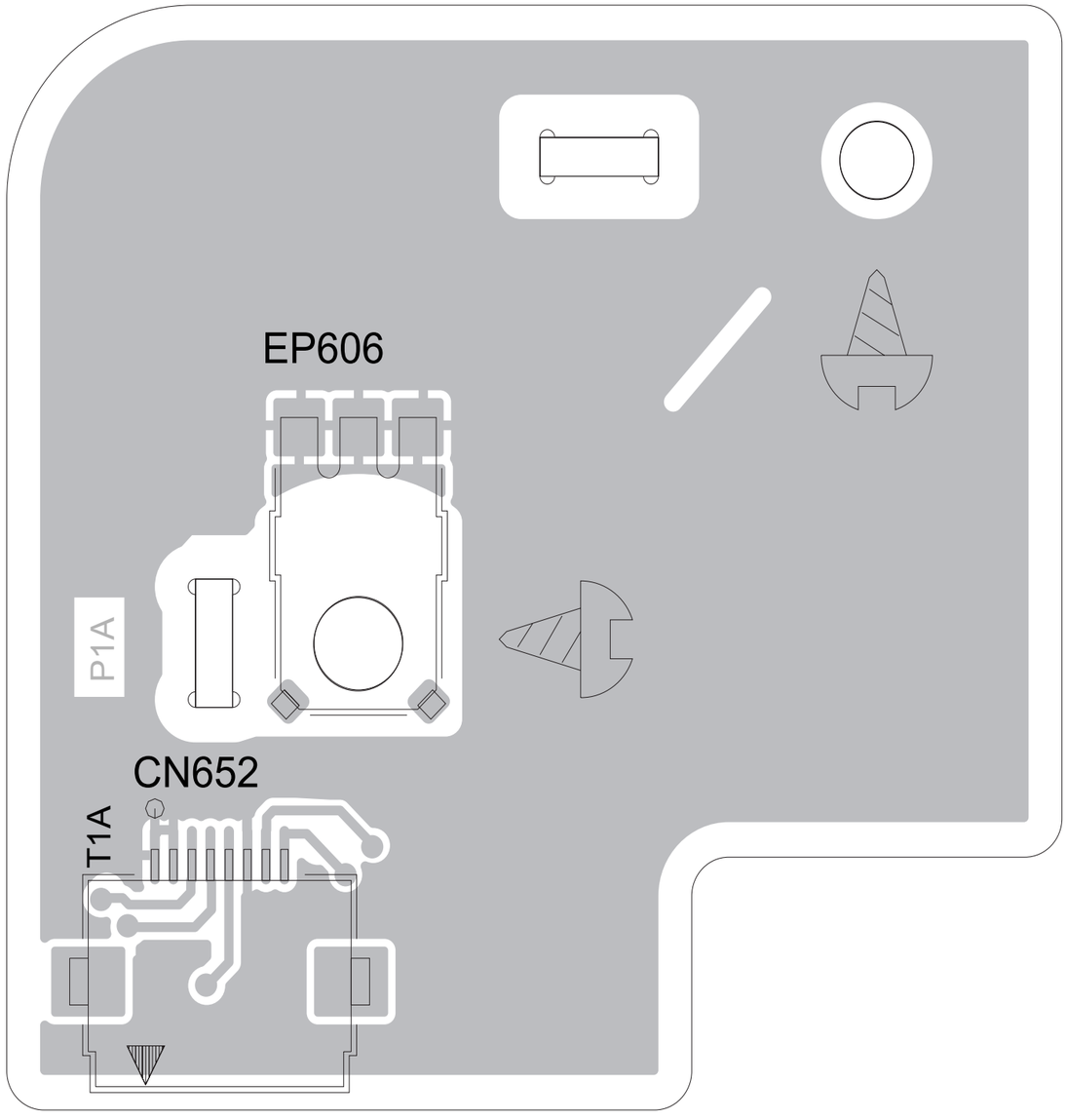
PANEL-B UNIT (EJECT) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



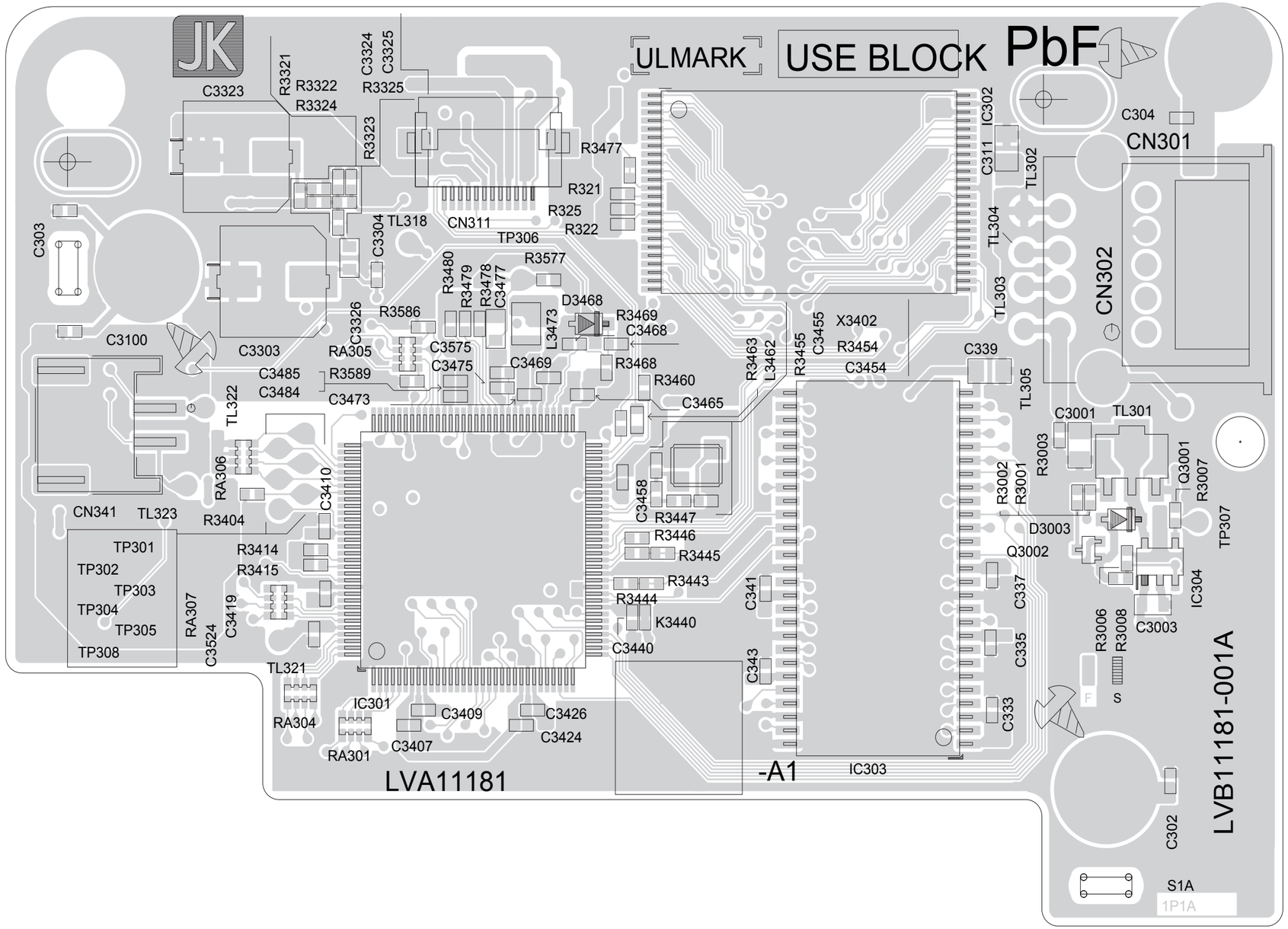
PANEL-B UNIT (EJECT) LVA11179-01A (LVB11179-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



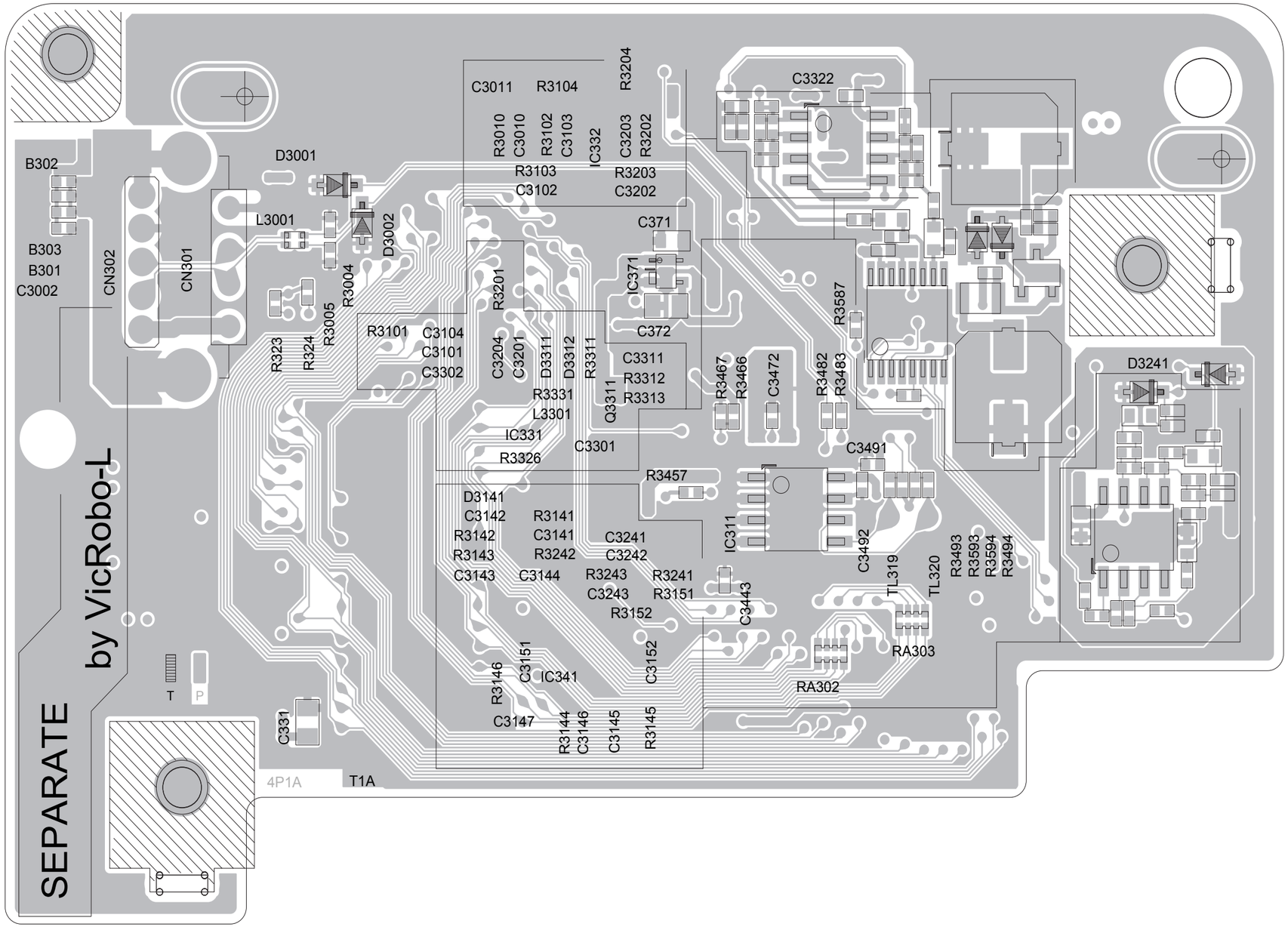
BT UNIT LVA11181-02A (LVB11181-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



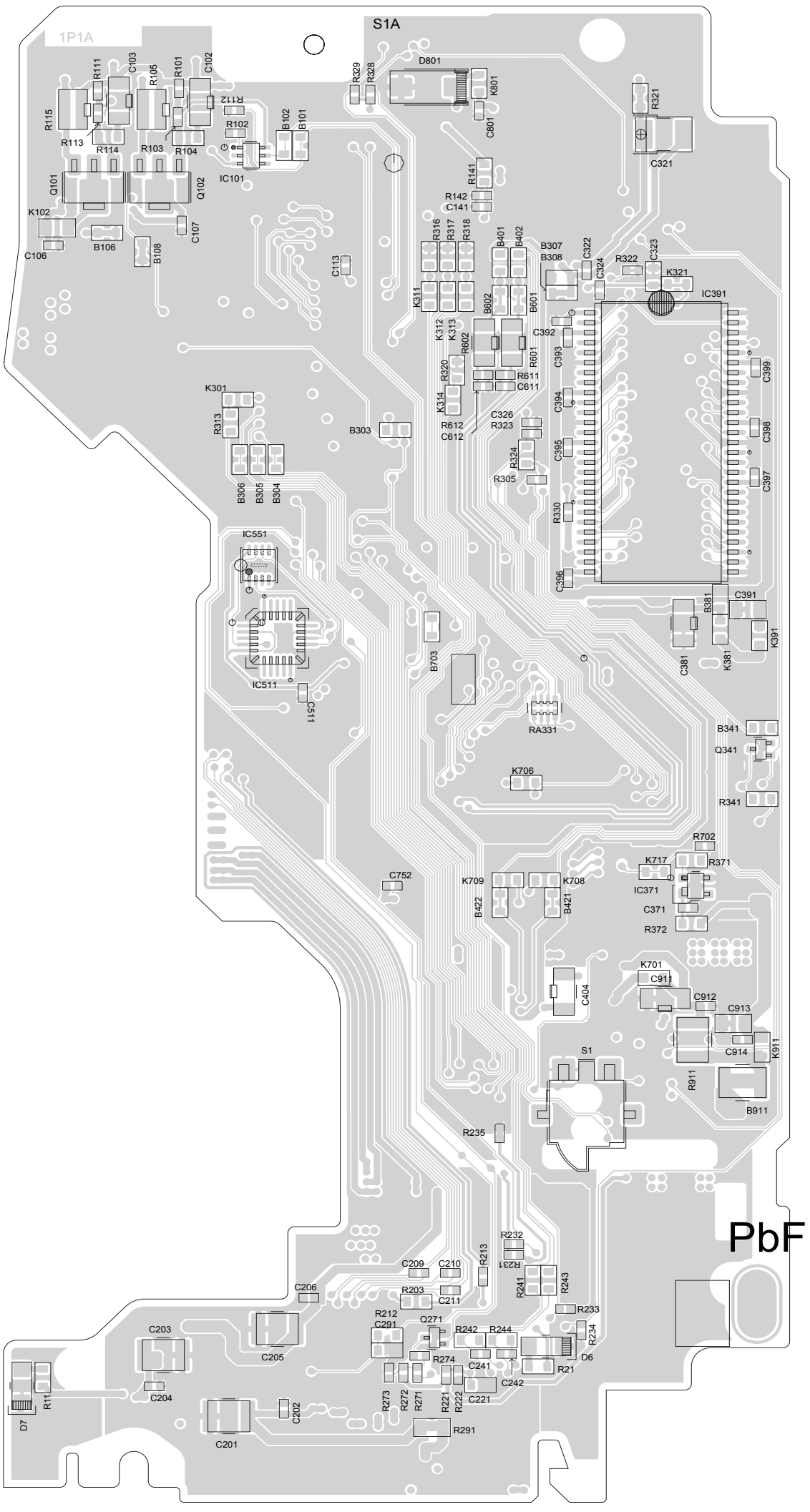
BT UNIT LVA11181-02A (LVB11181-001A)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



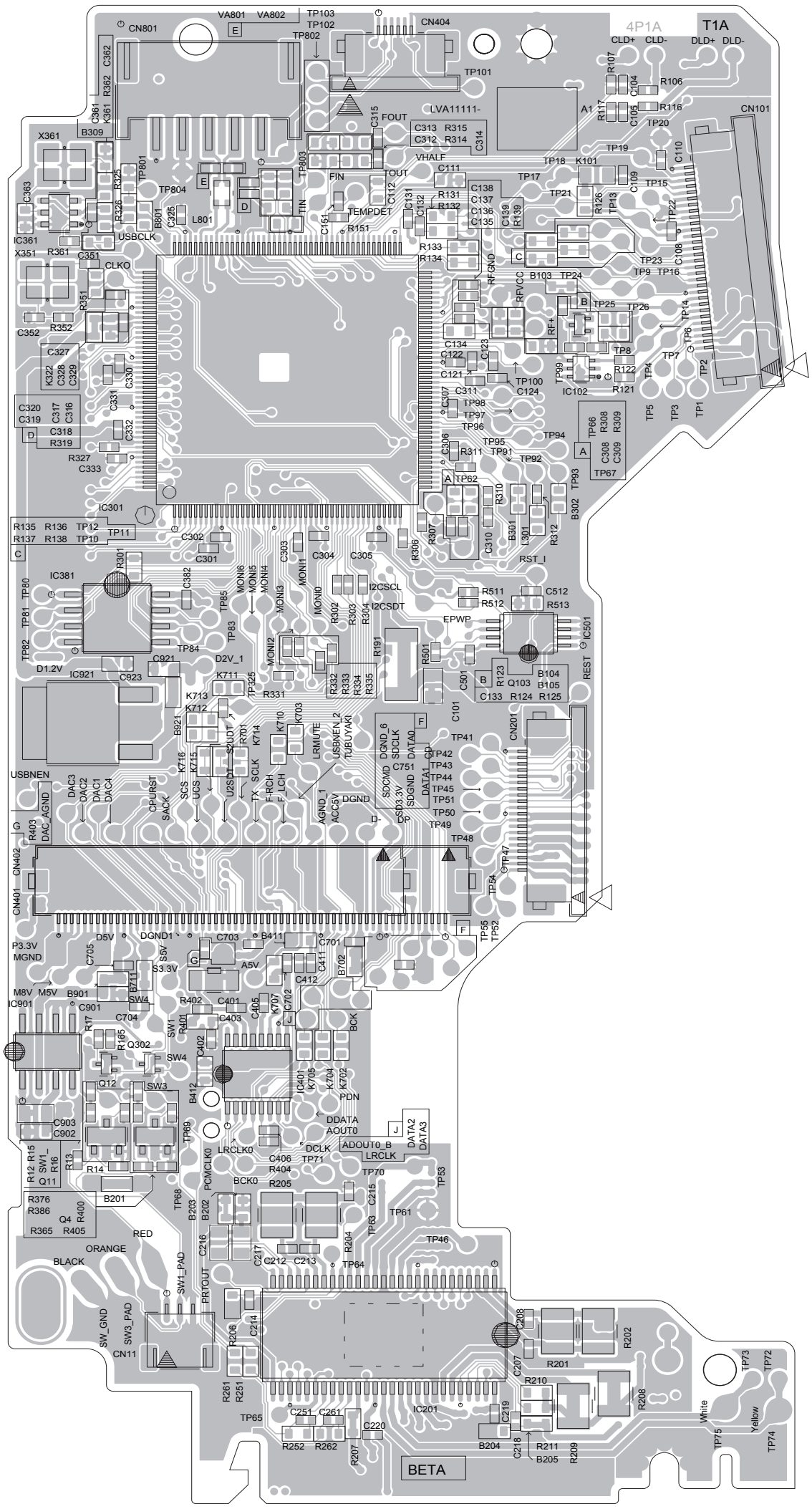
DVD UNIT-1 LVA11111-08A (LVB11111-001D)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



DVD UNIT-1 LVA11111-08A (LVB11111-001D)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



No.MA557

created date:2013-03-08

DVD UNIT-2 LVA11111-08A (LVB11111-001D)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))

DVD UNIT-2 LVA11111-08A (LVB11111-001D)

(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))