



SCHEMATIC DIAGRAMS

CD RECEIVER

KD-R218J
KD-R311EU
KD-R312EU
KD-R315U
KD-R315UT
KD-R316MUN
KD-R316UH
KD-R316UW

KD-R219UR
KD-R311EY
KD-R312EY
KD-R315UH
KD-R315UW
KD-R316SUN
KD-R316UN
KD-R317EE
KD-R36U

KD-R311E
KD-R312E
KD-R314UI
KD-R315UN
KD-R316M2UN
KD-R316U
KD-R316UT
KD-R318UF



■ 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 \triangle 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

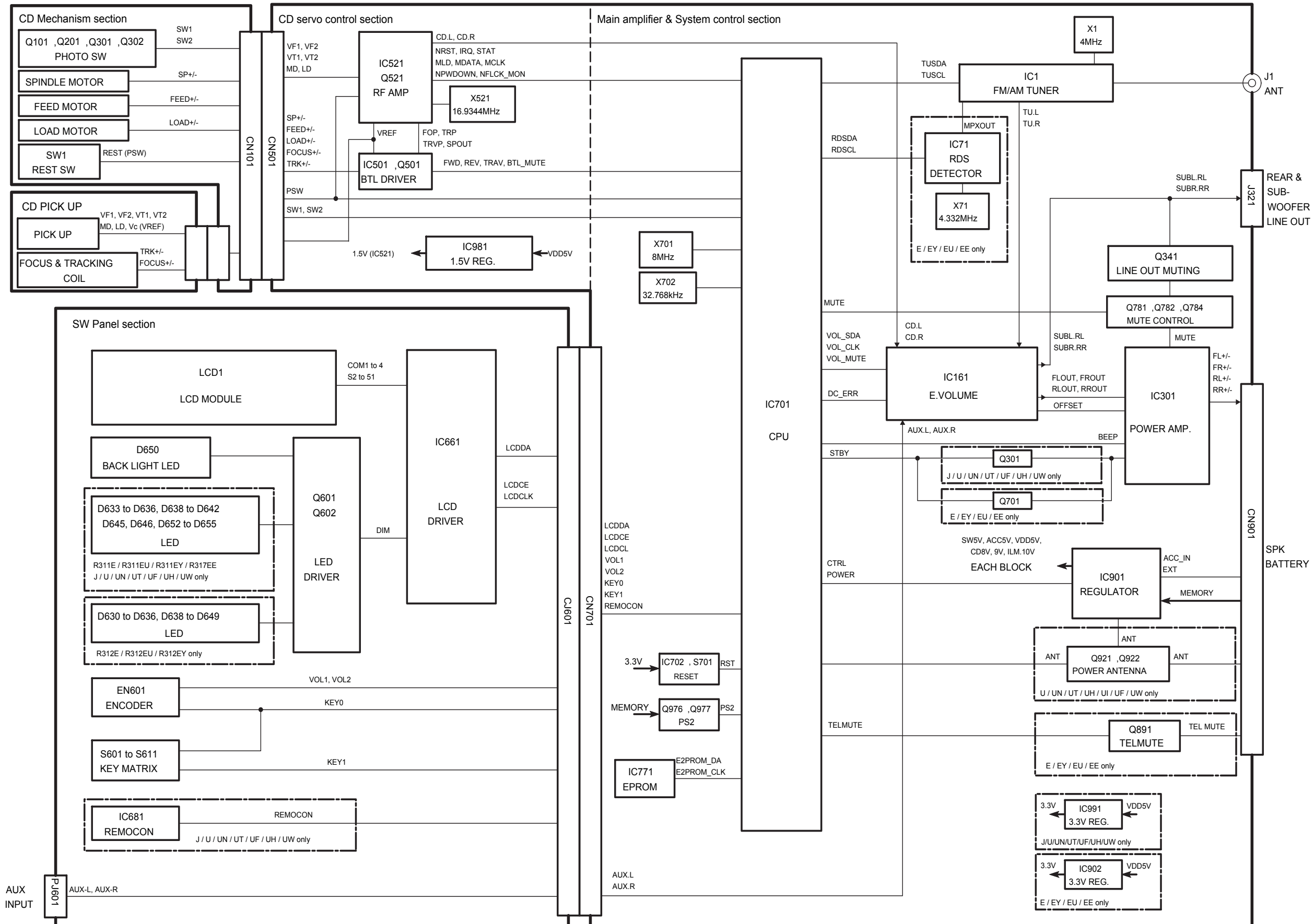
Certain parts of the power circuits and the GNDs differ according to the models. Care must be taken for the following points as the differences are indicated separately in the LIVE GND () and the ISOLATED (NEUTRAL) GND (.

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

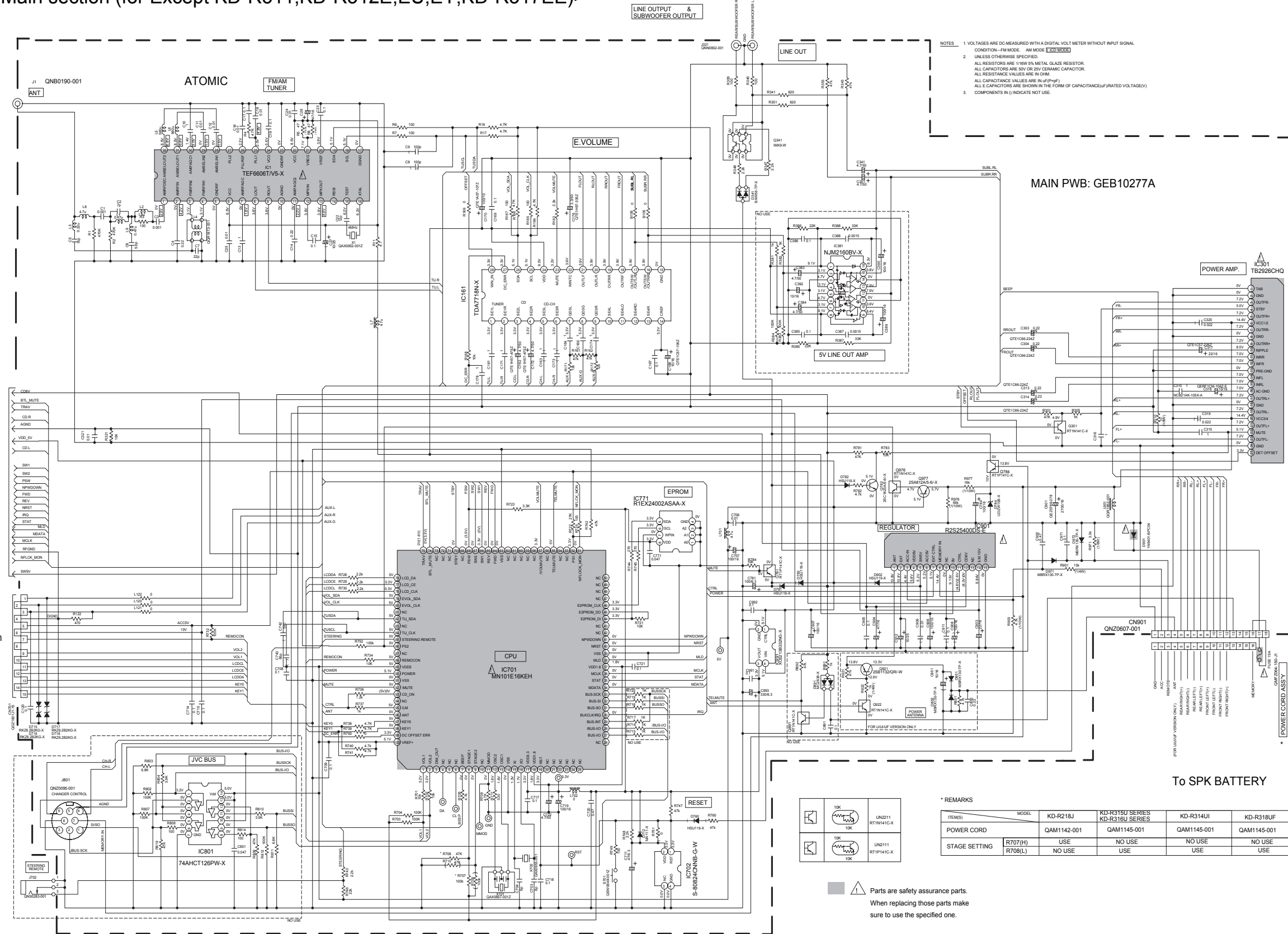
DEVIATION TOLERANCE RANGE									
F	G	J	K	M	N	R	H	Z	P
± 1%	± 2%	± 5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

Block diagram



<Main section (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>

To REAR & SUBWOOFER LINE OUT



- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION-FM MODE. AM MODE **EXCEPTED**
 2. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/16W 5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(PF).
 3. COMPONENTS IN () INDICATE NOT USE.

MAIN PWB: GEB10277A

To CD section (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)

To LCD & Key control section (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE) CN601

To SPK BATTERY

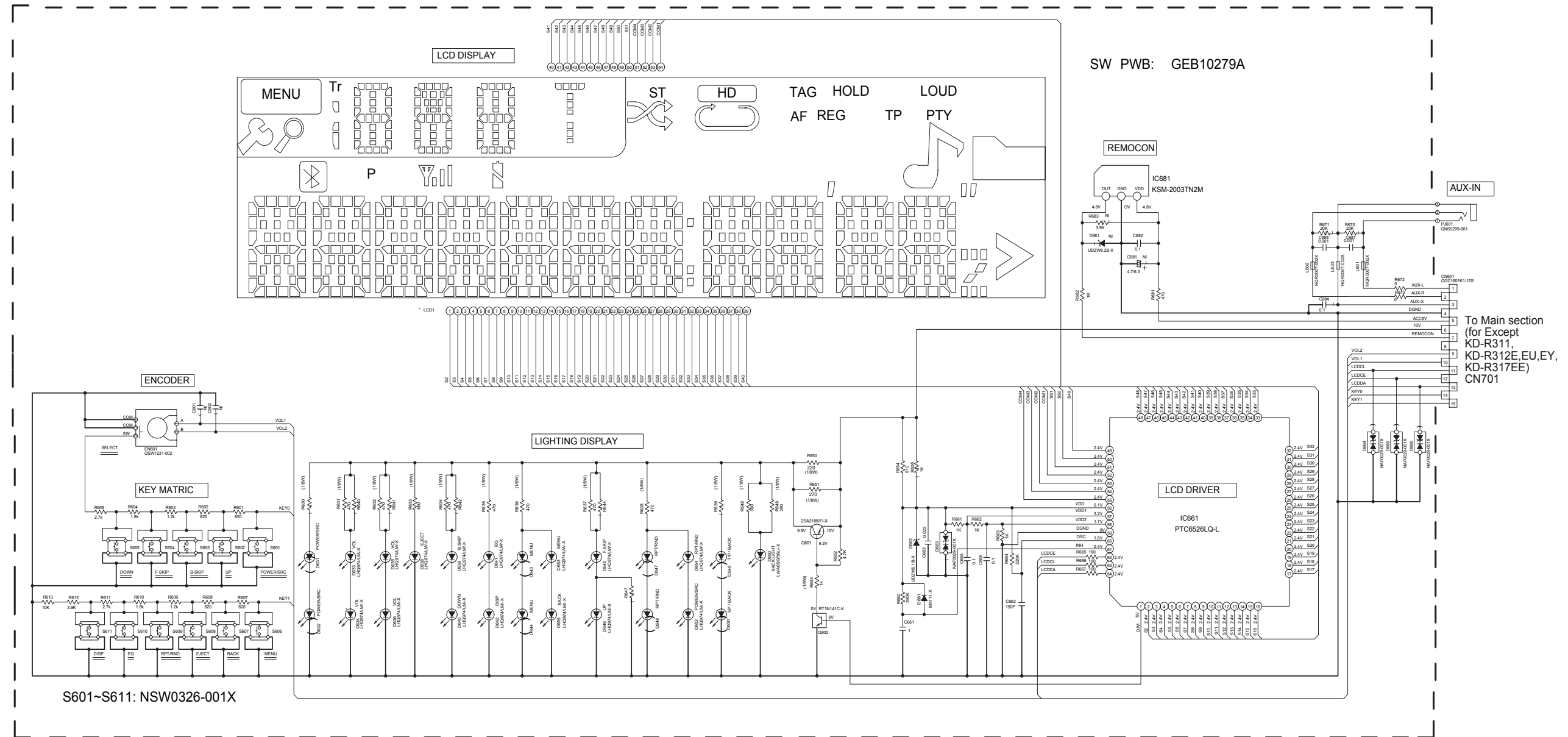
	15K	LN211
	10K	RT1N141C-X
	15K	LN211
	10K	RT1P141C-X

* REMARKS

ITEM(S)	MODEL	KD-R218J	KD-R315U SERIES KD-R316U SERIES	KD-R314UI	KD-R318UF
POWER CORD		QAM1142-001	QAM1145-001	QAM1145-001	QAM1145-001
STAGE SETTING		R707(H) R708(L)	USE NO USE	NO USE USE	NO USE USE

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

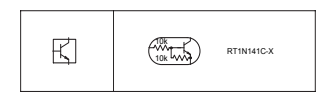
<LCD & Key control section (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>



To Main section
(for Except
KD-R311,
KD-R312E,EU,EY,
KD-R317EE)
CN701

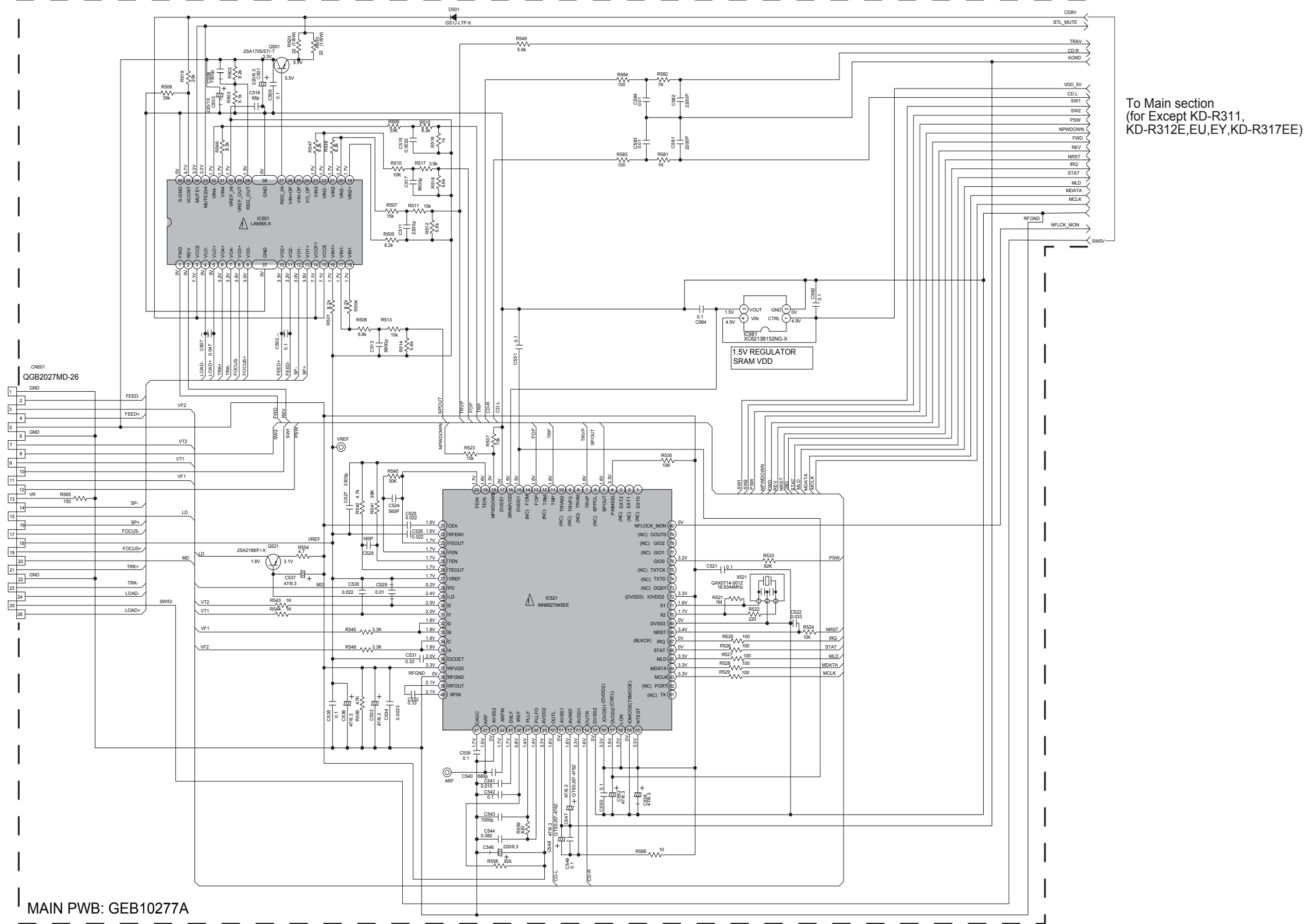
* REMARKS:

		KD-R311	KD-R312E
LCD	LCD1	QLD0631-001	QLD0628-001



- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
 2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN (P=PF)
 3. ALL E CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/(P/RATED VOLTAGE(V))
T --- TANTAL CAPACITOR.
COMPONENTS IN () INDICATE NOT USE.

<CD section (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>



To Mecha control section
CN101

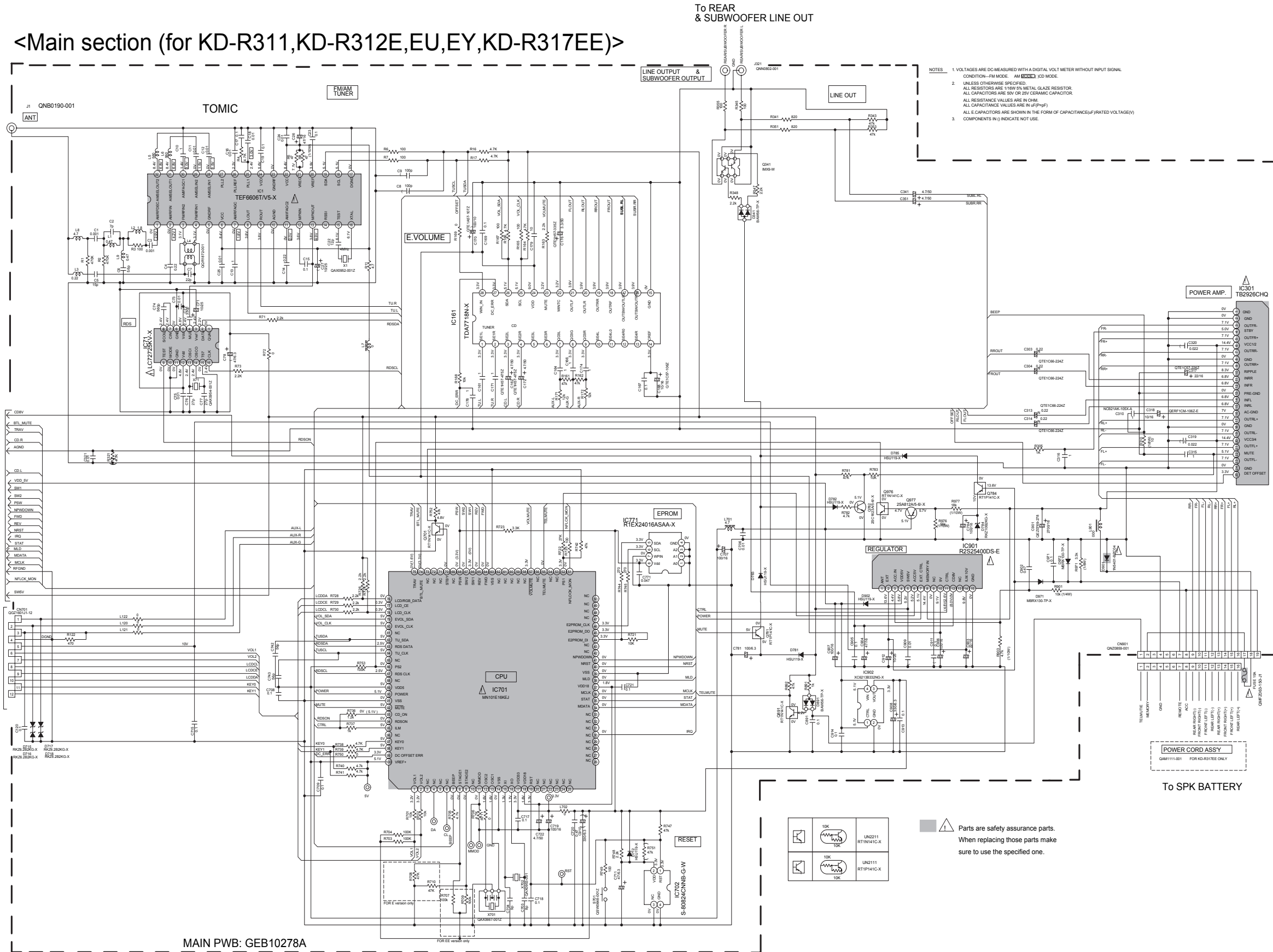
To Main section
(for Except KD-R311,
KD-R312E,EU,EY,KD-R317EE)

MAIN PWB: GEB10277A

- NOTES:
- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION — CD MODE.
 - UNLESS OTHERWISE SPECIFIED:
ALL RESISTOR ARE 1/16W 5%METAL GLAZE RESISTOR.
ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM
ALL CAPACITANCE VALUES ARE IN uF(pF).
ALL INDUCTANCE VALUES ARE IN uH
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)

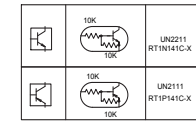
Parts are safety assurance parts.
When replacing those parts make
sure to use the specified one.

<Main section (for KD-R311, KD-R312E, EU, EY, KD-R317EE)>



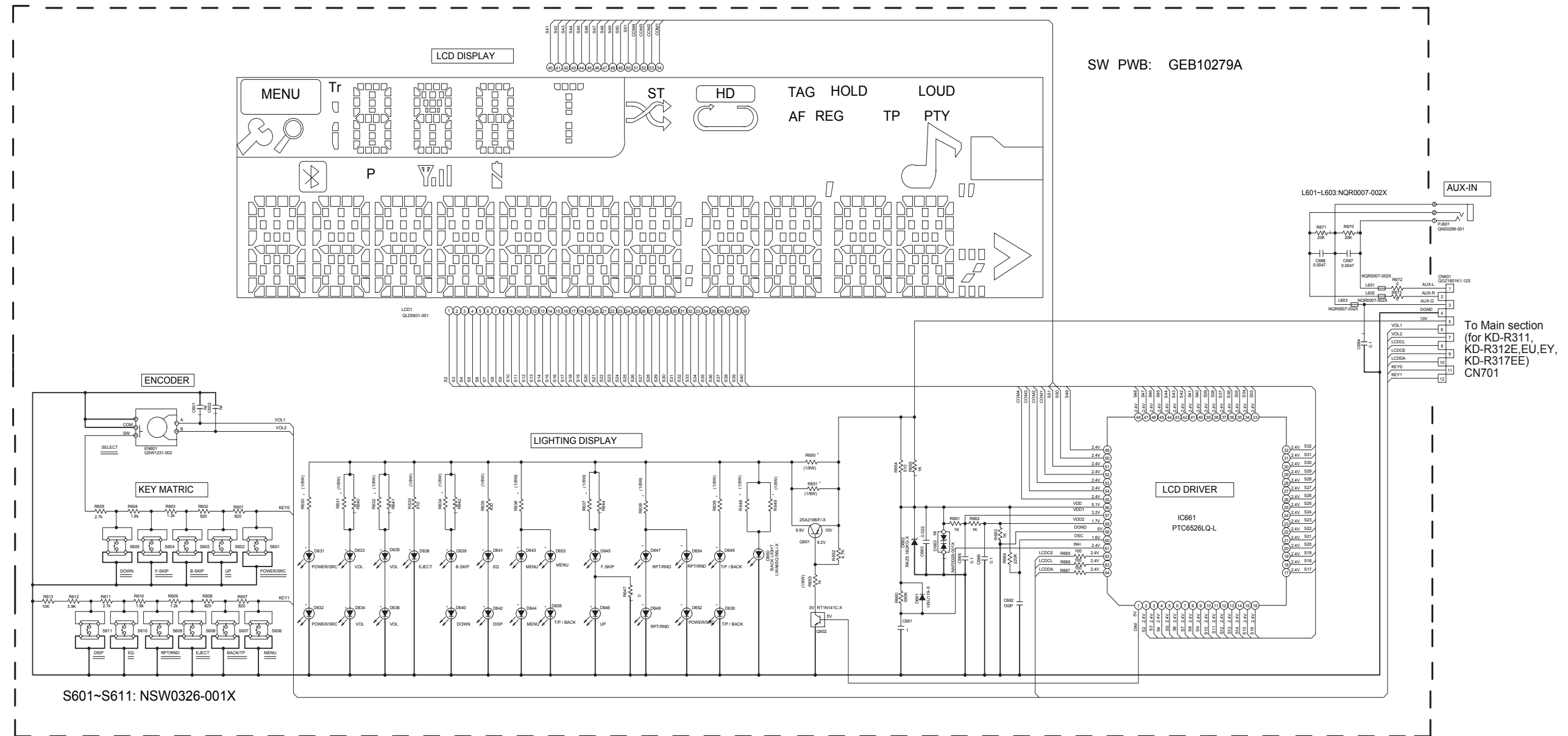
To CD section
(for KD-R311,
KD-R312E, EU, EY,
KD-R317EE)

To LCD & Key control
section
(for KD-R311,
KD-R312E, EU, EY,
KD-R317EE)
CN601



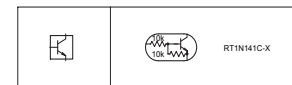
Parts are safety assurance parts.
When replacing those parts make
sure to use the specified one.

<LCD & Key control section (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>



* REMARKS

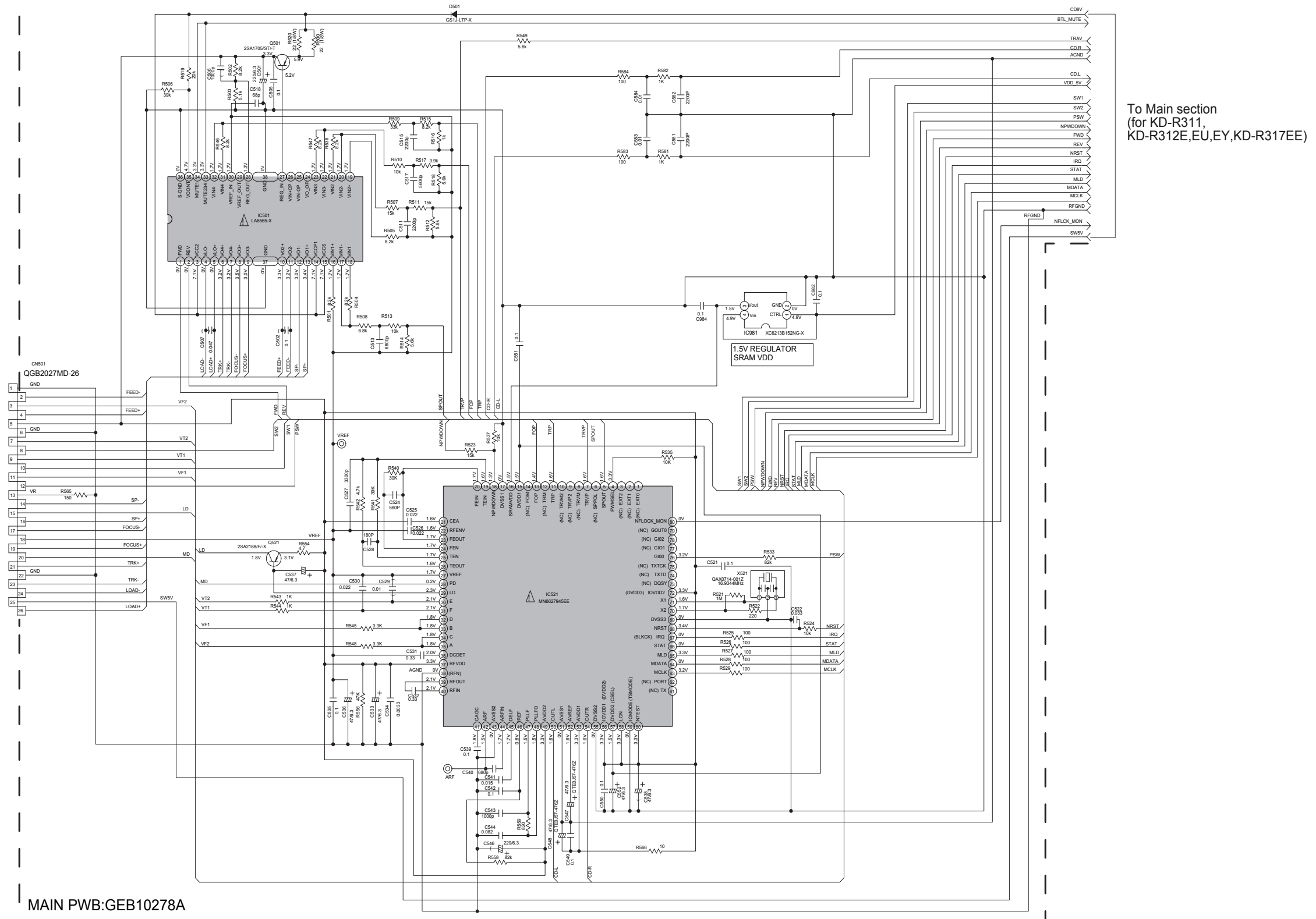
REMARKS	KD-R311E SERIES KD-R317EE		KD-R312E SERIES	
	D633 - D636 D639 - D640 D645 - D646	LSQ971KL-X	LNJ309B11-X	LNJ309B11-X
LED	D630 - D632 D643 - D644 D647 - D649	NOT IN USE	LNJ309B11-X	LNJ309B11-X
	D652 - D655	SML-D12V8WPO-X	NOT IN USE	NOT IN USE
	D638 D641 - D642	LSQ971KL-X	LSQ971KL-X	LSQ971KL-X
	D631 - D632 R634 R637	430	390	390
LED BRIGHTNESS	R636 R638	820	390	390
	R630 R639	NOT IN USE	390	390
	R648 - R649	390	820	390
DIMMER CIRCUITRY	R650	220	100	100
	R651	270	100	100



NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
- UNLESS OTHERWISE SPECIFIED:
ALL RESISTORS ARE 1/16W 4% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM.
ALL CAPACITANCE VALUES ARE IN uF(PpF)
ALL E CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(uF)/RATED VOLTAGE(V)
T - TANTALUM CAPACITOR
- COMPONENTS IN () INDICATE NOT USE.

<CD section (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>




To Main section
(for KD-R311,
KD-R312E,EU,EY,KD-R317EE)

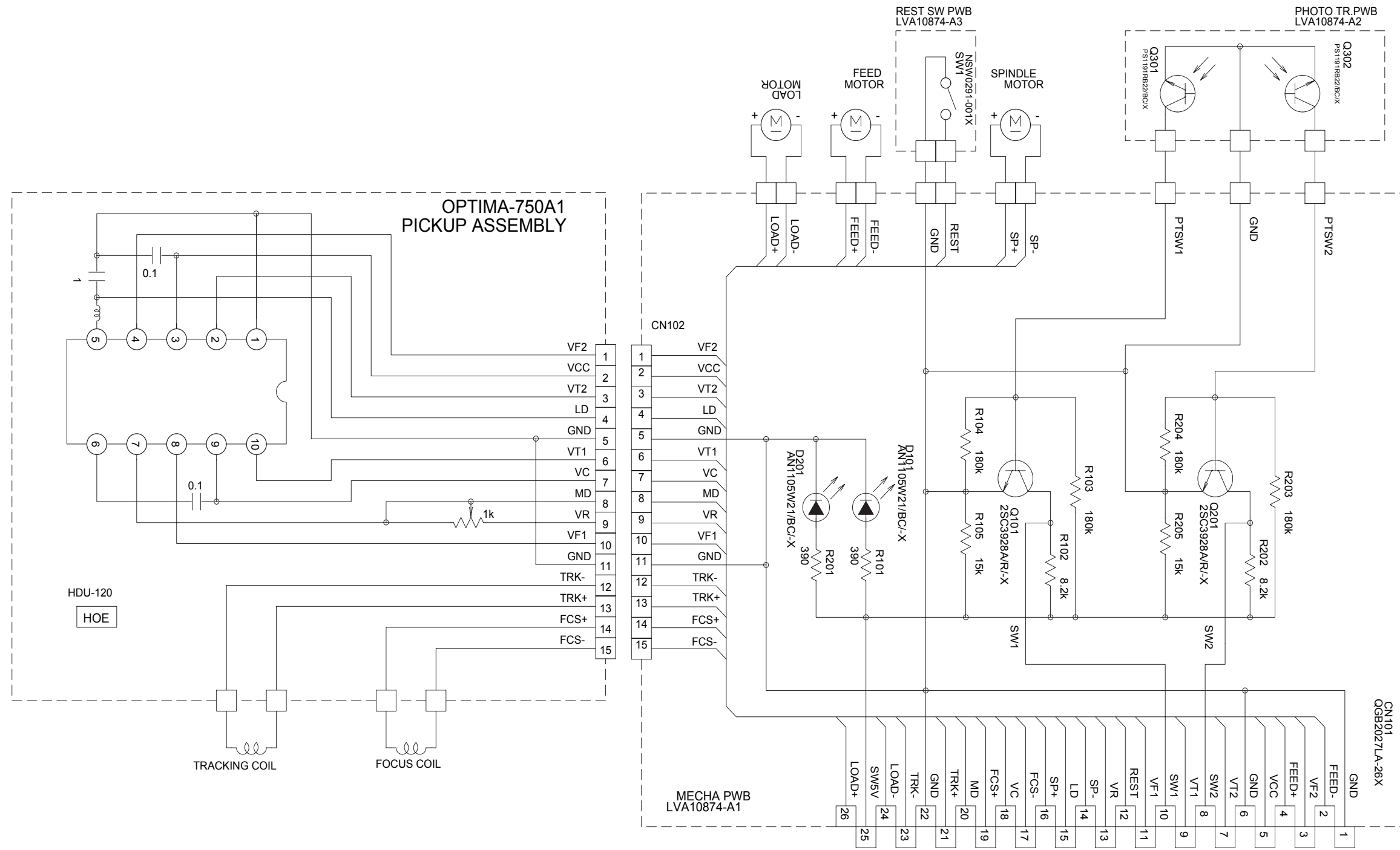
To Mecha control section
CN101

MAIN PWB:GEB10278A

- NOTES:
- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL CONDITION - CD MODE.
 - UNLESS OTHERWISE SPECIFIED:
ALL RESISTOR ARE 1/16W 5%METAL GLAZE RESISTOR.
ALL CAPACITOR ARE 50V OR 25V CERAMIC CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM
ALL CAPACITANCE VALUES ARE IN uF(p=pF).
ALL INDUCTANCE VALUES ARE IN uH
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/(RATED VOLTAGE)

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

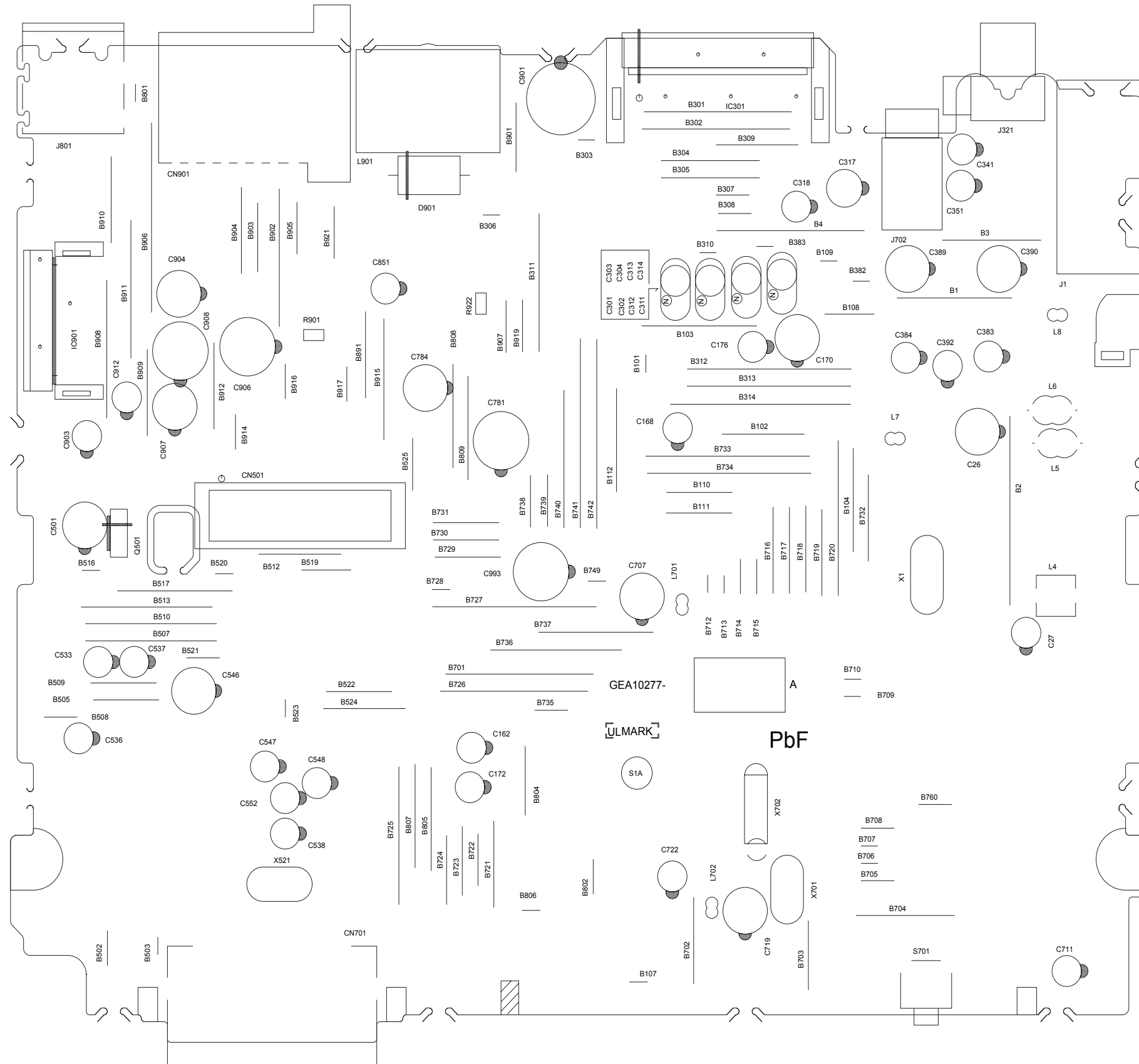
<Mecha control section>



To CD section
(for Except KD-R311,
KD-R312E,EU,EY,KD-R317EE)
CN501

To CD section
(for KD-R311,KD-R312E,EU,EY,KD-R317EE)
CN501

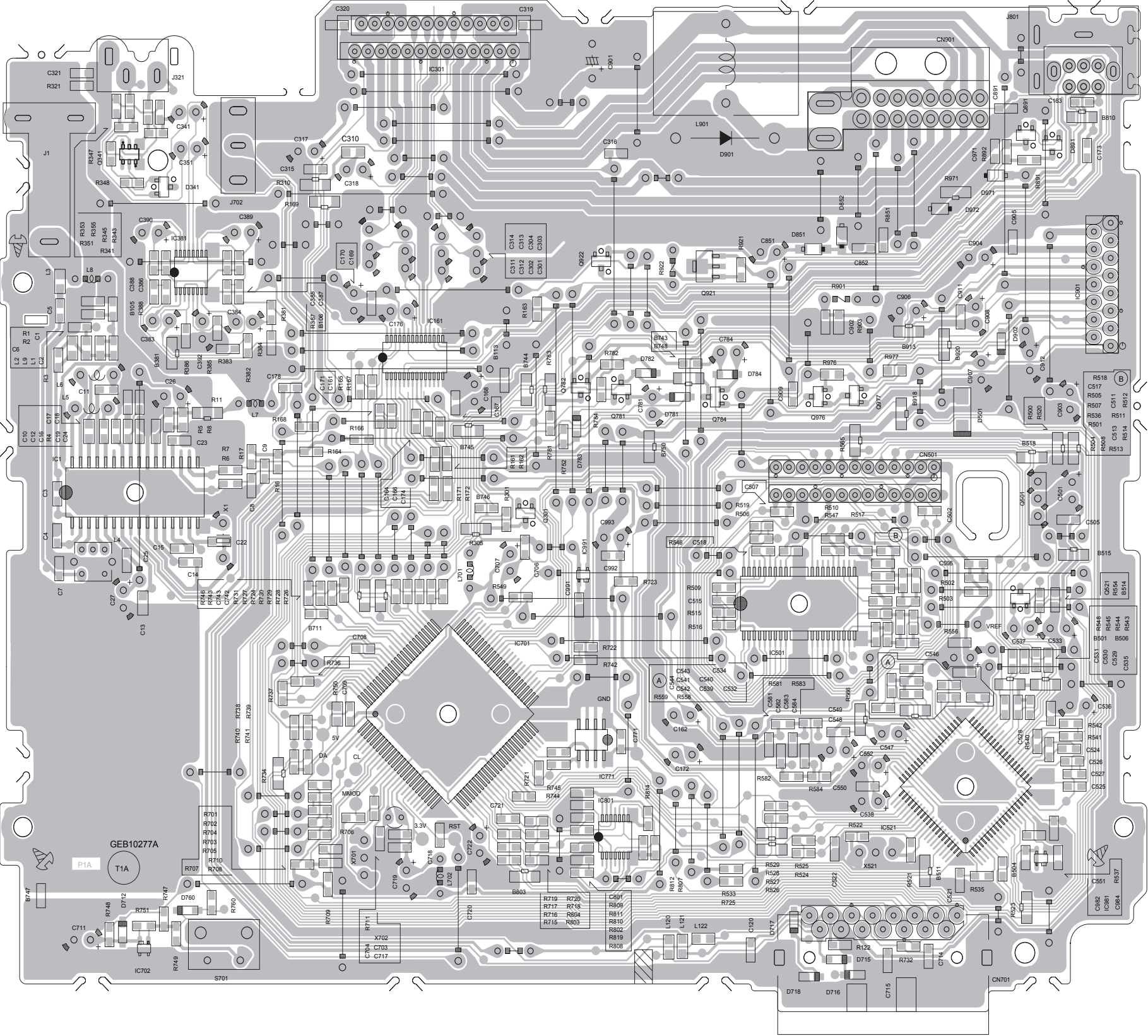
<Main board (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>
 (Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
 (Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



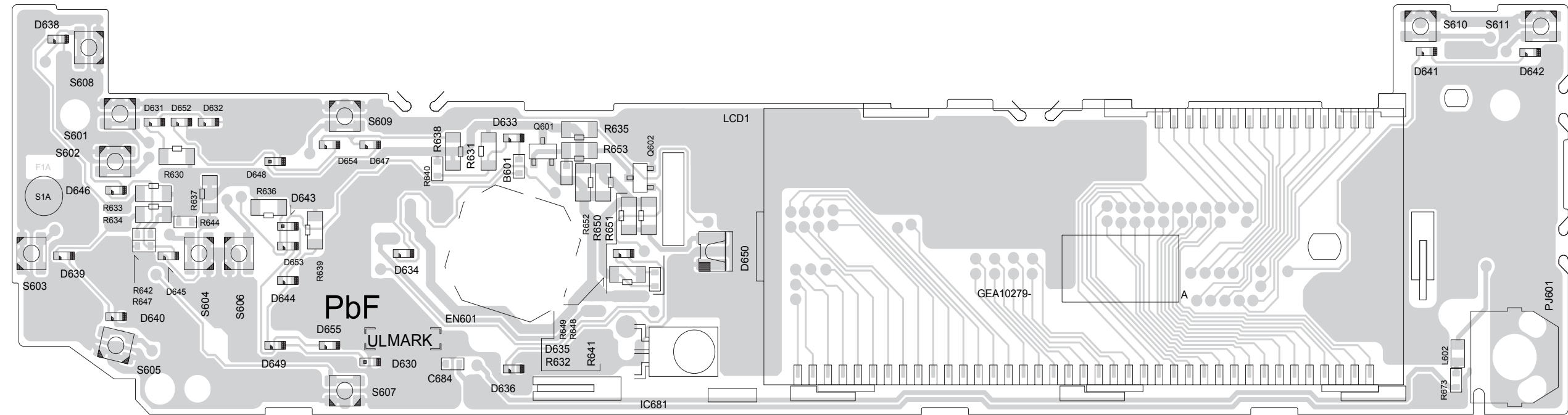
<Main board (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>

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

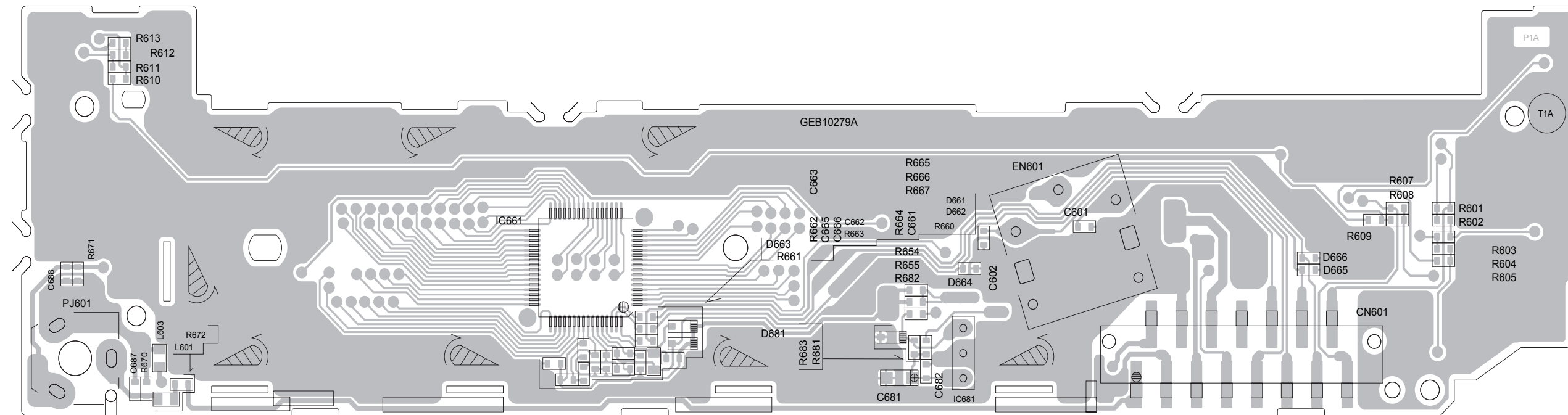
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



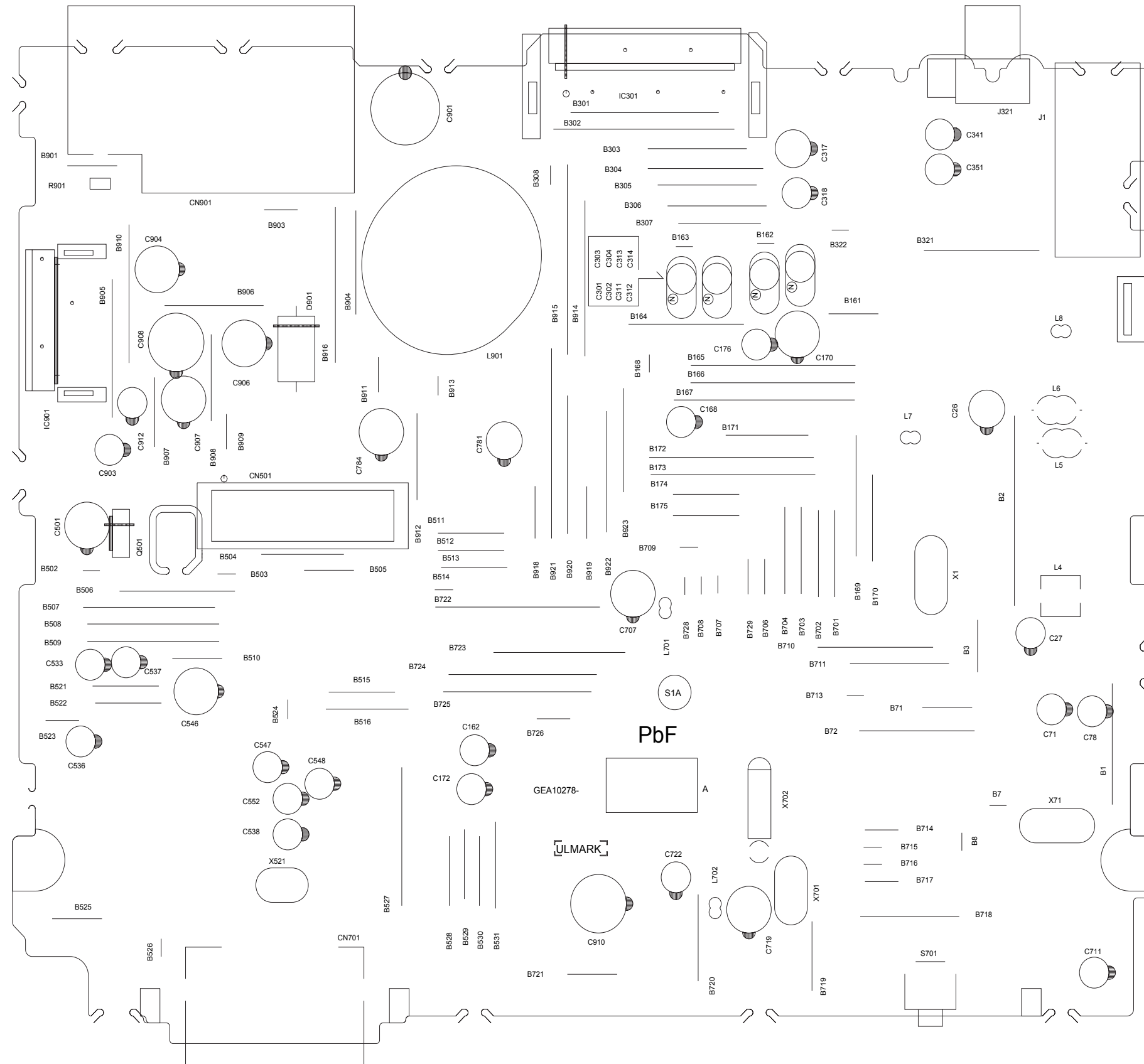
<Switch board (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>
(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Switch board (for Except KD-R311,KD-R312E,EU,EY,KD-R317EE)>
(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))



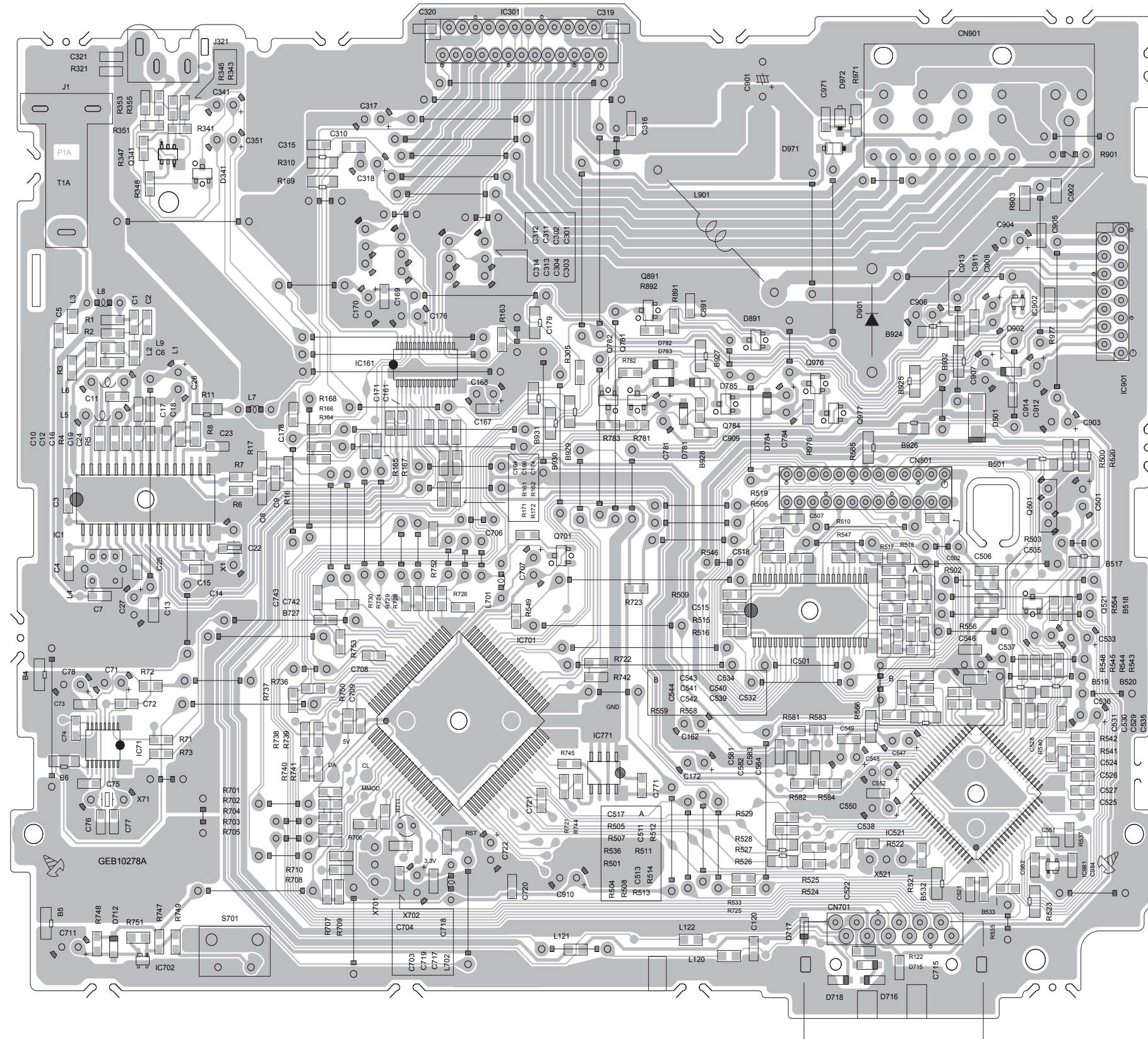
<Main board (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>
 (Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
 (Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



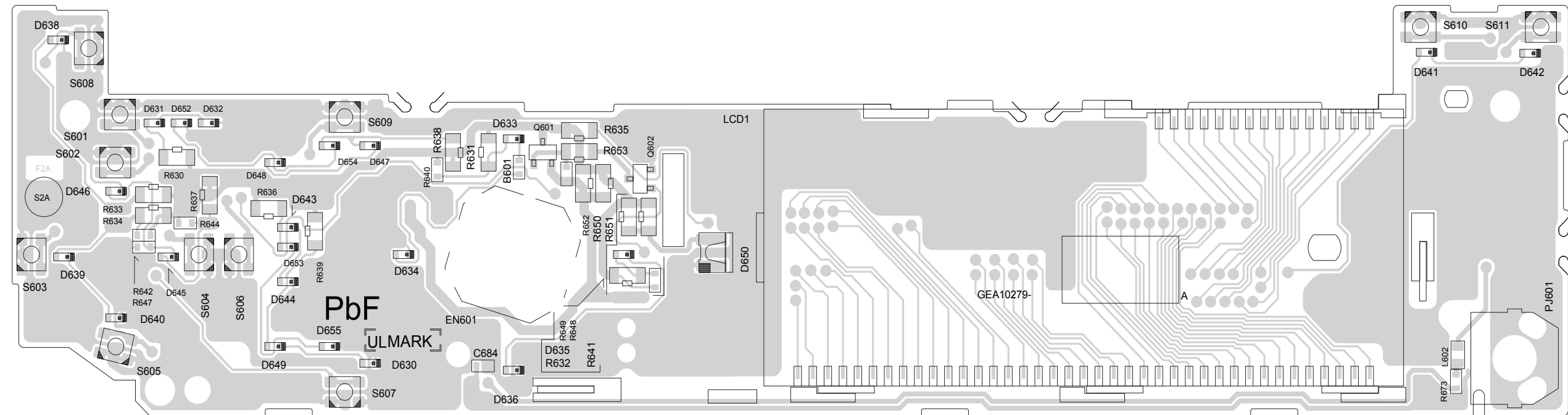
<Main board (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>

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

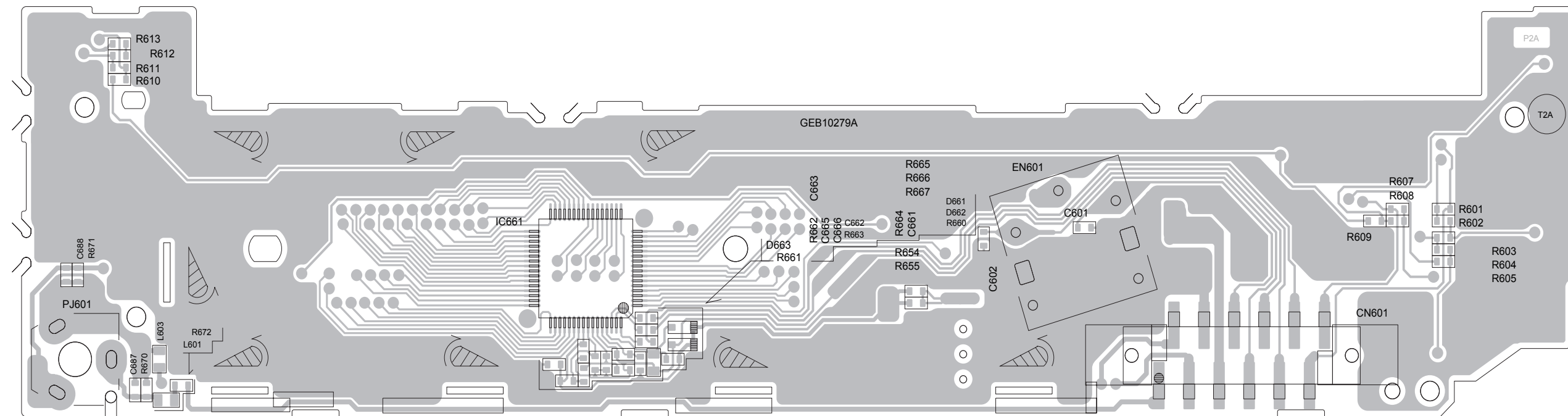
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Switch board (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>
(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))



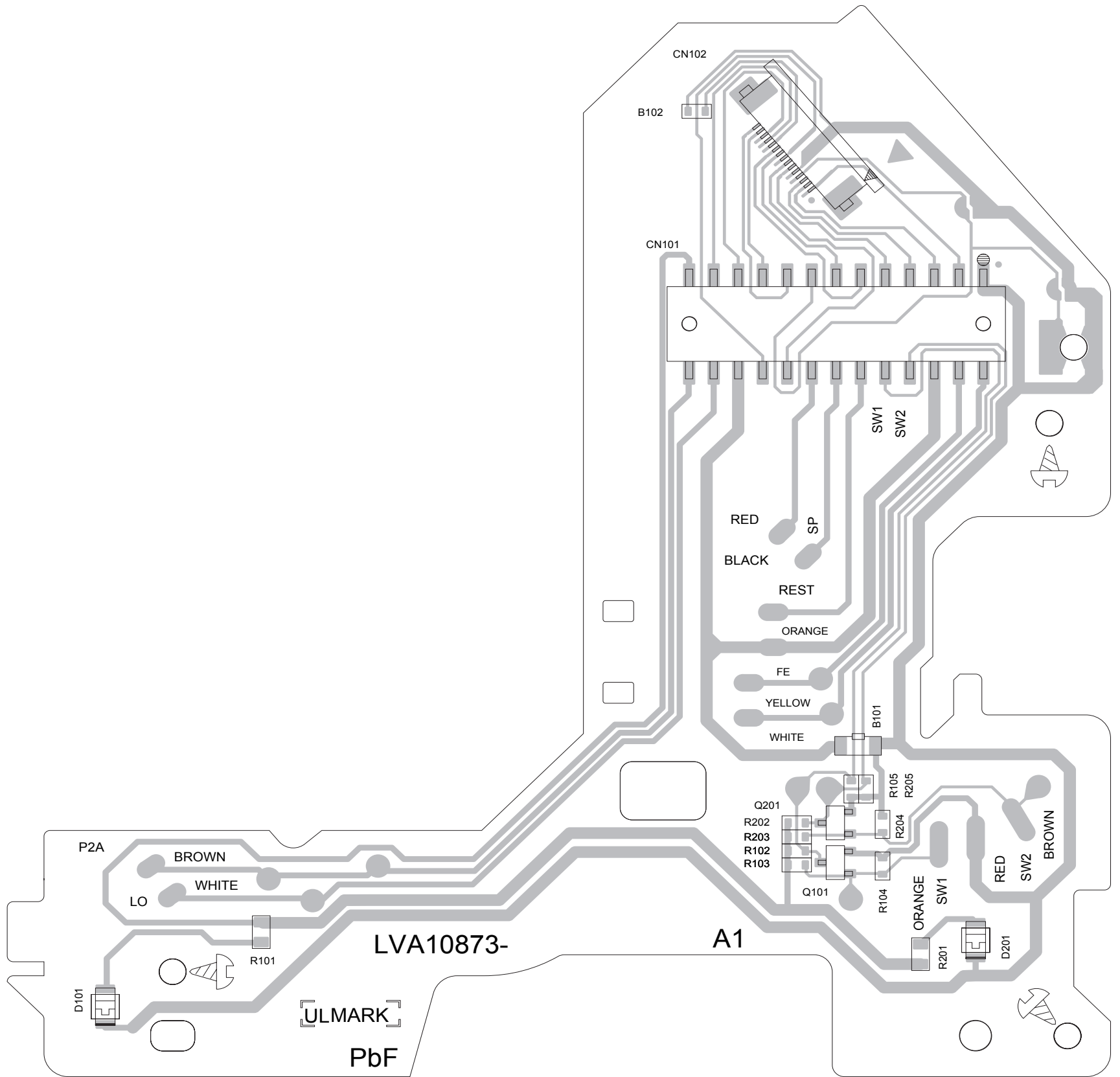
<Switch board (for KD-R311,KD-R312E,EU,EY,KD-R317EE)>
(Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade))
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Mecha control board>

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

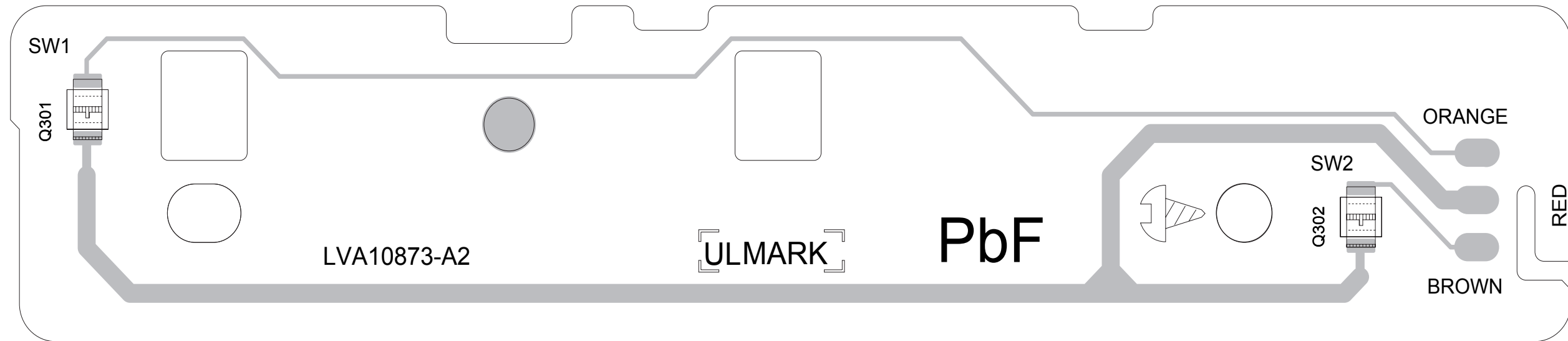
(Lead free solder used in the board (material : Sn-Cu, melting point : 230 Centigrade))



<Photo board>

(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))



<Rest switch board>

(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))

