

Service Manual

AUTOMOTIVE AFTERMARKET

CY-PAD1003N

Digital Mono Amplifier



Specifications*

General

Power Supply	DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Current Consumption	29A (at 350Wx1)
Speaker Impedance	4 Ω
Power Output ("EIA" Power)	
1-CH (Monaural)	350Wx1 (10Hz-8000Hz, 1%, 4 Ω)
Maximum Power Output	
1-CH (Monaural)	600Wx1 (10Hz-8000Hz, 10%)
Total Harmonic Distortion	0.2% (1000Hz, at 10W)
Low Pass Filter	50Hz-250Hz
Bass Boost	0dB-15dB (Middle Frequency: 45Hz)
Subsonic Filter	20Hz, -3dB, 12dB/oct
Signal to Noise Ratio	90dB (IHF, A)
Frequency Response	10Hz-8kHz
Input Sensitivity	0.2V-6V
Input Impedance	More than 22k Ω

Dimensions (WxHxD)** 280x62x303 mm

Weight** 4.0 kg

* Specifications and the design are subject to possible modification without notice due to improvements.

** Dimensions and Weight shown are approximate.

** Above specifications comply with EIA standards.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution :

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 700 ± 20°F (370 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C)
- This lead free solder will be used for the products after serial No. 1,000,001.

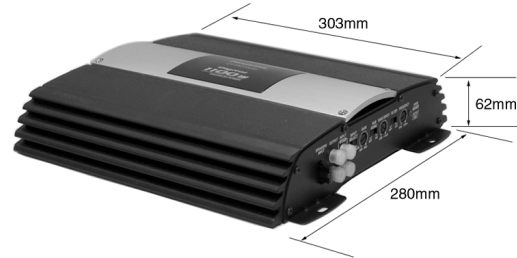
2 FEATUERS

- 1100 W × 1channel maximum power output
- Low-Pass Filter for subwoofer
- Hight Level Speaker Input connection
- Bass boost control system
- Crossover Frequency Control
- RCA output terminals
- 5.1-channel Surround System (Combination with other Panasonic car audio products)

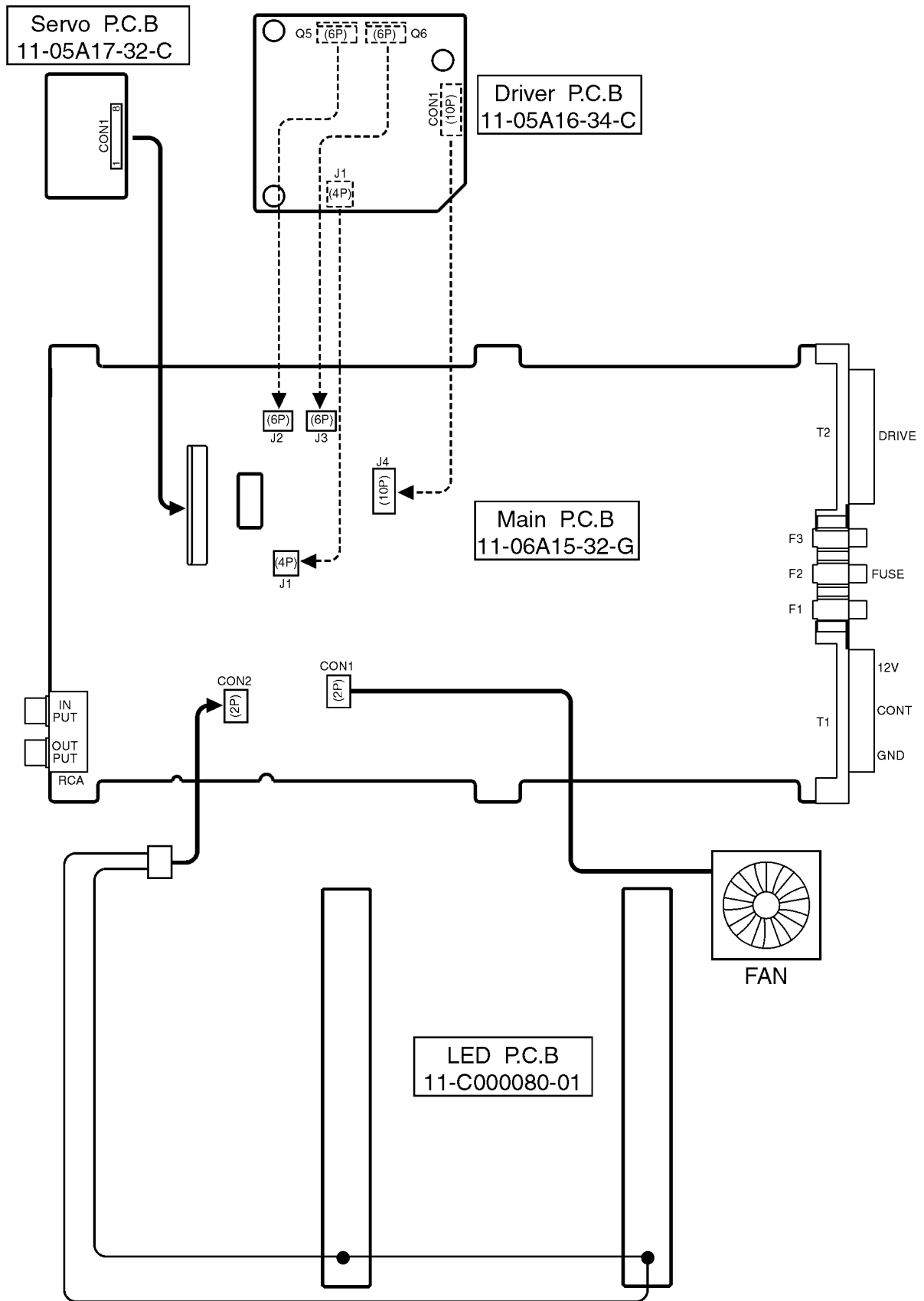
3 REPLACEING THE FUSE

Use fuses of the same specified rating 25 amps. Using different substitutes or fuses with higher ratings, or connecting the unit directly without a fuse, could cause fire or damage to the stereo unit.

4 DIMENSIONS



5 WIRING CONNECTION



6 REPLACEMENT PARTS LIST

Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
 - Order intake period is basically six months after the first shipment.
5. "T" marks in remarks column are indicated supply parts of PTW.

Ref. No.	Part No.	Part Name & Description	Remarks
[11-06A15-32-G] Main Block			
IC's AND TRANSISTORS			
QP16	07-07815-00	IC	T
QP17	07-07915-00	IC	T
U1	07-00072-01	IC	T
U2	07-00072-01	IC	T
U3	07-00072-01	IC	T
U4	07-00072-01	IC	T
UP1	07-00494-00	IC	T
Q2	08-05401-00	Transistor	T
Q5	08-00034-00	Transistor	T
Q6	08-00034-00	Transistor	T
Q11	08-03421-00	Transistor	T
Q12	08-05551-85	Transistor	T
Q13	09-00114-01	Transistor	T
Q13A	09-00114-00	Transistor	T
Q14	08-05401-85	Transistor	T
Q15	08-05401-85	Transistor	T
Q16	08-03904-85	Transistor	T
Q19	08-03421-00	Transistor	T
QF1	08-10667-01	Transistor	T
QP1	08-05551-00	Transistor	T
QP2	08-05401-00	Transistor	T
QP3	08-05551-00	Transistor	T
QP4	08-05401-00	Transistor	T
QP5	08-05401-00	Transistor	T
QP6	08-50N06-00	Transistor	T
QP7	08-50N06-00	Transistor	T
QP8	08-50N06-00	Transistor	T
QP9	08-50N06-00	Transistor	T
QP10	08-50N06-00	Transistor	T
QP11	08-50N06-00	Transistor	T
QP12	08-01358-00	Transistor	T
QP13	08-05551-00	Transistor	T
QP14	08-05551-00	Transistor	T
QP15	08-05551-00	Transistor	T
U99	08-05551-00	Transistor	T
DIODES			
D5	09-14148-85	Diode	T
D15	09-20130-01	Zener Diode	T

Ref. No.	Part No.	Part Name & Description	Remarks
D17	09-14148-85	Diode	T
D18	09-20056-03	Zener Diode	T
D22	09-00240-86	Zener Diode	T
D23	09-14148-85	Diode	T
DA1	09-14148-85	Diode	T
DA2	09-14148-85	Diode	T
DA10	09-14148-01	Diode	T
DA20	09-14148-85	Diode	T
DP1	09-14148-01	Diode	T
DP4	09-14148-01	Diode	T
DP5	09-14004-00	Diode	T
DP6	09-14148-01	Diode	T
DP7	09-14148-01	Diode	T
DP8	09-14148-01	Diode	T
DP9	09-14148-01	Diode	T
DP10	09-14148-01	Diode	T
DP11	09-20A20-00	Diode	T
DP12	09-20C20-00	Diode	T
DP13	09-00154-00	Diode	T
DP14	09-00154-00	Diode	T
DP15	09-00154-00	Diode	T
DP16	09-00154-00	Diode	T
DP17	09-15401-01	Diode	T
DP20	09-14148-01	Diode	T
DP21	09-14148-01	Diode	T
Z4	09-20056-85	Zener Diode	T
ZA1	09-20120-03	Zener Diode	T
ZA2	09-20120-03	Zener Diode	T
ZD2	09-20390-03	Zener Diode	T
ZD3	09-20390-03	Zener Diode	T
ZD4	09-00047-00	Zener Diode	T
ZF1	09-00075-00	Zener Diode	T
LED	19-00329-00	LED	T
PHOTOCOUPLEDERS			
P1	07-00817-02	Photocoupler	T
P2	07-00817-02	Photocoupler	T
CAPACITORS			
C1	04-21000-05	100PF 50WV	T
C2	02-21001-46	10 μ F 50WV	T
C3	04-21000-05	100PF 50WV	T
C4	02-21001-46	10 μ F 50WV	T
C5	02-21001-46	10 μ F 50WV	T
C6	02-21001-46	10 μ F 50WV	T
C7	02-21001-46	10 μ F 50WV	T
C8	02-21001-46	10 μ F 50WV	T
C9	04-21000-05	100PF 50WV	T
C10	04-21000-05	100PF 50WV	T
C11	02-21001-46	10 μ F 50WV	T
C12	03-21030-60	0.01 μ F 63WV	T
C13	03-21030-60	0.01 μ F 63WV	T
C14	03-26830-06	0.068 μ F 63WV	T
C14A	03-21030-60	0.01 μ F 63WV	T
C15	03-26830-06	0.068 μ F 63WV	T
C15A	03-21040-07	0.1 μ F 63WV	T
C17	04-21500-05	150PF 100WV	T
C18	03-24740-03	0.47 μ F 63WV	T
C19	03-21040-07	0.1 μ F 63WV	T
C20	03-24730-06	0.047 μ F 63WV	T
C21	03-21040-07	0.1 μ F 63WV	T
C25	03-21040-85	0.1 μ F 50WV	T
C31	03-22240-05	0.22 μ F 100WV	T
C32	03-22240-05	0.22 μ F 100WV	T
C33	03-22240-05	0.22 μ F 100WV	T
C38	02-24702-61	470 μ F 80WV	T
C39	02-24702-61	470 μ F 80WV	T
C51	06-00474-02	0.47 μ F 400WV	T
C51A	02-22201-45	22 μ F 50WV	T
C51B	06-00684-01	0.68 μ F 250WV	T
C51C	03-21030-60	0.01 μ F 63WV	T
C55	02-21002-85	100 μ F 16WV	T

Ref. No.	Part No.	Part Name & Description	Remarks
RG1	01-11030-63	10kΩ 1/8W	T
RP1	01-13320-63	3.3kΩ 1/8W	T
RP2	01-13320-63	3.3kΩ 1/8W	T
RP3	01-13320-63	3.3kΩ 1/8W	T
RP4	01-13320-63	3.3kΩ 1/8W	T
RP12	01-54520-85	4.53kΩ	T
RP13	01-12050-63	2MΩ 1/8W	T
RP14	01-11530-63	1.5MΩ 1/8W	T
RP15	01-52230-61	22kΩ 1/8W	T
RP16	01-51530-85	15kΩ	T
RP17	01-53620-62	3.6kΩ 1/8W	T
RP18	01-15630-63	56kΩ 1/8W	T
RP19	01-13020-63	3kΩ 1/8W	T
RP20	01-11030-63	10kΩ 1/8W	T
RP21	01-11050-63	1MΩ 1/8W	T
RP22	01-16810-63	680Ω 1/8W	T
RP23	01-11000-63	10Ω 1/8W	T
RP24	01-11020-63	1kΩ 1/8W	T
RP25	01-11020-63	1kΩ 1/8W	T
RP26	01-11020-43	1kΩ 1/4W	T
RP27	01-11020-43	1kΩ 1/4W	T
RP28	01-12200-43	22Ω 1/4W	T
RP29	01-12200-43	22Ω 1/4W	T
RP30	01-12200-43	22Ω 1/4W	T
RP31	01-12200-43	22Ω 1/4W	T
RP32	01-12200-43	22Ω 1/4W	T
RP33	01-12200-43	22Ω 1/4W	T
RP33A	01-12200-22	22Ω 1/2W	T
RP33B	01-12200-22	22Ω 1/2W	T
RP34	01-11001-22	1Ω 1/2W	T
RP34A	01-11001-22	1Ω 1/2W	T
RP34B	01-11020-63	1kΩ 1/8W	T
RP35	01-11020-63	1kΩ 1/8W	T
RP36	01-11030-63	10kΩ 1/8W	T
RP37	01-11040-63	100kΩ 1/8W	T
RP38	01-14720-63	4.7kΩ 1/8W	T
RP39	01-11030-63	10kΩ 1/8W	T
RP40	01-11000-43	10Ω 1/4W	T
RP43	01-11000-43	10Ω 1/4W	T
RP44	01-14720-11	4.7kΩ 1W	T
RR1	01-11040-63	100kΩ 1/8W	T
RR2	01-11020-63	1kΩ 1/8W	T
RV1	01-51530-64	15.6kΩ 1/8W	T
RV2	01-53030-62	30kΩ 1/8W	T
THERMISTOR			
RT	13-00215-00	Thermistor	T
VARIABLE RESISTERS			
VR1	15-22030-07	VR	T
VR2	15-22030-07	VR	T
VR3	15-25030-06	VR	T
SWITCHES			
S1	18-00886-00	2P2T Switch	T
SW1	18-00886-00	2P2T Switch	T
SW2	18-00886-00	2P2T Switch	T
TRANSFORMER			
TR1	20-00217-00	Transformer	T
CONNECTORS			
CON1	30-00281-00	2Pin Terminal	T
CON2	30-00115-02	2Pin Connector	T
T1	32-00637-02	3P Terminal	T
T2	32-00638-02	4P Terminal	T
J1	30-00282-00	2Pin Connector	T
J2	30-00283-00	3Pin Connector	T
J3	30-00283-00	3Pin Connector	T

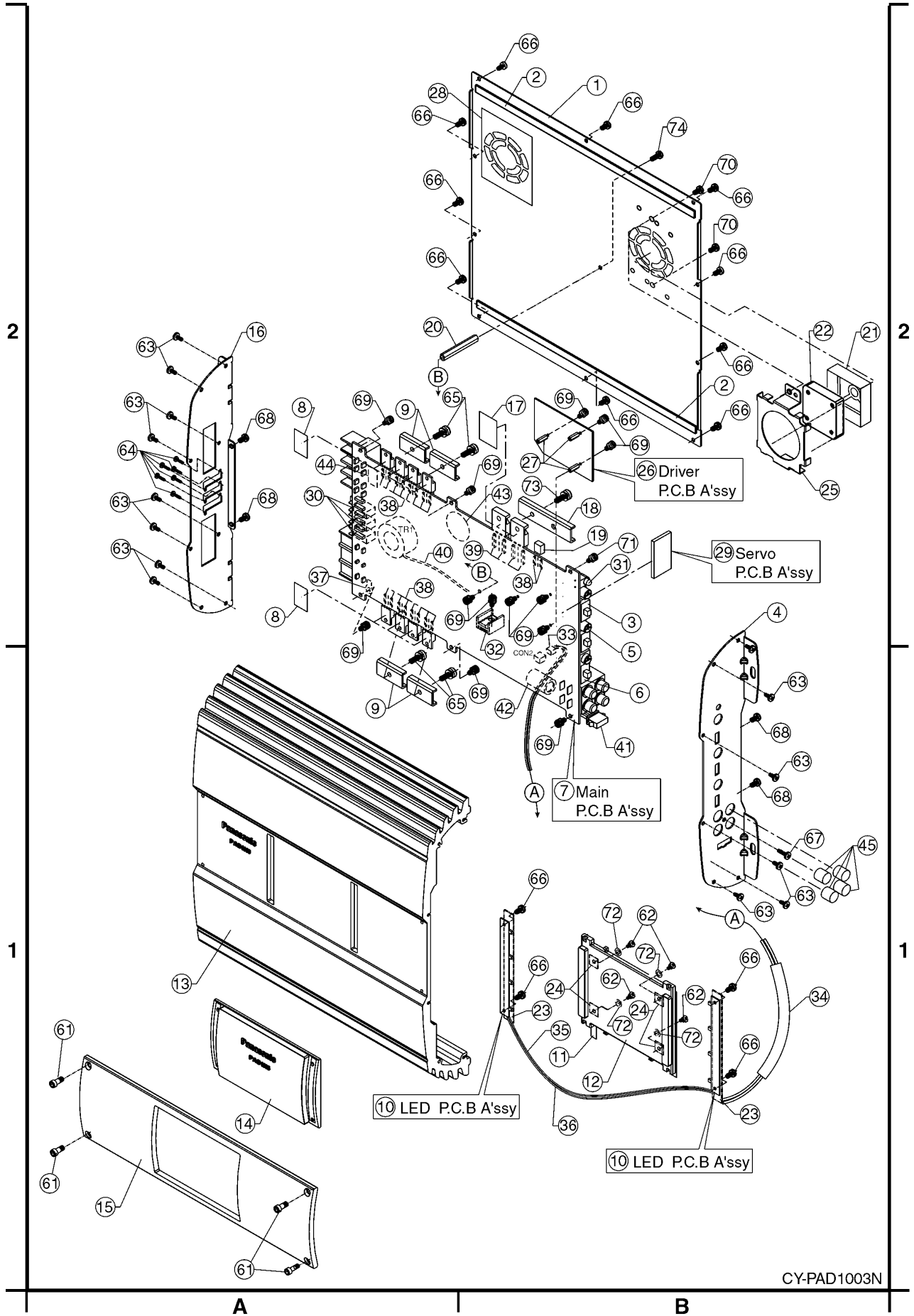
Ref. No.	Part No.	Part Name & Description	Remarks
J4	30-00284-00	5Pin Connector	T
COILS			
L3	20-00219-00	100uH Coil	T
L4	20-00219-00	100uH Coil	T
L5	20-00219-00	100uH Coil	T
RELAY			
RL1	21-00203-00	Relay	T
FUSES			
F1	71-00418-00	25A Fuse	T Δ
F2	71-00418-00	25A Fuse	T Δ
F3	71-00418-00	25A Fuse	T Δ
INDUCTORS			
B1	20-00211-00	Inductor	T
B2	20-00211-00	Inductor	T
B3	20-00211-00	Inductor	T
B4	20-00211-00	Inductor	T
L1	20-00221-00	Inductor	T
L2	20-00220-00	Inductor	T
LP1	20-00210-00	Inductor	T
OTHER			
RCA	32-00678-00	4Pin RCA Jack	T
[11-05A17-32-C] Servo Block			
IC			
U1	07-00072-85	IC	T
CAPACITORS			
C1	02-21001-86	10μF 25WV	T
C4	03-24740-85	0.47μF 50WV	T
C6	02-21001-86	10μF 25WV	T
C7	02-22201-85	22μF 25WV	T
C8	02-22201-85	22μF 25WV	T
C10	03-24710-85	470PF 50WV	T
C12	03-24710-85	470PF 50WV	T
CA1	02-22201-85	22μF 25WV	T
CA2	03-21040-85	0.1μF 50WV	T
CA3	02-22201-85	22μF 25WV	T
CA4	03-21040-85	0.1μF 50WV	T
RESISTERS			
R1	01-51230-85	12kΩ	T
R2	01-51230-85	12kΩ	T
R3	01-51030-85	10kΩ	T
R4	01-51620-84	1.6kΩ	T
R5	01-54820-84	6.8kΩ	T
R6	01-54330-85	43kΩ	T
R7	01-54330-85	43kΩ	T
R8	01-51020-85	1kΩ	T
R9	01-54710-84	470Ω	T
R10	01-51020-85	1kΩ	T
R11	01-51020-85	1kΩ	T
R13	01-51820-84	1.8kΩ	T
R14	01-51820-84	1.8kΩ	T
VARIABLE RESISTER			
VR3	13-00220-85	VR	T
CONNECTOR			

Ref. No.	Part No.	Part Name & Description	Remarks
CON1	30-00242-00	8P Connector	T
[11-05A16-34-C] Driver Block			
IC's AND TRANSISTORS			
U1	07-04051-85	IC	T
U2	07-70004-85	IC	T
U4	07-70008-85	IC	T
U6	07-02011-85	IC	T
U10	07-07809-85	IC	T
U13	07-07805-85	IC	T
Q1	08-05401-85	Transistor	T
Q9	08-03904-85	Transistor	T
Q17	08-01260-85	Transistor	T
Q18	08-01898-85	Transistor	T
DIODEs			
D1	09-14148-85	Diode	T
D2	09-14148-85	Diode	T
D6	09-00014-85	Diode	T
D7	09-00014-85	Diode	T
D14	09-40120-85	Diode	T
D19	09-20056-85	Zener Diode	T
D20	09-14148-85	Diode	T
D26	09-00014-85	Diode	T
Z5	09-00240-85	Zener Diode	T
Z6	09-20056-85	Zener Diode	T
CAPACITORS			
C1	03-22210-85	220PF 100WV	T
C3	02-21001-86	10µF 25WV	T
C8	03-21040-85	0.1µF 50WV	T
C9	03-21050-85	1µF 16WV	T
C17	03-21020-85	1000PF 100WV	T
C18	03-21020-85	1000PF 100WV	T
C23	03-23340-85	0.33µF 25WV	T
C26	03-21040-86	0.1µF 100WV	T
C29	02-21001-86	10µF 25WV	T
C42	02-21001-86	10µF 25WV	T
C44	03-21050-86	1µF 16WV	T
C46	02-21001-86	10µF 25WV	T
C47	02-21001-86	10µF 25WV	T
C48	02-24701-85	47µF 35WV	T
C53	03-21030-85	0.01µF 50WV	T
C57	03-21040-85	0.1µF 50WV	T
C60	02-21001-86	10µF 25WV	T
C61	02-24701-86	47µF 25WV	T
CA1	03-24740-03	0.47µF 100WV	T
CA2	03-22240-05	0.22µF 100WV	T
RESISTERS			
R1	01-54730-83	47kΩ	T
R3	01-51020-87	1kΩ	T
R4	01-51020-85	1kΩ	T
R8	01-53340-85	330kΩ	T
R10	01-55620-85	5.6kΩ	T
R11	01-51030-85	10kΩ	T
R12	01-54730-84	47kΩ	T
R13	01-51030-85	10kΩ	T
R14	01-54730-84	47kΩ	T
R17	01-51010-85	100Ω	T
R21	13-00221-85	10kΩ	T
R23	01-51010-85	100Ω	T
R26	13-00220-85	1kΩ	T
R31	01-52200-86	22Ω	T
R33	01-51030-87	10kΩ	T
R34	01-51030-87	10kΩ	T
R41	01-51040-85	100kΩ	T
R44	01-56820-84	6.8kΩ	T
R47	01-59100-84	9.1kΩ	T

Ref. No.	Part No.	Part Name & Description	Remarks
R49	01-54700-85	4.7kΩ	T
R50	01-52200-86	22Ω	T
R68	01-52230-86	22kΩ	T
R69	01-52230-86	22kΩ	T
R72	01-53320-83	3.3kΩ	T
R73	01-53320-83	3.3kΩ	T
R74	01-51030-87	10kΩ	T
R82	01-51030-85	10kΩ	T
CONNECTORS			
CON1	30-00280-00	5Pin Connector	T
J1	30-00378-00	2Pin Connector	T
Q5	30-00279-00	3Pin Connector	T
Q6	30-00279-00	3Pin Connector	T
[11-C00080-01] LED Block			
LED's			
LED1	19-00328-00	LED	T
LED2	19-00328-00	LED	T
LED3	19-00328-00	LED	T
LED4	19-00328-00	LED	T
LED5	19-00328-00	LED	T
LED6	19-00328-00	LED	T
LED7	19-00328-00	LED	T
LED8	19-00328-00	LED	T
RESISTERS			
R1	01-12210-85	220Ω	T
R2	01-12210-85	220Ω	T
R3	01-12210-85	220Ω	T
R4	01-12210-85	220Ω	T
RJ1	01-10000-95	0Ω 1/4W	T
RJ2	01-10000-95	0Ω 1/4W	T
Accessories			
PRINTING			
	80-P4003-0N	Operating Instructions	T
Installation Hardware			
(For Installation)			
	ST-RP450-20	Tapping Screw (5*20)	T
	YH-00018-00	Plain Washer (5*)	T
	YH-00016-01	Allen Wrench	T
	YH-00020-00	Spacer	T
	ST-RP450-40	Tapping Screw (5*40)	T
(For Wiring)			
	35-00124-00	Speaker Input Connector	T
	76-00408-00	Terminal Cover for Short-Circuit Prevention	T
Mechanical Parts			
MISCELLANEOUS			
1	71-00485-00	Bottom Panel	T
2	78-00444-00	Gasket Bottom	T
3	78-00410-00	Gasket Switch	T
4	71-00711-00	Side Panel Right	T
5	76-00411-00	VR Cap	T
6	73-00159-00	Bracket 1VR	T
7	11-00672-00	Main PCB w/Component	T/RTL
8	78-00441-00	Mica Sheet	T
9	74-00179-00	Bracket U Form	T
10	11-00665-00	LED PCB w/Component	T/RTL
11	76-00412-00	Display Lens Sheet	T
12	76-00413-00	Display Lens	T
13	77-00363-00	Heatsink	T
14	76-00429-00	Display Cover	T

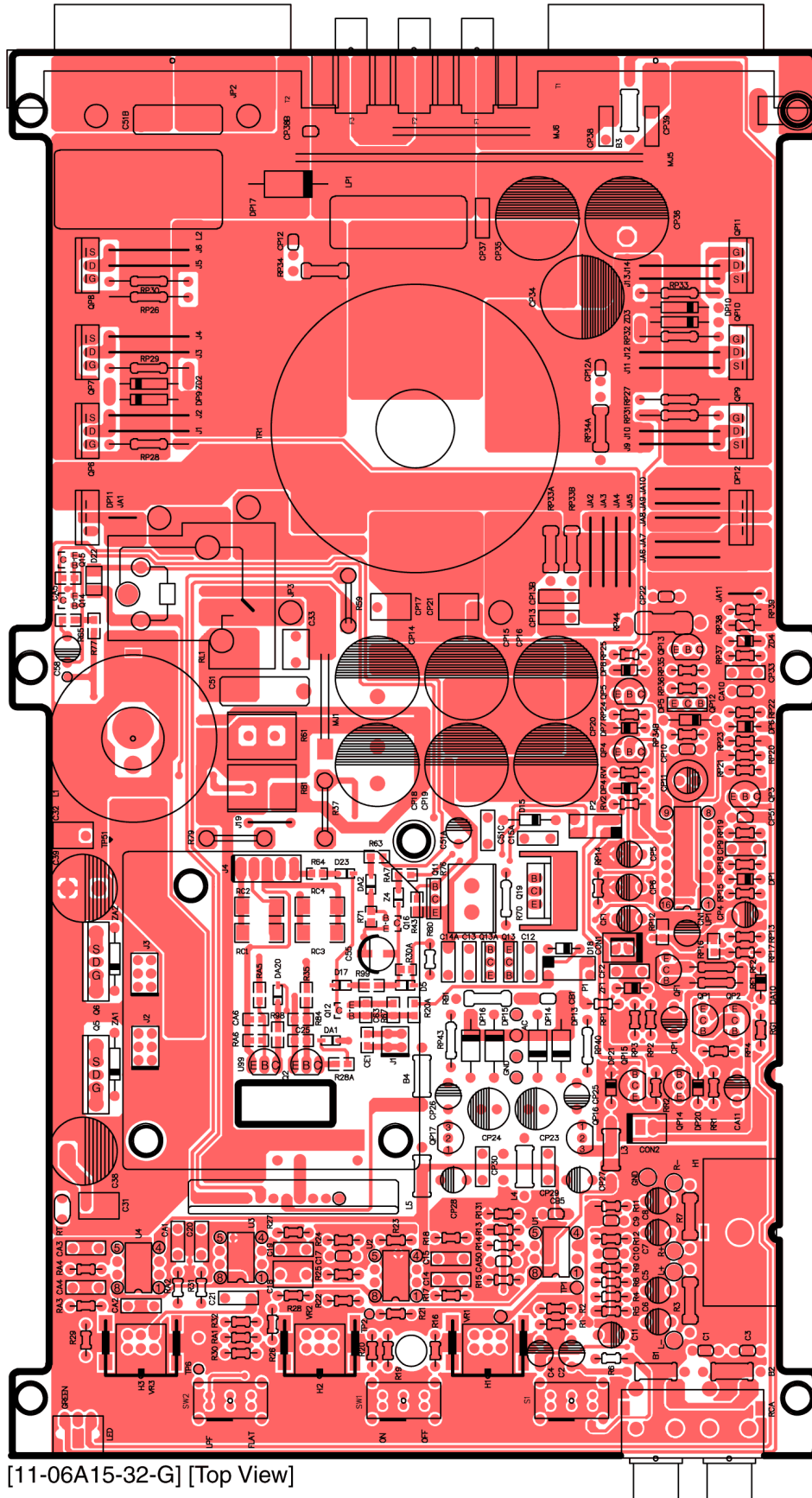
Ref. No.	Part No.	Part Name & Description	Remarks
15	71-00709-00	Top Cover	T
16	71-00710-00	Side Panel Left	T
17	78-00412-00	Ceramic Sheet	T
18	74-00216-00	Bracket U Form	T
19	78-00351-00	EVA Foam	T
20	74-00210-00	Column Hexagon	T
21	76-00428-00	Wrap for FAN	T
22	75-00221-00	FAN	T
23	78-00407-00	Insulated Sheet	T
24	78-00409-00	Insulated Sheet	T
25	73-00167-00	Bracket for FAN	T
26	11-00673-00	Driver PCB w/Component	T/RTL
27	74-00205-00	Column Hexagon	T
28	78-00421-00	Meshy Cloth	T
29	11-0674-00	Servo PCB w/Component	T/RTL
30	76-00239-00	Fuse Holder	T
31	24-00314-00	LED Holder	T
32	77-00362-00	Heatsink	T
33	25-00720-00	Black/Red Cable	T
34	24-00313-00	Heat-shink Sleeve	T
35	25-00706-00	Red Cable	T
36	25-00705-00	Black Cable	T
37	74-00208-00	Ground	T
38	78-00384-00	Silicon Tube	T
39	78-00345-00	Silicon Tube	T
40	78-00276-00	Silicon Tube	T
41	34-00159-00	GND Hi-Level Input	T
42	20-00218-00	Magnetic Ring	T
43	78-00443-00	Insulating Sheet	T
44	78-00442-00	Insulating Sheet	T
45	76-00410-00	Wrap RCA Jack	T
61	SM-IH240-09	Screw	T
62	SM-FP220-05	Screw	T
63	S3-RP430-06	Screw	T
64	S3-RP420-10	Screw	T
65	SM-RP240-12	Screw	T
66	S3-RP430-05	Screw	T
67	SM-PR430-08	Screw	T
68	S3-RP430-10	Screw	T
69	SM-RP230-W8	Screw	T
70	SM-RP430-05	Screw	T
71	YH-00019-00	Spring Washer	T
72	YH-00018-00	Plat Washer	T
73	SM-RP240-14	Screw	T
74	S3-RP230-08	Screw	T

7 EXPLODED VIEW (Unit)



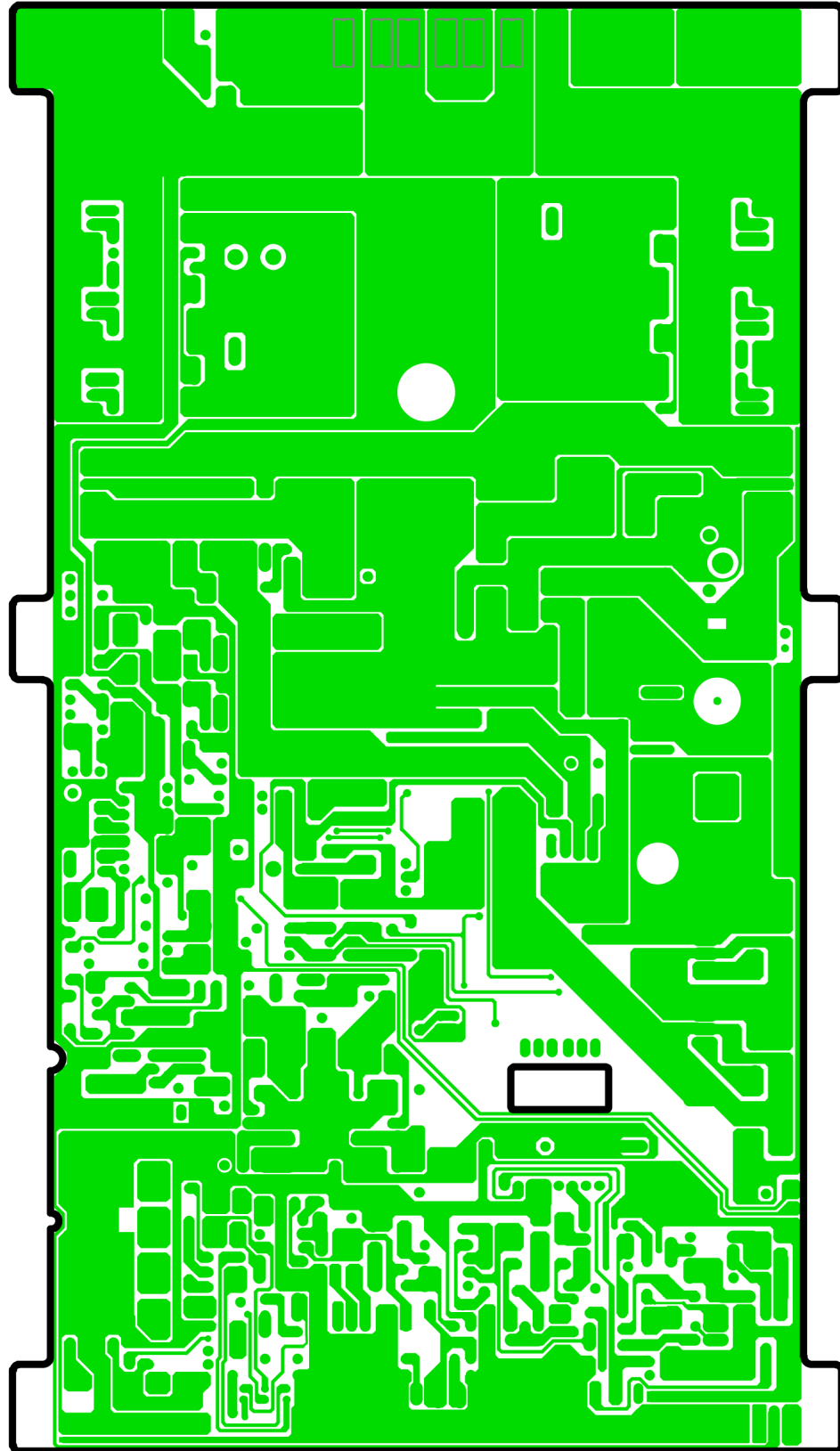
8 WIRING DIAGRAM

8.1. Main Block (Top View)



[11-06A15-32-G] [Top View]

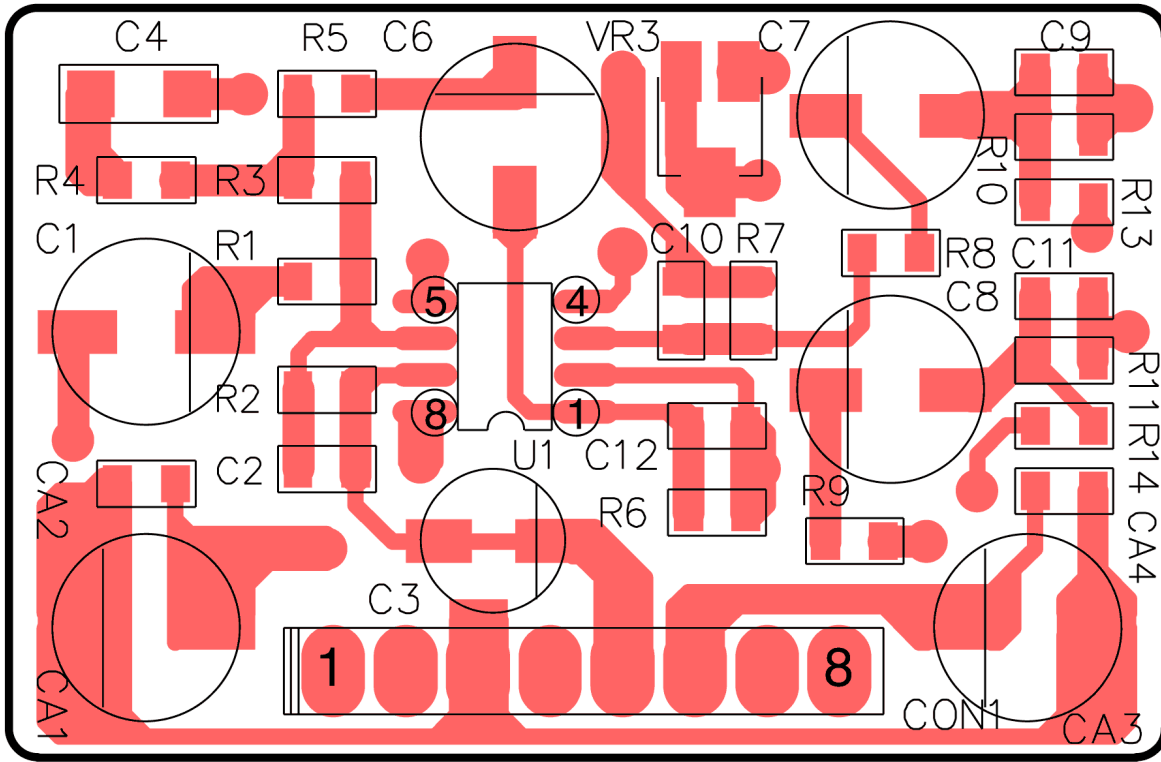
8.2. Main Block (Bottom View)



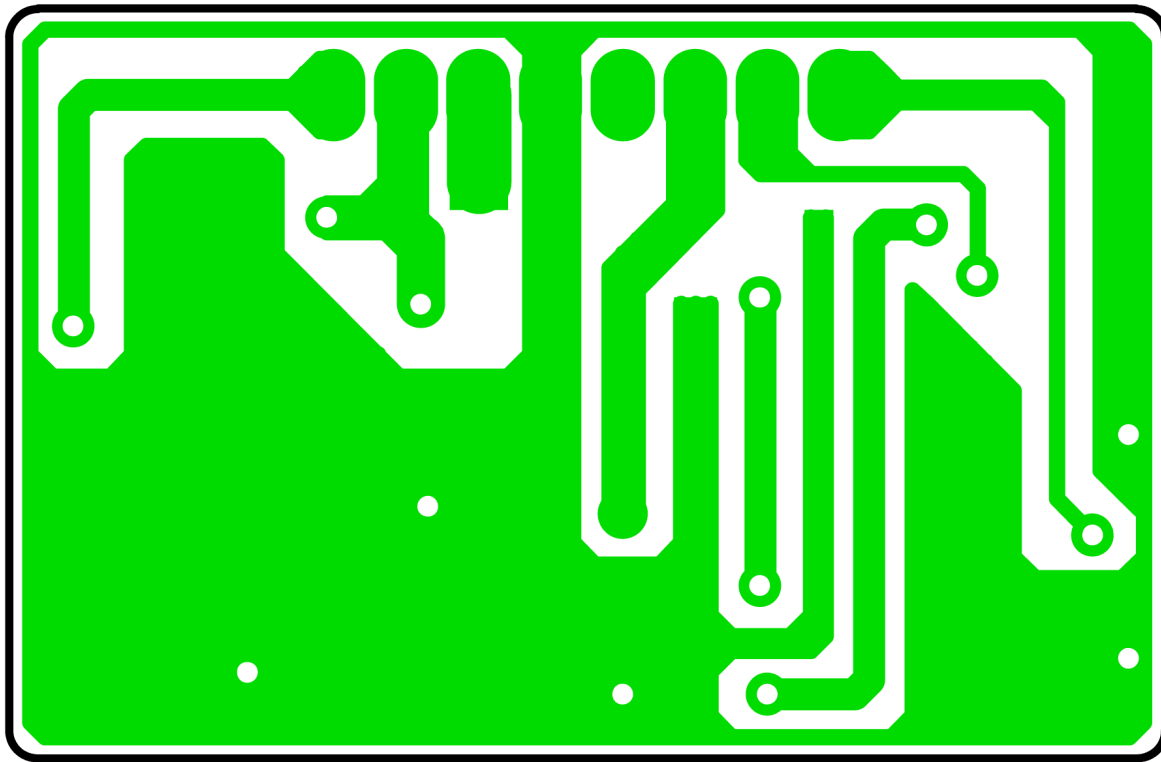
[11-06A15-32-G] [Bottom View]

CY-PAD1003N MAIN P.C.B

8.3. Servo Block

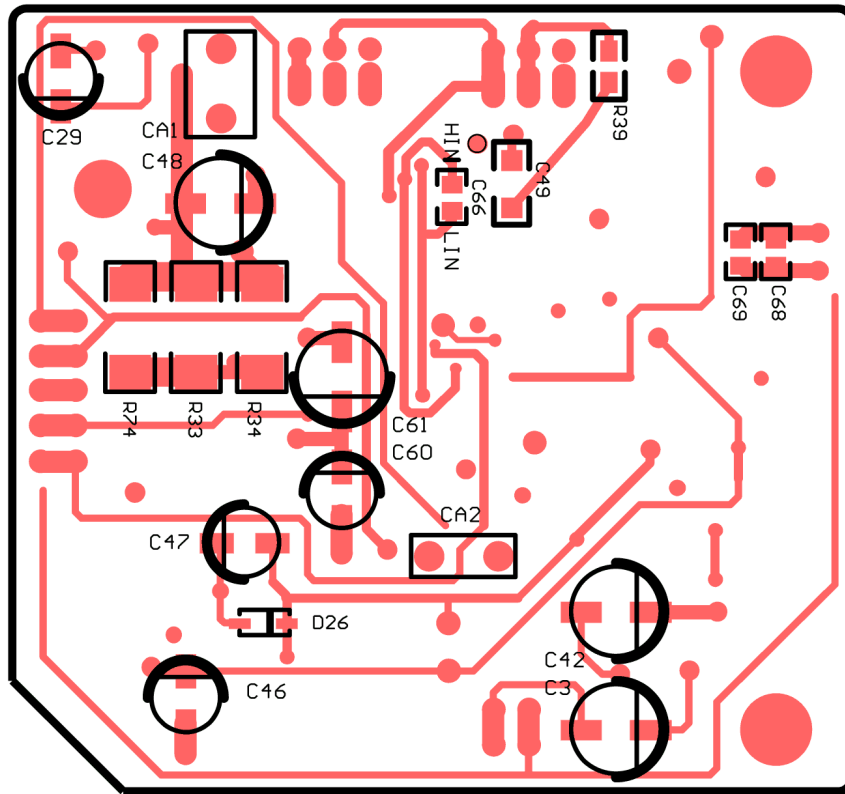


[11-05A17-32C] [Top View]

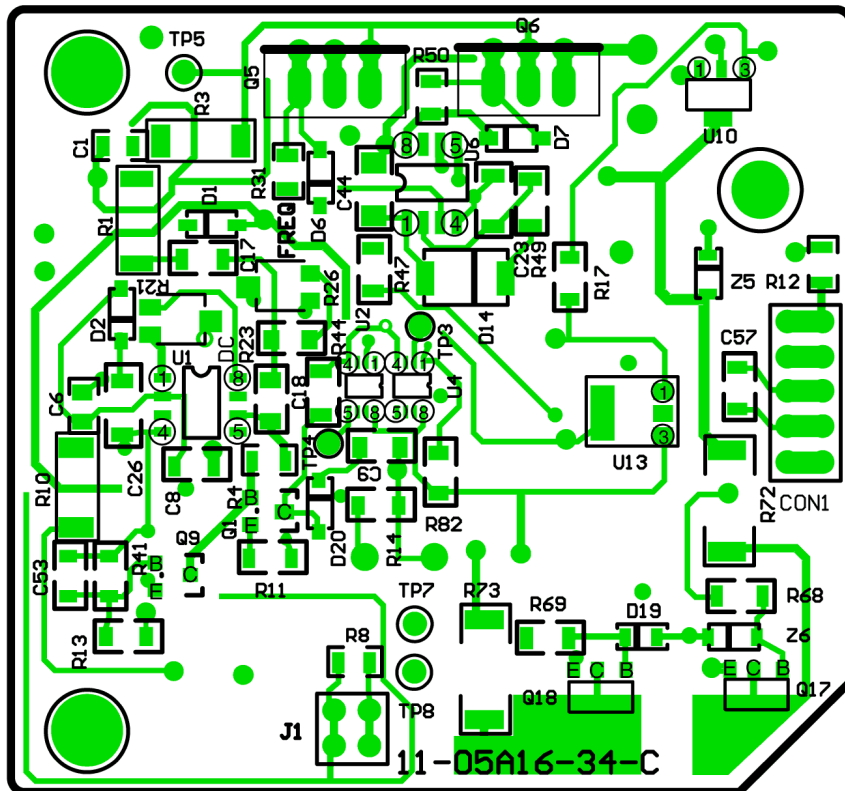


[11-05A17-32-C] [Bottom View]

8.4. Driver Block

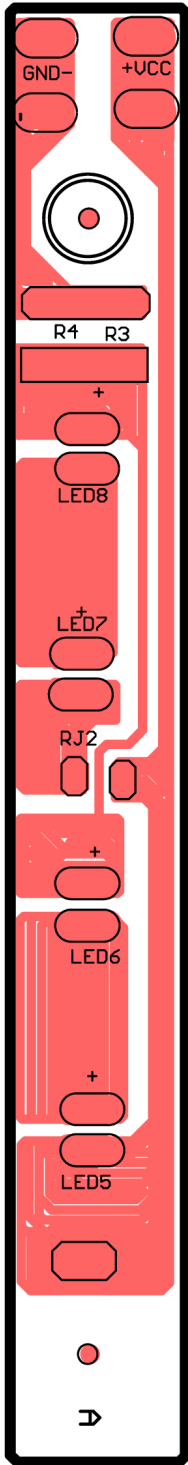


[11-05A16-34-C] [Top View]

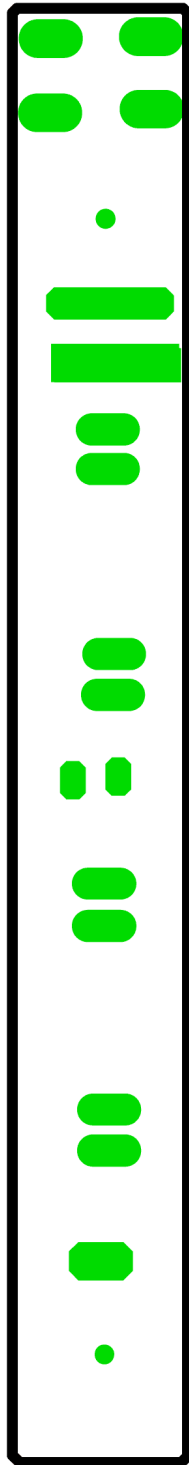


[11-05A16-34-C] [Bottom View]

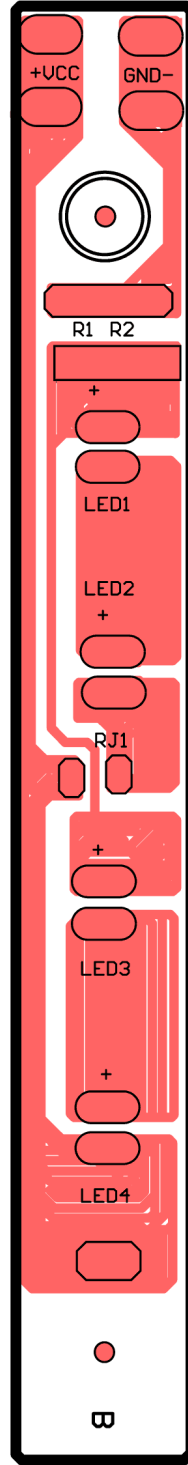
8.5. LED Block



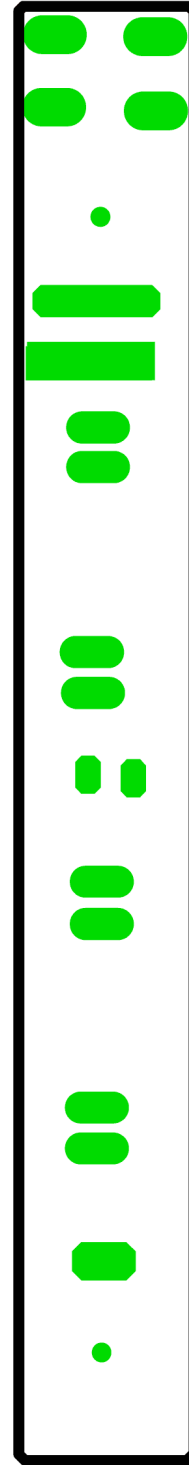
[11-C000080-01A]
[Top View]



[11-C000080-01A]
[Bottom View]



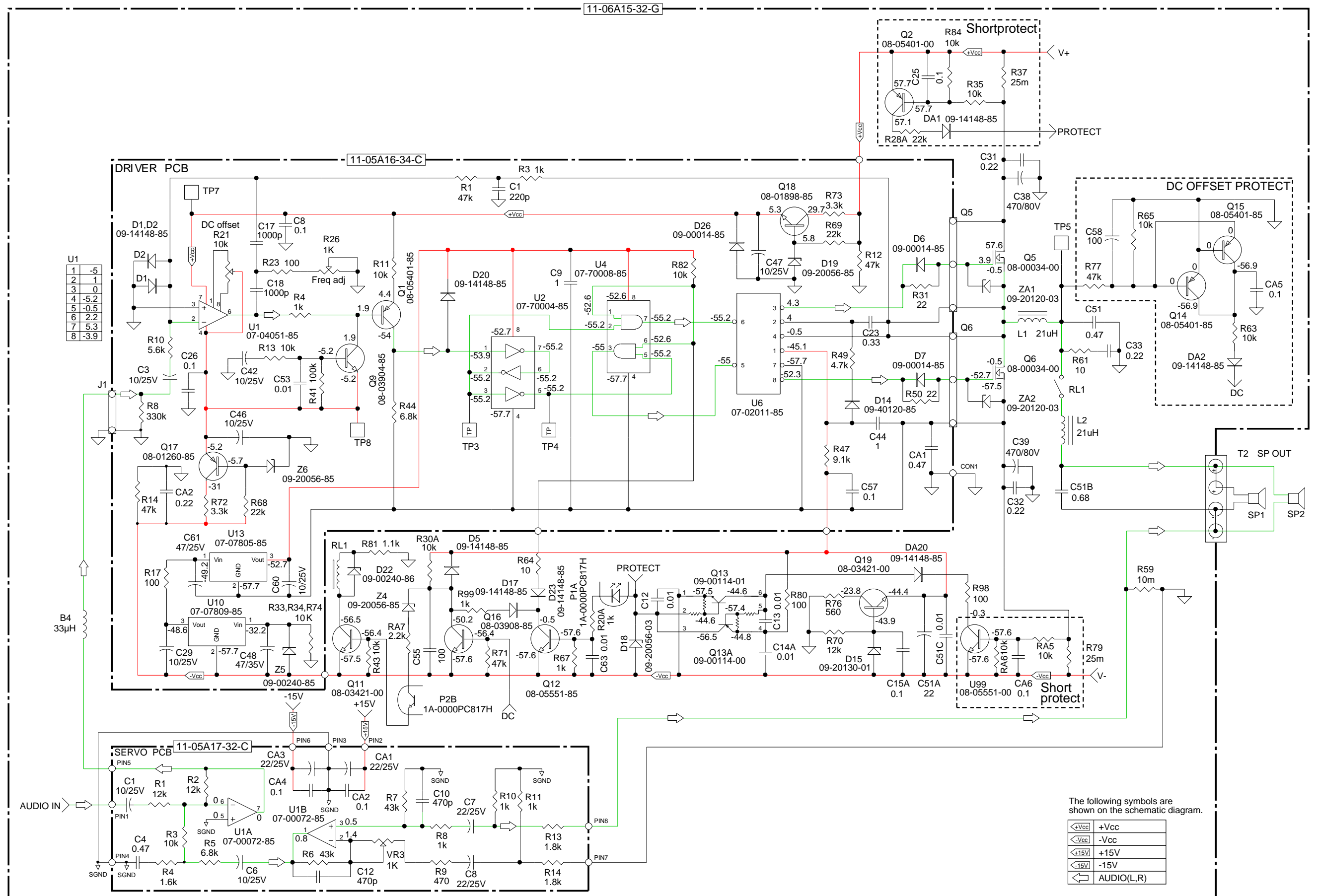
[11-C000080-01B]
[Top View]



[11-C000080-01B]
[BOTTOM View]

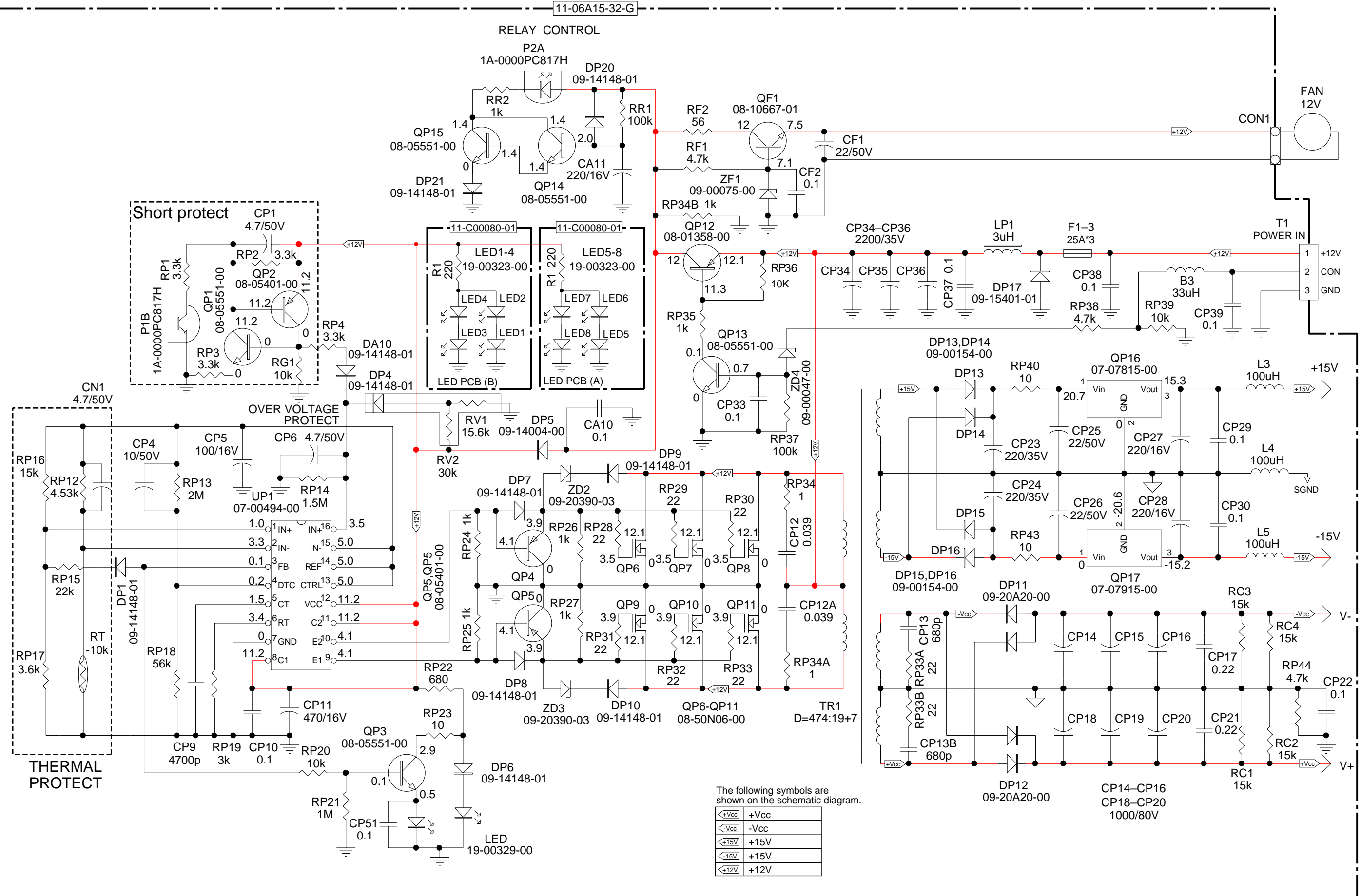
9 SCHEMATIC DIAGRAM

9.1. Main-1/Driver/Servo Block



9.2. Main-2/LED Block

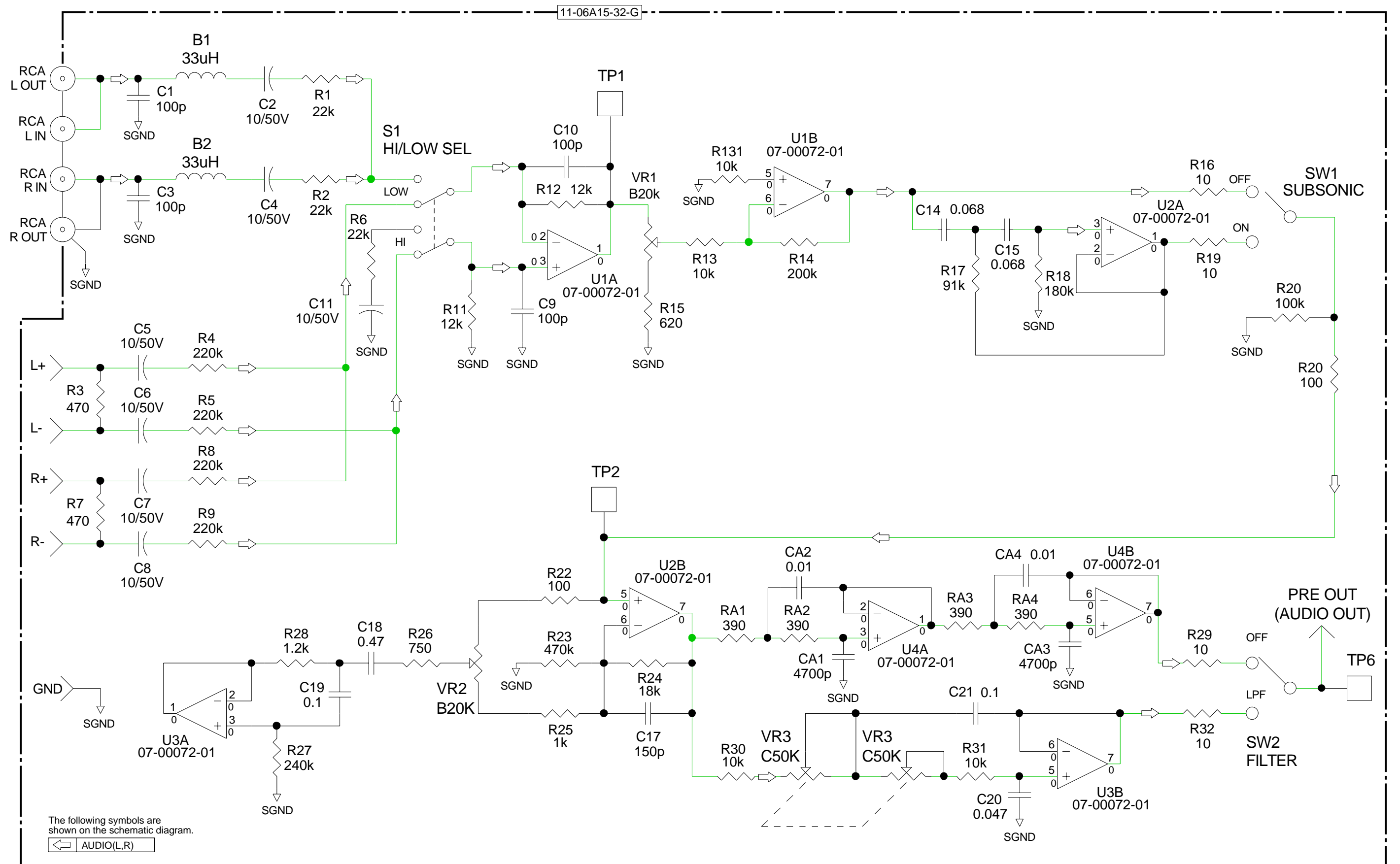
11-06A15-32-G



The following symbols are shown on the schematic diagram.

<+Vcc	+Vcc
<-Vcc	-Vcc
<+15V	+15V
<-15V	+15V
<+12V	+12V

9.3. Main-3 Block

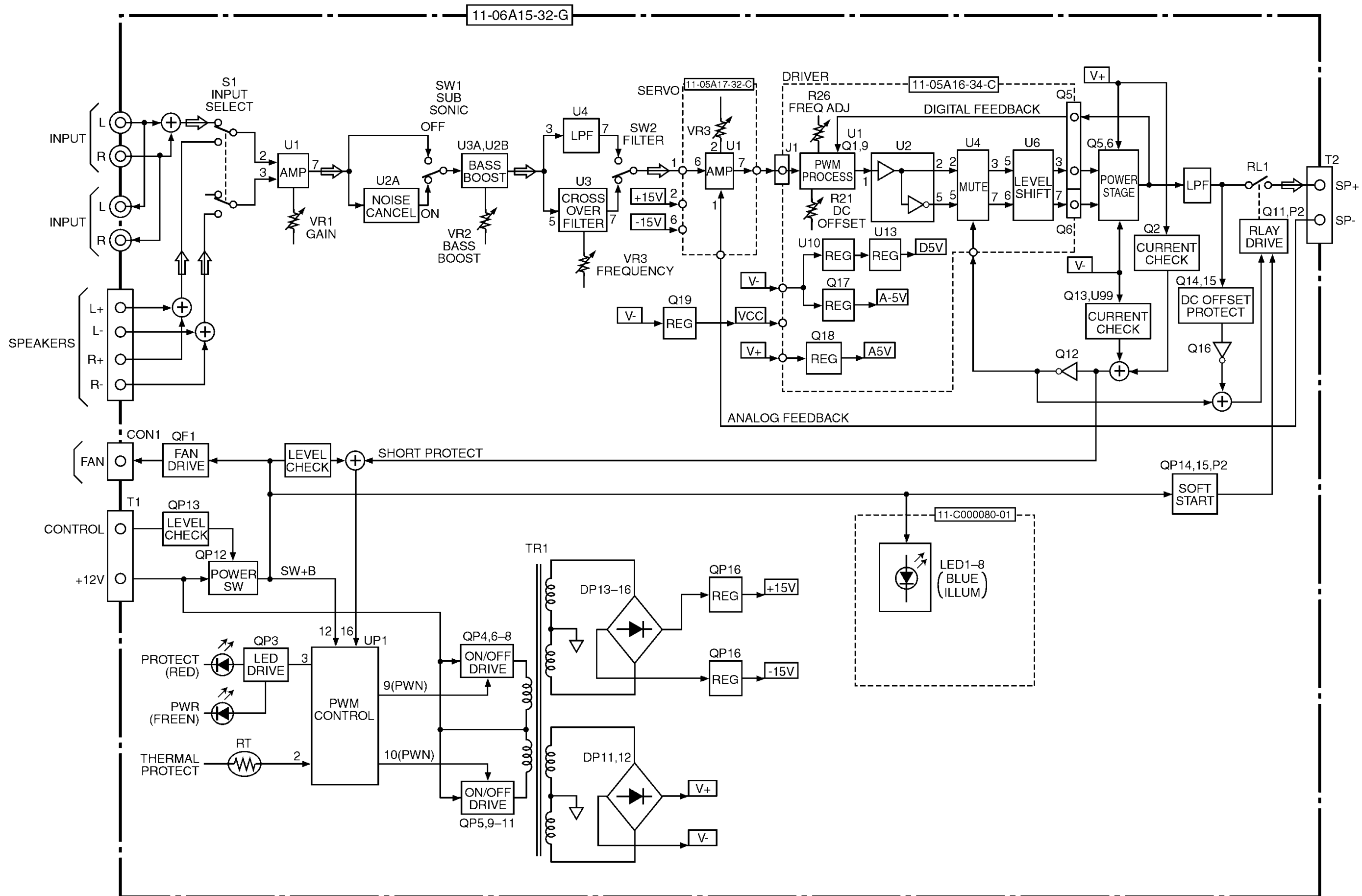


The following symbols are shown on the schematic diagram.

← AUDIO(L,R)

**THIS PAGE IS JUST FOR
THE PAGE LAYOUT USE
ONLY.**

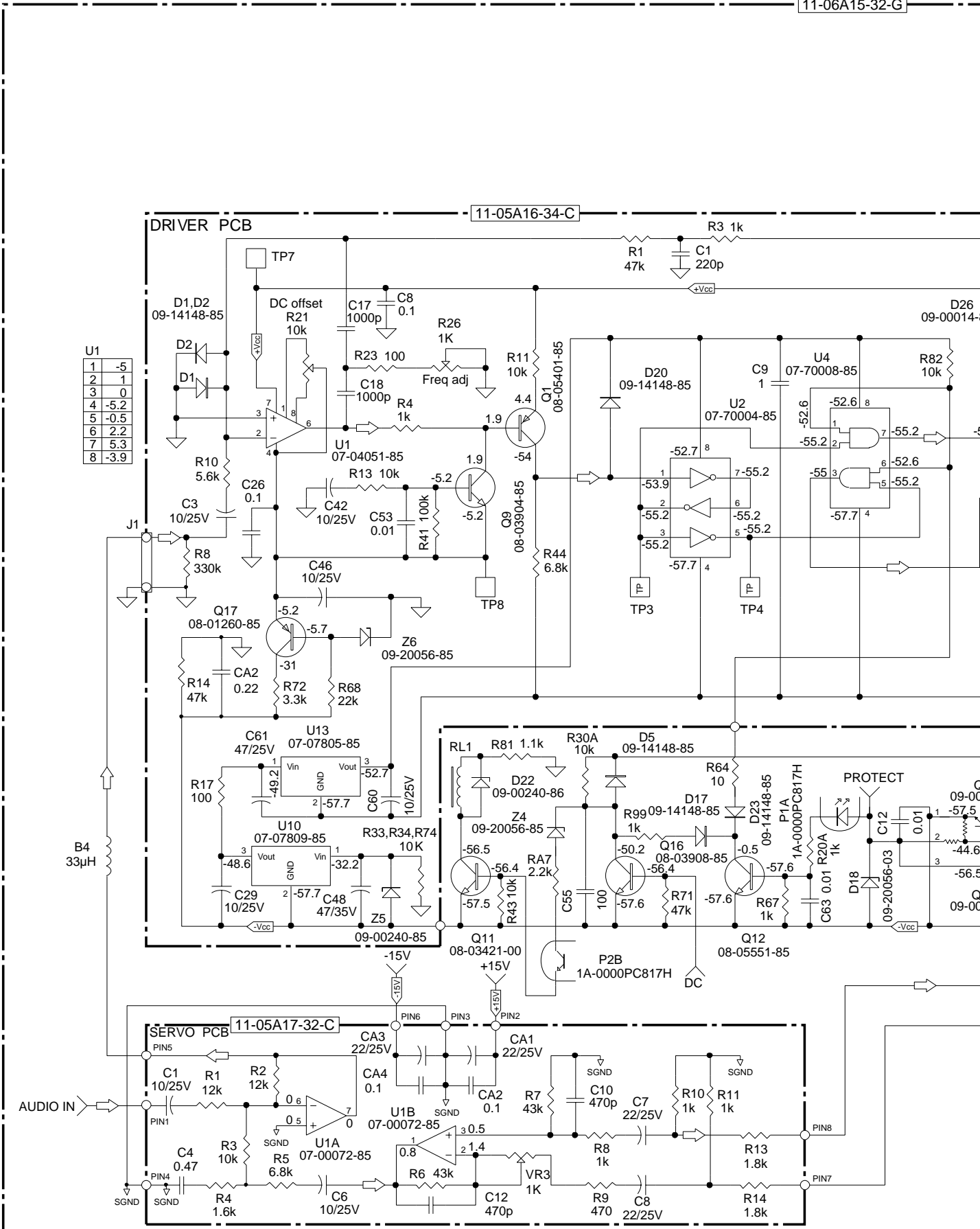
10 BLOCK DIAGRAM



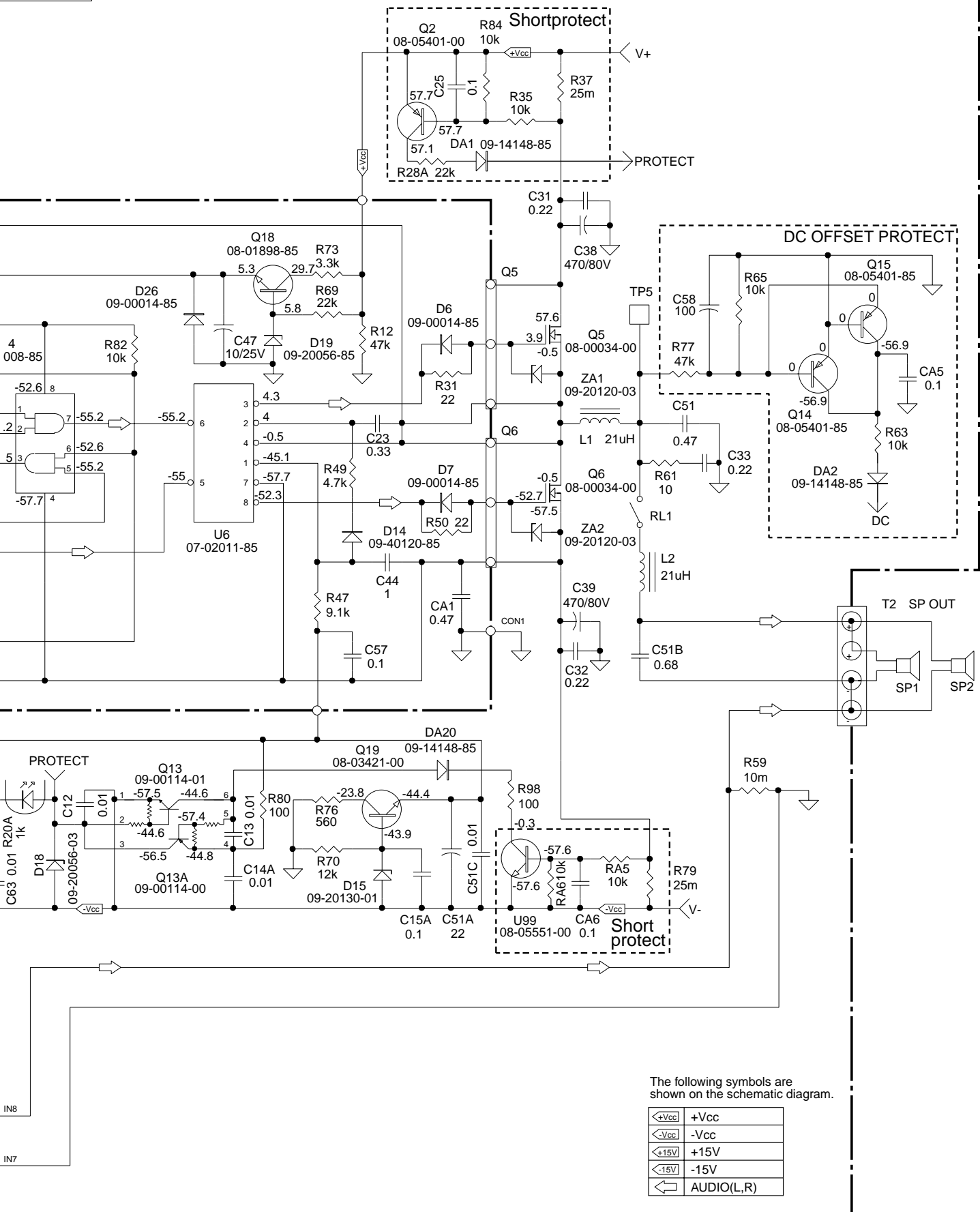
9 SCHEMATIC DIAGRAM

9.1. Main-1/Driver/Servo Block

11-06A15-32-G



-06A15-32-G



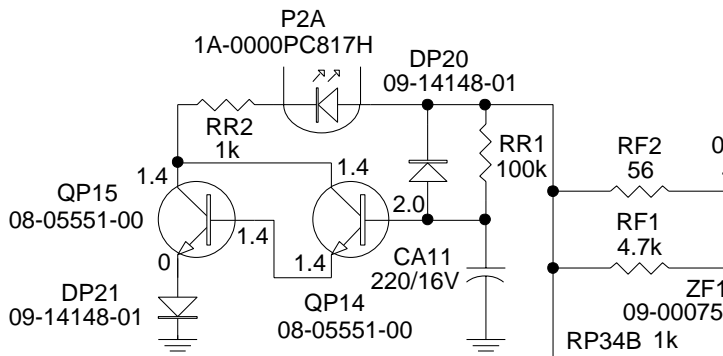
The following symbols are shown on the schematic diagram.

<+Vcc	+Vcc
<-Vcc	-Vcc
<+15V	+15V
<-15V	-15V
<AUDIO(L,R)	AUDIO(L,R)

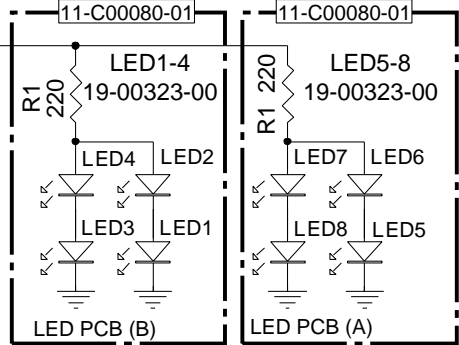
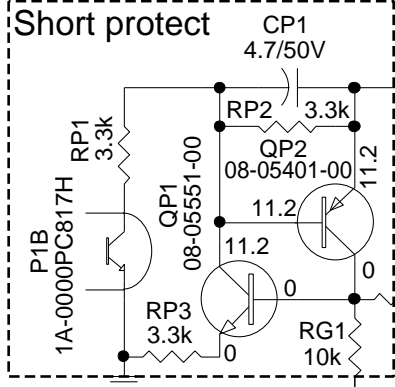
9.2. Main-2/LED Block

11-06A15-32-G

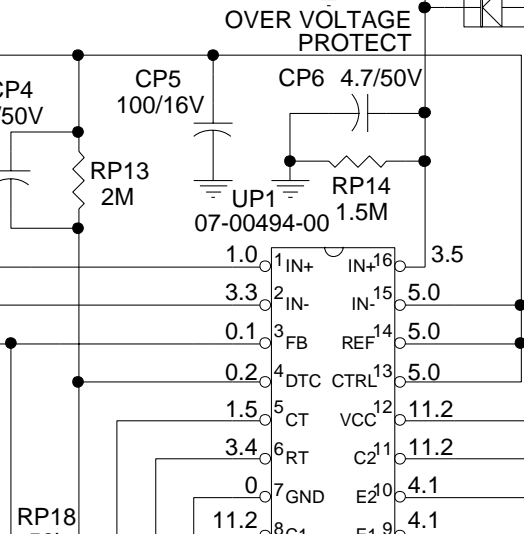
RELAY CONTROL



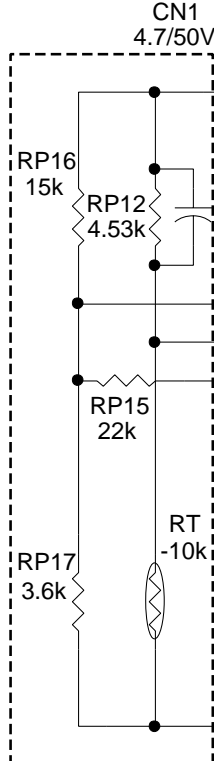
Short protect



OVER VOLTAGE PROTECT

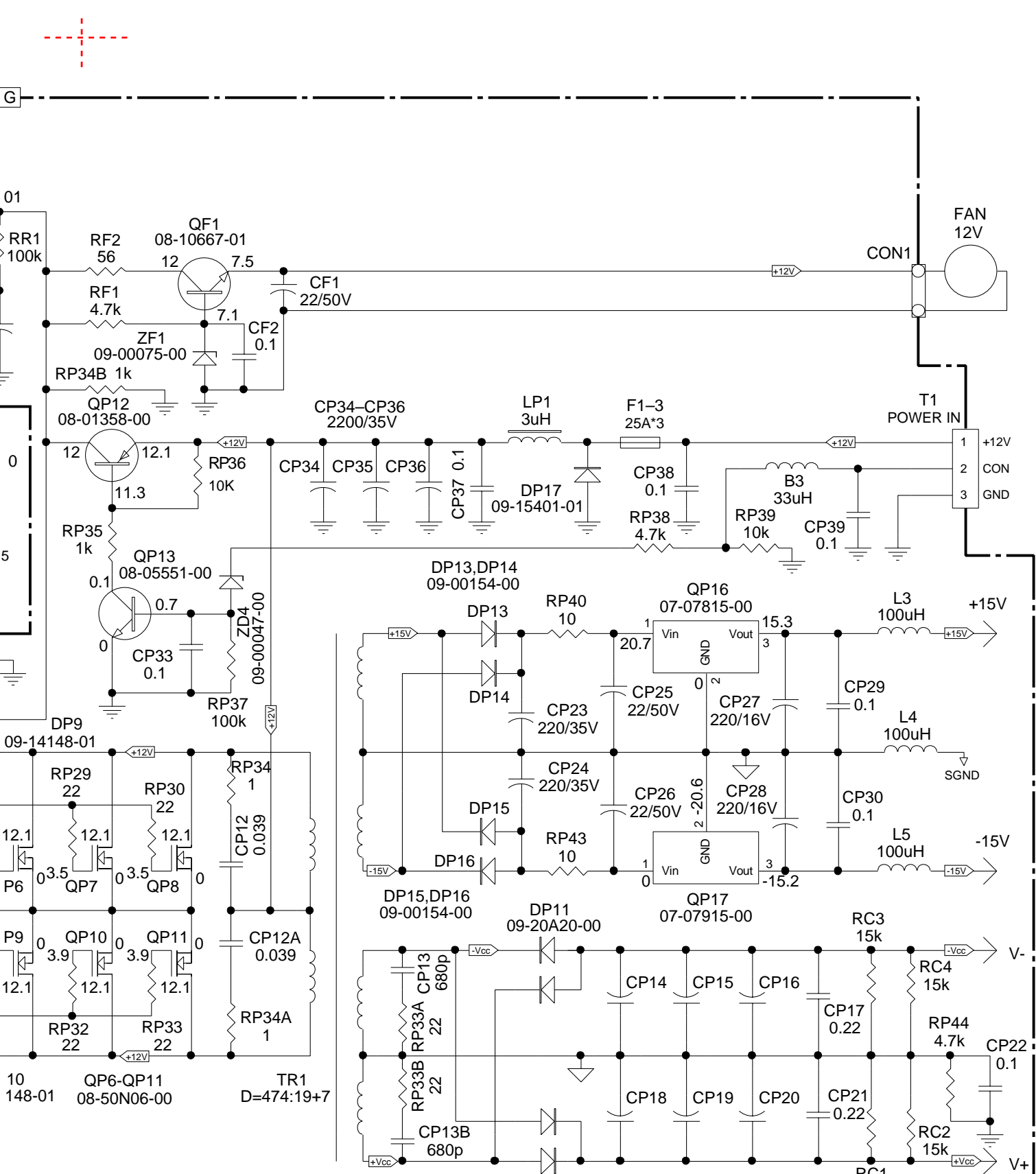


THERMAL PROTECT



The fo
show

- <-Vcc
- <-Vcc
- <-15V
- <-15V
- <-12V



The following symbols are shown on the schematic diagram.

	+Vcc
	-Vcc
	+15V
	+15V
	+12V

9.3. Main-3 Block

11-06A15-32-G

