



T 752

AV Surround Sound Receiver

SERVICE MANUAL

ADDENDUM

CONTENTS

MAIN BOARD (ISSUE 6 - PN-01)

VERSION HISTORY	3
PCB LAYOUT	4 - 7
SCHEMATIC DIAGRAM	8 - 11

TRIGGER (ISSUE 6 - PN-01)

VERSION HISTORY	12
PCB LAYOUT	13
SCHEMATIC DIAGRAM	14 - 15

KEYBOARD (ISSUE 6 - PN-01)

VERSION HISTORY	16
PCB LAYOUT	17 - 20
SCHEMATIC DIAGRAM	21 - 24

DSP (ISSUE 6 - PN-02)

VERSION HISTORY	25
PCB LAYOUT	26 - 30
SCHEMATIC DIAGRAM	31 - 35

AUDIO (ISSUE 6 - PN-03)

VERSION HISTORY	36
PCB LAYOUT	37 - 39
SCHEMATIC DIAGRAM	40 - 43

DIGITAL IN/OUT (ISSUE 6 - PN-02)

VERSION HISTORY	44
PCB LAYOUT	44 - 45
SCHEMATIC DIAGRAM	46 - 50

PRE-OUT (ISSUE 6 - PN-02)

VERSION HISTORY	51
PCB LAYOUT	52 - 54
SCHEMATIC DIAGRAM	55 - 59

NOTE PART NUMBER CHANGE:

Original P/N	Interim P/N	Final P/N with Description
80-0907520-02-00	800-KEBD52-00	50-922-0752-90 - T752 KEYBOARD ASSEMBLY
80-0907520-63-00	800-POBD52-00	50-924-0752-90 - T752 PRE-OUT BOARD ASSEMBLY

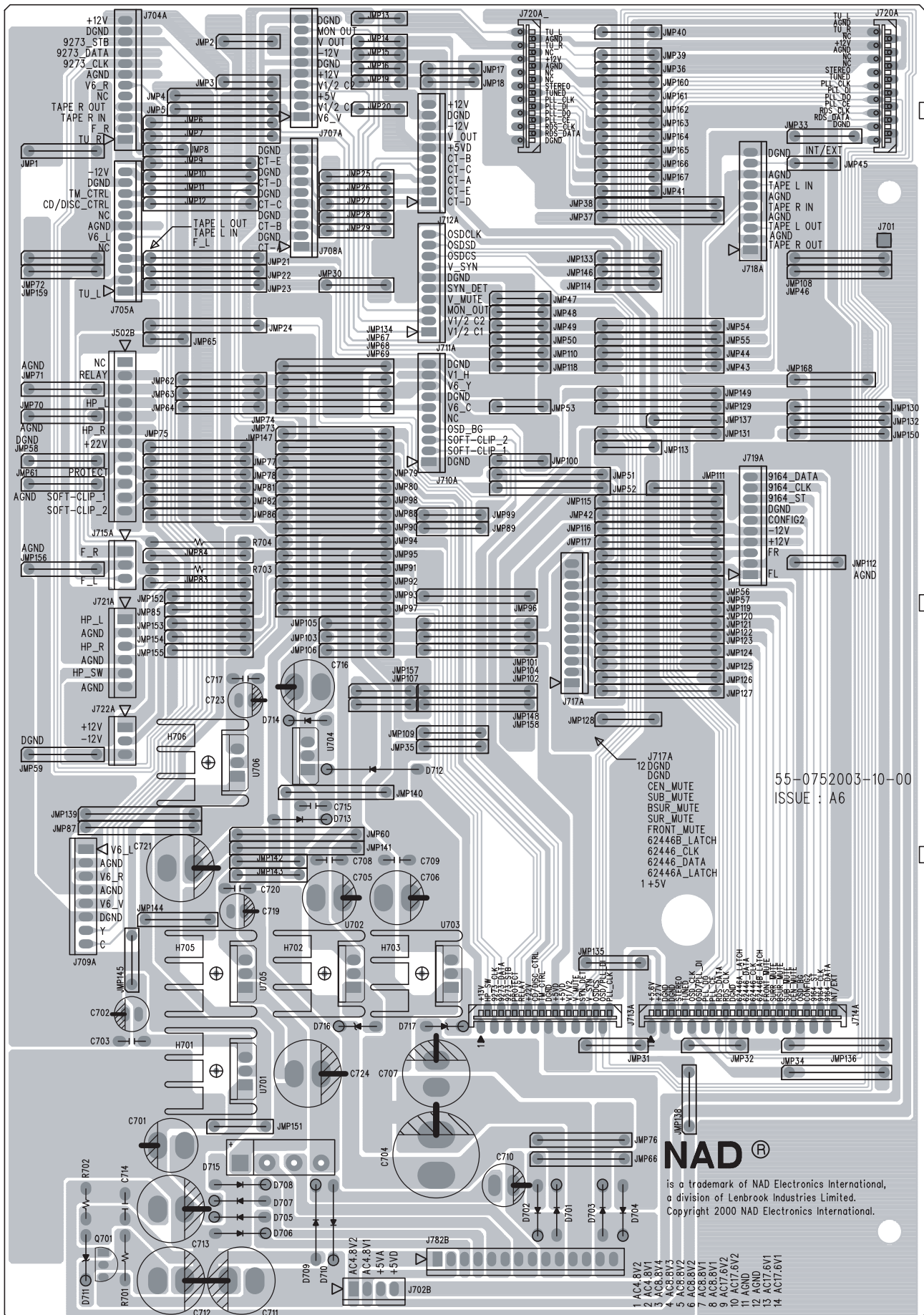
VERSION HISTORY

MAIN BOARD

ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	MAIN BOARD : 55-0752003-10-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	MAIN BOARD : 55-0752003-10-00 A7	• Add +5.6V to Pre-Out	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	MAIN BOARD : 55-0752003-10-00 A8	• Add Connector option for DSP	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	MAIN BOARD : 55-0752003-10-01	• No layout change	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667

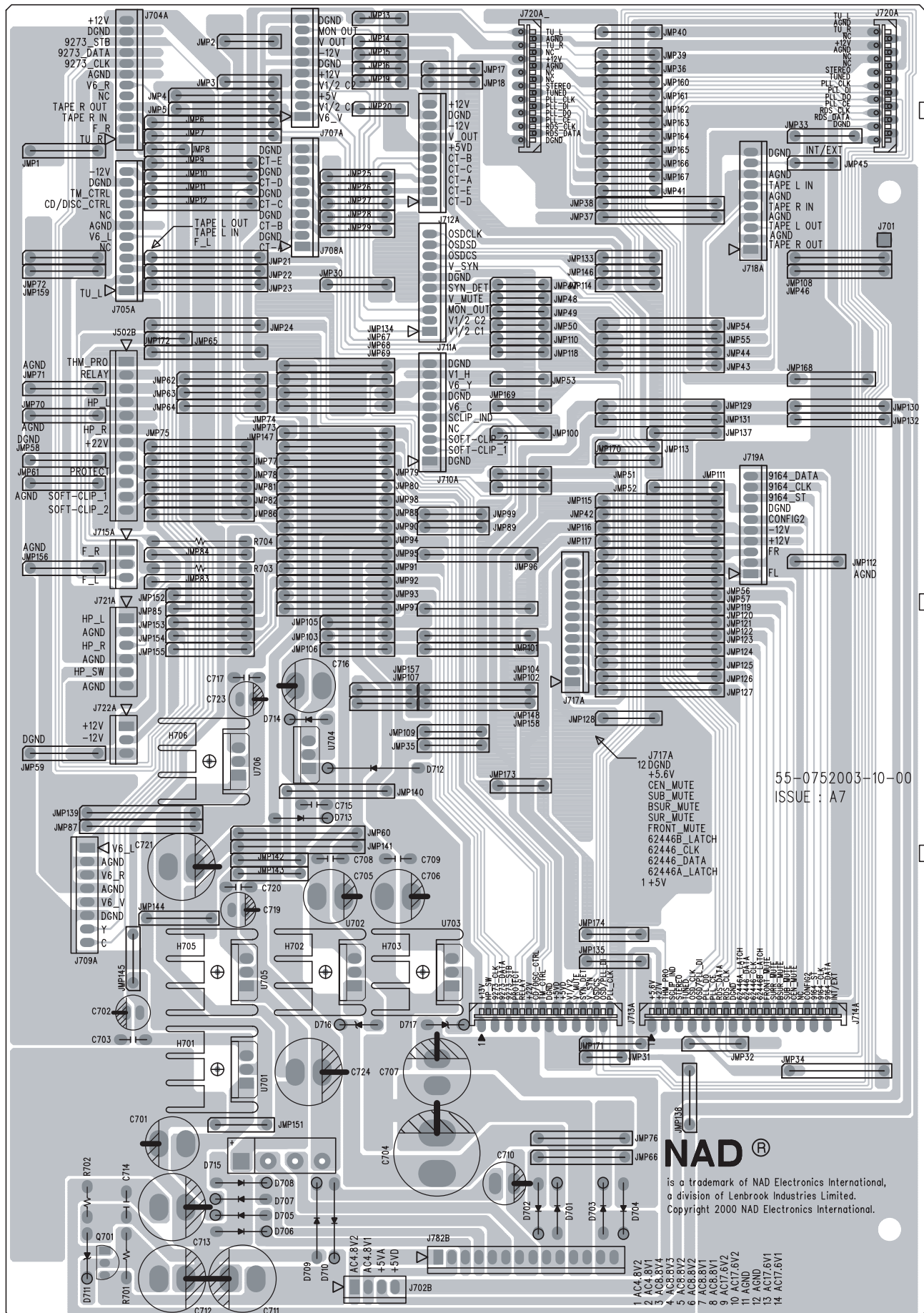
PCB LAYOUT

MAIN BOARD (ISSUE 6)



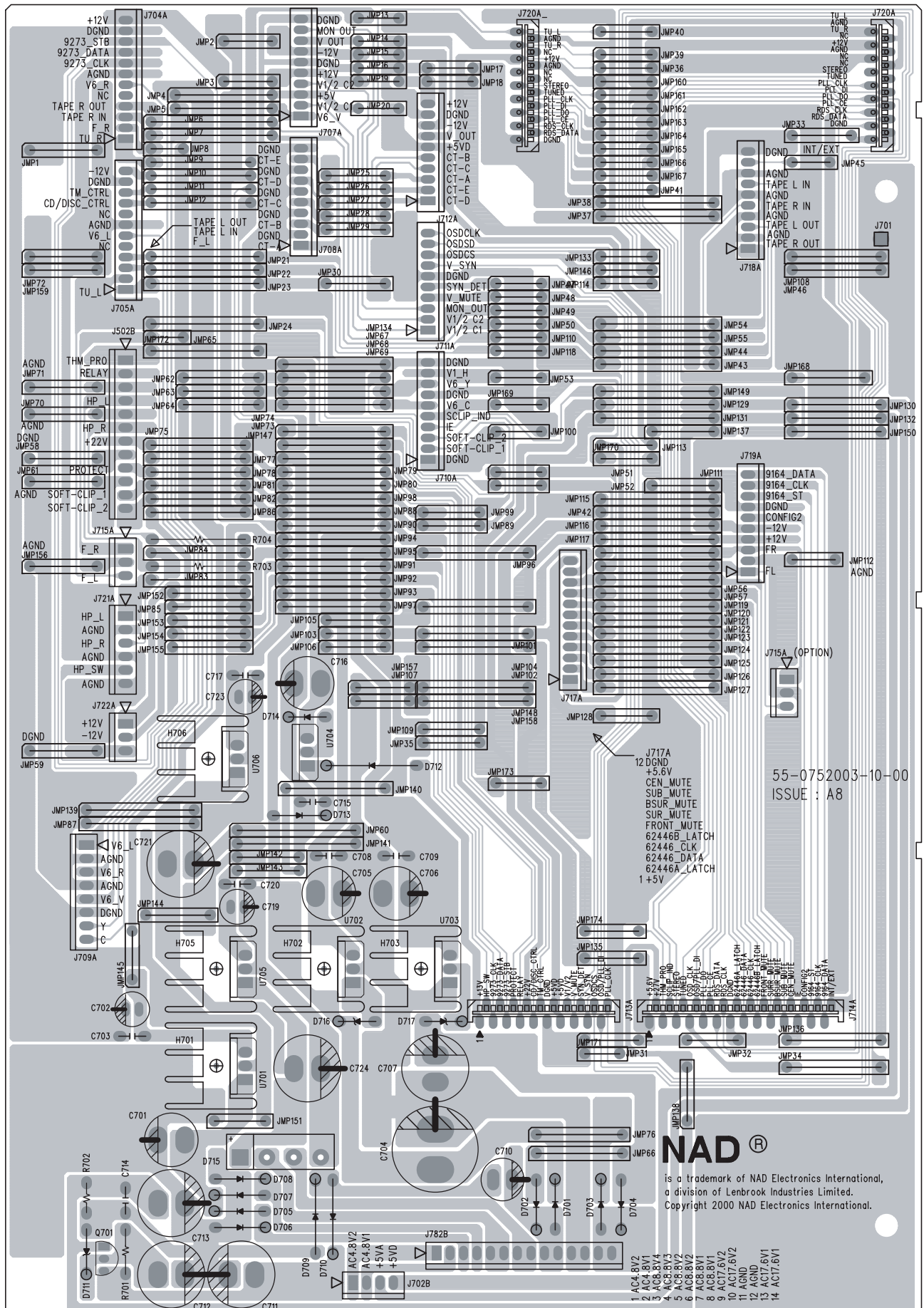
PCB LAYOUT

MAIN BOARD (ISSUE 7)



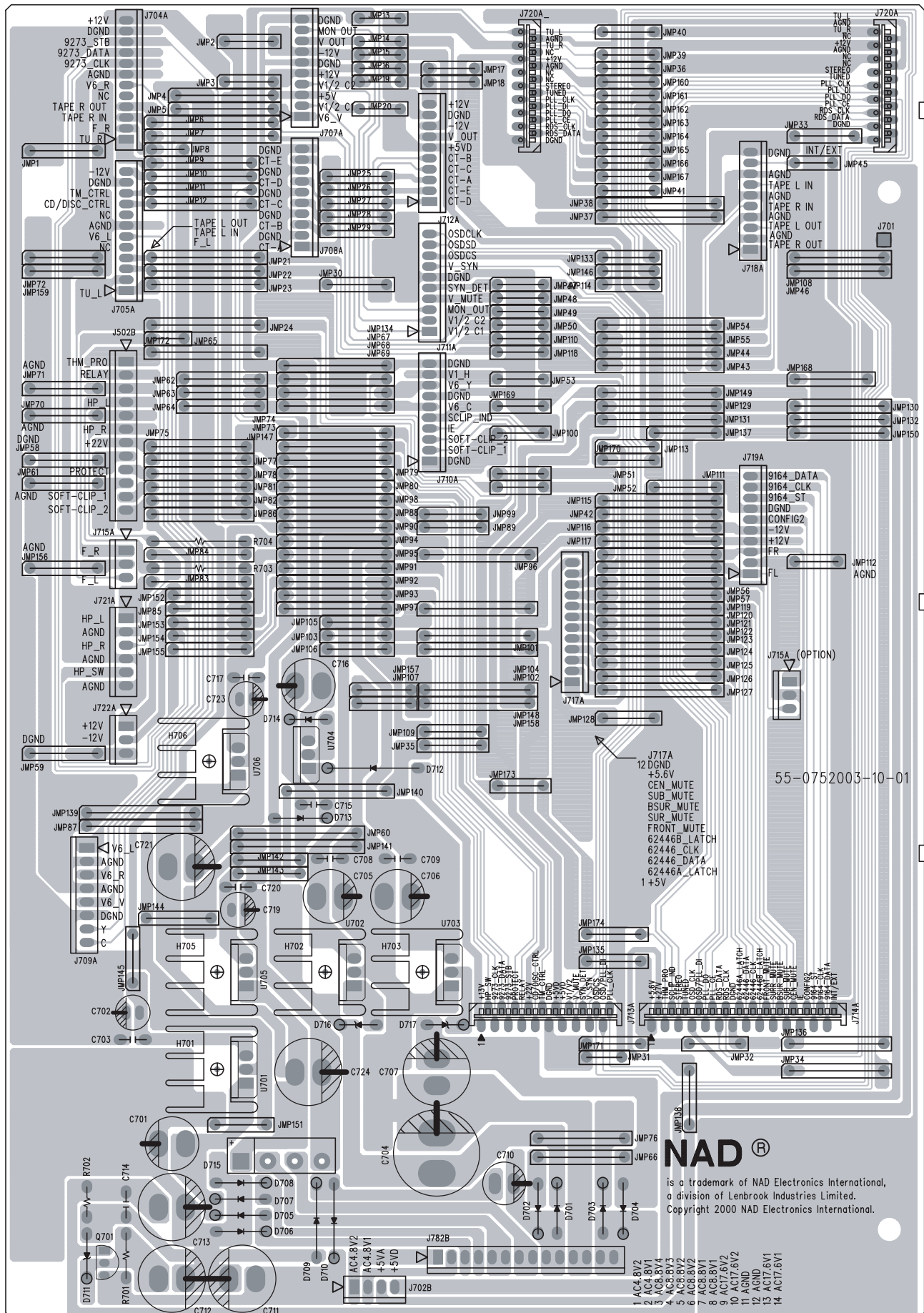
PCB LAYOUT

MAIN BOARD (ISSUE 8)

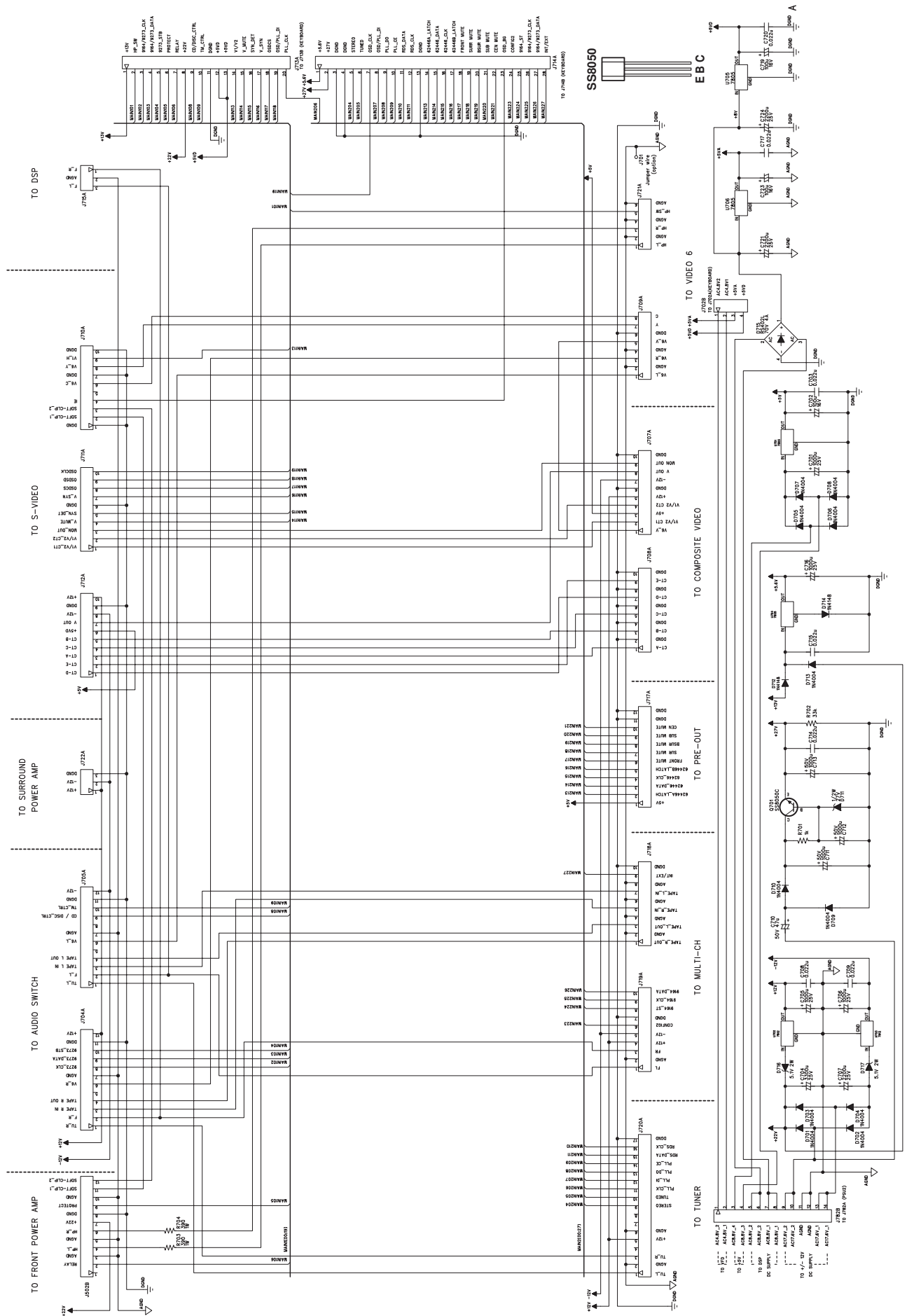


PCB LAYOUT

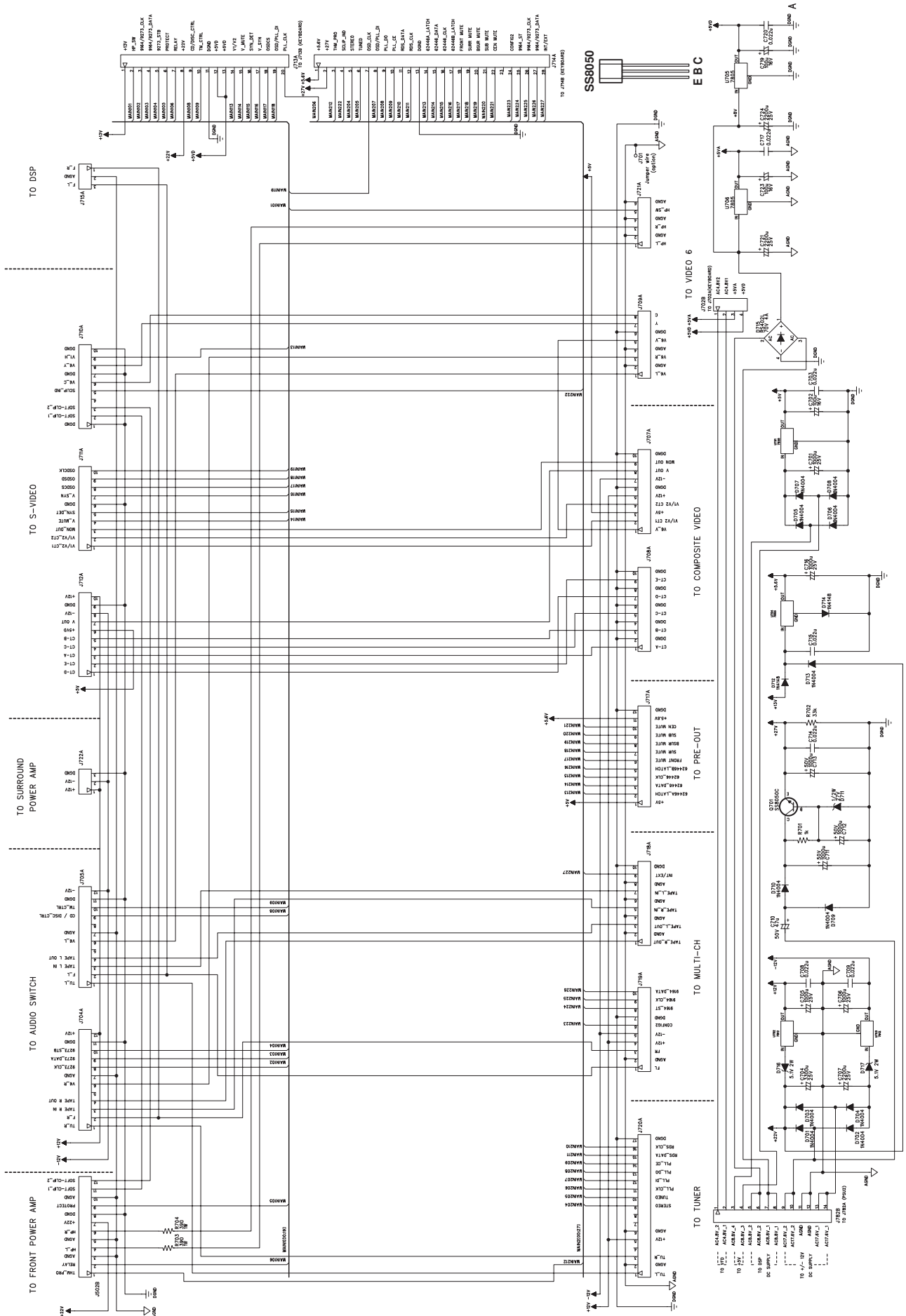
MAIN BOARD (PN-01)



SCHEMATIC DIAGRAM MAIN BOARD (ISSUE 6)

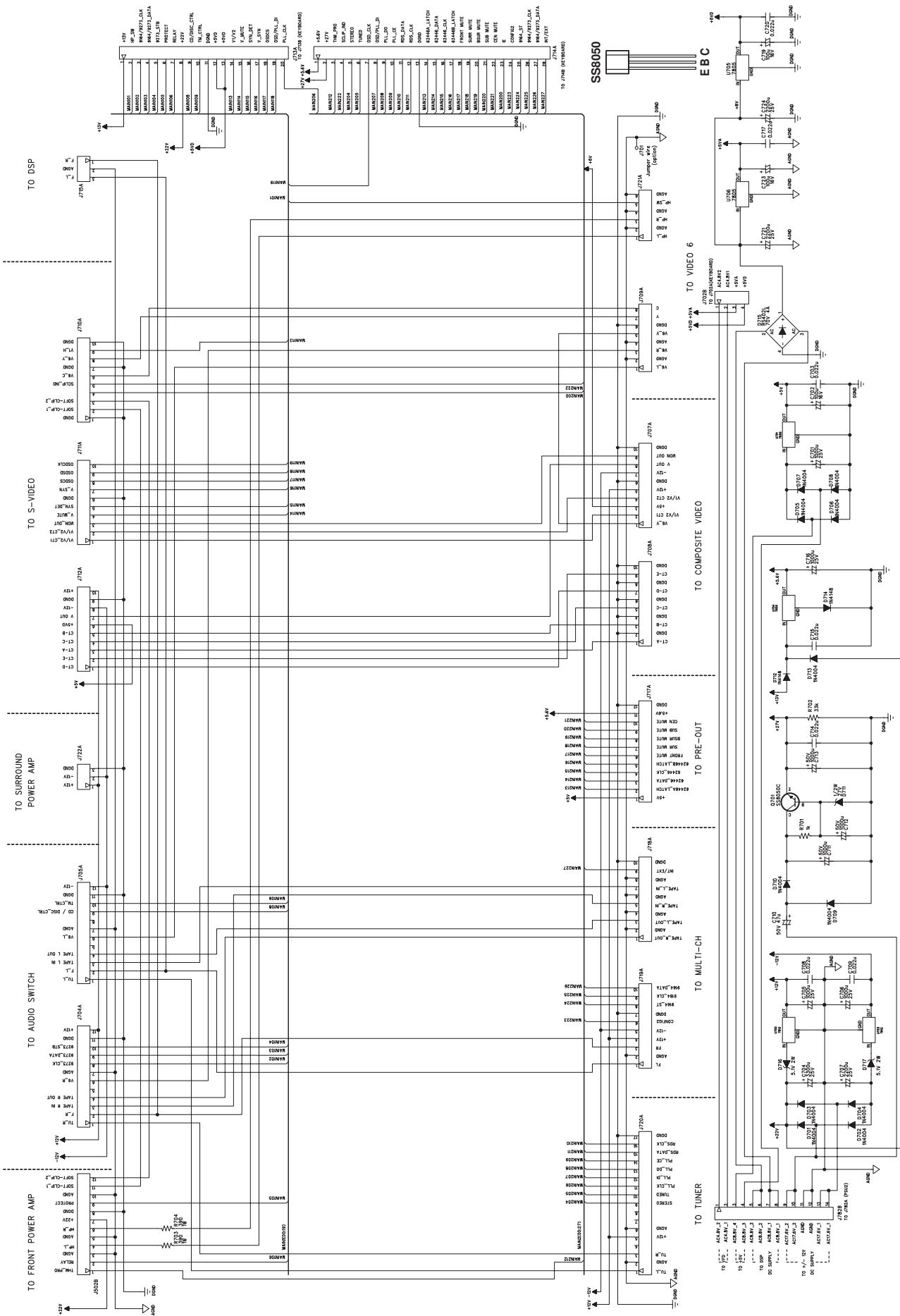


SCHEMATIC DIAGRAM MAIN BOARD (ISSUE 7)



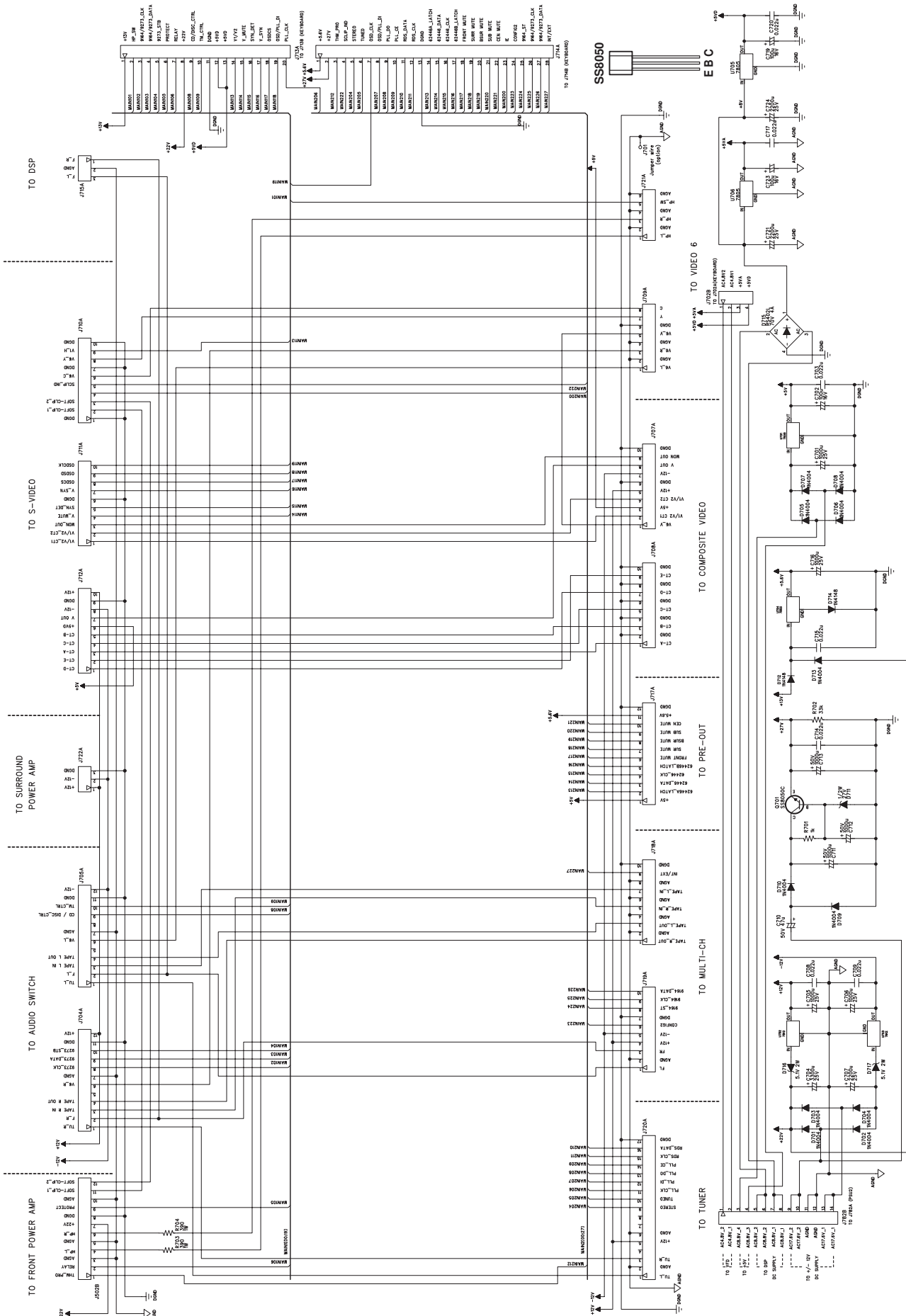
SCHEMATIC DIAGRAM

MAIN BOARD (ISSUE 8)



SCHEMATIC DIAGRAM

MAIN BOARD (PN-01)



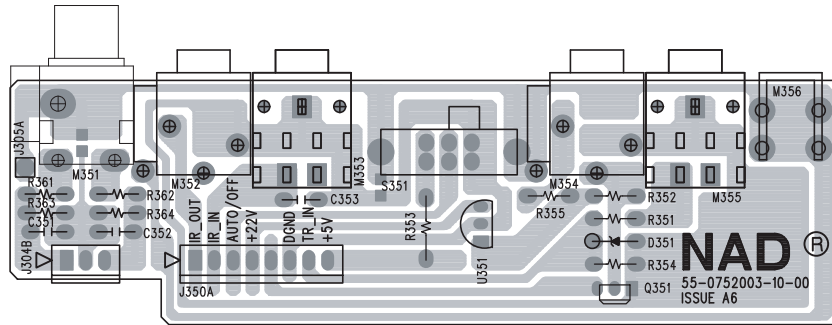
VERSION HISTORY

TRIGGER BOARD

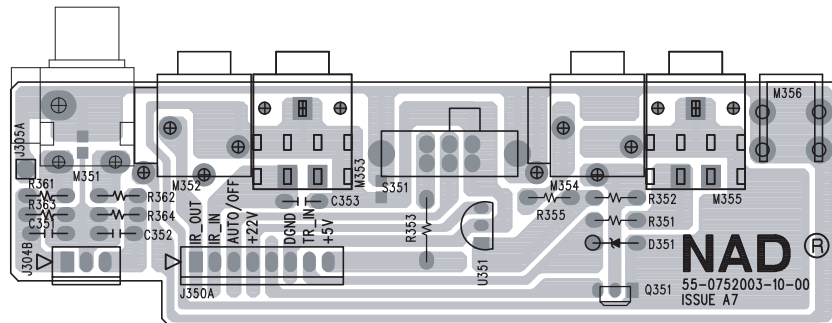
ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	TRIGGER BOARD : 55-0752003-10-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	TRIGGER BOARD : 55-0752003-10-00 A7	Delete R354 (Trigger in)	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	TRIGGER BOARD : 55-0752003-10-00 A8	- Circuit update (IR OUT) - Add Resistor to GND (Trigger IN/OUT)	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	TRIGGER BOARD : 55-0752003-10-01	Delete C353 (IR IN)	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667

PCB LAYOUT

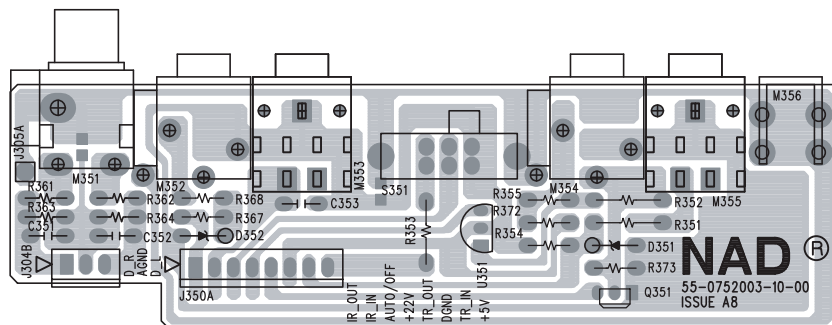
TRIGGER BOARD (ISSUE 6)



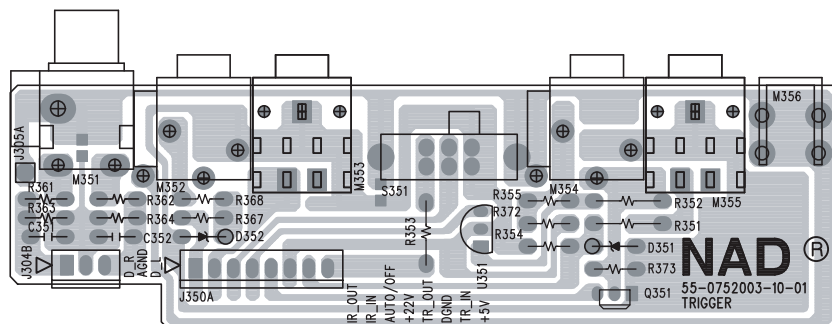
TRIGGER BOARD (ISSUE 7)



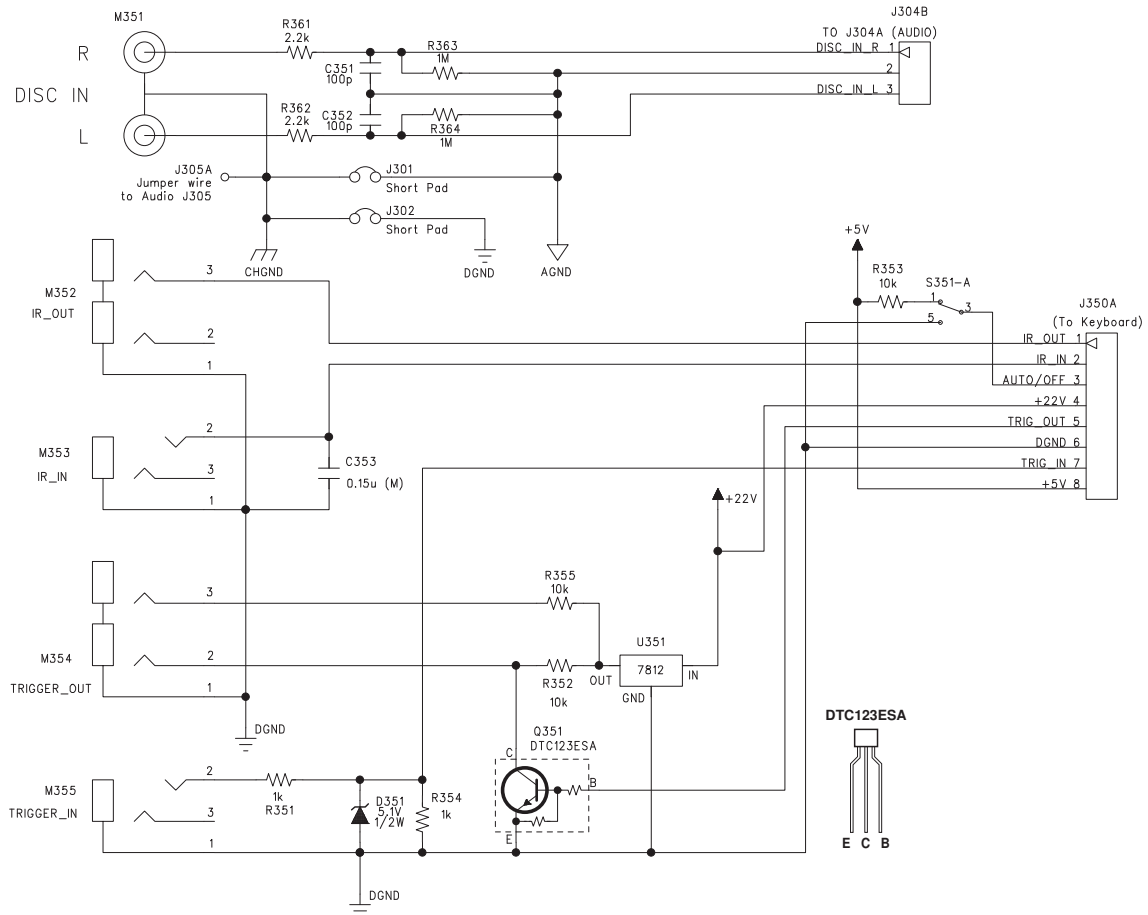
TRIGGER BOARD (ISSUE 8)



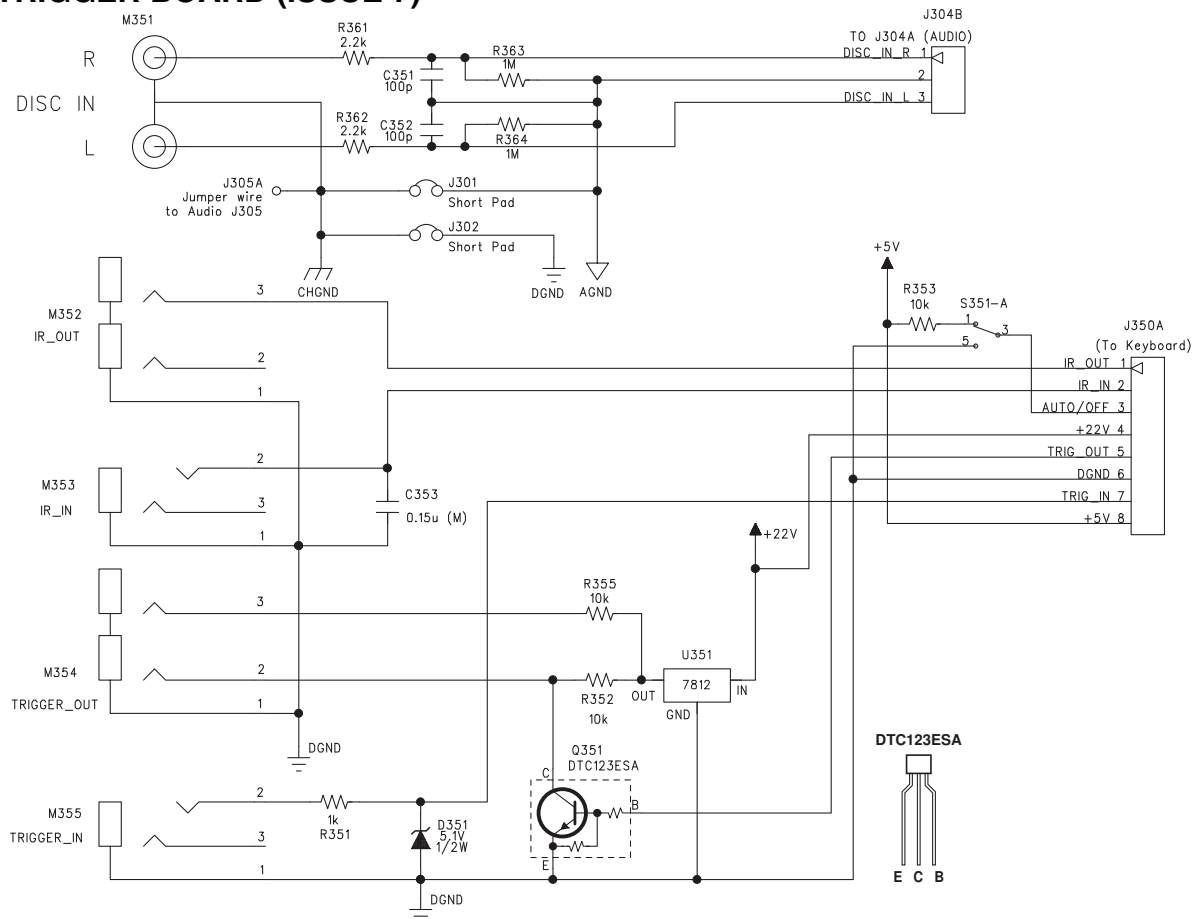
TRIGGER BOARD (PN-01)



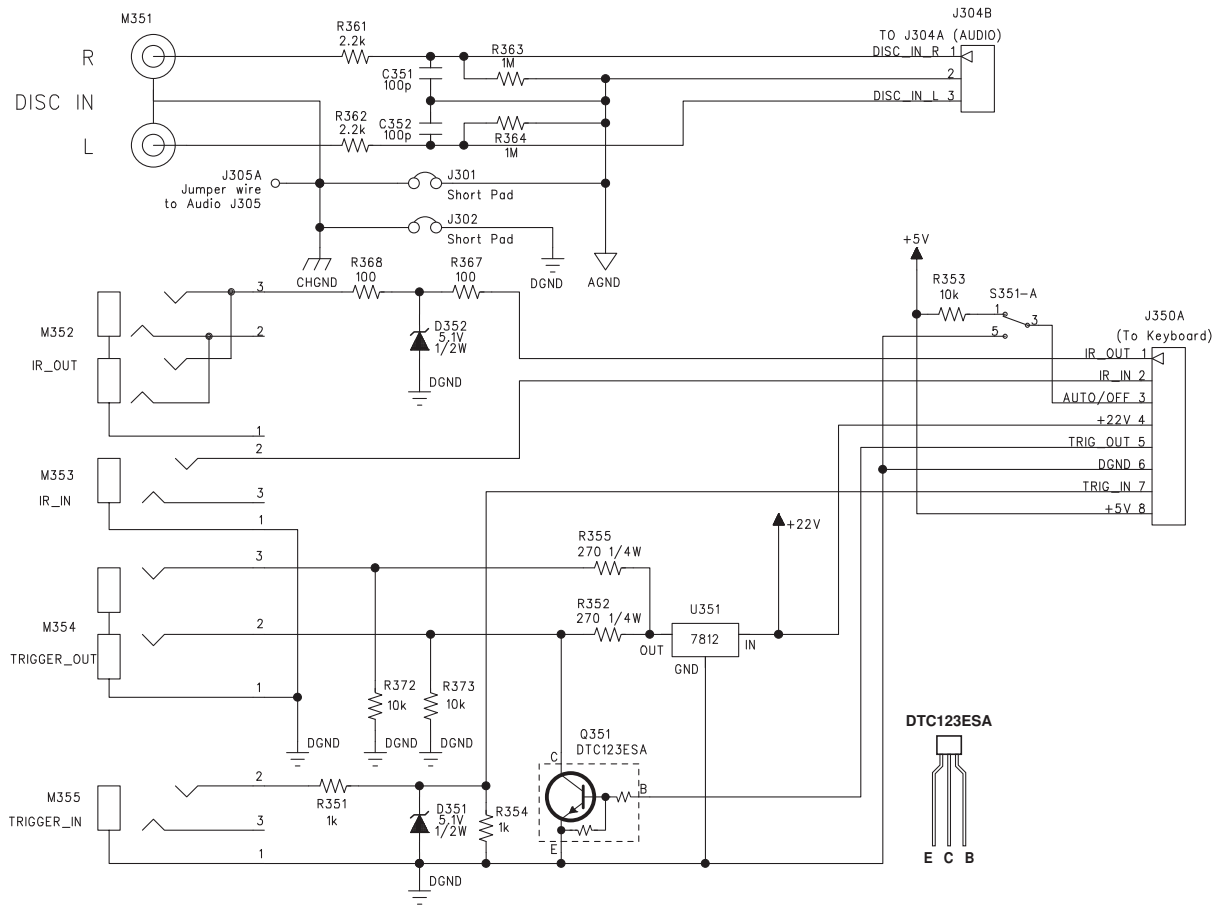
SCHEMATIC DIAGRAM TRIGGER BOARD (ISSUE 6)



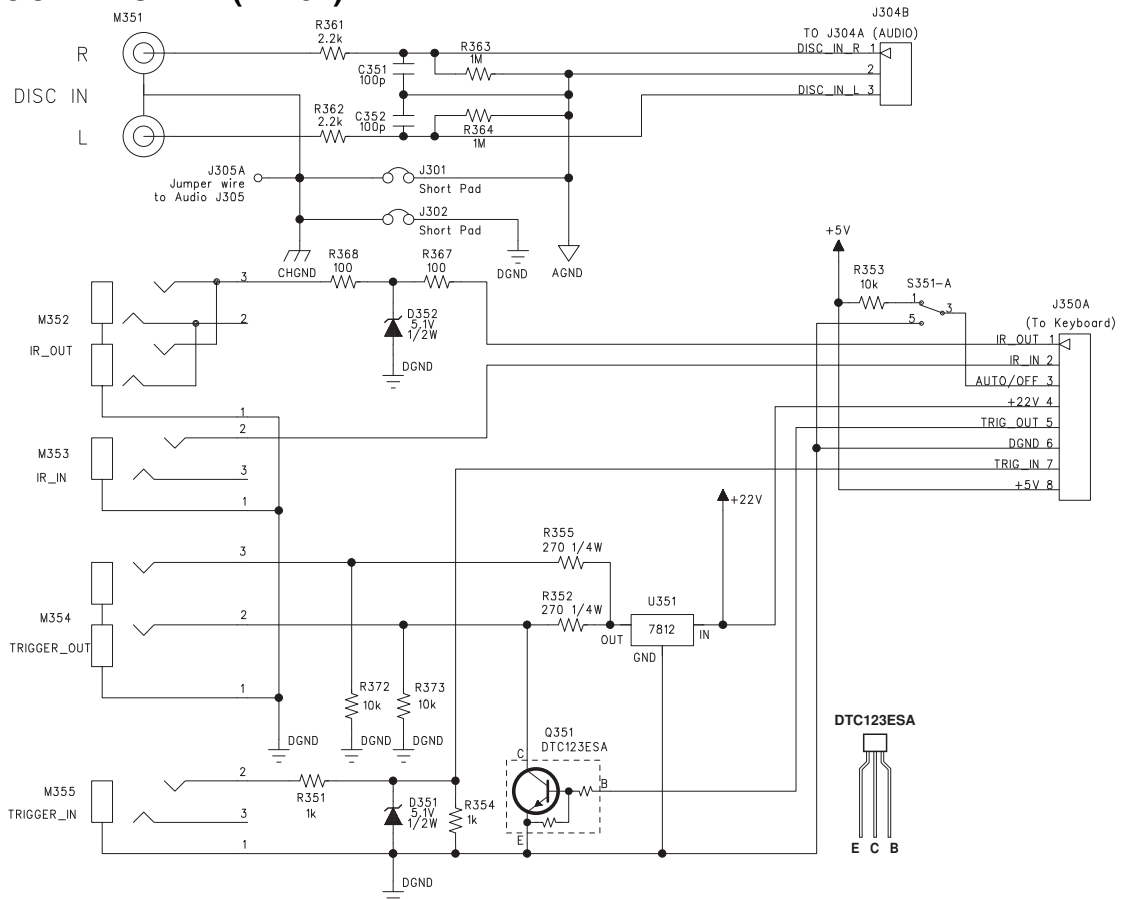
TRIGGER BOARD (ISSUE 7)



SCHEMATIC DIAGRAM TRIGGER BOARD (ISSUE 8)



TRIGGER BOARD (PN-01)



VERSION HISTORY

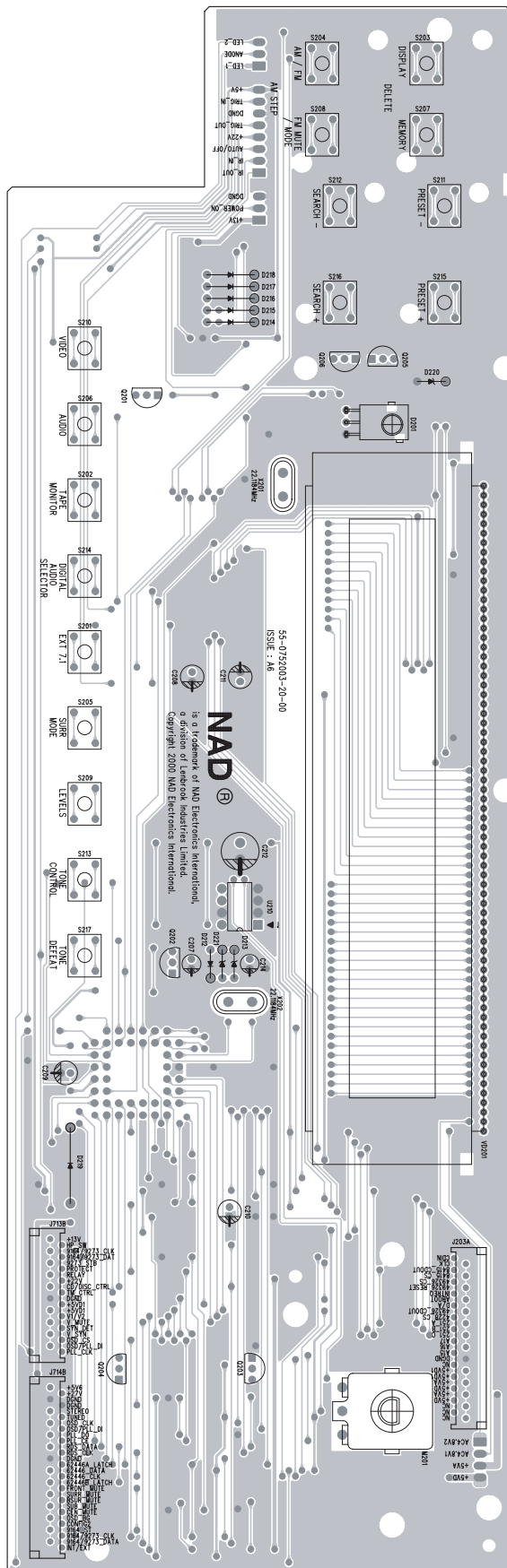
KEYBOARD

ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	KEYBOARD : 55-0752003-20-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	KEYBOARD : 55-0752003-20-00 A7	• New connection of THERMAL	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	KEYBOARD : 55-0752003-20-00 A8	• No layout change	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	KEYBOARD : 55-0752003-20-01	• Add RC of Rotary Encoder	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667

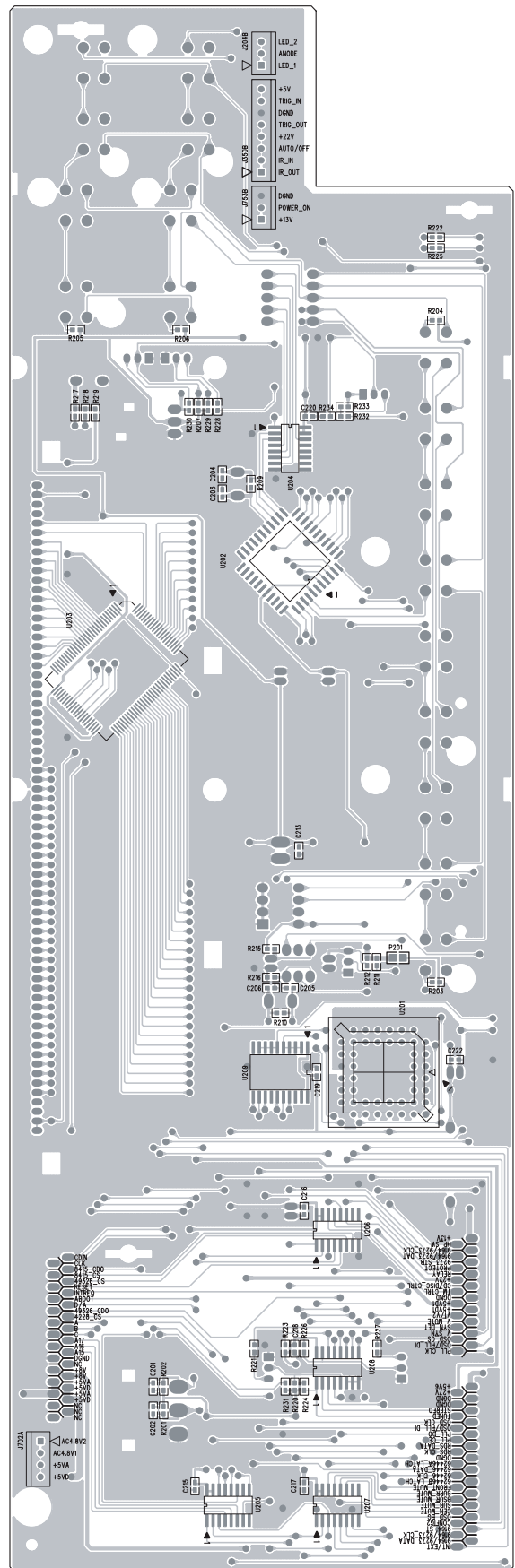
PCB LAYOUT

KEYBOARD (ISSUE 6)

COMPONENT SIDE

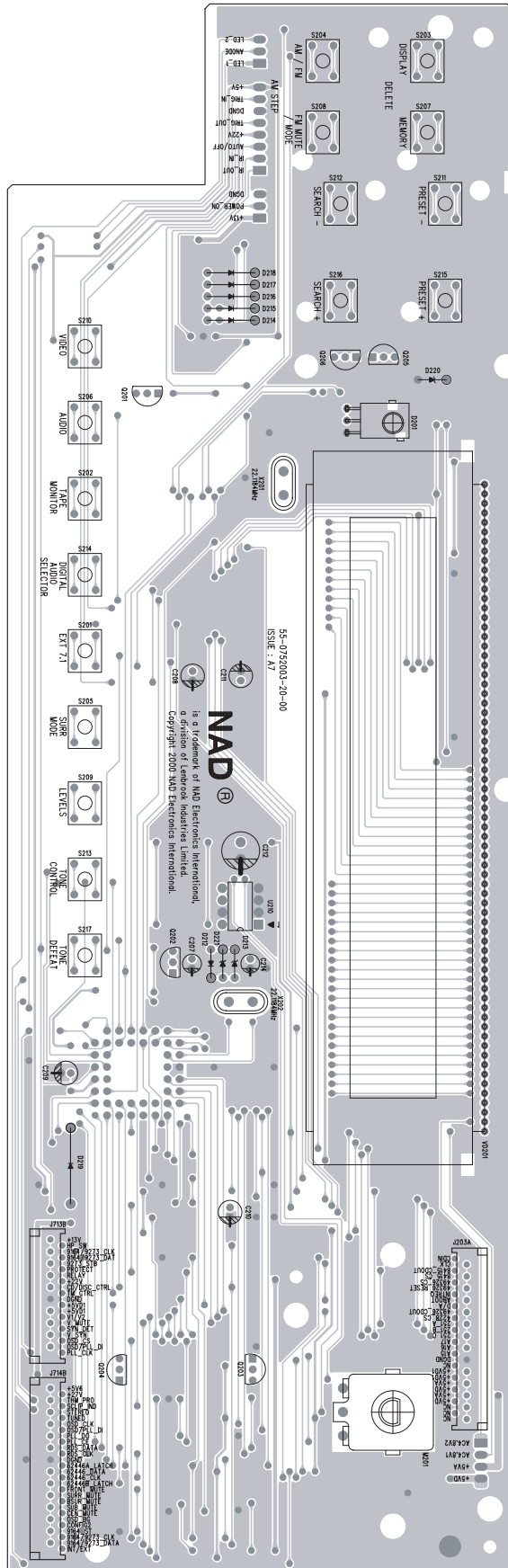


COPPER SIDE

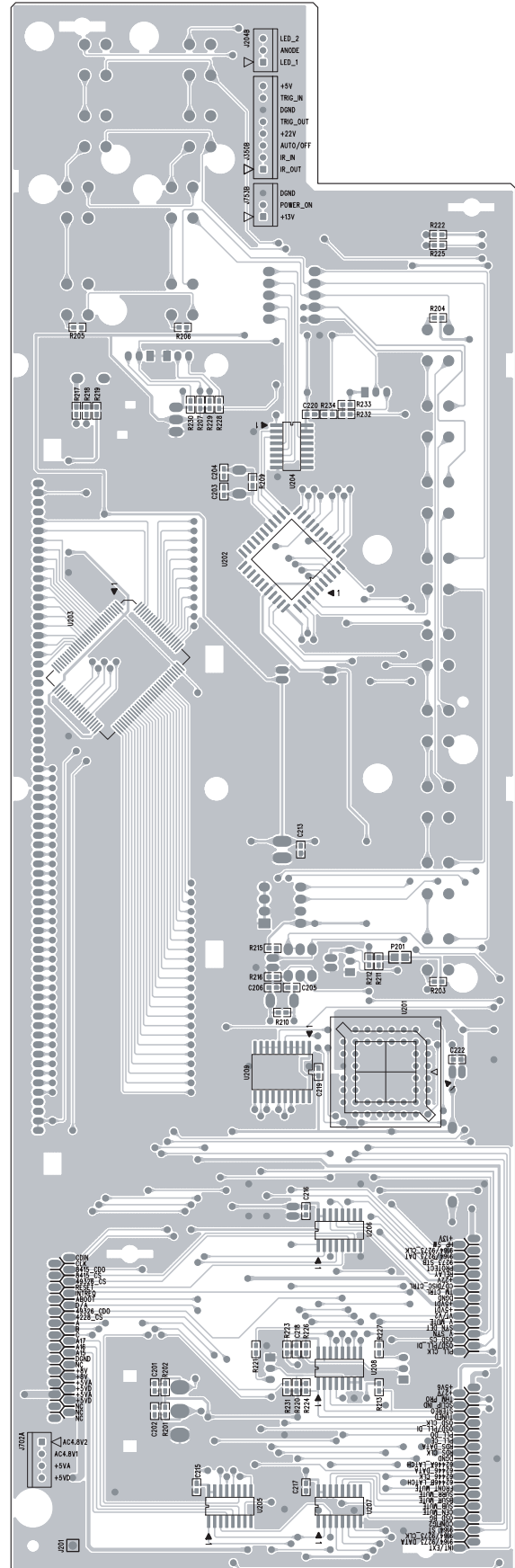


PCB LAYOUT KEYBOARD (ISSUE 7)

COMPONENT SIDE

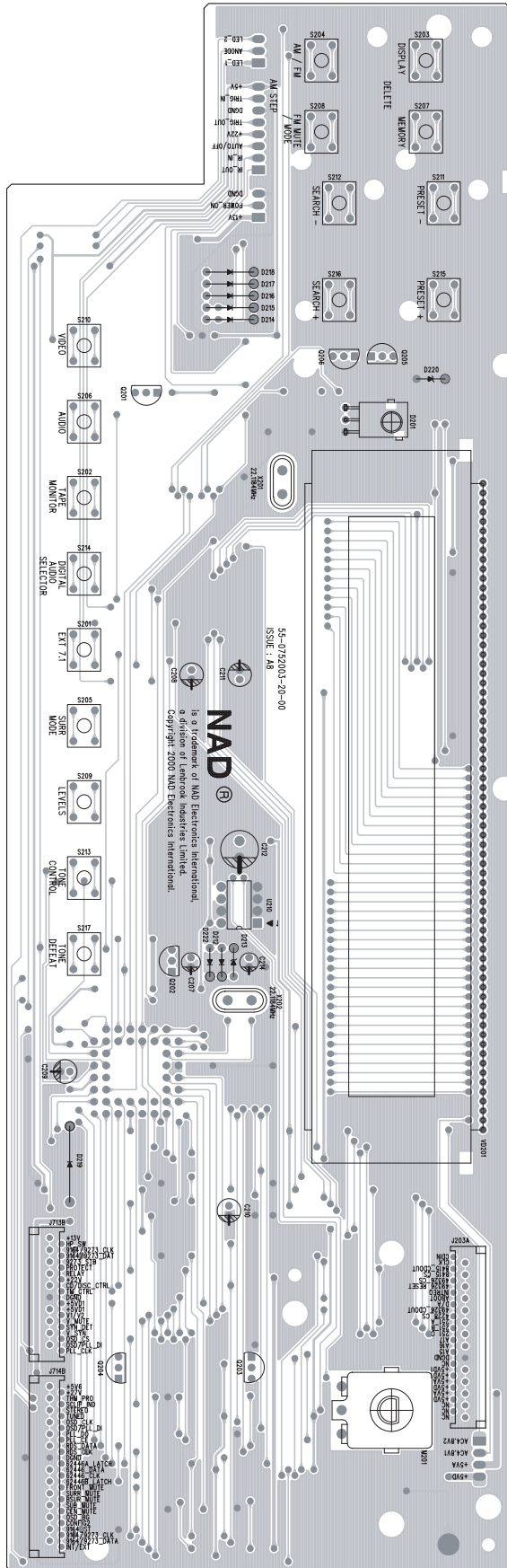


COPPER SIDE

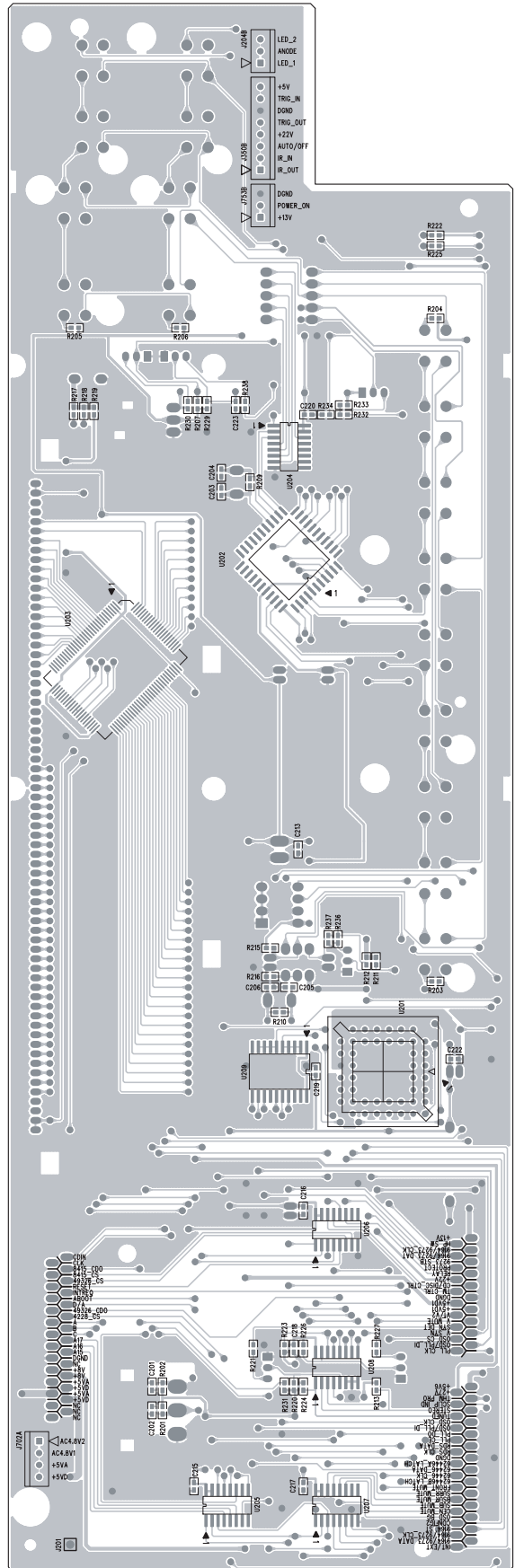


PCB LAYOUT KEYBOARD (ISSUE 8)

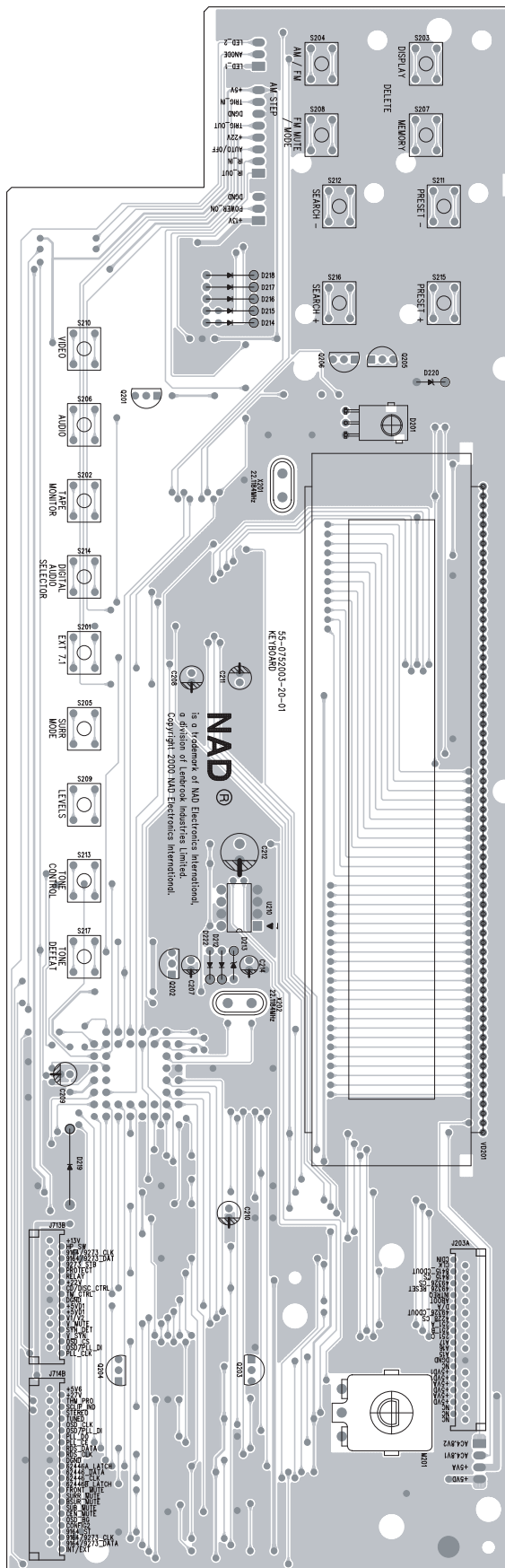
COMPONENT SIDE



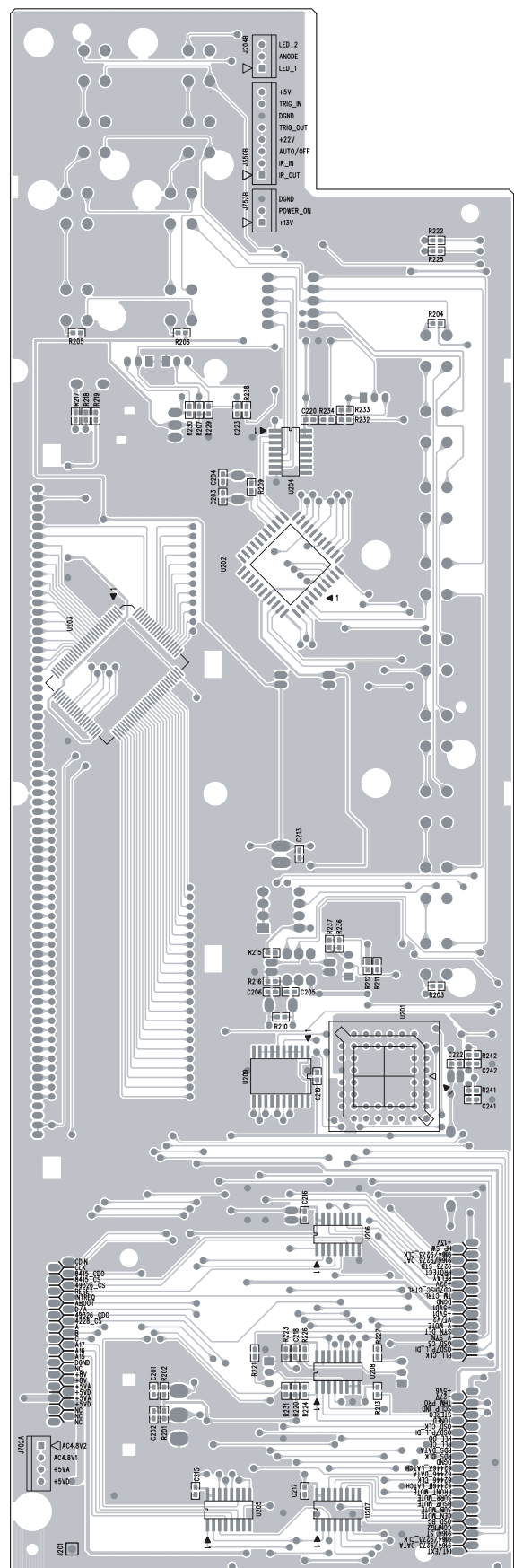
COPPER SIDE



COMPONENT SIDE

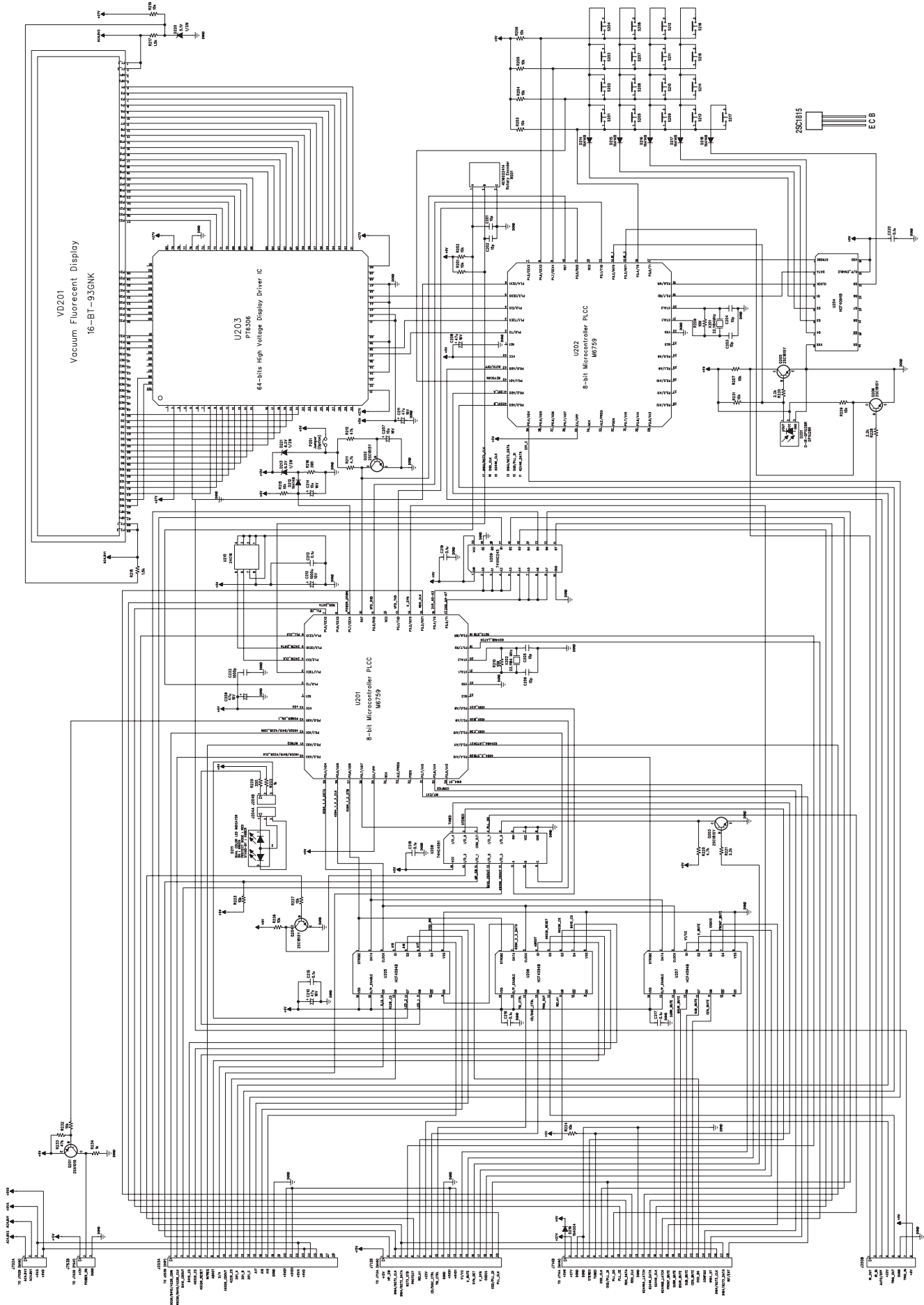


COPPER SIDE



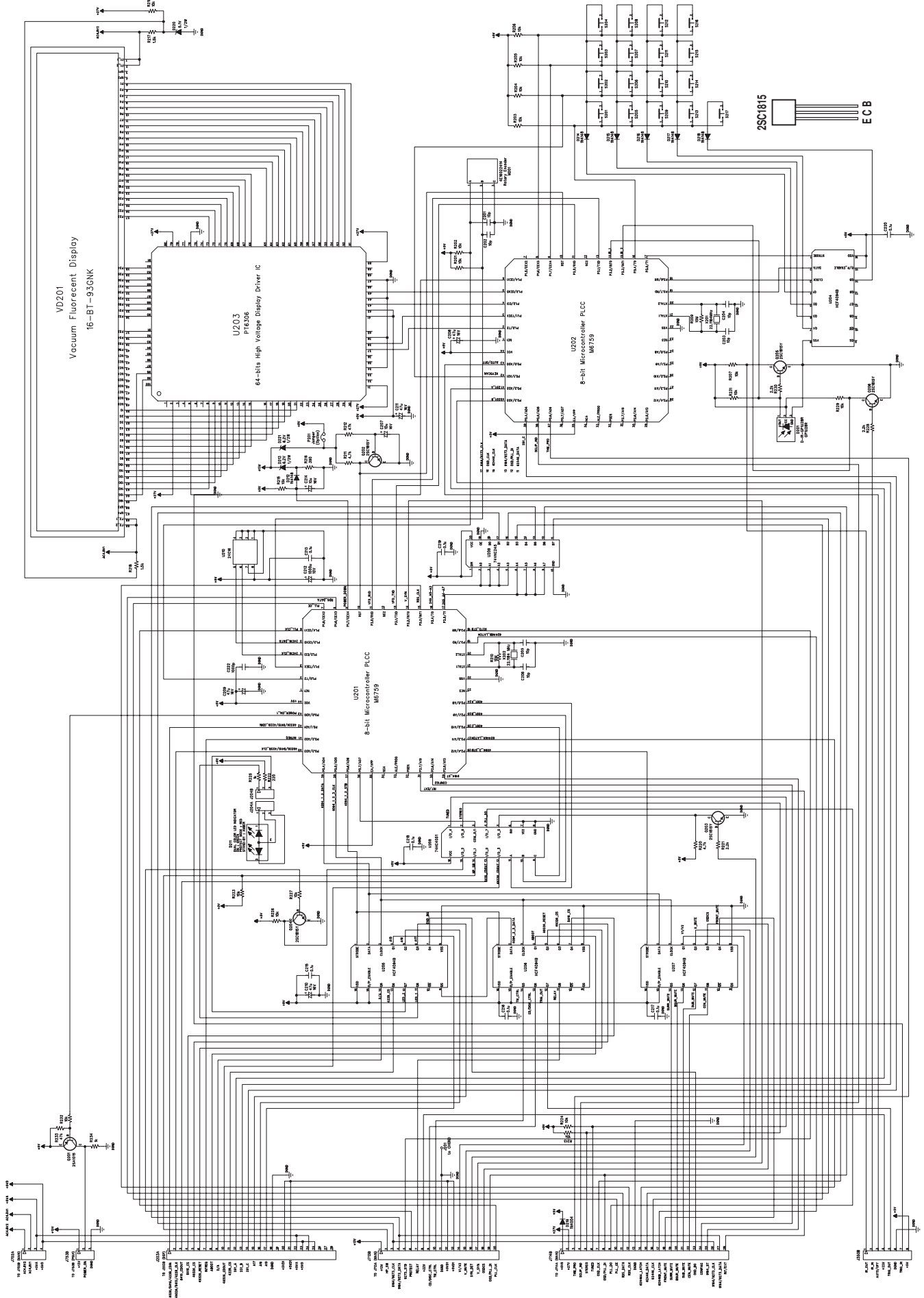
SCHEMATIC DIAGRAM

KEYBOARD (ISSUE 6)



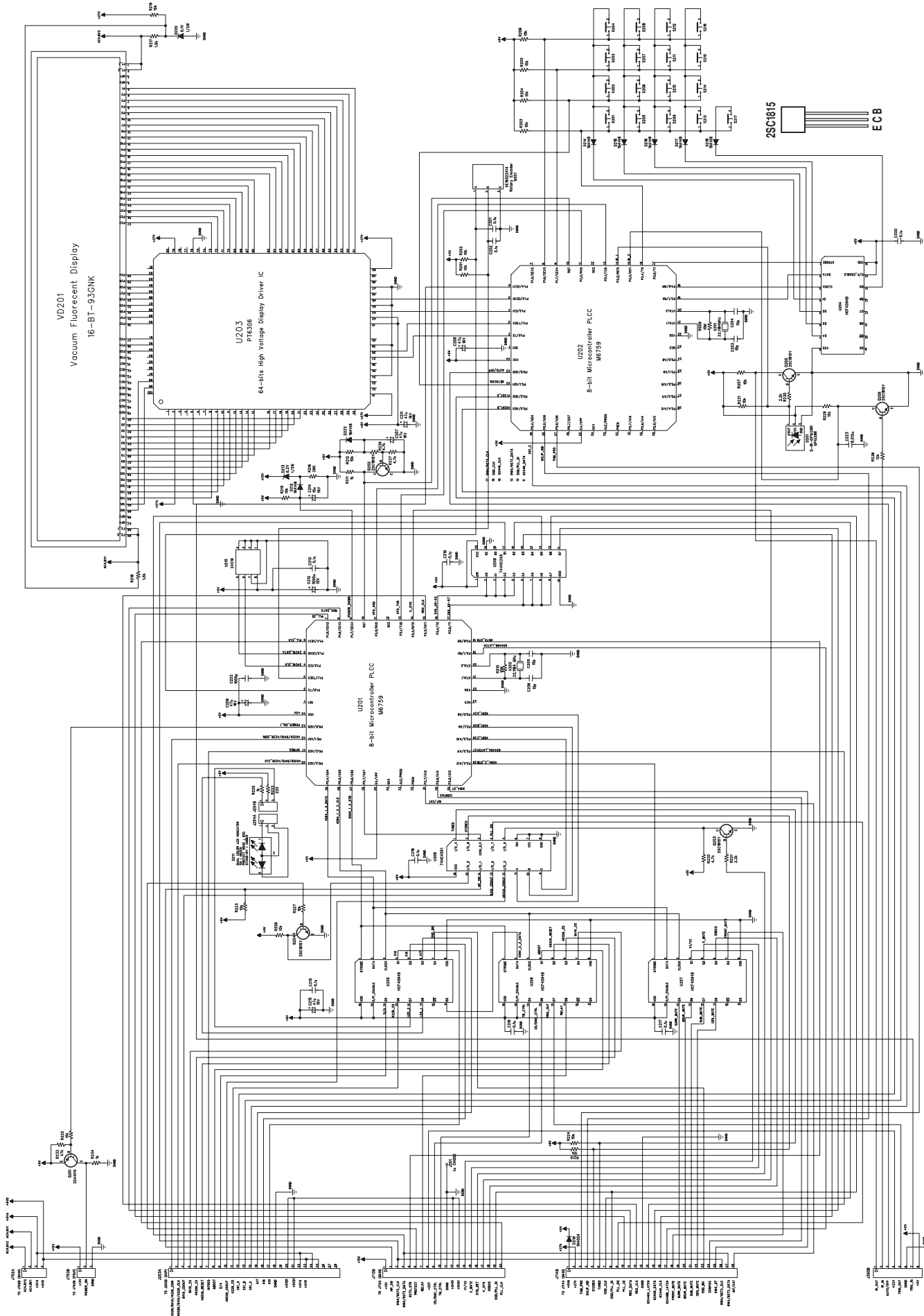
SCHEMATIC DIAGRAM

KEYBOARD (ISSUE 7)



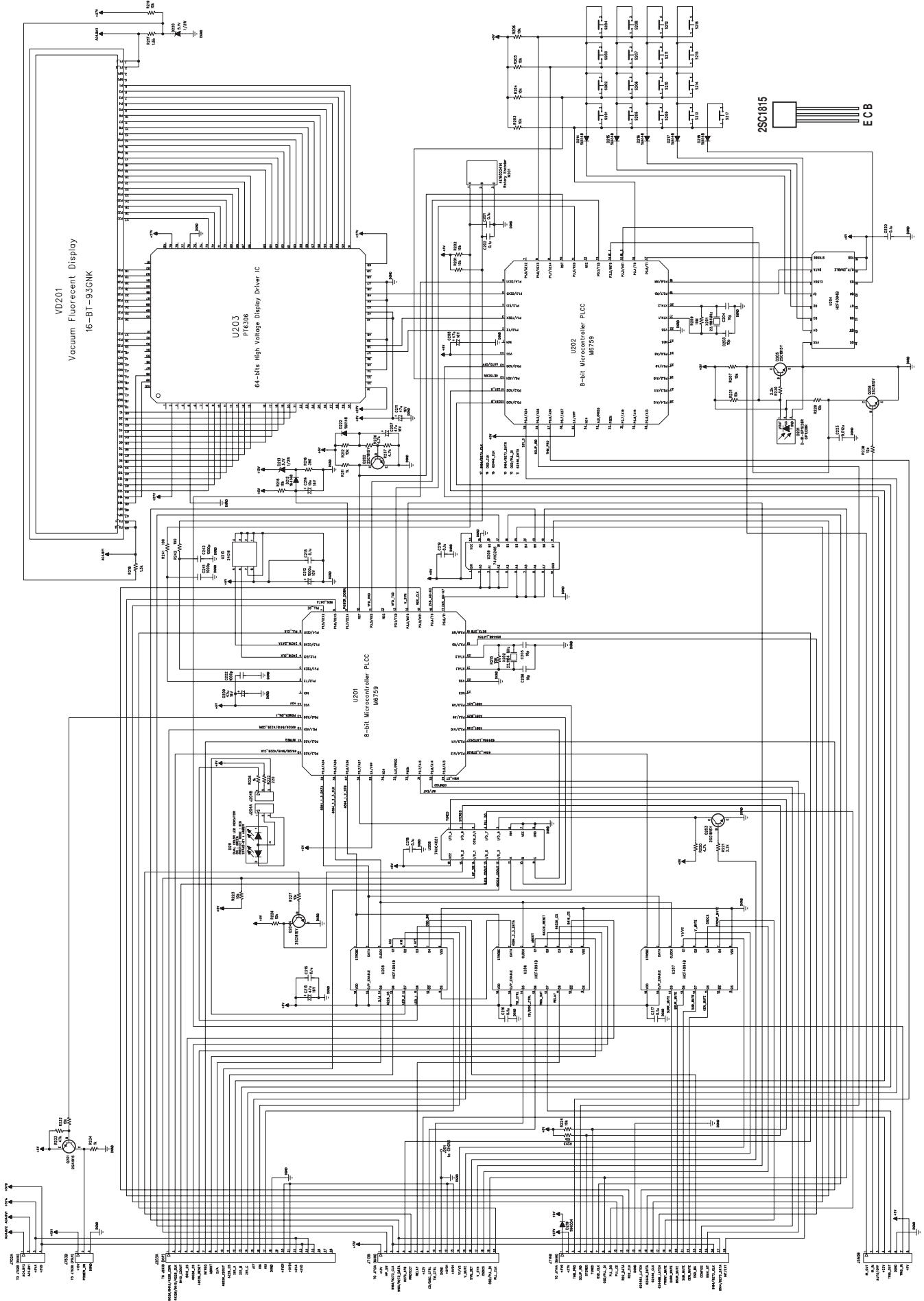
SCHEMATIC DIAGRAM

KEYBOARD (ISSUE 8)



SCHEMATIC DIAGRAM

KEYBOARD (PN-01)

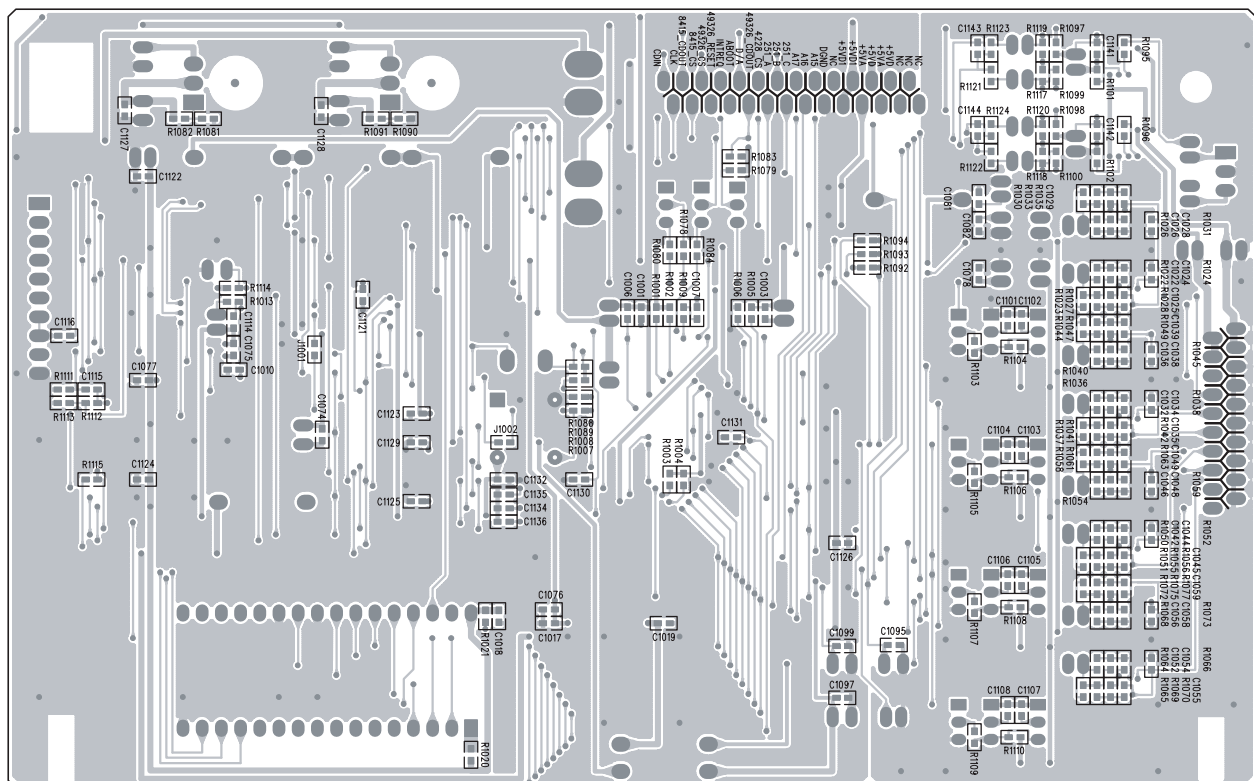


VERSION HISTORY

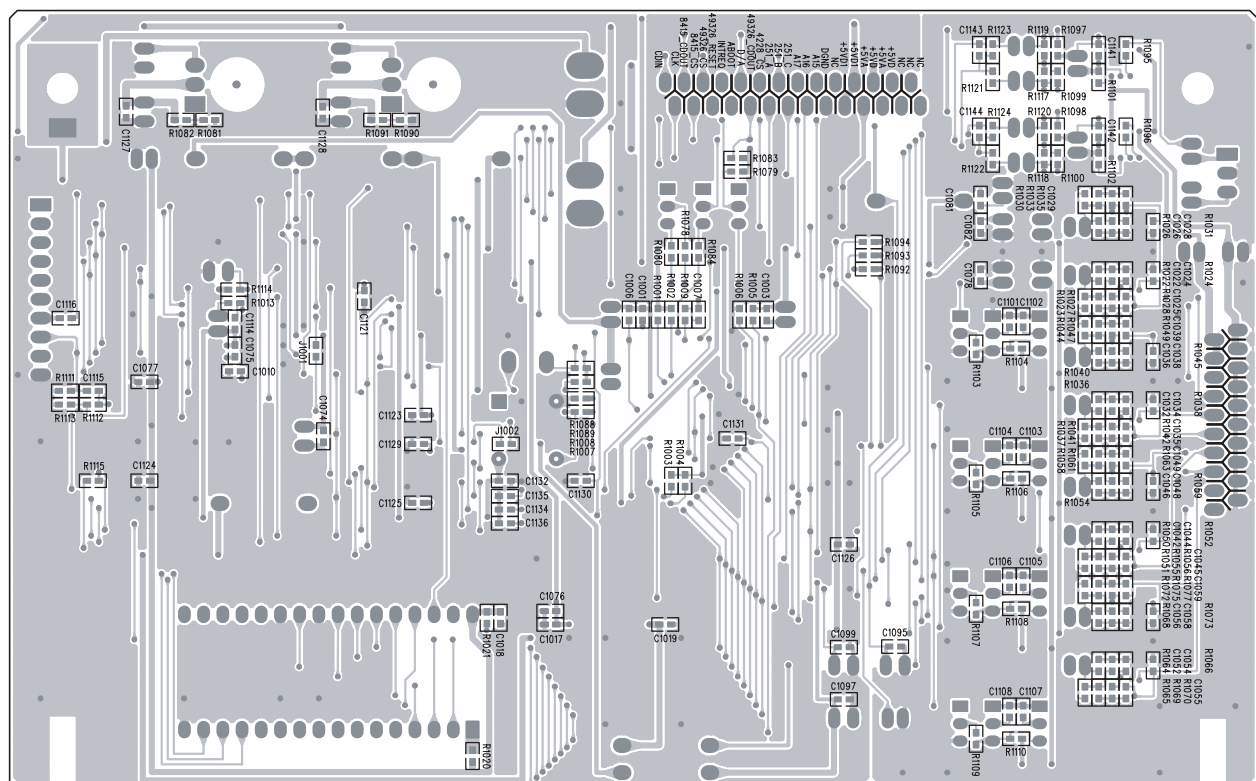
DSP BOARD

ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	DSP BOARD : 55-0752054-20-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	DSP BOARD : 55-0752054-20-00 A7	No layout change	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	DSP BOARD : 55-0752054-20-00 A8	- Add RC of digital in - Add Diode of 8415 RST	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	DSP BOARD : 55-0752054-20-01	No layout change	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667
PN-02	DSP BOARD : 55-0752054-20-02	No layout change	

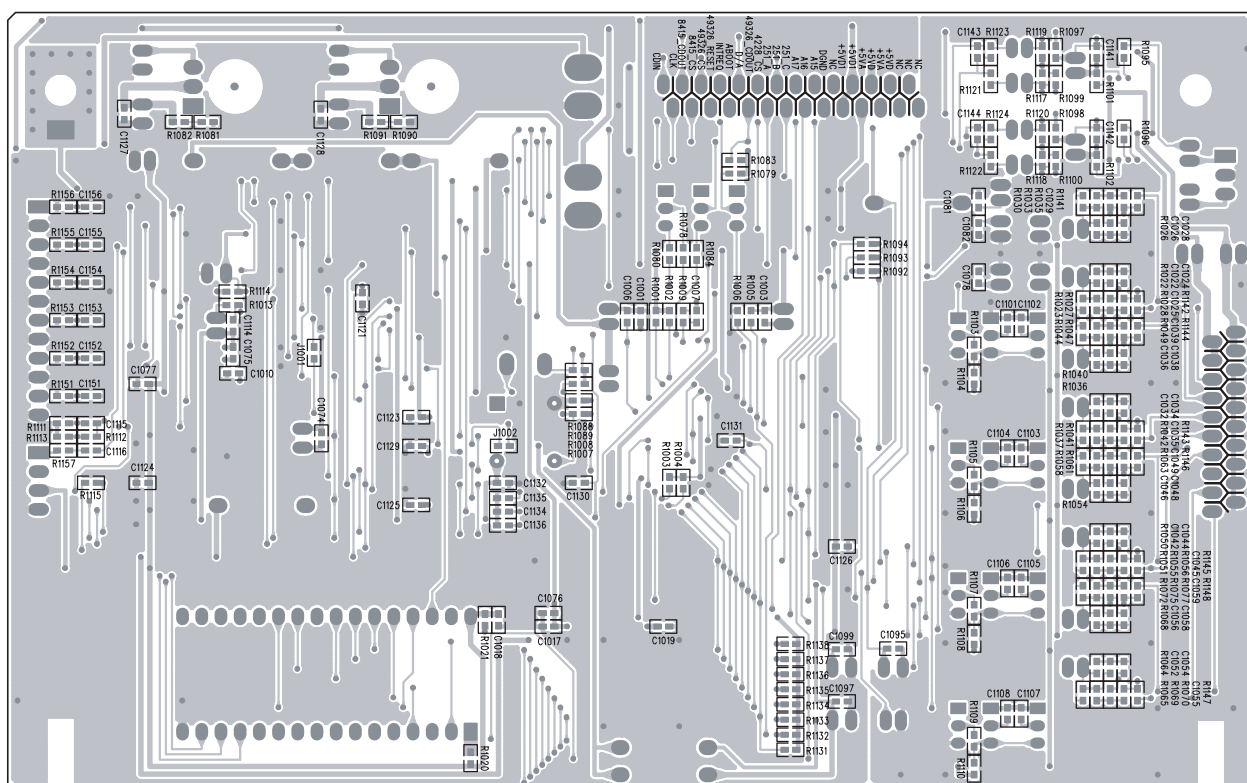
COMPONENT SIDE



COMPONENT SIDE

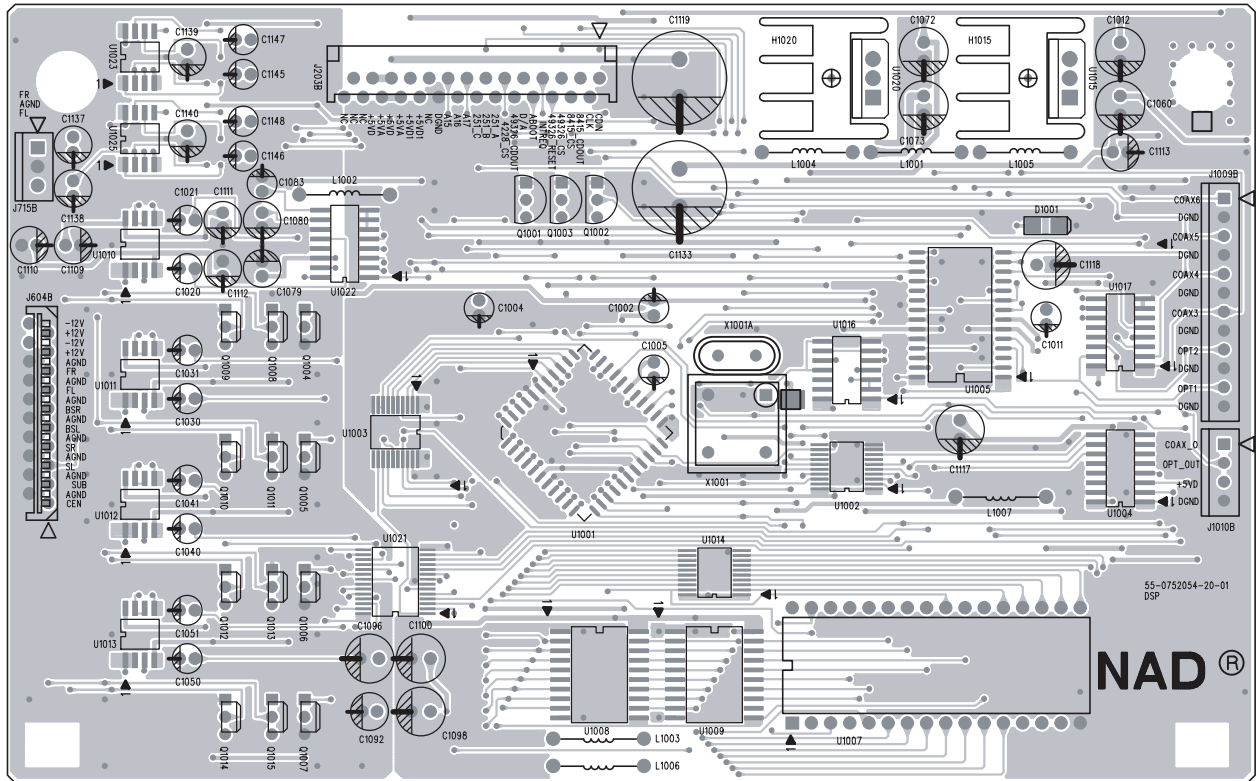


COMPONENT SIDE

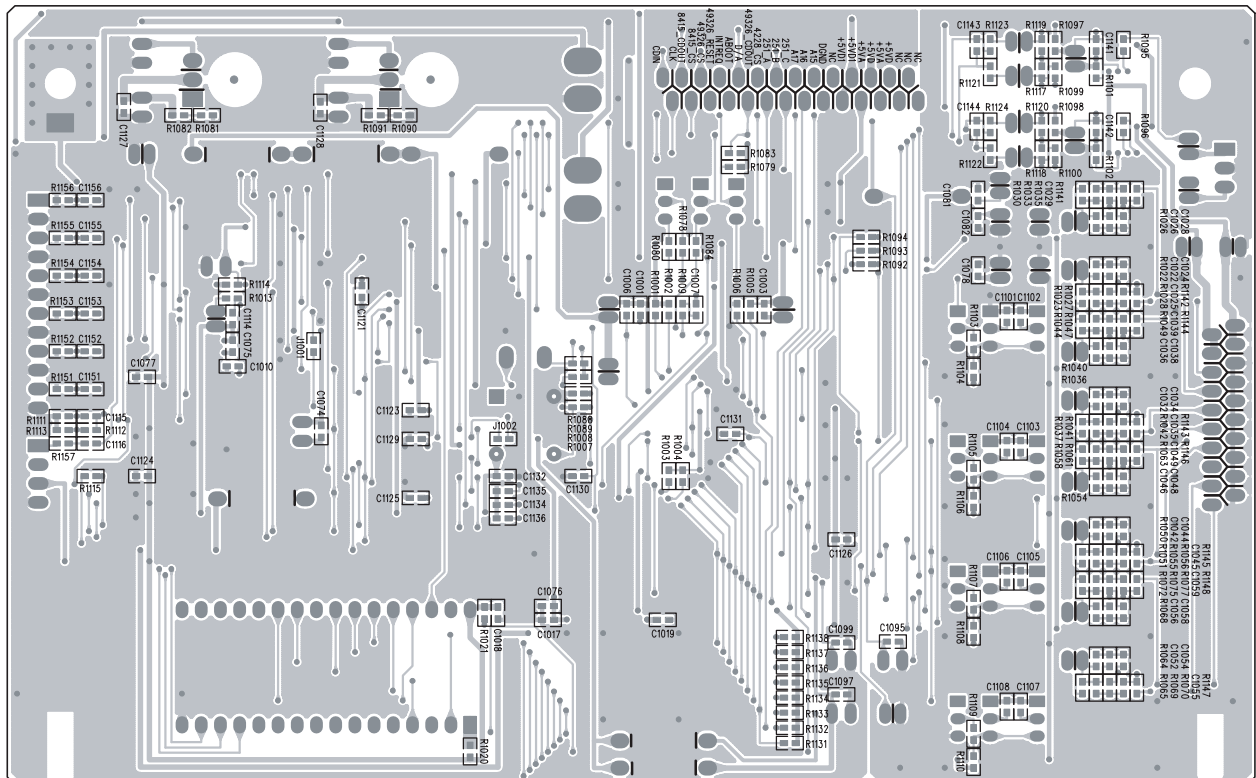


PCB LAYOUT DSP BOARD (PN-01)

COMPONENT SIDE

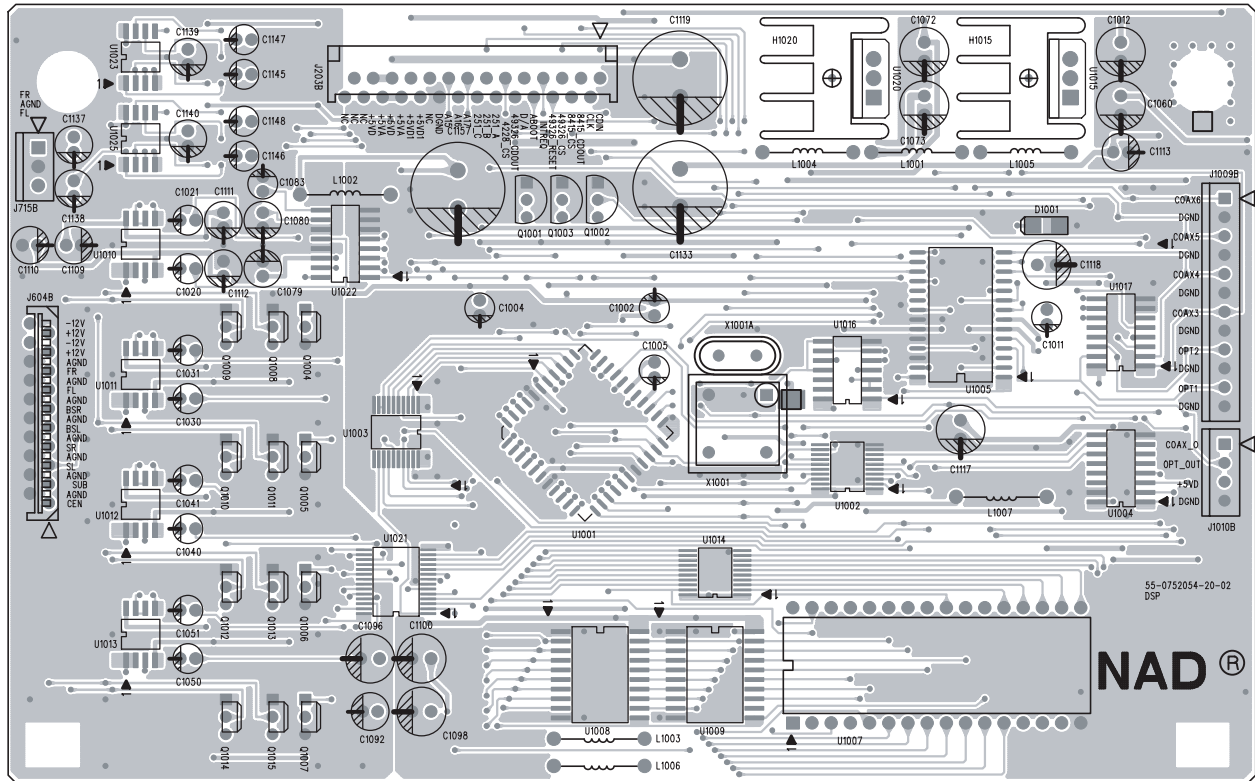


COPPER SIDE

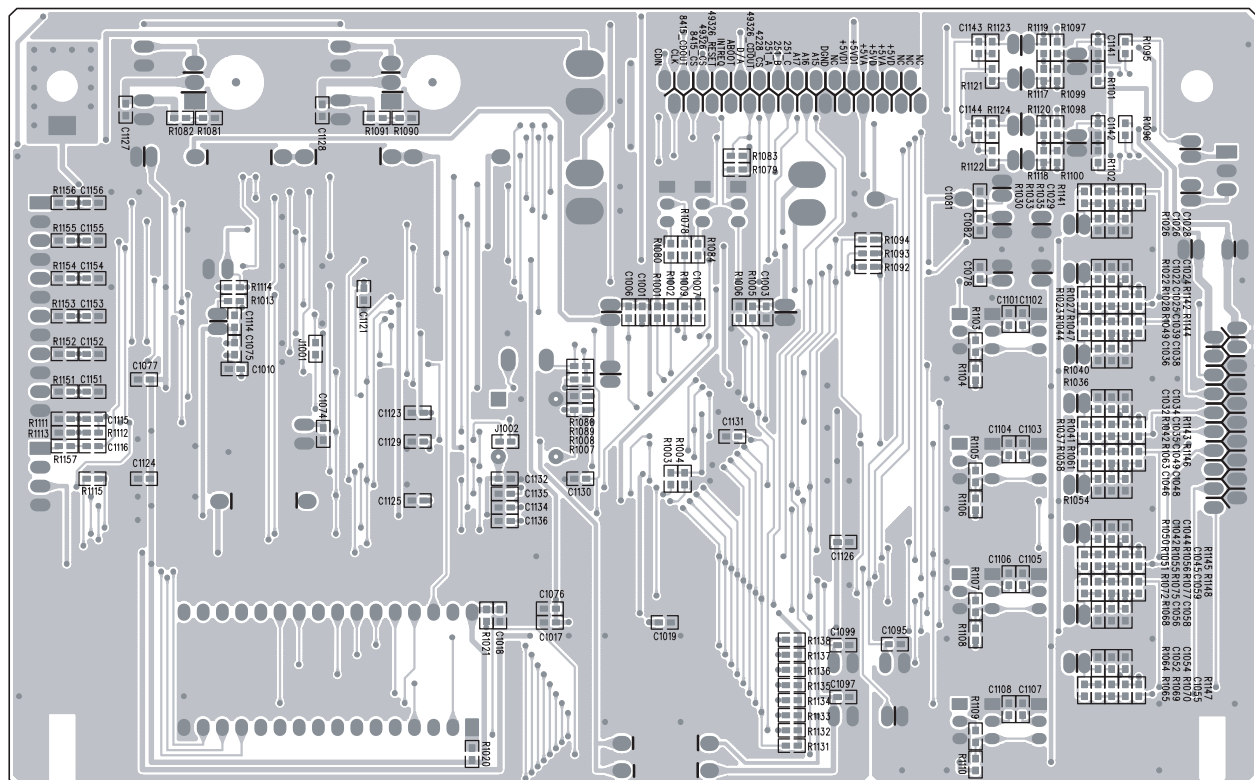


PCB LAYOUT DSP BOARD (PN-02)

COMPONENT SIDE

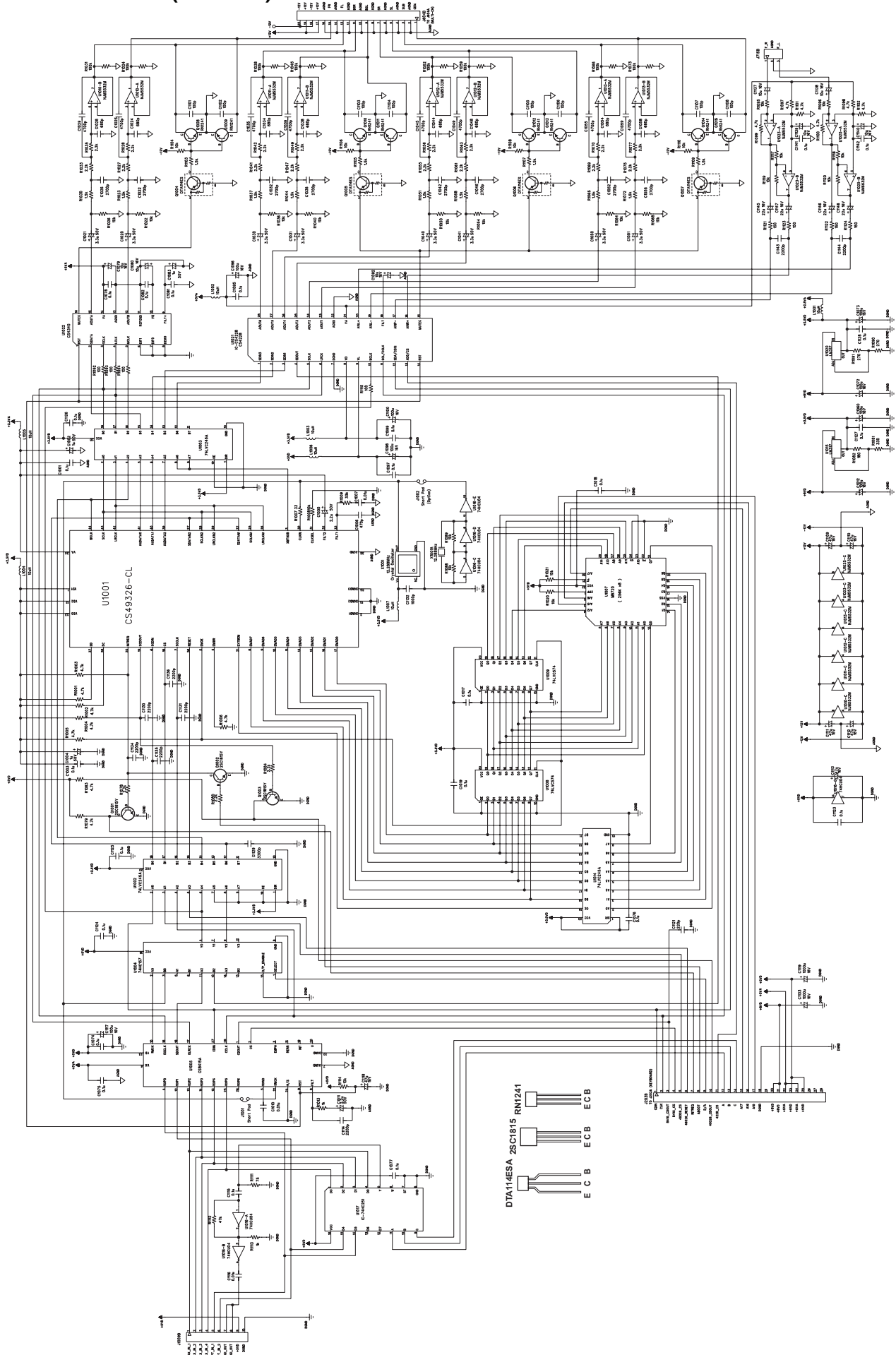


COPPER SIDE



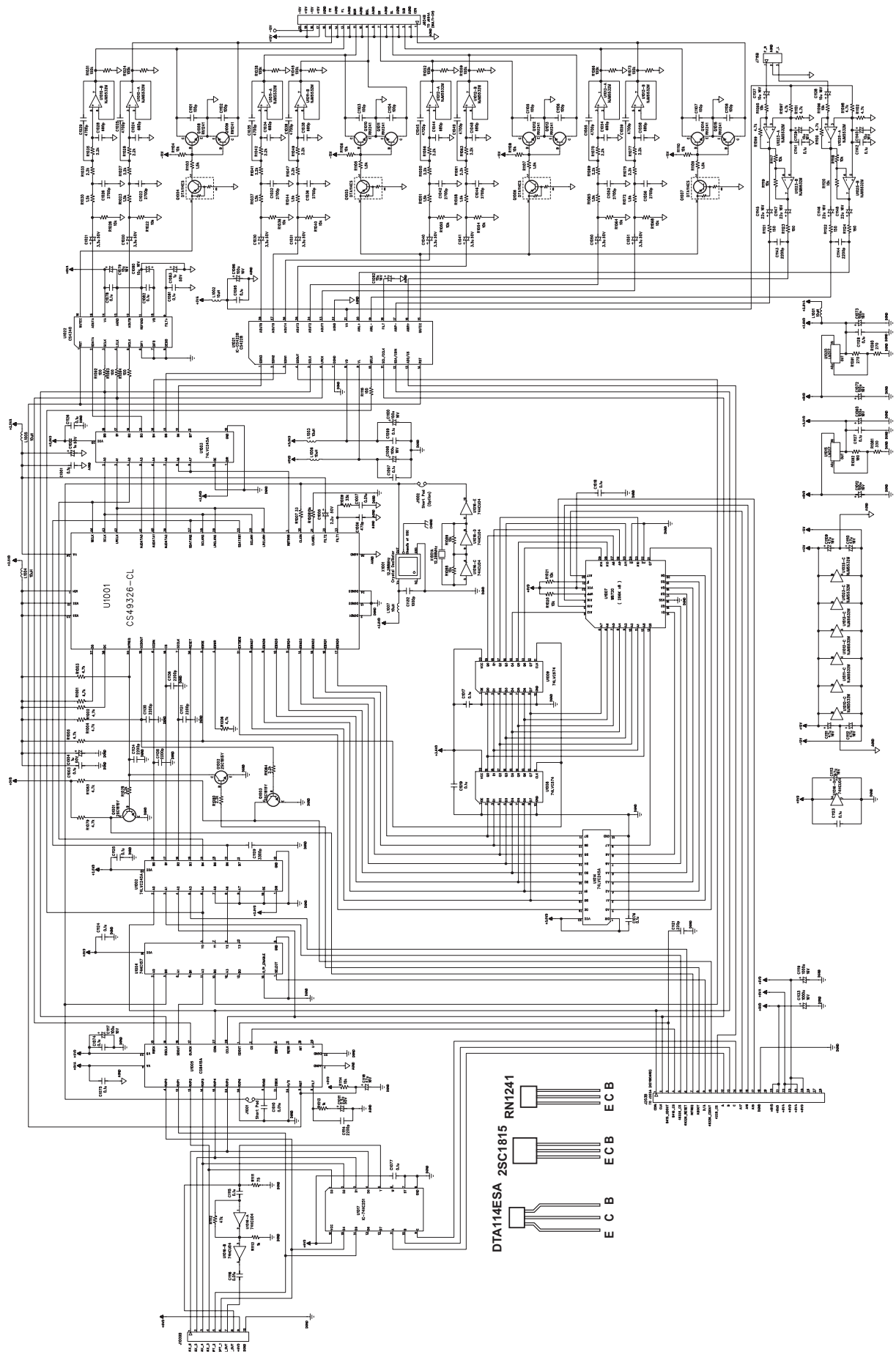
SCHEMATIC DIAGRAM

DSP BOARD (ISSUE 6)



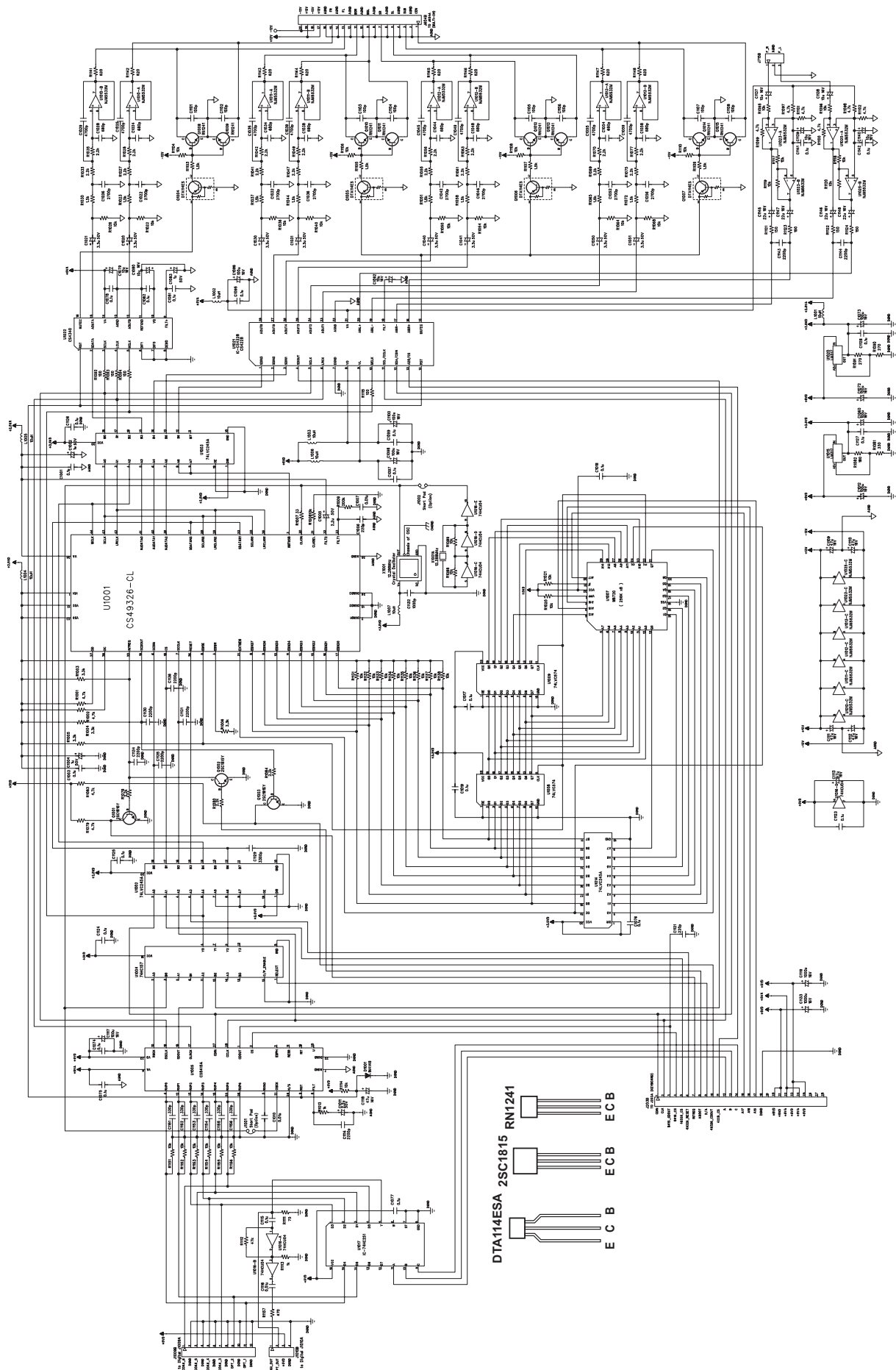
SCHEMATIC DIAGRAM

DSP BOARD (ISSUE 7)



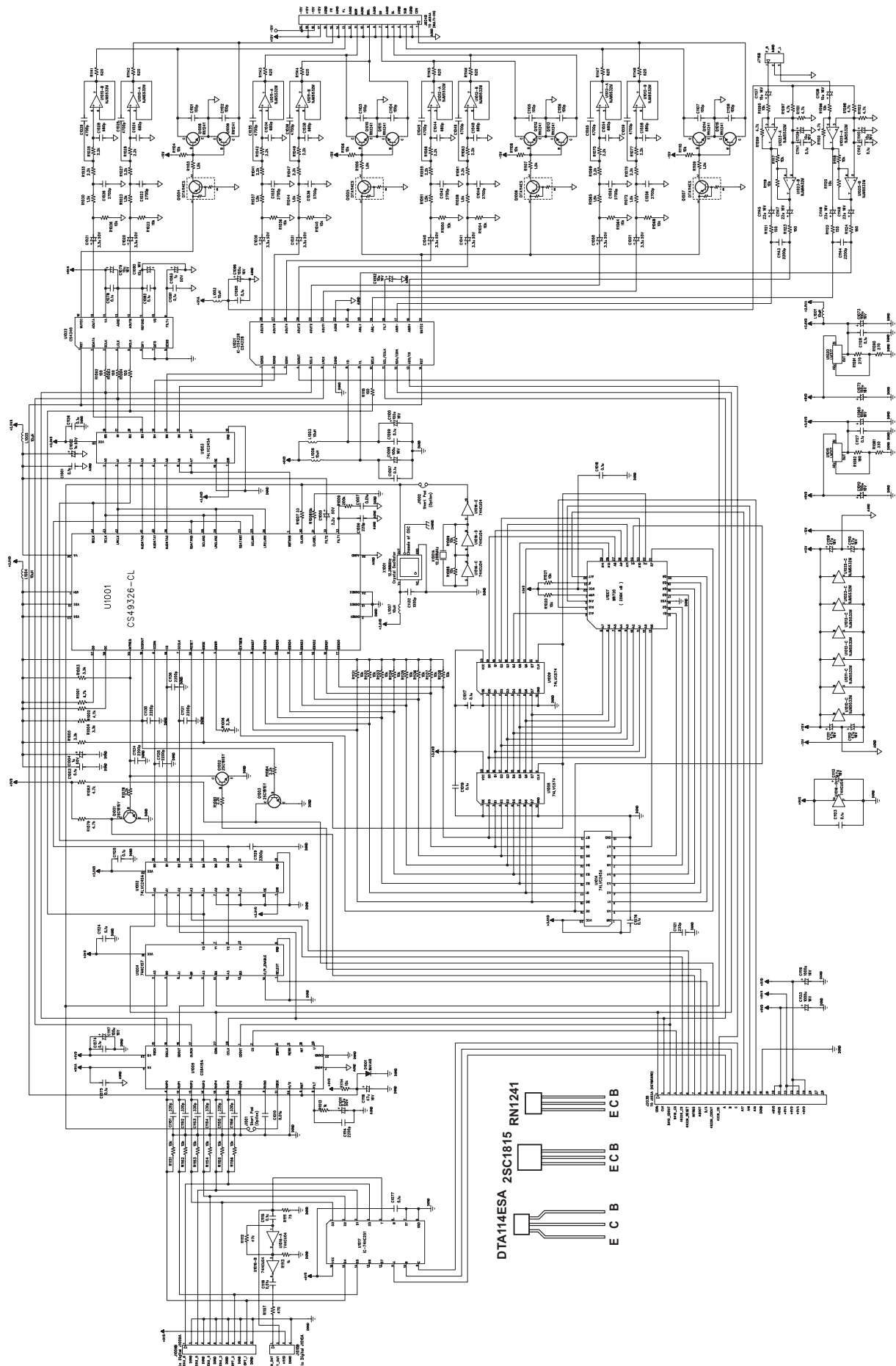
SCHEMATIC DIAGRAM

DSP BOARD (ISSUE 8)



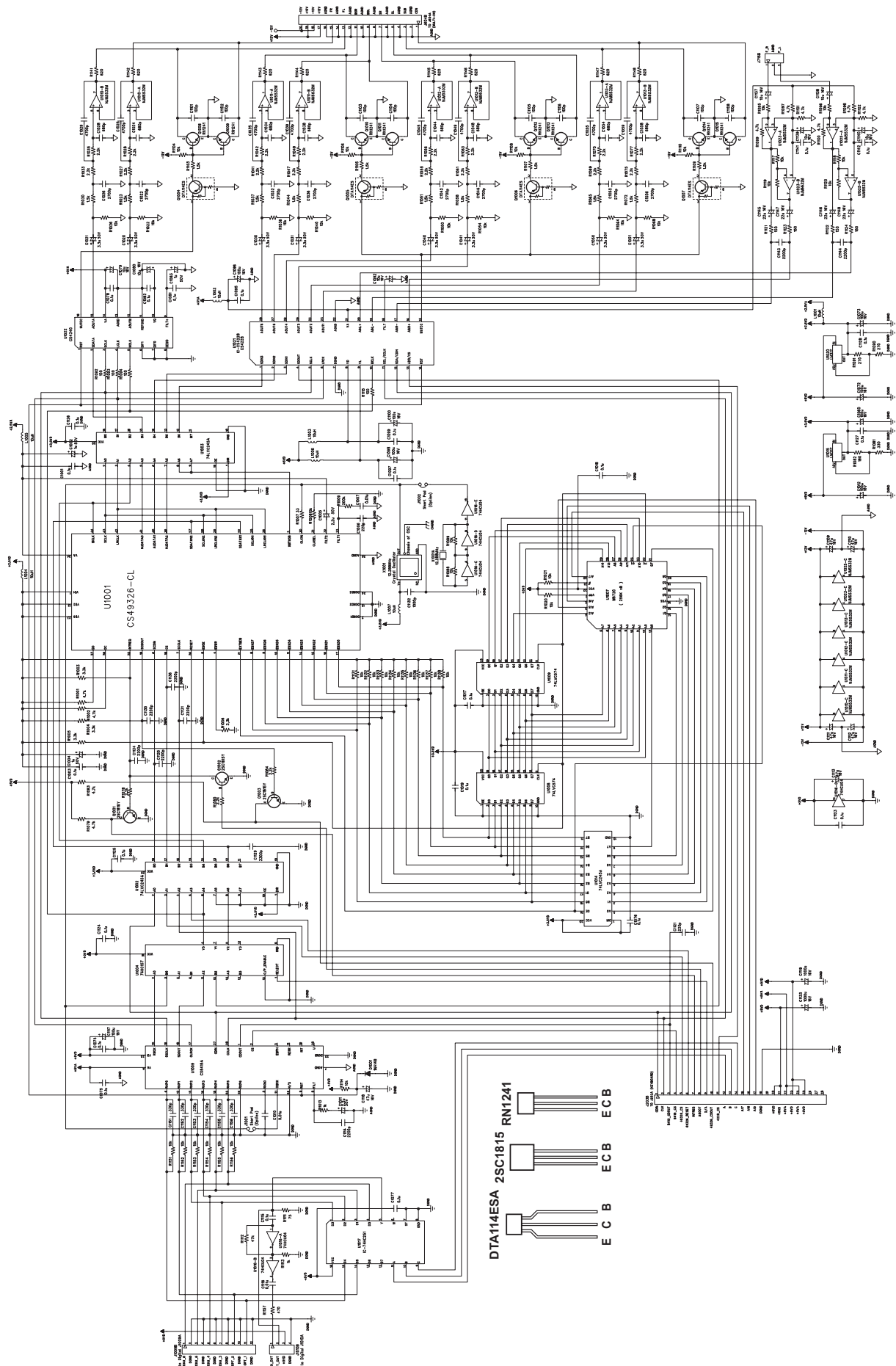
SCHEMATIC DIAGRAM

DSP BOARD (PN-01)



SCHEMATIC DIAGRAM

DSP BOARD (PN-02)



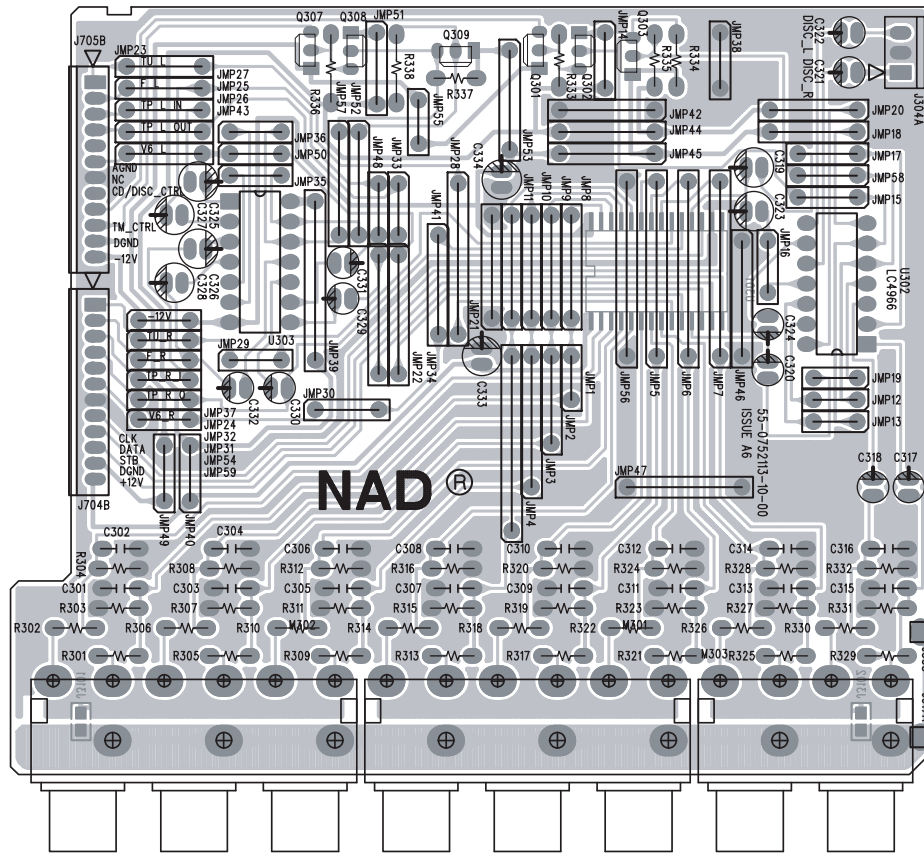
VERSION HISTORY

AUDIO BOARD

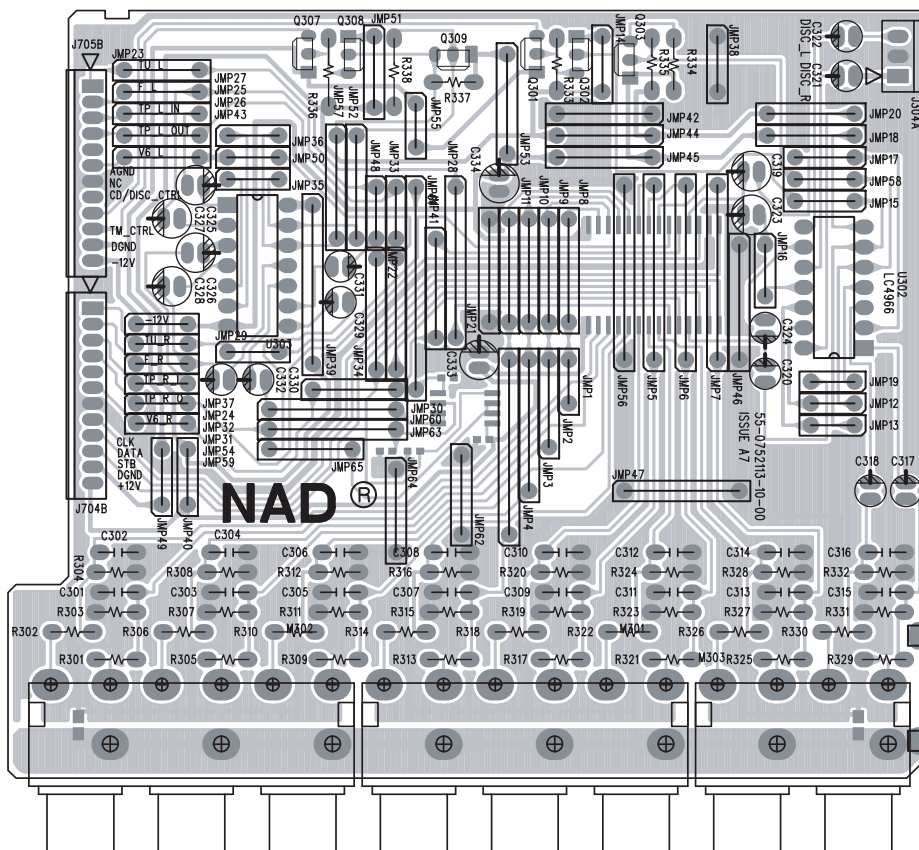
ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	AUDIO BOARD : 55-0752113-10-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	AUDIO BOARD : 55-0752113-10-00 A7	• Add Oamp for Tape Out	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	AUDIO BOARD : 55-0752113-10-00 A8	• No layout change	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	AUDIO BOARD : 55-0752113-10-01	• No layout change	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667
PN-02	AUDIO BOARD : 55-0752113-10-02	• No layout change	
PN-03	AUDIO BOARD : 55-0752113-10-03	• No layout change	

PCB LAYOUT

AUDIO BOARD (ISSUE 6)

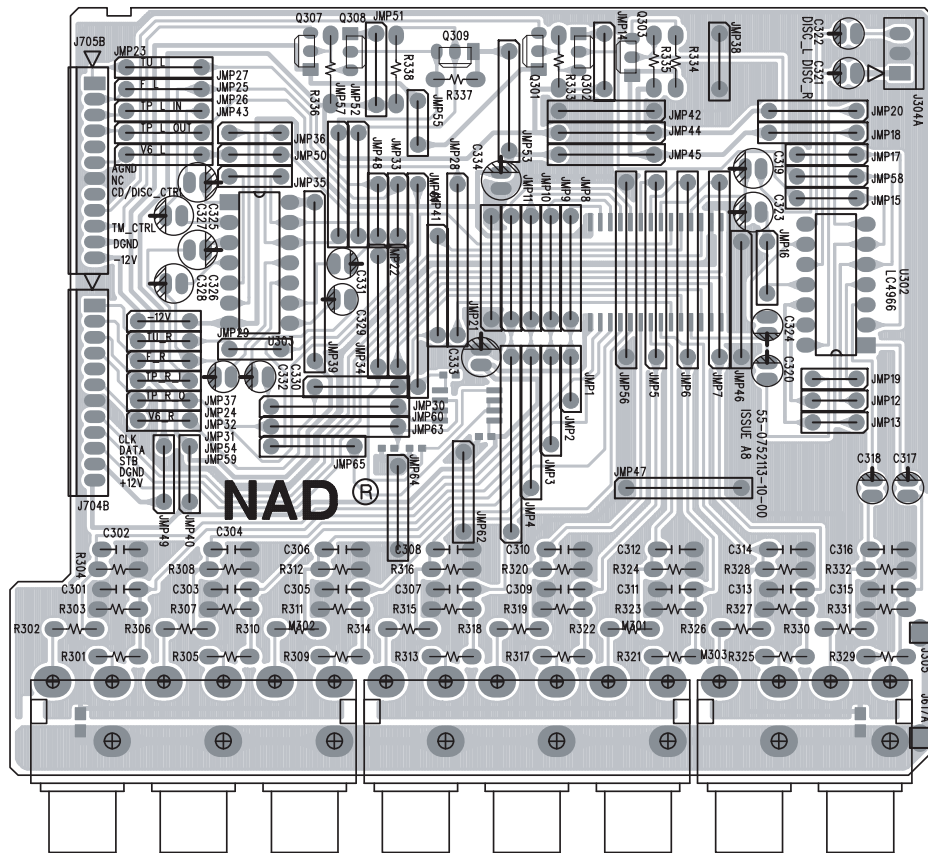


AUDIO BOARD (ISSUE 7)

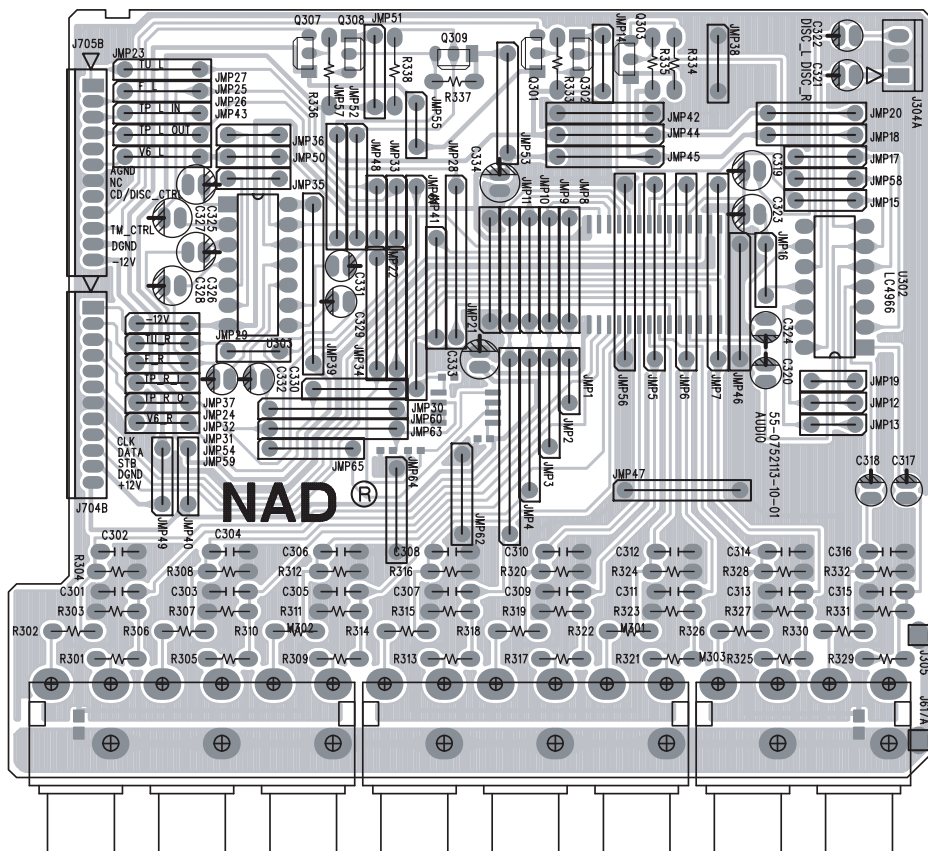


PCB LAYOUT

AUDIO BOARD (ISSUE 8)

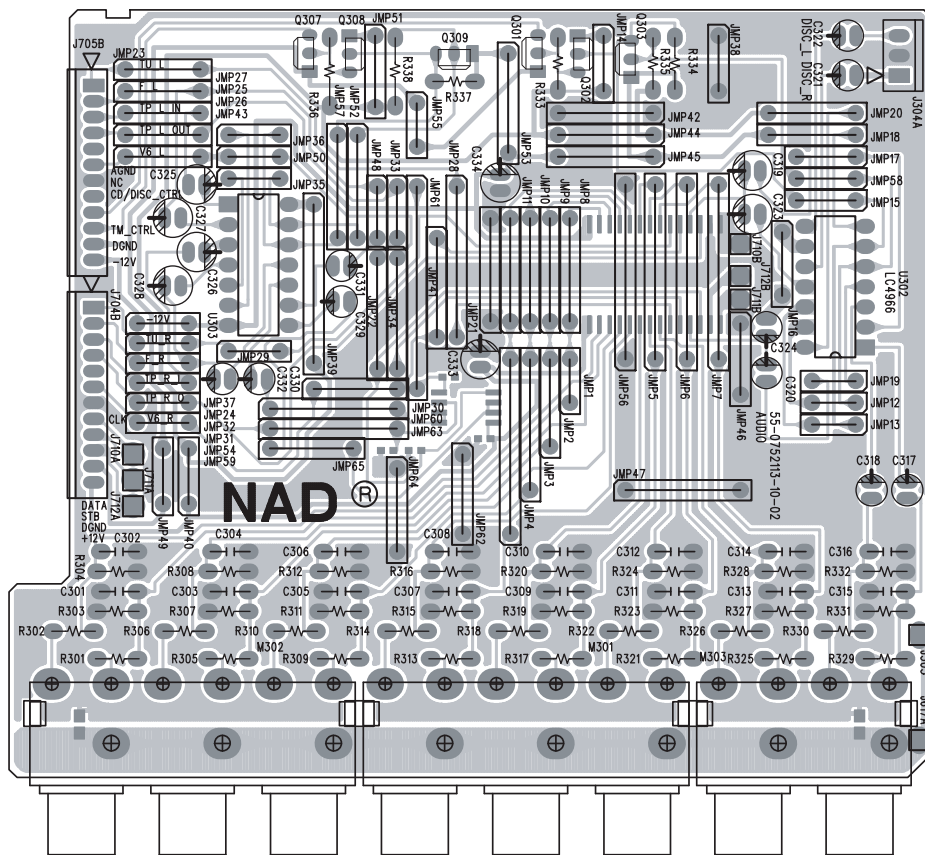


AUDIO BOARD (PN-01)

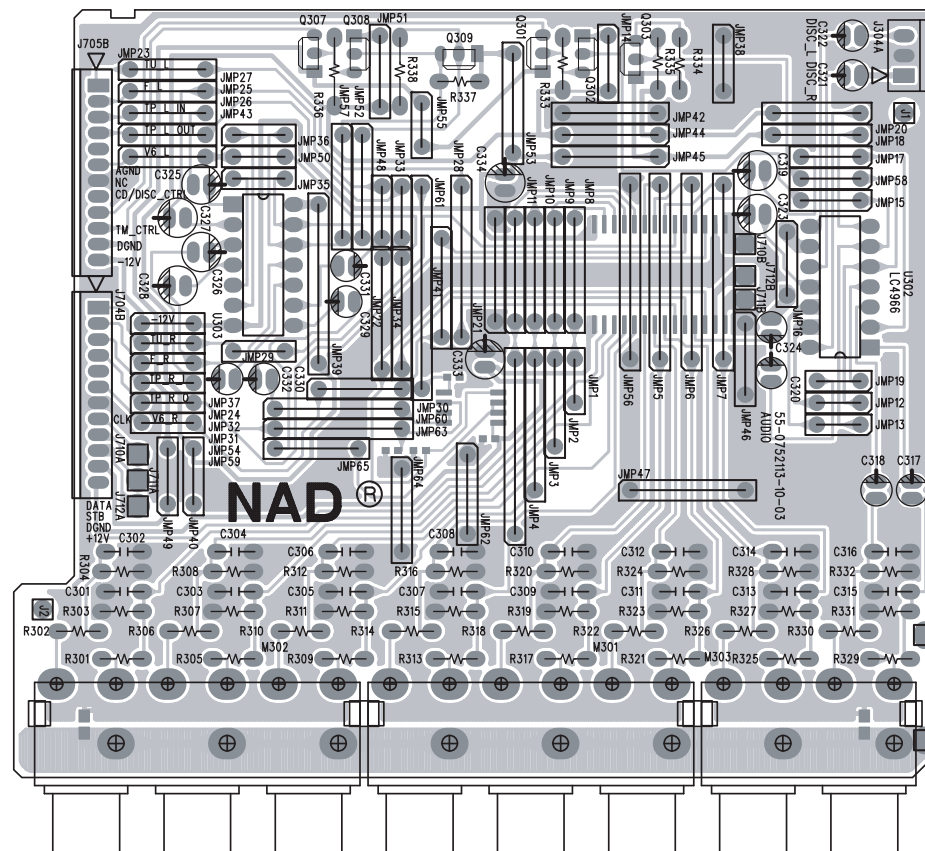


PCB LAYOUT

AUDIO BOARD (PN-02)

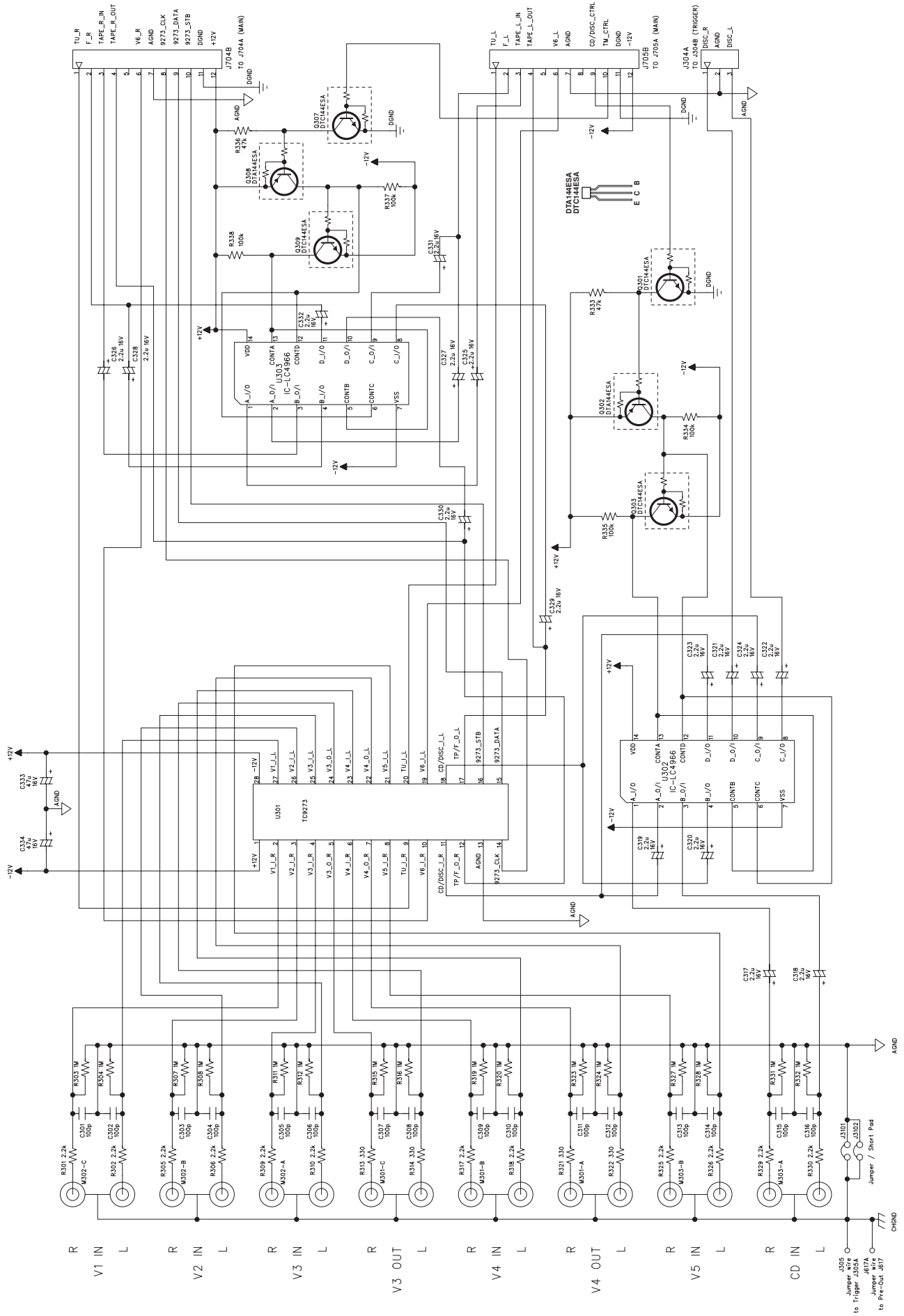


AUDIO BOARD (PN-03)



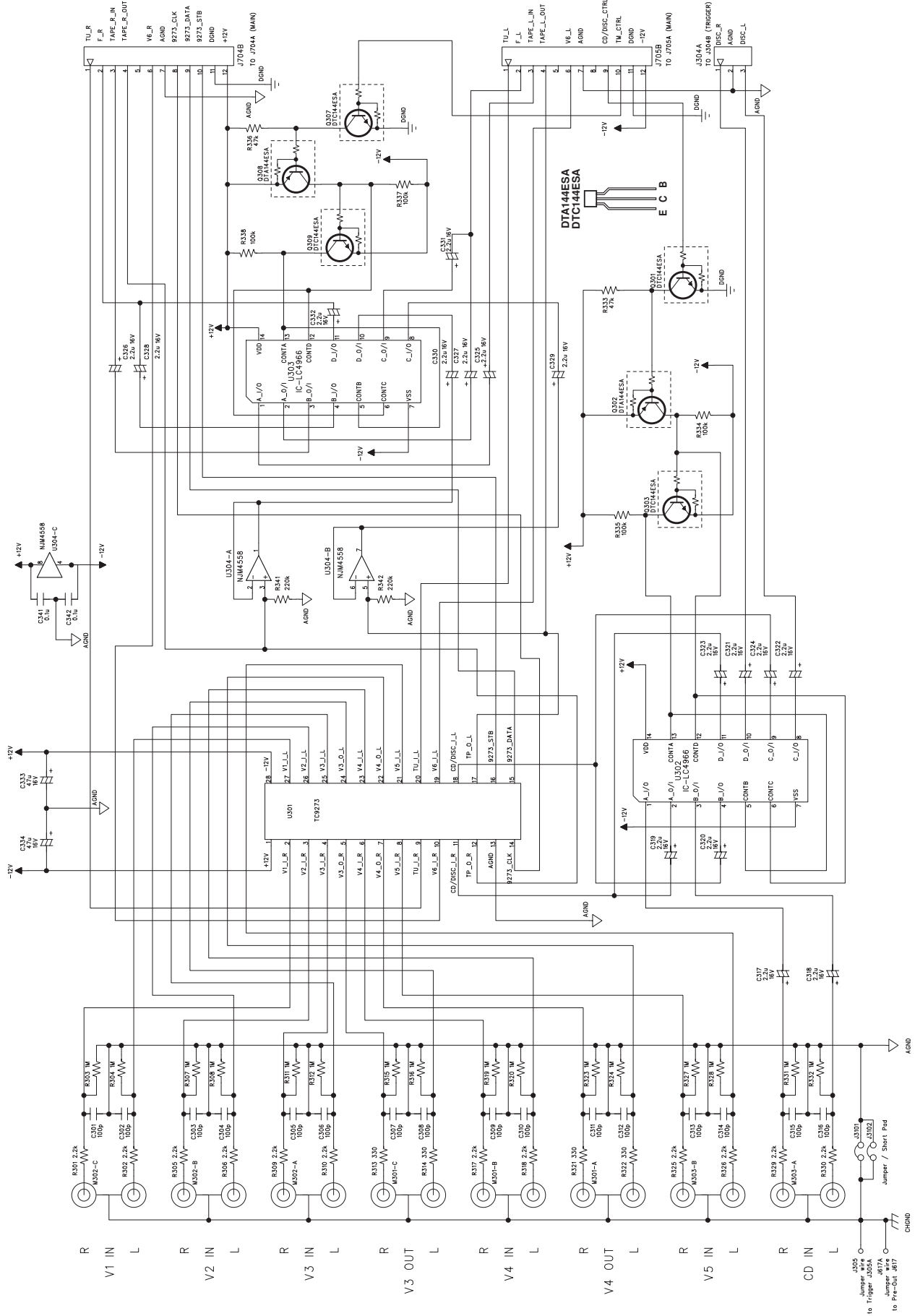
SCHEMATIC DIAGRAM

AUDIO BOARD (ISSUE 6)



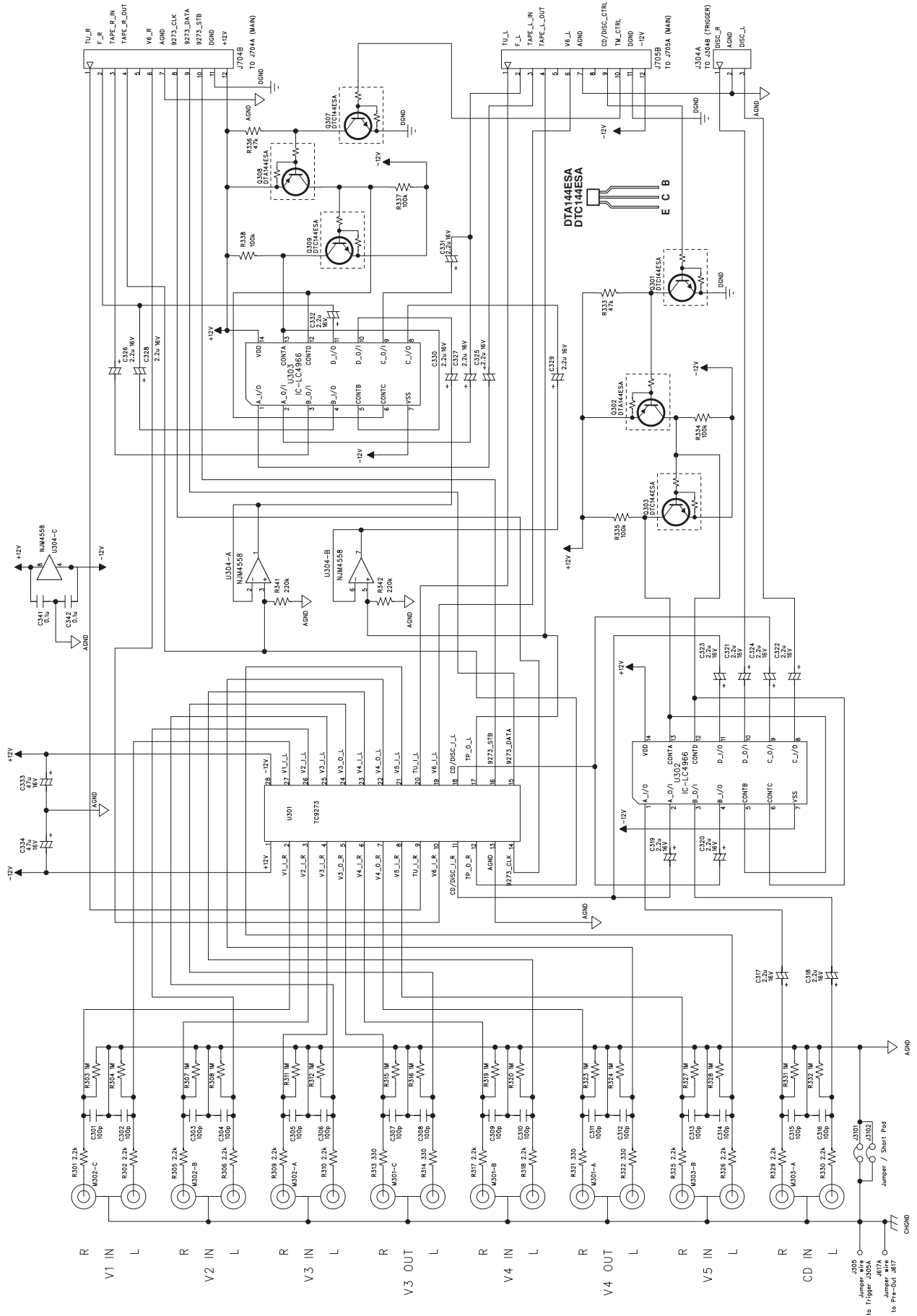
SCHEMATIC DIAGRAM

AUDIO BOARD (ISSUE 7)



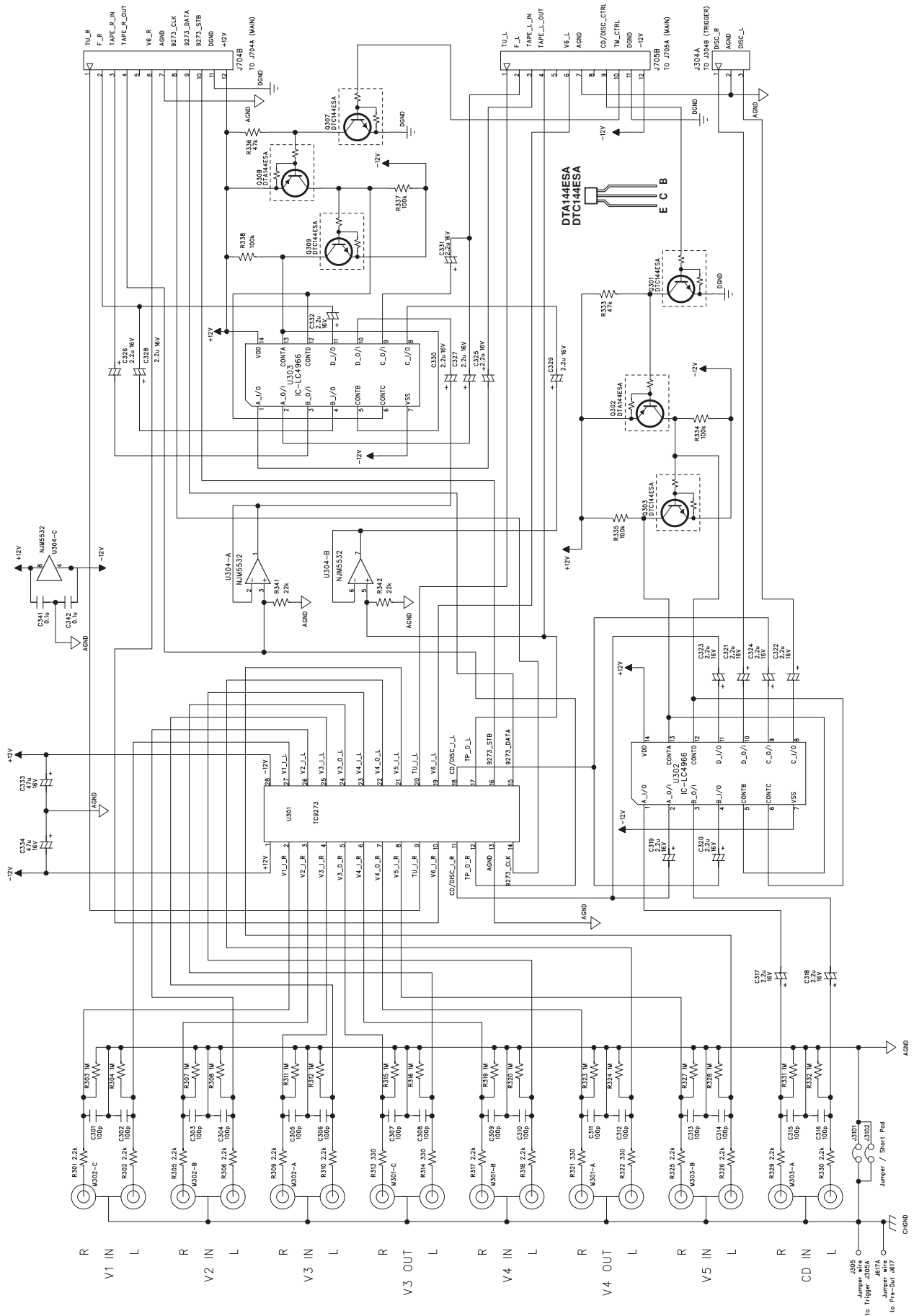
SCHEMATIC DIAGRAM

AUDIO BOARD (ISSUE 8)



SCHEMATIC DIAGRAM

AUDIO BOARD (PN-01 - PN-03)



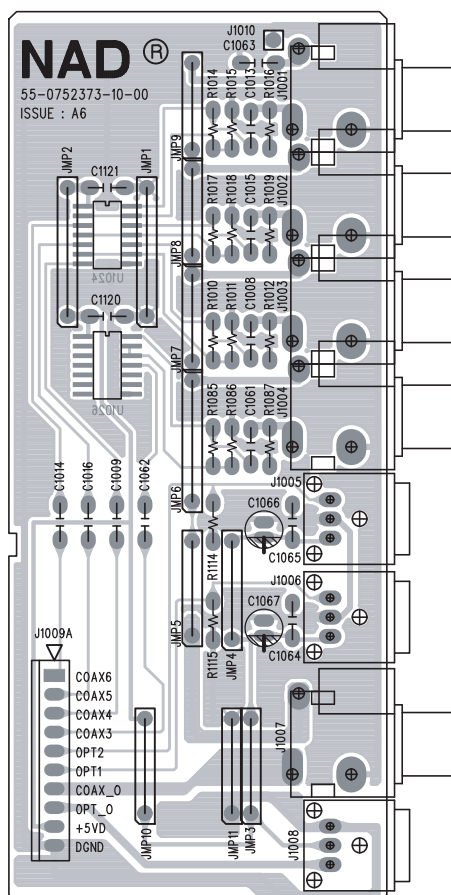
VERSION HISTORY

DIGITAL IN / OUT BOARD

ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	DIGITAL I/O BOARD : 55-0752373-10-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	DIGITAL I/O BOARD : 55-0752373-10-00 A7	• Add resistor of DIGITAL IN 4	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	AUDIO BOARD : 55-0752373-10-00 A8	• No layout change	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	AUDIO BOARD : 55-0752373-10-01	• No layout change	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667
PN-02	AUDIO BOARD : 55-075373-10-02	• No layout change	

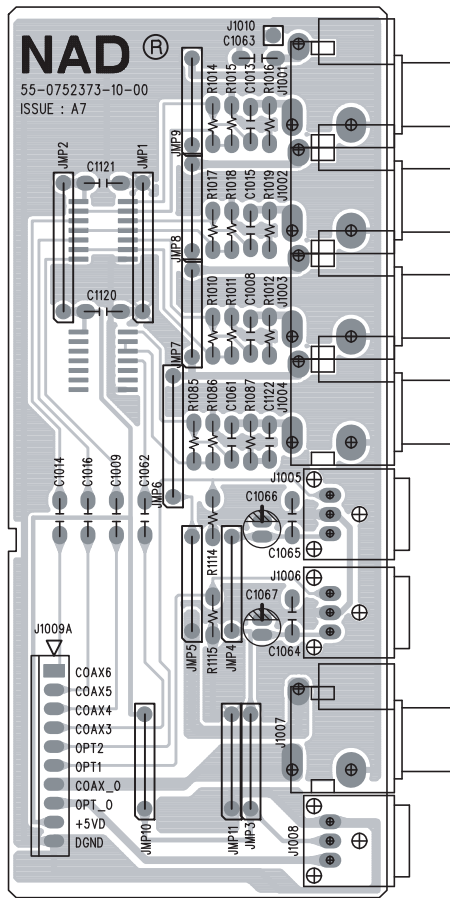
PCB LAYOUT

DIGITAL IN / OUT BOARD (ISSUE 6)

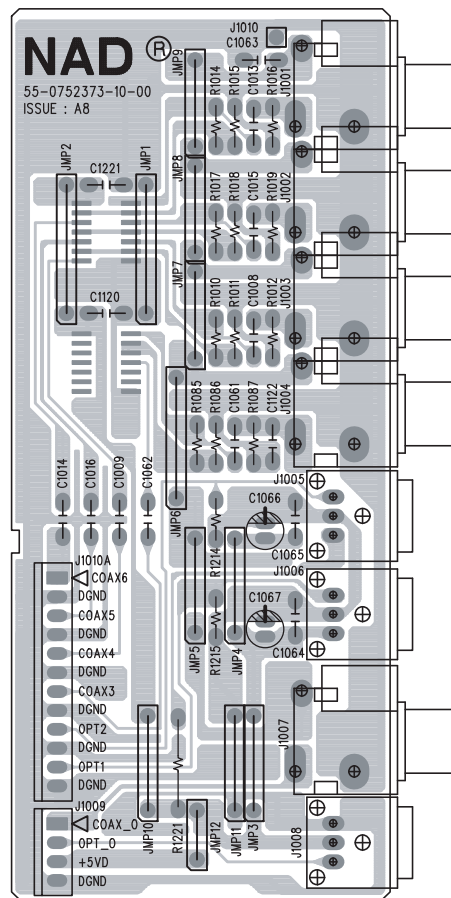


PCB LAYOUT

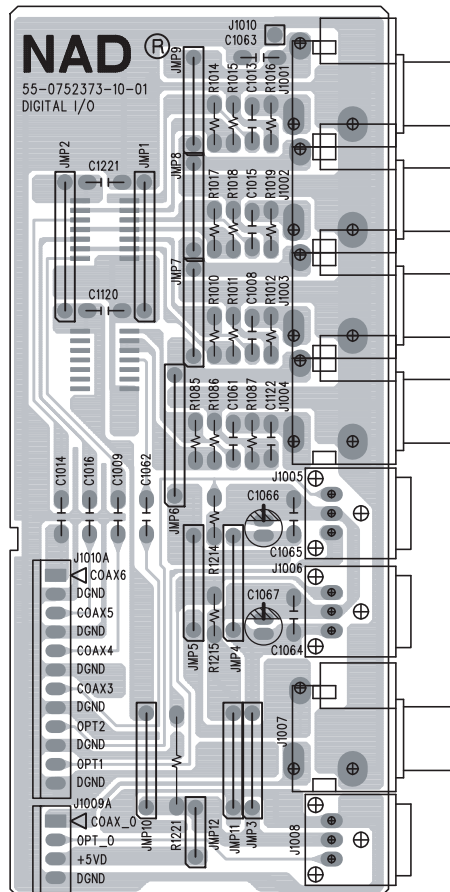
DIGITAL IN / OUT BOARD (ISSUE 7)



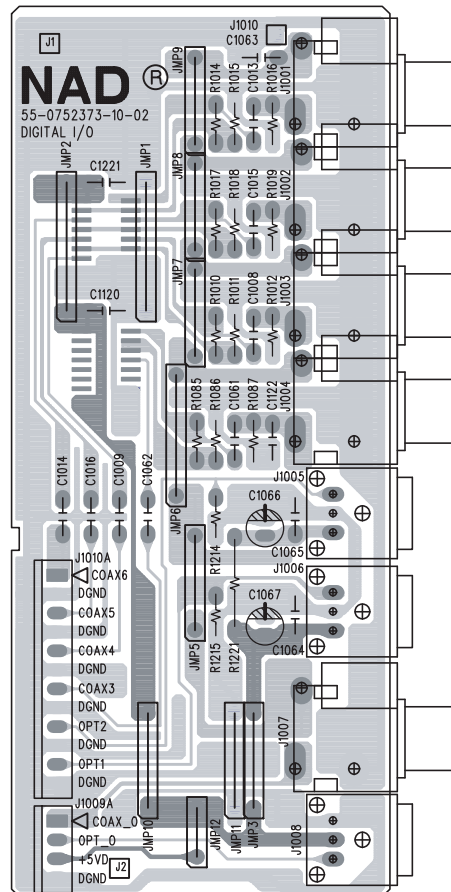
DIGITAL IN / OUT BOARD (ISSUE 8)



DIGITAL IN / OUT BOARD (PN-01)

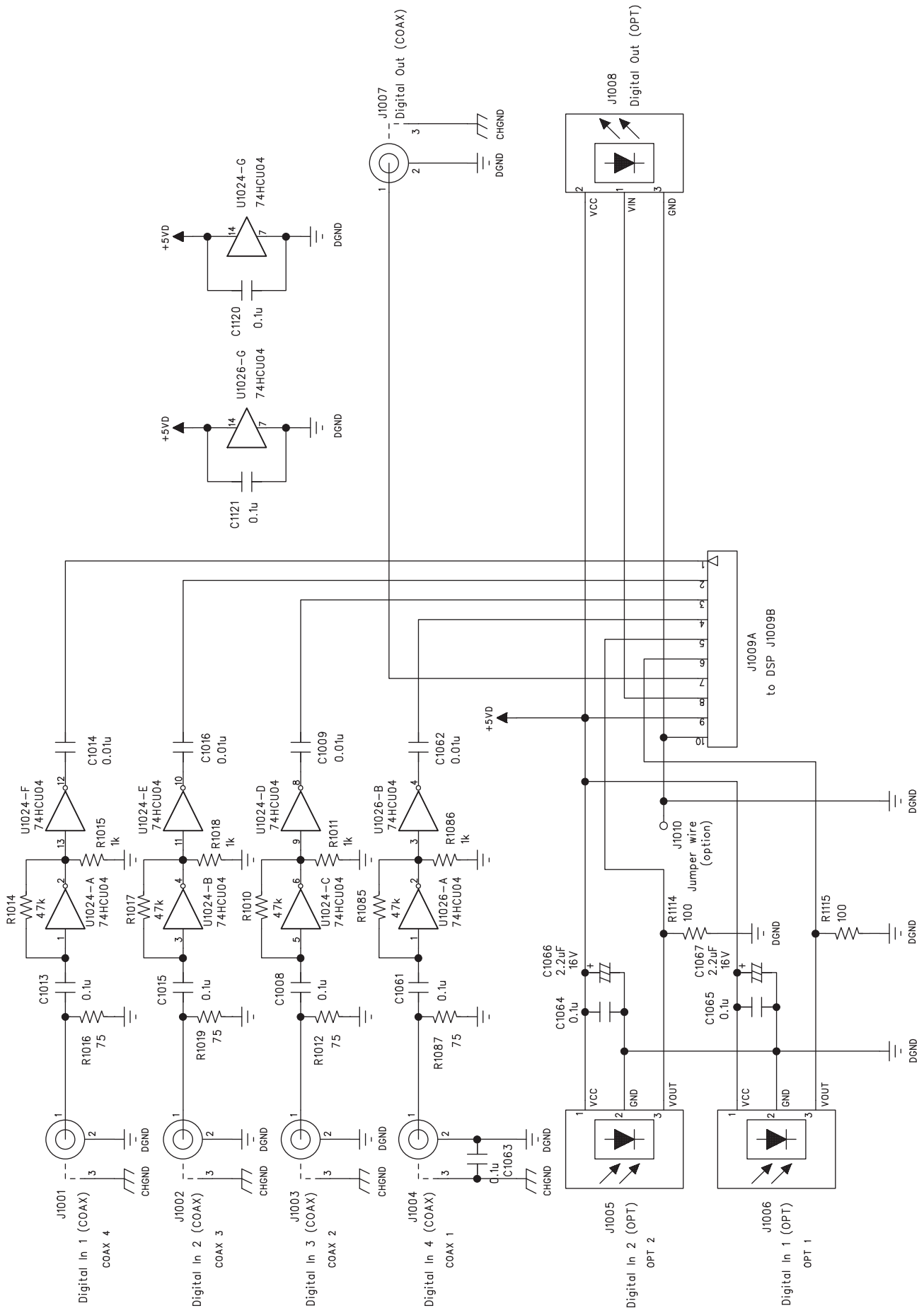


DIGITAL IN / OUT BOARD (PN-02)



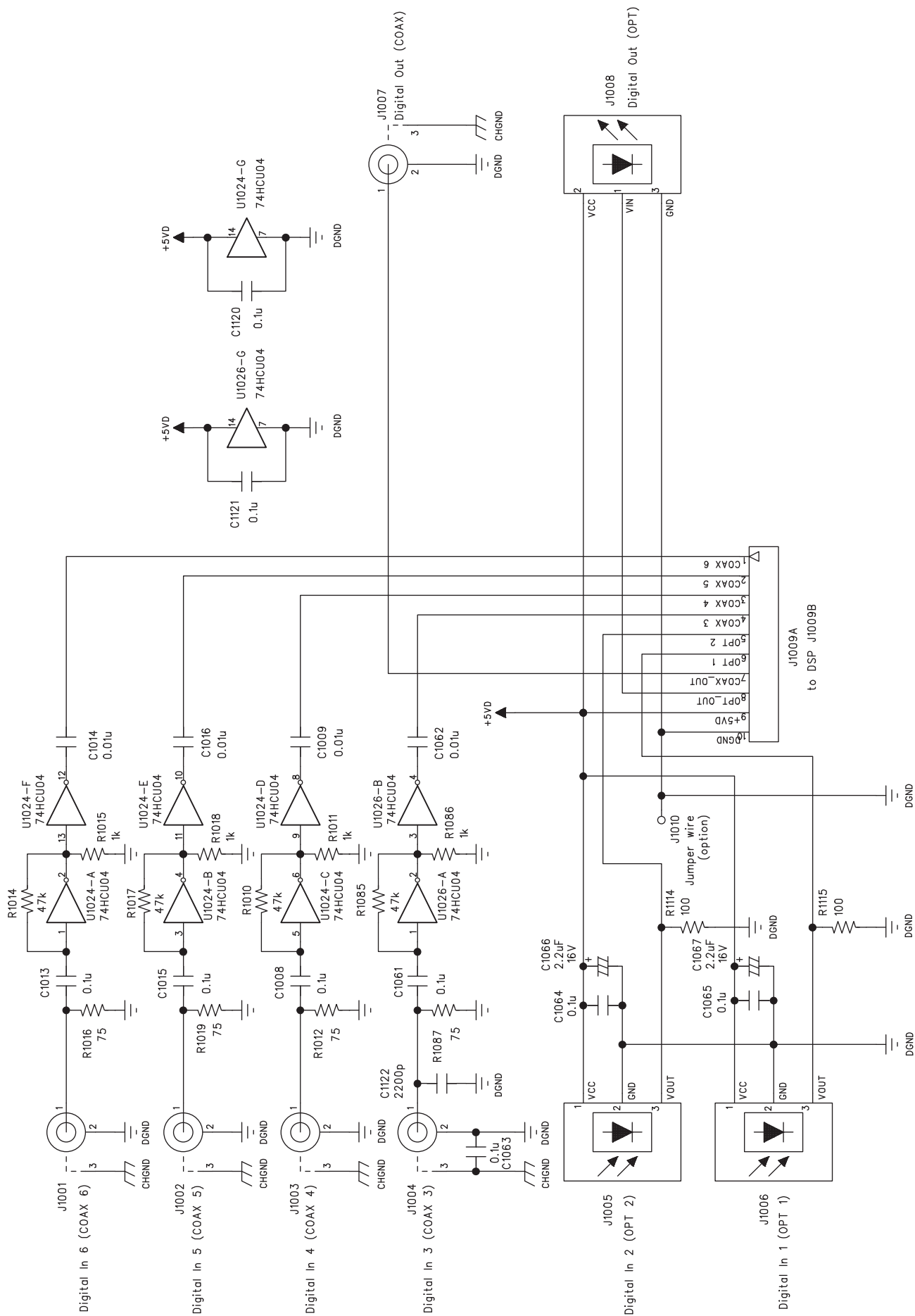
SCHEMATIC DIAGRAM

DIGITAL IN / OUT BOARD (ISSUE 6)



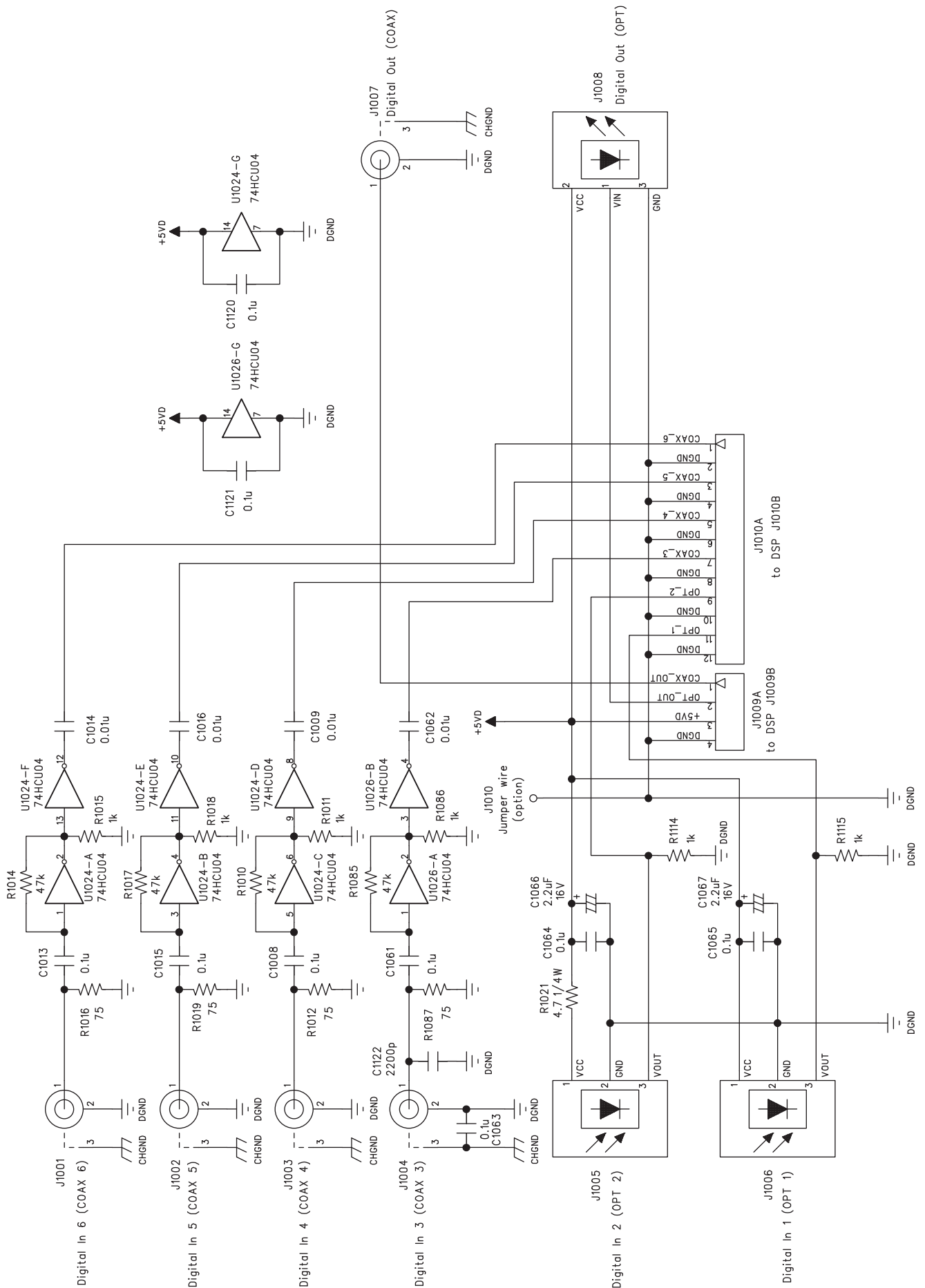
SCHEMATIC DIAGRAM

DIGITAL IN / OUT BOARD (ISSUE 7)



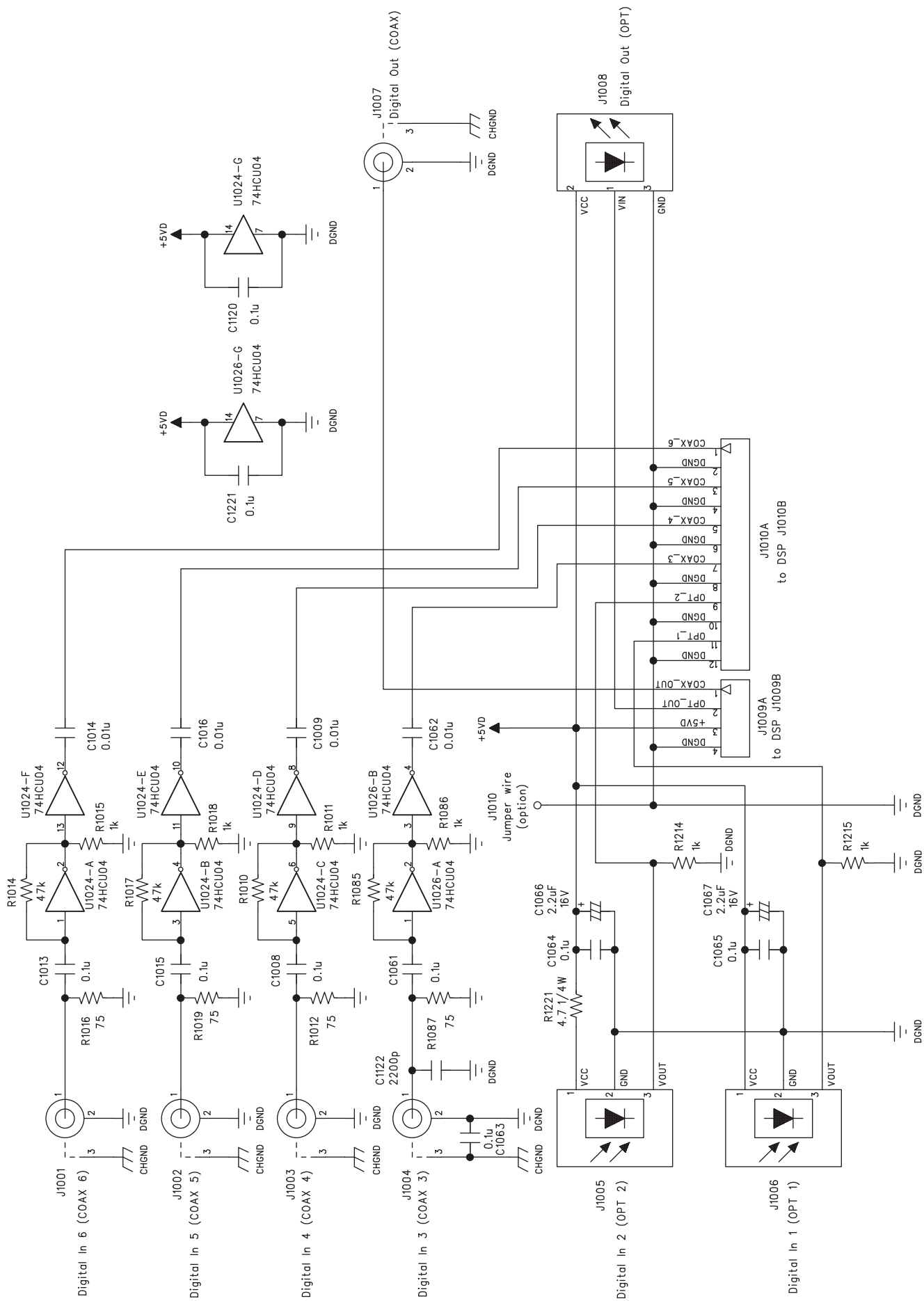
PCB LAYOUT

DIGITAL IN / OUT BOARD (ISSUE 8)



PCB LAYOUT

DIGITAL IN / OUT BOARD (PN-01)



PCB LAYOUT

DIGITAL IN / OUT BOARD (PN-02)



VERSION HISTORY

PRE-OUT BOARD

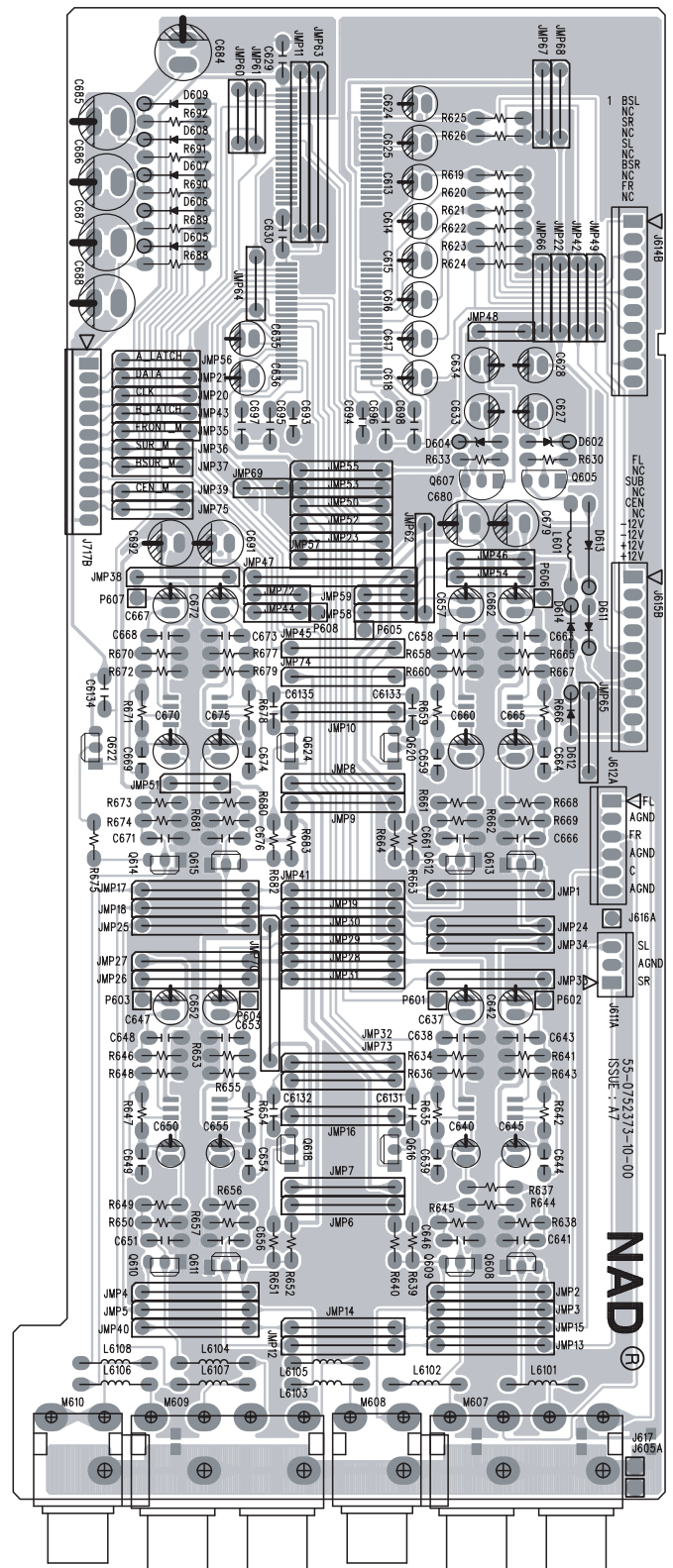
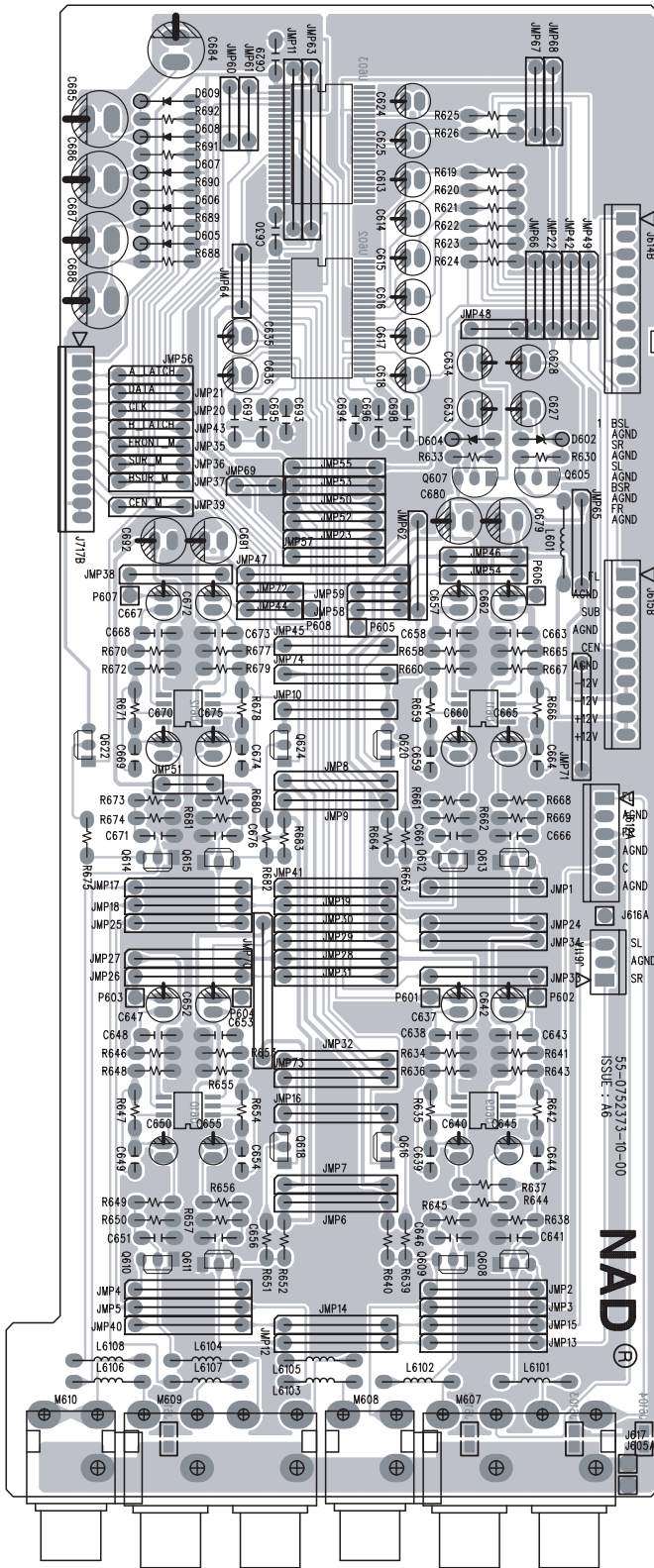
ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
ISSUE 6	PRE-OUT BOARD : 55-0752373-10-00 A6		R28T75200001-R28T75200280 R28T75200401-R28T75200481
ISSUE 7	PRE-OUT BOARD : 55-0752373-10-00 A7	• Add Diode on +12V • Add Diode on -12V	R28T75200281-R28T75200400 R28T75200482-R28T75201253 R2XT75203301-R2XT75203460
ISSUE 8	PRE-OUT BOARD : 55-0752373-10-00 A8	• No layout change	R28T75201254-R29T75202800 R2XT75202801-R2XT75203300 R2XT75203461-R2XT75203514
PN-01	PRE-OUT BOARD : 55-0752373-10-01	• No layout change	R2XT75203515-R2XT75204550 R2YT75204551-R2YT75205594 R2YT75207629-R2YT75207685 R2ZT75205595-R2ZT75206600 R31T75206601-R31T75207100 R32T75207101-R32T75207600 R33T75207601-R33T75207727 R34T75207728-R34T75209227 R37T75209228-R37T75210377 R38T75210378-R38T75210667
PN-02	PRE-OUT BOARD : 55-0752373-10-02	• Add supply C.Cap C761, C762	

PCB LAYOUT

PRE-OUT BOARD (ISSUE 6)

PCB LAYOUT

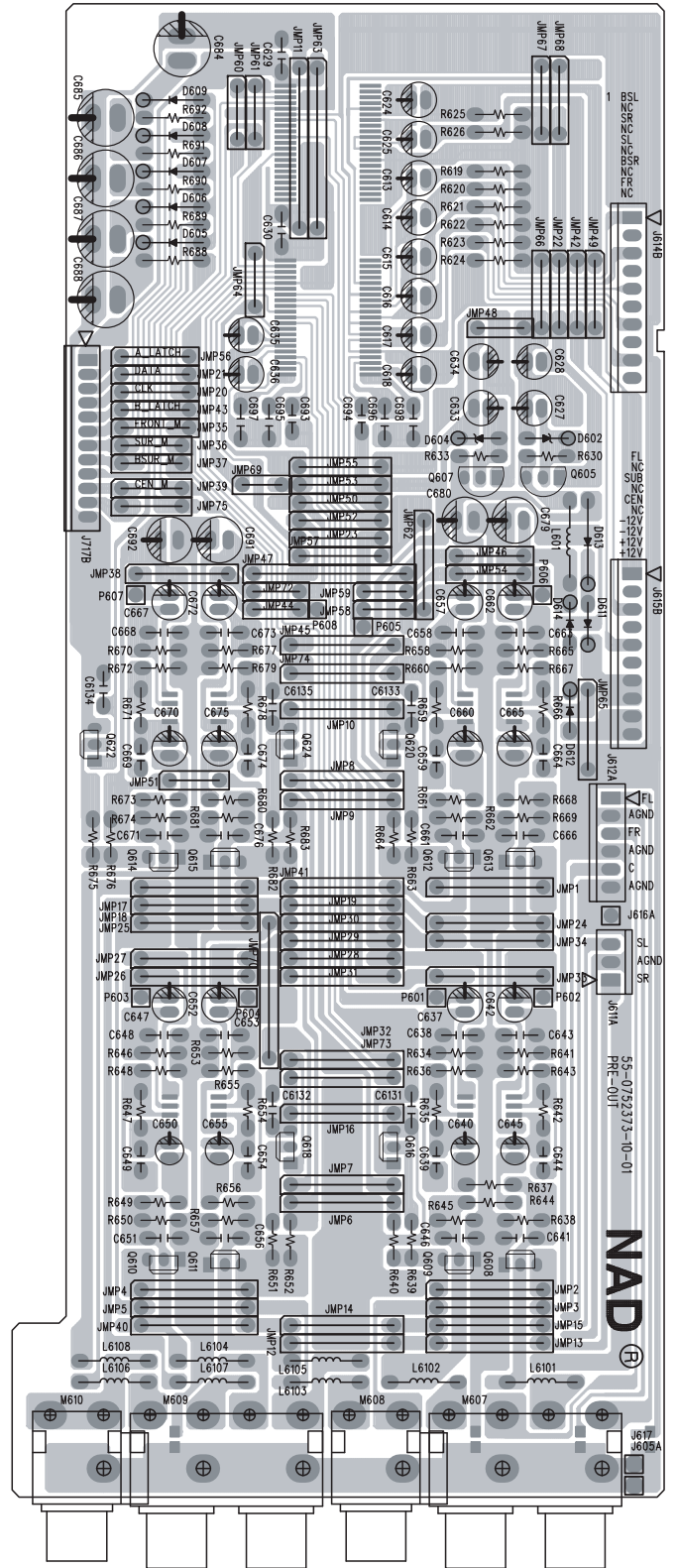
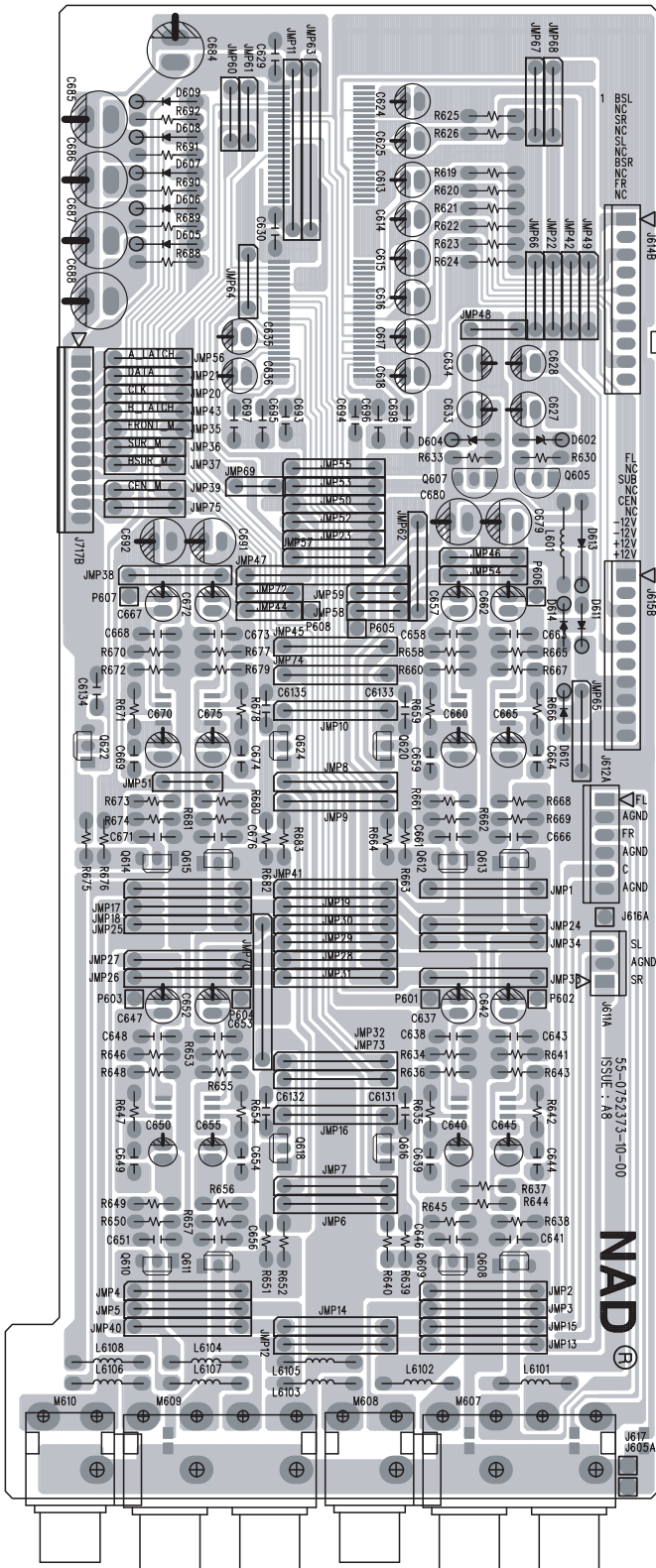
PRE-OUT BOARD (ISSUE 7)



PCB LAYOUT

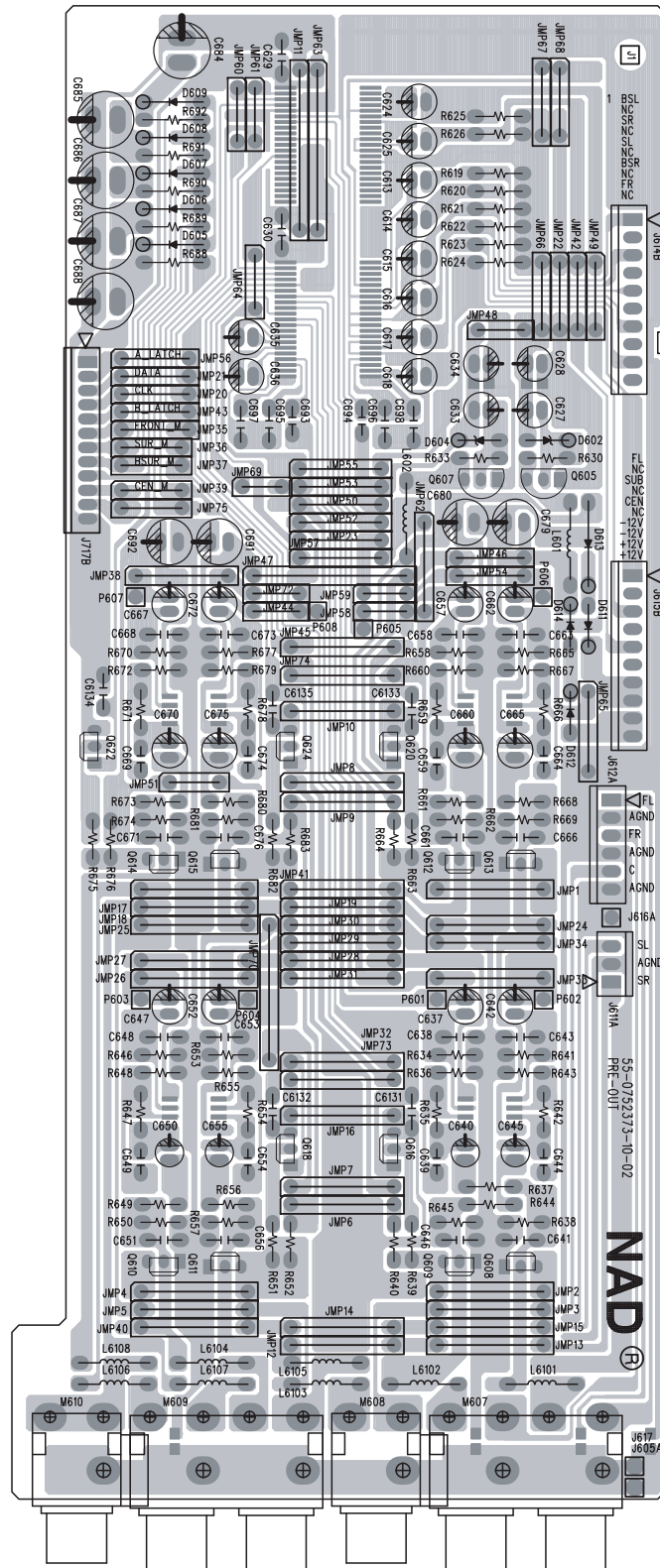
PRE-OUT BOARD (ISSUE 8)

PRE-OUT BOARD (PN-01)



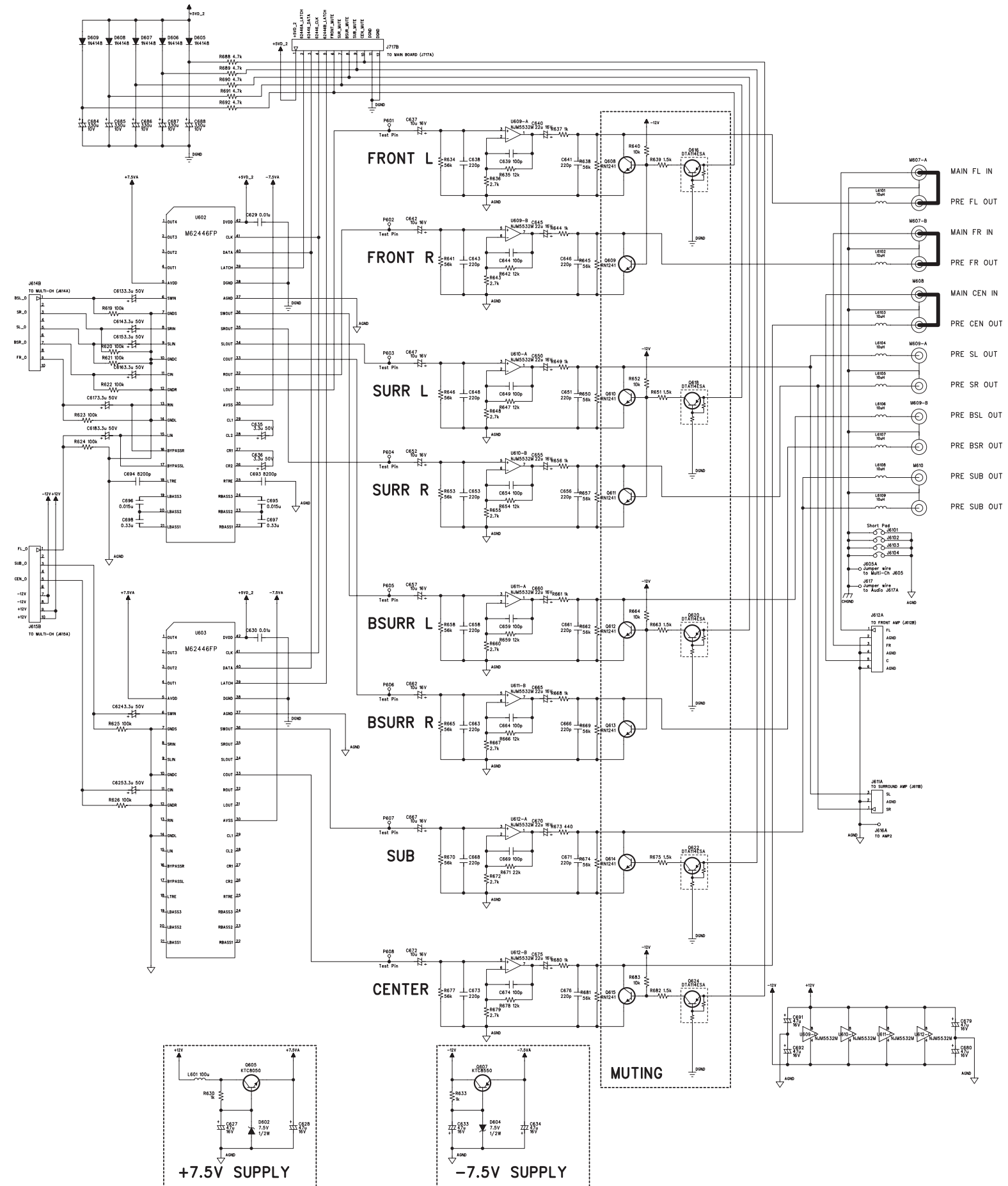
PCB LAYOUT

PRE-OUT BOARD (PN-02)



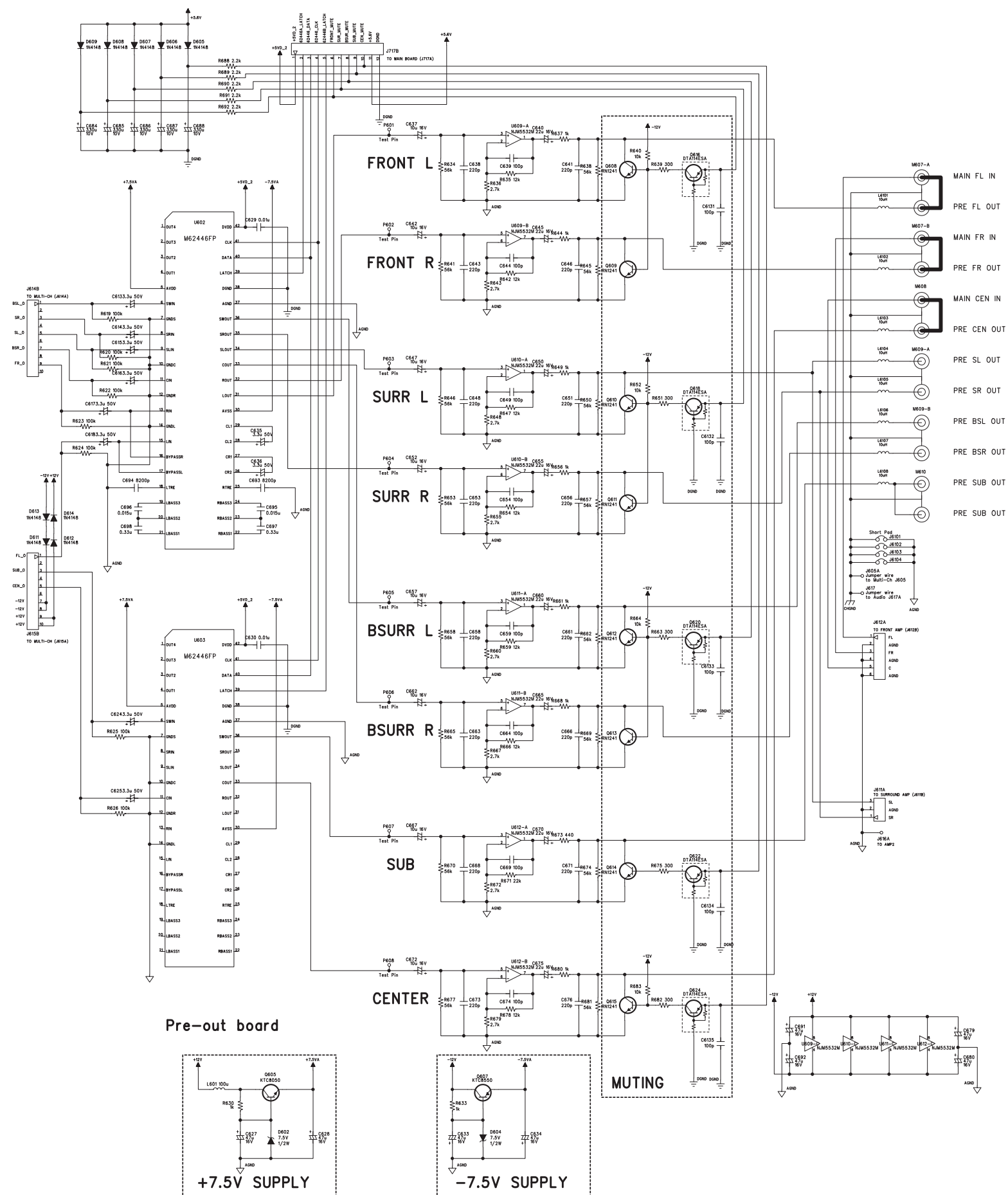
SCHEMATIC DIAGRAM

PRE-OUT BOARD (ISSUE 6)



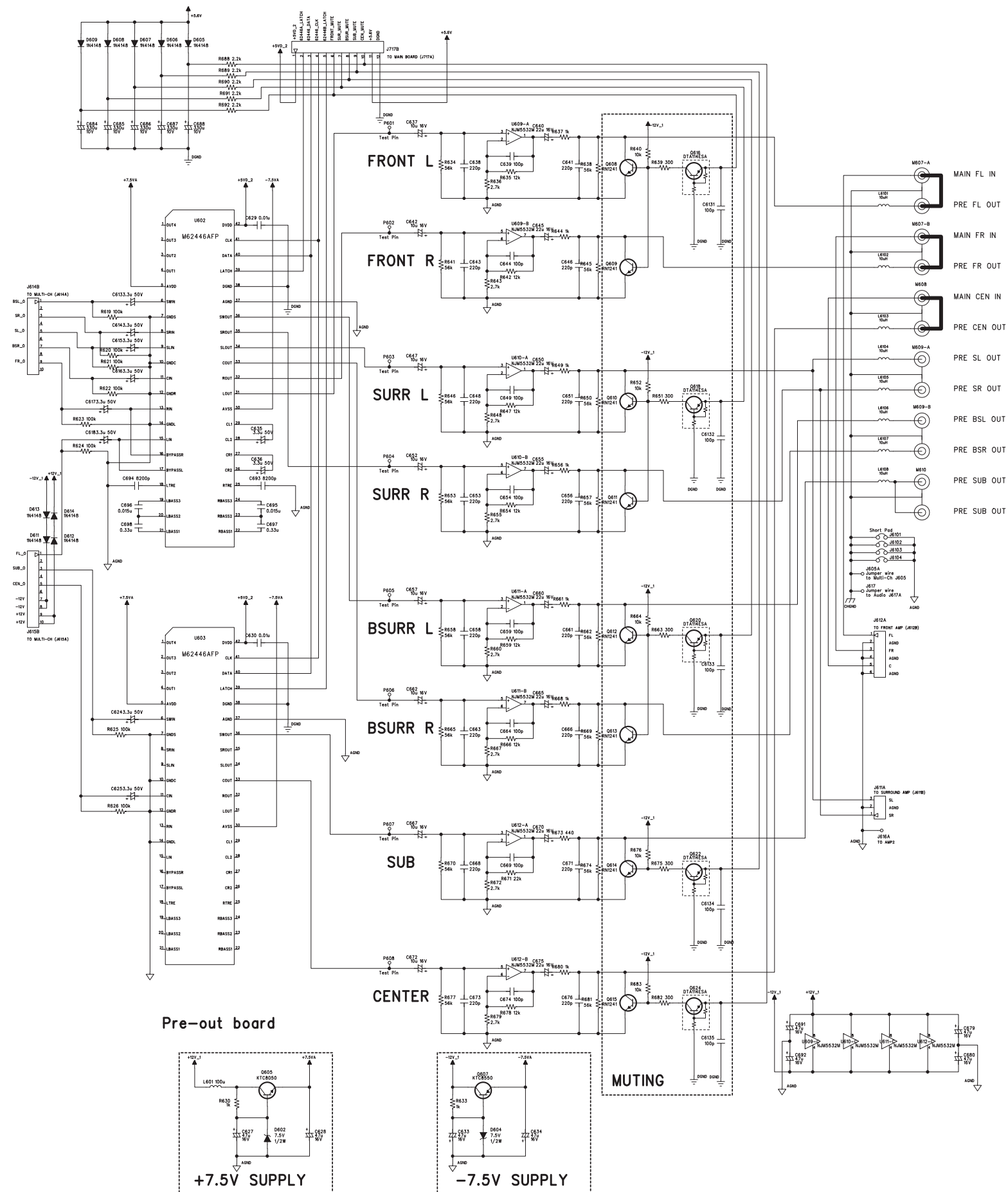
SCHEMATIC DIAGRAM

PRE-OUT BOARD (ISSUE 7)

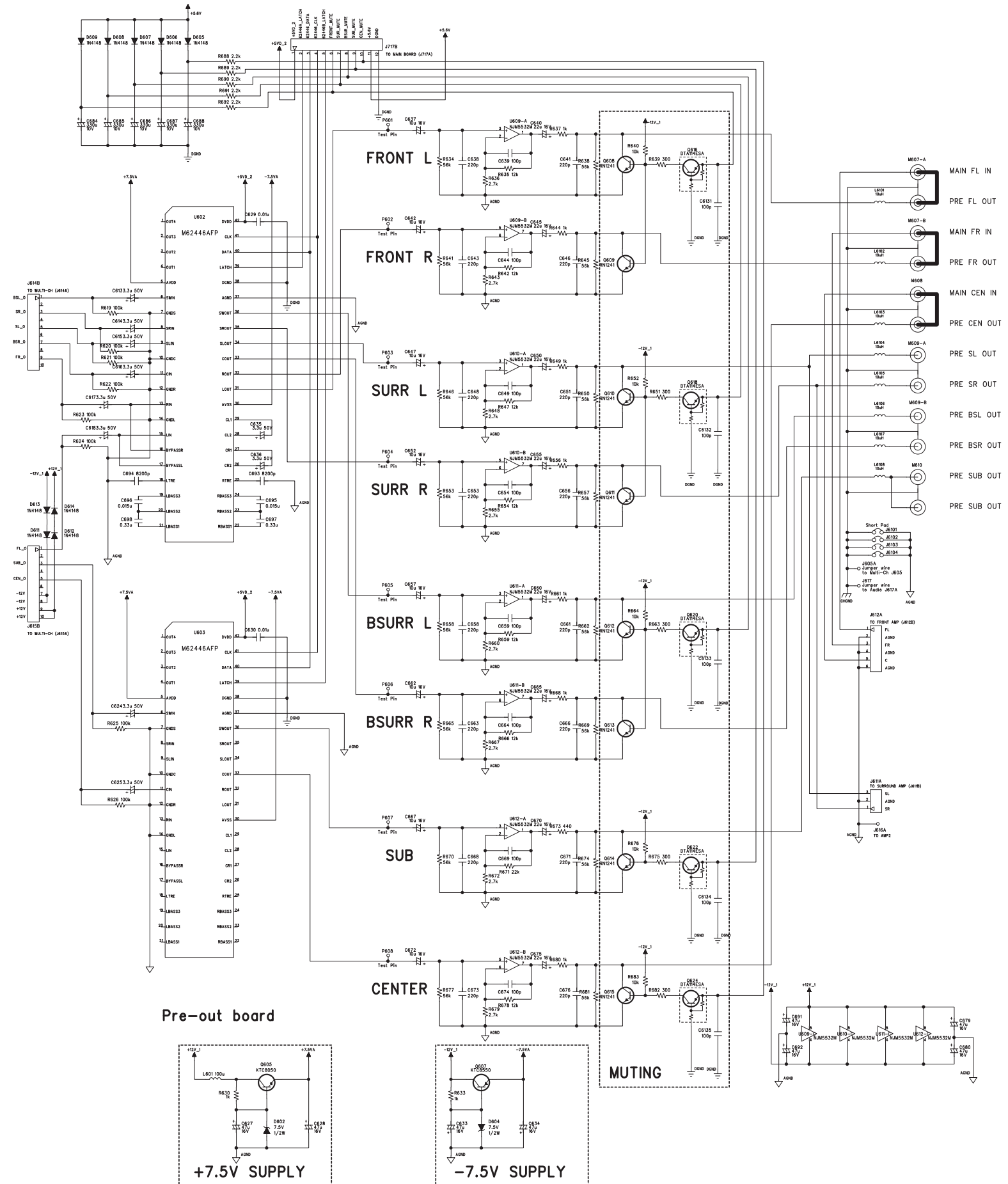


SCHEMATIC DIAGRAM

PRE-OUT BOARD (ISSUE 8)

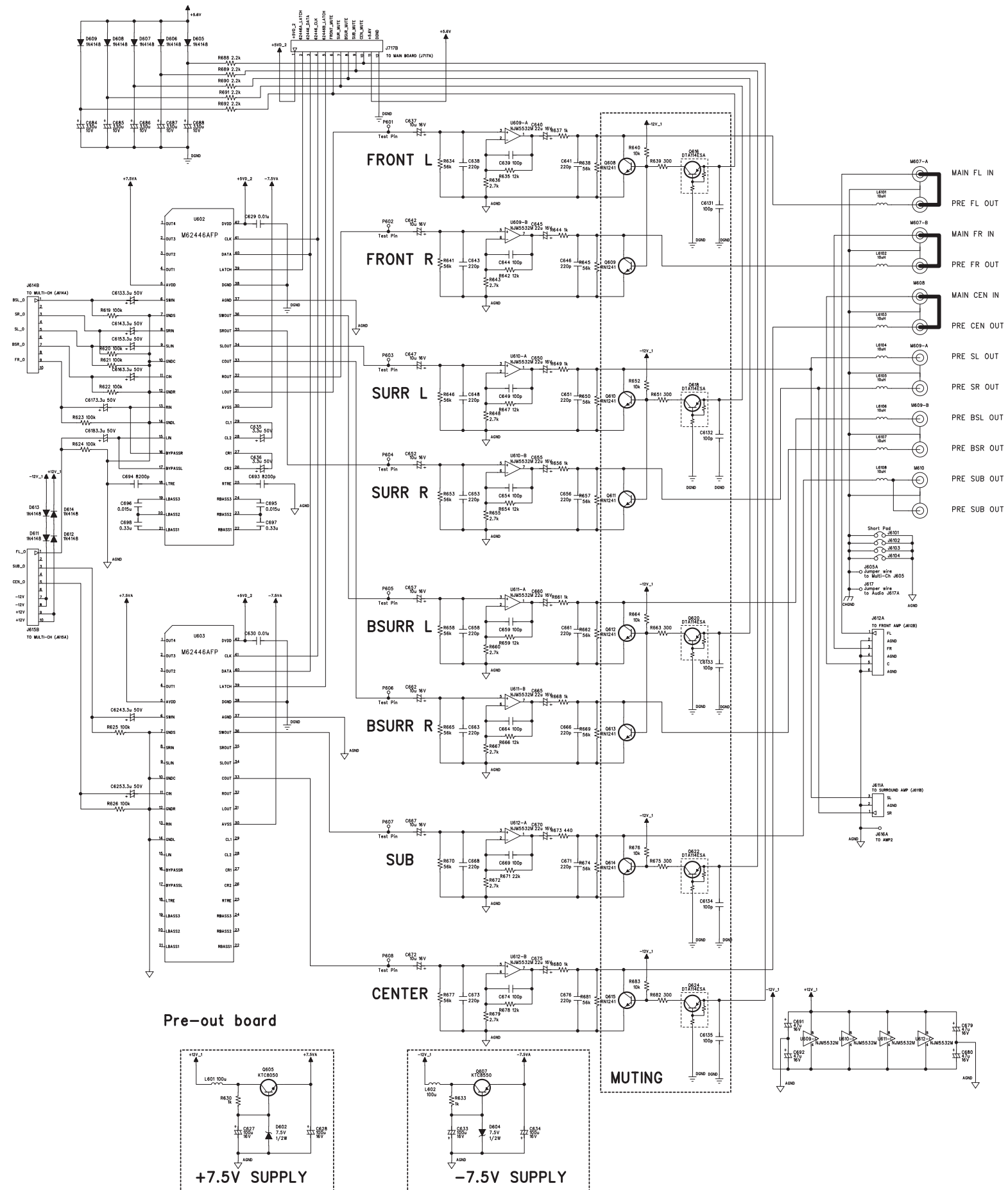


SCHEMATIC DIAGRAM PRE-OUT BOARD (PN-01)



SCHEMATIC DIAGRAM

PRE-OUT BOARD (PN-02)

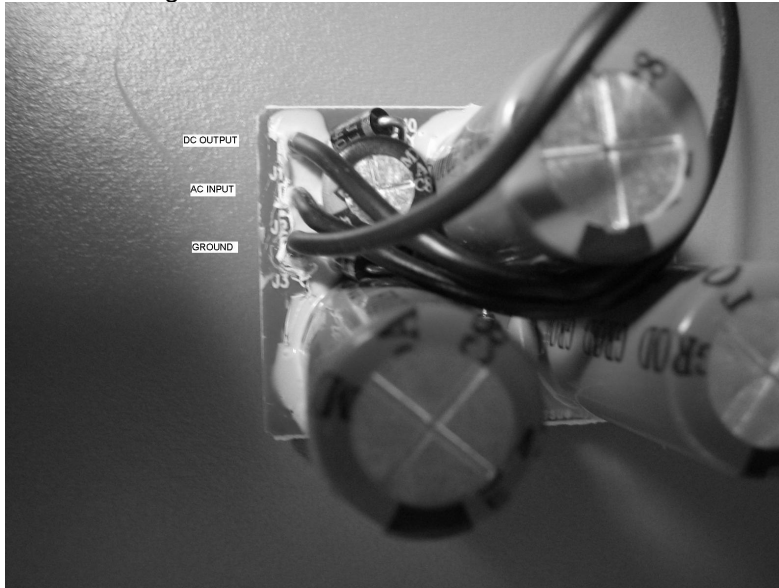


Service Hint for replacing Q701 in T752/T762 with 95-0907627-12-01

- 1 Q701 module with flying leads
- 1 black foam block, with double sided tape on two sides
- 1 set of instructions

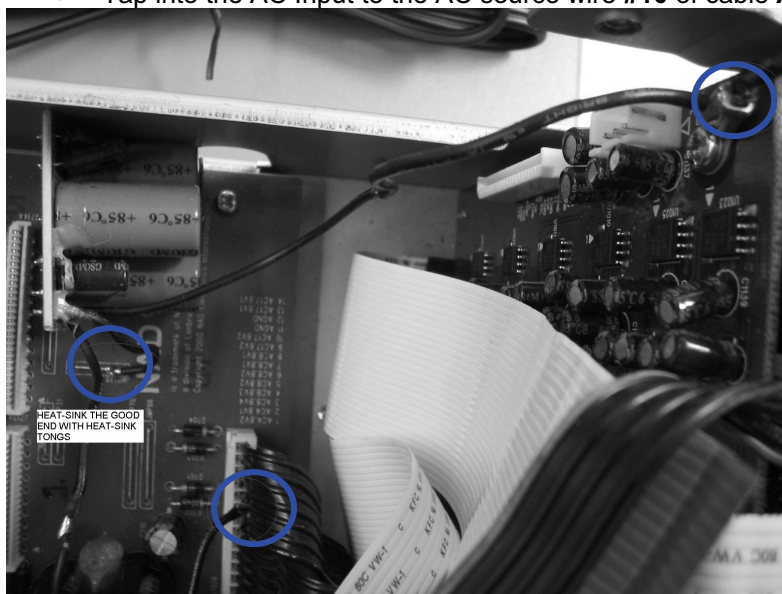
When Q701 becomes defective, the T752 will turn on, but the VFD will not light up. The purpose of replacing the transistor Q701 with a module is to facilitate a more reliable and quicker repair process with a minimum of parts disturbance, if and when Q701 becomes defective.

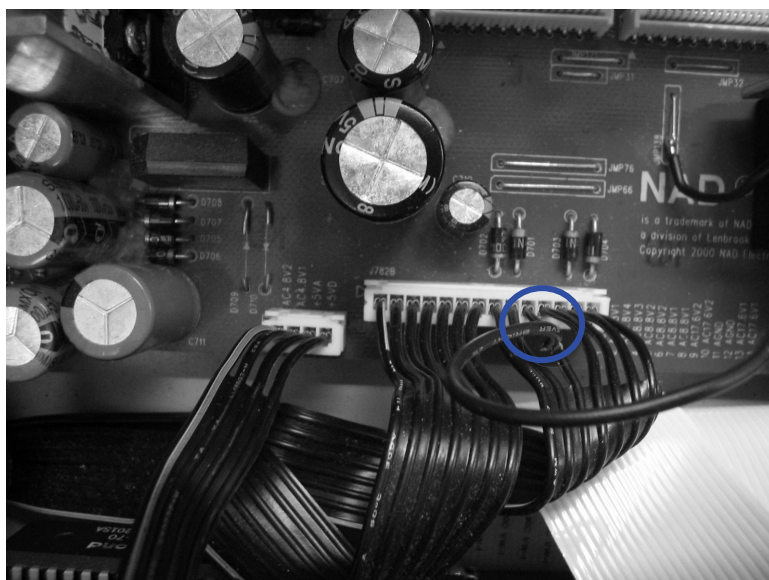
- **J1** is DC output
- **J2** is AC input
- **J3** is ground



95-0907627-12-01

- Connect the long ground wire to the DSP ground, top right hand side of the DSP module
- Connect the DC Output to jumper **JMP138** be sure not to heat up the solder connections on the bottom of the main PCB: Use heat-sink tongs.
- Tap into the AC Input to the AC source wire **#10** of cable **AC17.6V2**





- Cut out the following parts:
- 1. Diodes **D709** and **D710**
- 2. **Q701** (cut out or pull out)
- 3. Cut out **R702**

