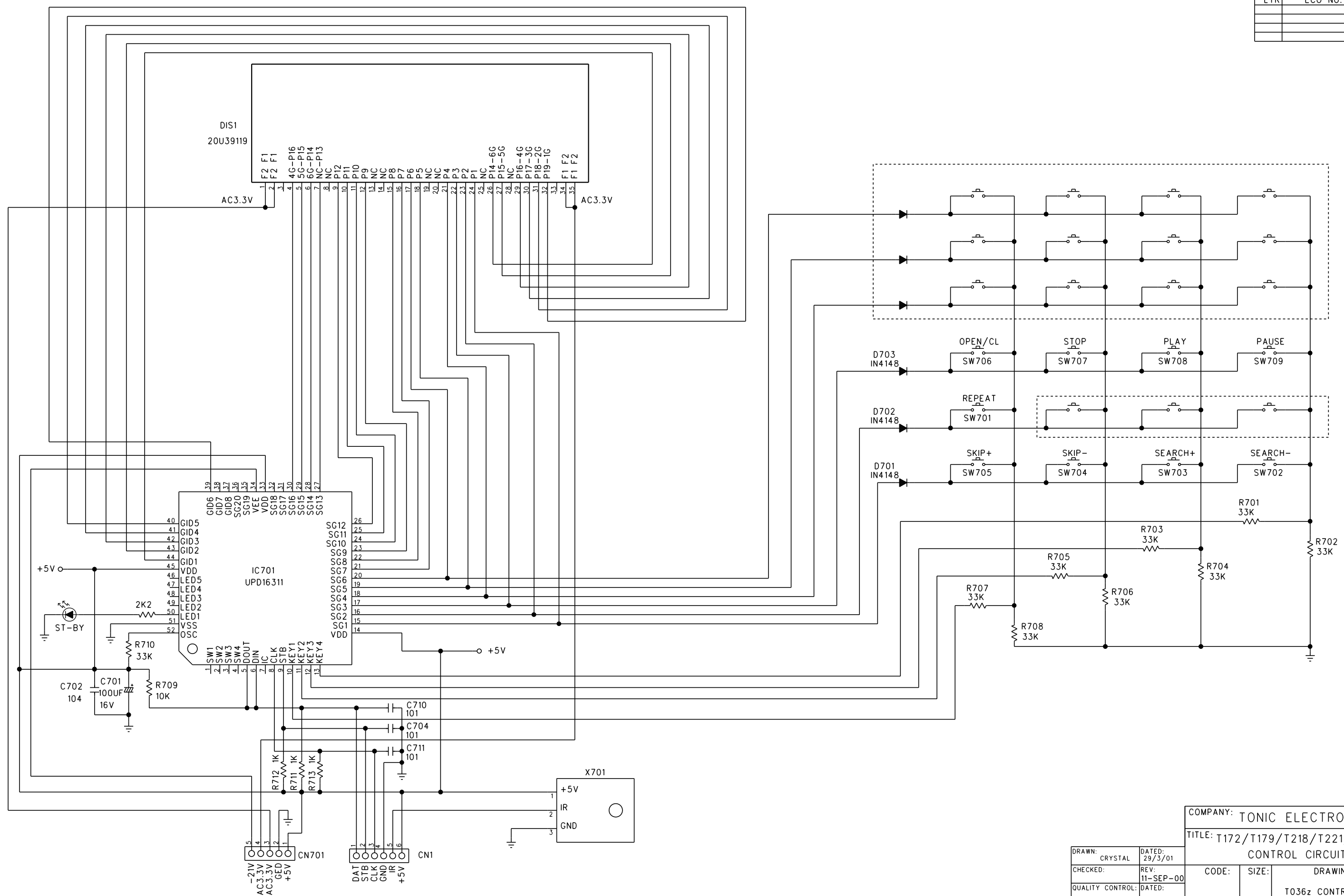


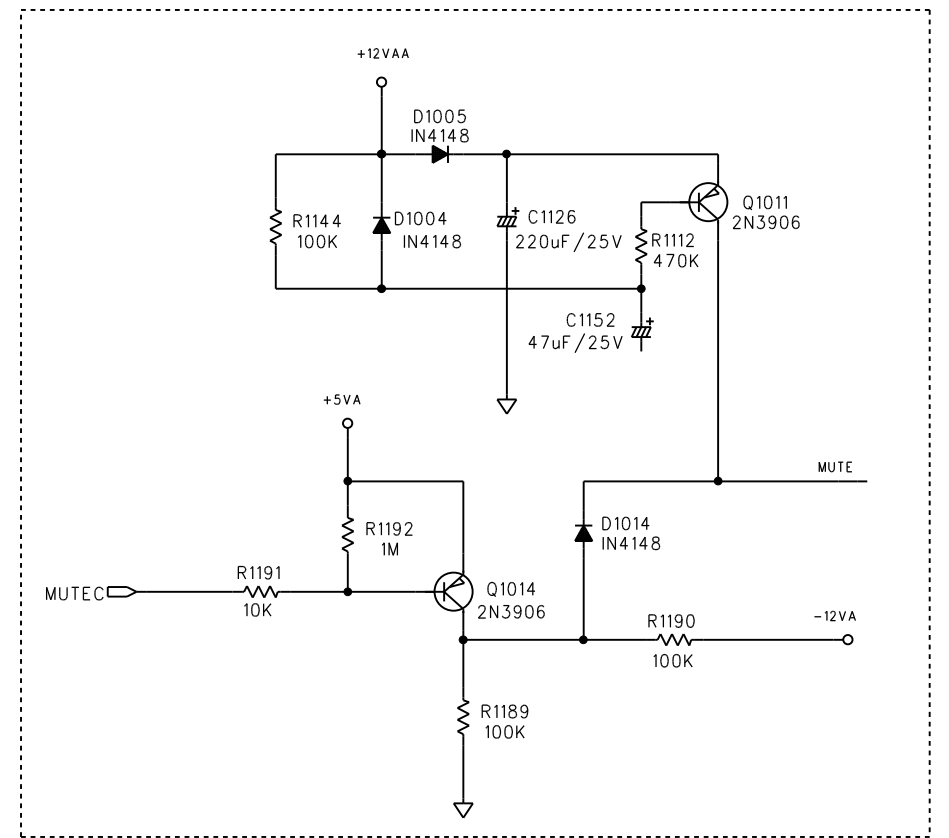
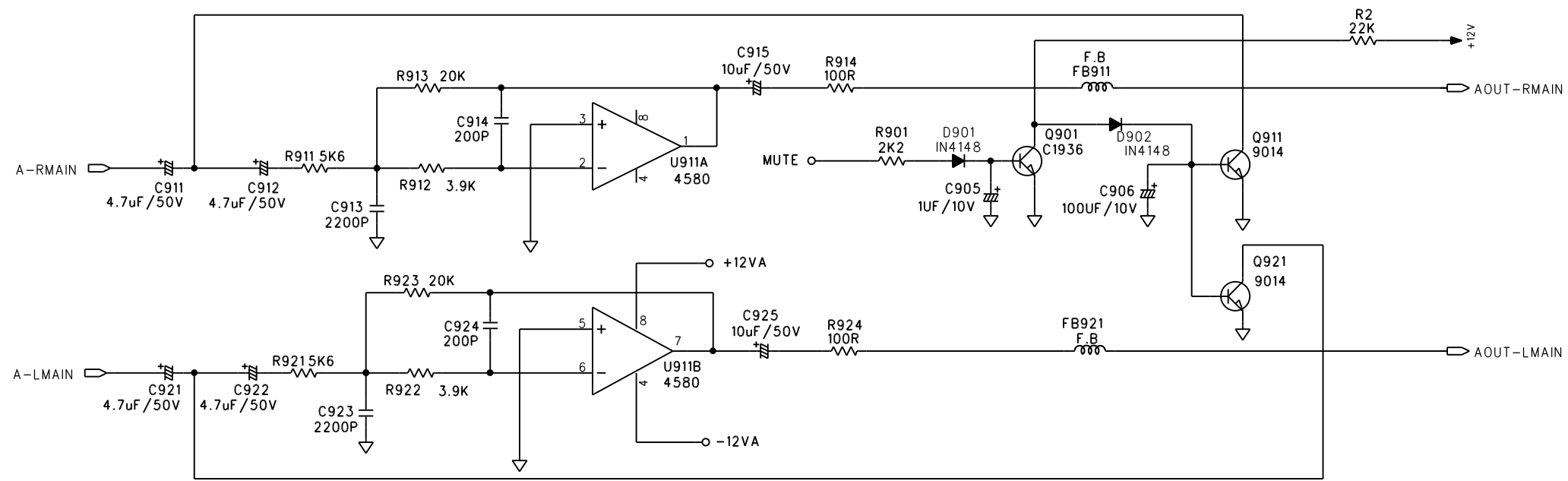
REVISION RECORD			
LTR	ECO NO:	APPROV	DATE



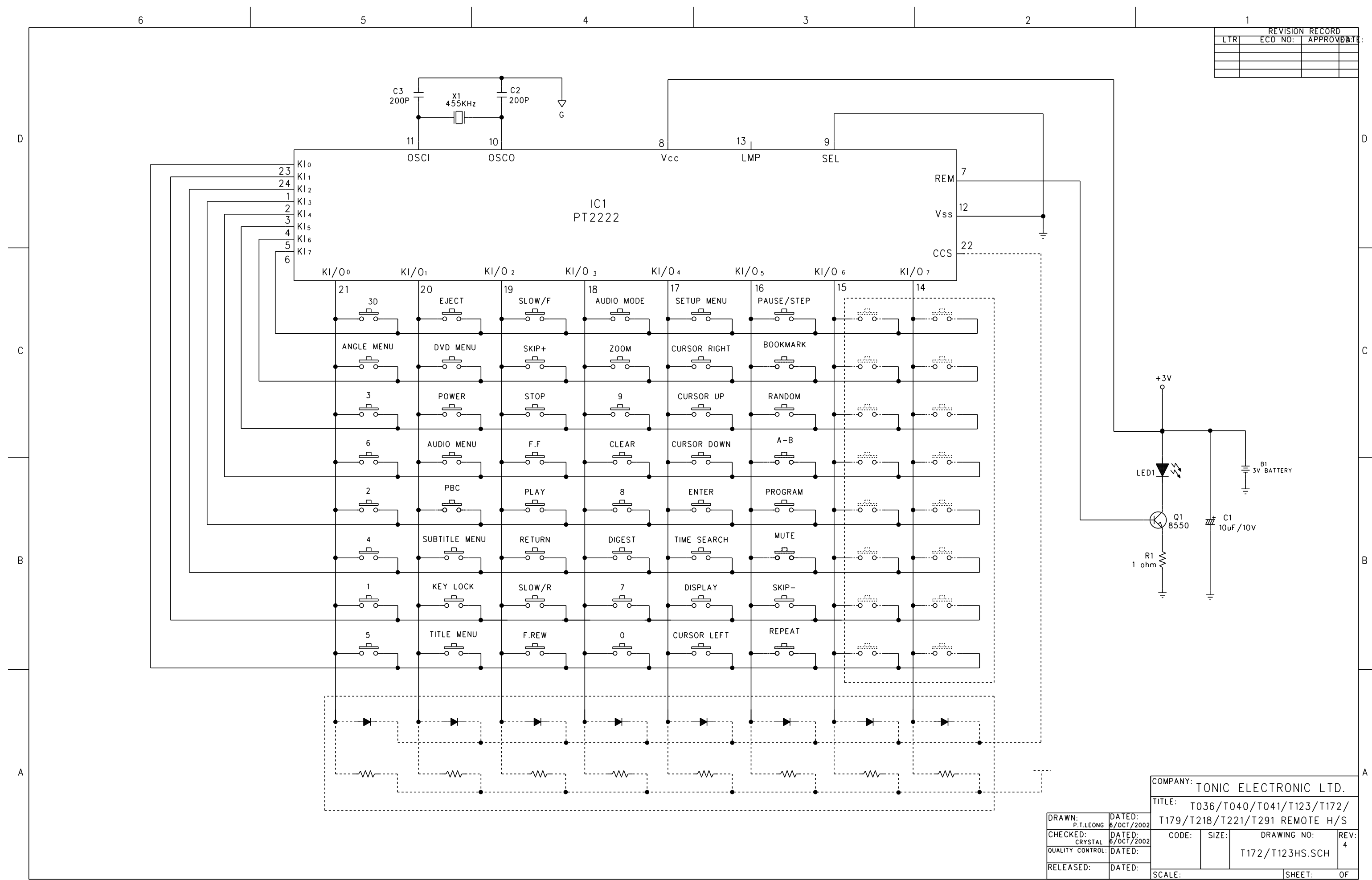
COMPANY: TONIC ELECTRONIC LTD.			
TITLE: T172/T179/T218/T221/T29/T306 CONTROL CIRCUIT			
CODE:	SIZE:	DRAWING NO:	
		T036z CONTROL.SCH	
SCALE:	SHEET: 1 OF 1		

DRAWN: CRYSTAL	DATED: 29/3/01
CHECKED:	REV: 11-SEP-00
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

REVISION RECORD			
LTR	ECO NO:	APPROVE	DATE



DRAWN: P.T.LEONG		DATED: 8/NOV/2002		COMPANY: TONIC ELECTRONIC LTD.			
CHECKED: ANTHONY TO		DATED: 8/NOV/2002		TITLE: T352/T205			
QUALITY CONTROL:		DATED:		CODE:	SIZE:	DRAWING NO:	REV:
RELEASED:		DATED:		D	T172	.SCH	8/NOV/2002
SCALE:				SHEET:			



REVISION RECORD			
LTR	ECO NO.	APPROV	DATE

COMPANY: TONIC ELECTRONIC LTD.			
TITLE: T036/T040/T041/T123/T172/T179/T218/T221/T291 REMOTE H/S			
DRAWN: P.T.LEONG	DATED: 6/OCT/2002	CODE:	SIZE:
CHECKED: CRYSTAL	DATED: 6/OCT/2002	DRAWING NO:	REV: 4
QUALITY CONTROL:	DATED:	T172/T123HS.SCH	
RELEASED:	DATED:	SCALE:	SHEET: OF

MT1369E (LQFP208) DVD MP Board for Hitachi PUH

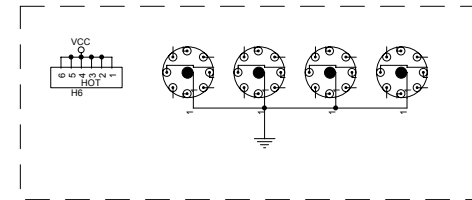
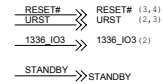
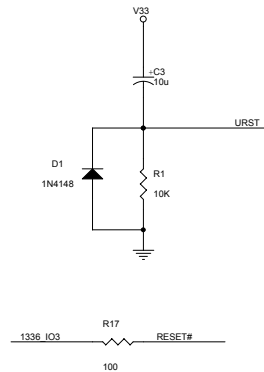
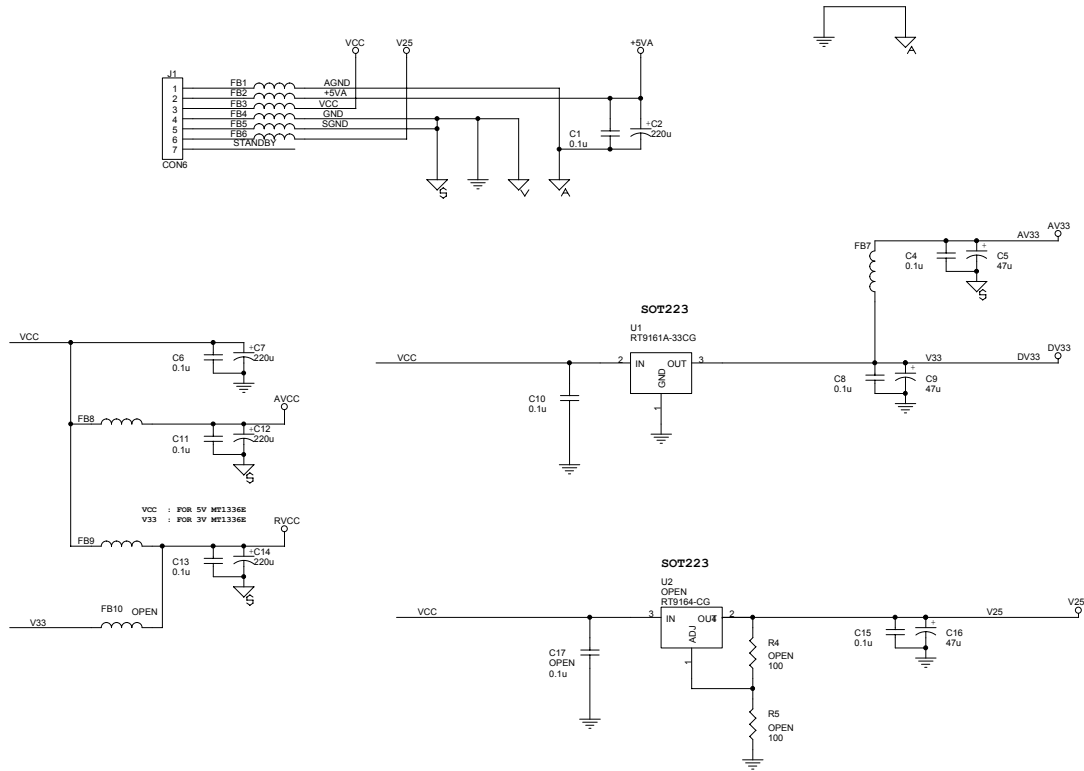
- 1 INDEX & POWER, RESET
- 2 RF / SERVO & MPEG - MT1336E / MT1369E
- 3 MEMORY - SDRAM, FLASH/EEPROM
- 4 AUDIO DAC, VIDEO DAC

Layout consideration

1. Audio/Video ground & digital ground should be connected at one point, either at power connector or underneath Audio/Video DAC.
2. For EMC consideration, all power supply lines should have serial ferrite beads, laid as close to the chip as possible.
3. All the clock signals should have contain 33 ohm serial resistors, as close to the source as possible.
4. Digital ground should connected the chassis ground at one point.
5. Make sure digital signals do not cross the analog boundaries.

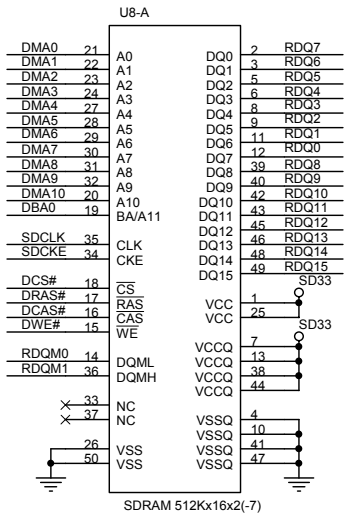
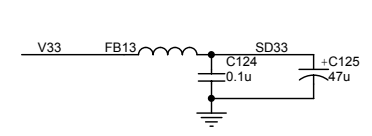
NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
RVCC	Servo 5V	MT1336E
AVCC	RF 5V	PICKUP HEADER
V33	Digital 3.3V	SDRAM, Flash, VideoDAC
DV33	Digital 3.3V	MT1369E
AV33	Servo 3.3V	MT1369E
V25	Digital 2.5V	MT1369E
+5VA	Audio 5V	Audio DAC
+3VV	Video 3.3V	Video DAC

NAME	TYPE
GND	Digital Ground
SGND	Servo Analog Ground
AGND	Audio Ground
VGND	Video Ground

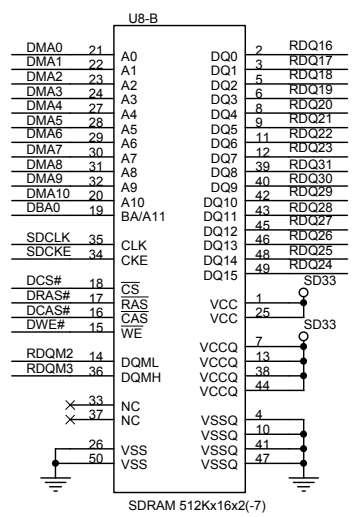


MediaTek Inc. / E-Smart

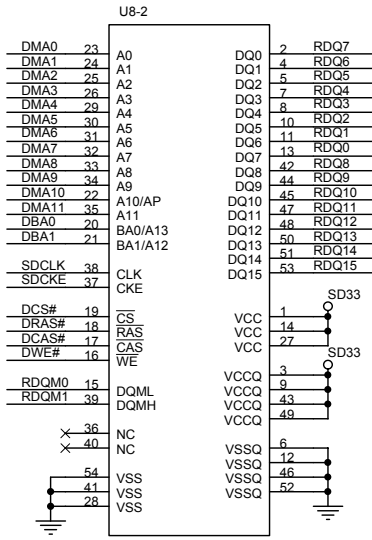
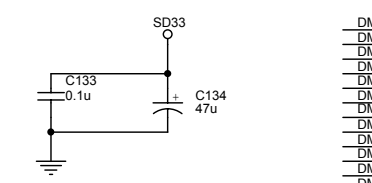
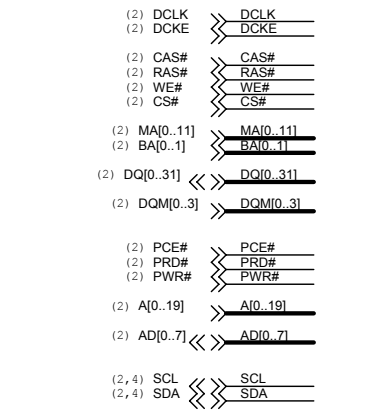
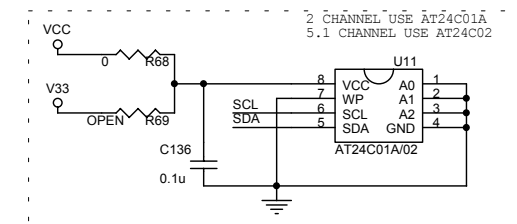
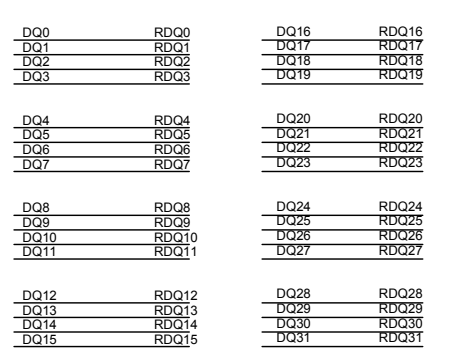
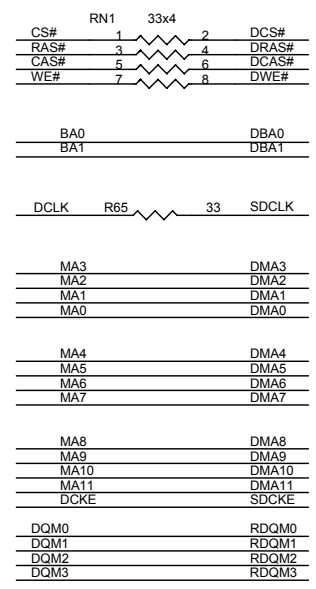
File	Index	
Size	Document Number	Rev
	MT1369_HOP12K_E3T1.DSN	E3T1
Date	Saturday, June 01 2002	Sheet 1 of 4



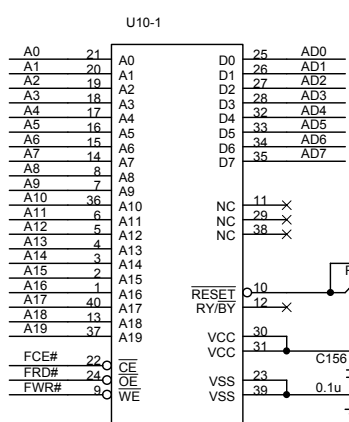
SDRAM 512Kx16x2(-7)
50-PIN TSOP(II),
(400milx825mil, 0.8mm pin pitch)



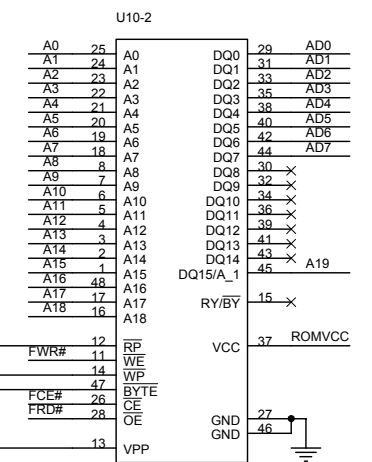
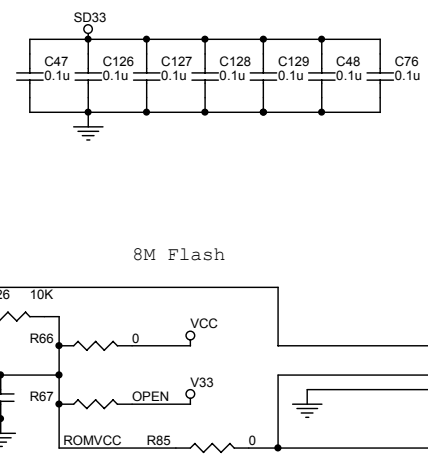
SDRAM 512Kx16x2(-7)
50-PIN TSOP(II),
(400milx825mil, 0.8mm pin pitch)



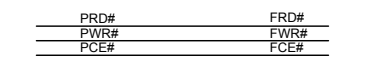
SDRAM 1Mx16x4(-7)
54-Pin TSOP(II)(400mil x 875mil)



28F008B5/B3(-7) TSOP
Flash 8M, 40TSOP



28F800B5/B3(-7) TSOP
Flash 8M, 48TSOP

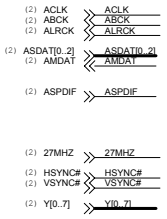
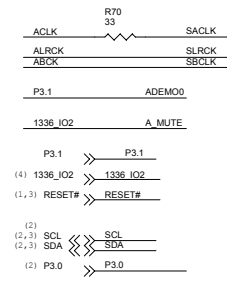


MediaTek Inc. / E-Smart

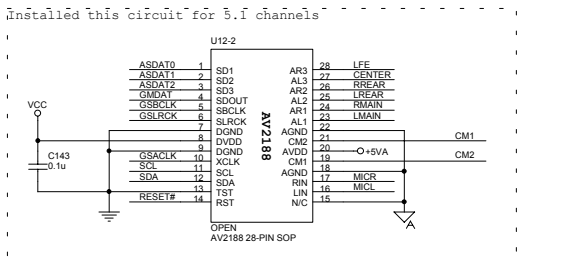
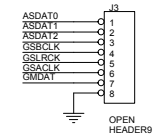
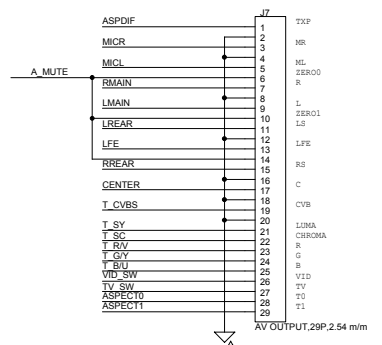
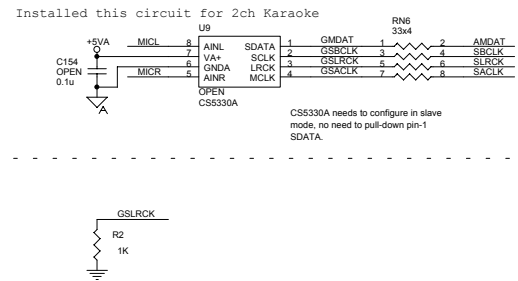
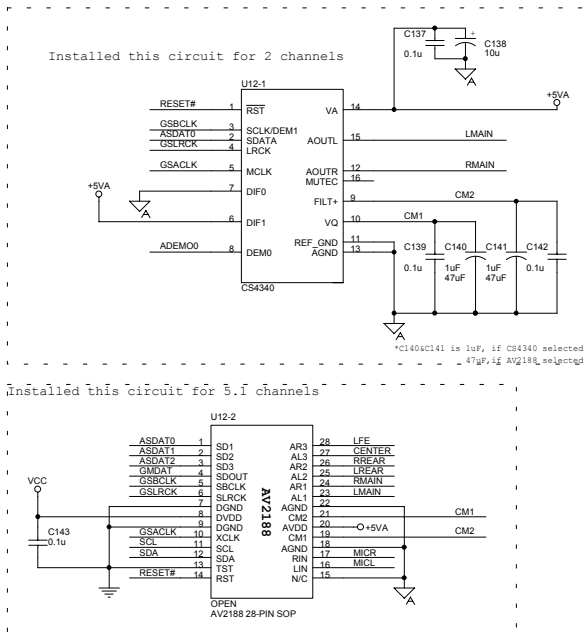
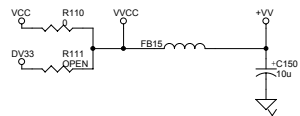
Title: **Memory**

Size: Document Number **MT1369_HOP12K_E3T1.DSN** Rev: E3T1

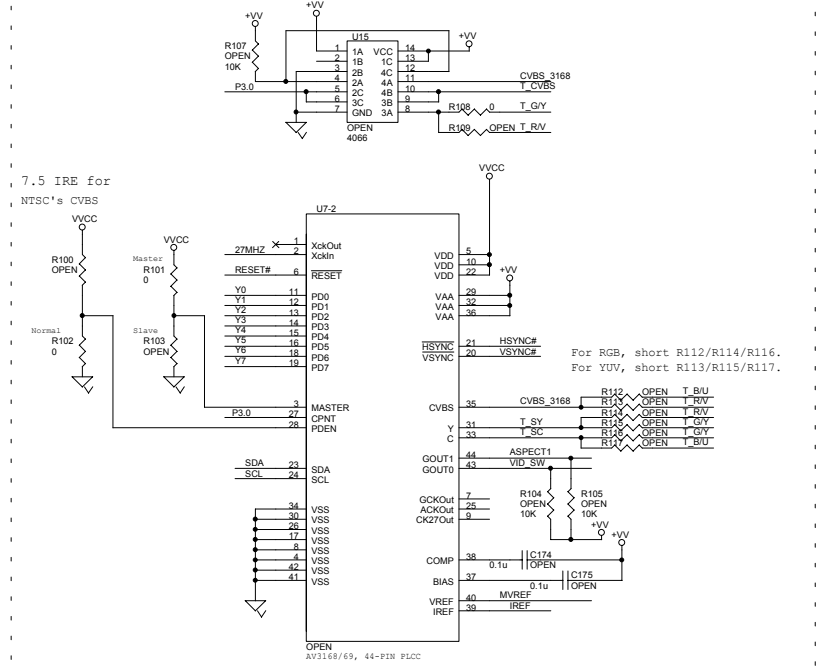
Date: Saturday, June 01, 2002 Sheet 3 of 4



Short R110 for AV3168/3169
Short R111 for CS4954/4955



Installed this circuit for using AV3168 Video DAC



MT1369E (LQFP208) DVD MP Board for Sanyo PUH

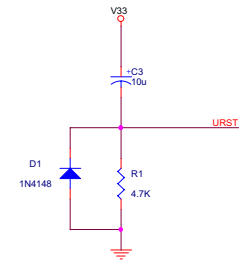
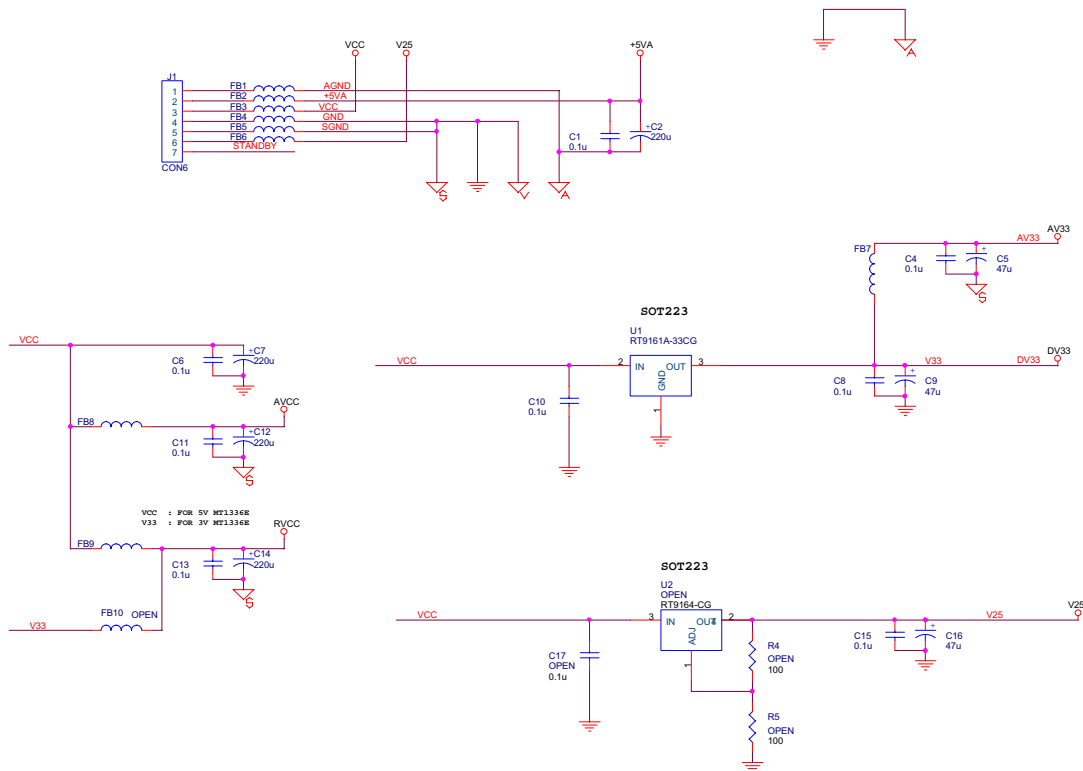
- 1 INDEX & POWER, RESET
- 2 RF / SERVO & MPEG - MT1336E / MT1369E
- 3 MEMORY - SDRAM, FLASH/EEPROM
- 4 AUDIO DAC, VIDEO DAC

Layout consideration

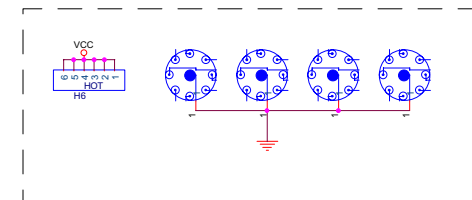
1. Audio/Video ground & digital ground should be connected at one point, either at power connector or underneath Audio/Video DAC.
2. For EMC consideration, all power supply lines should have serial ferrite beads, laid as close to the chip as possible.
3. All the clock signals should have contain 33 ohm serial resistors, as close to the source as possible.
4. Digital ground should connected the chassis ground at one point.
5. Make sure digital signals do not cross the analog boundaries.

NAME	TYPE	DEVICE
VCC	Digital 5V	SUPPLY
RVCC	Servo 5V	MT1336E
AVCC	RF 5V	PICKUP HEADER
V33	Digital 3.3V	SDRAM, Flash, VideoDAC
DV33	Digital 3.3V	MT1369E
AV33	Servo 3.3V	MT1369E
V25	Digital 2.5V	MT1369E
+5VA	Audio 5V	Audio DAC
+3VV	Video 3.3V	Video DAC

NAME	TYPE
GND	Digital Ground
SGND	Servo Analog Ground
AGND	Audio Ground
VGND	Video Ground



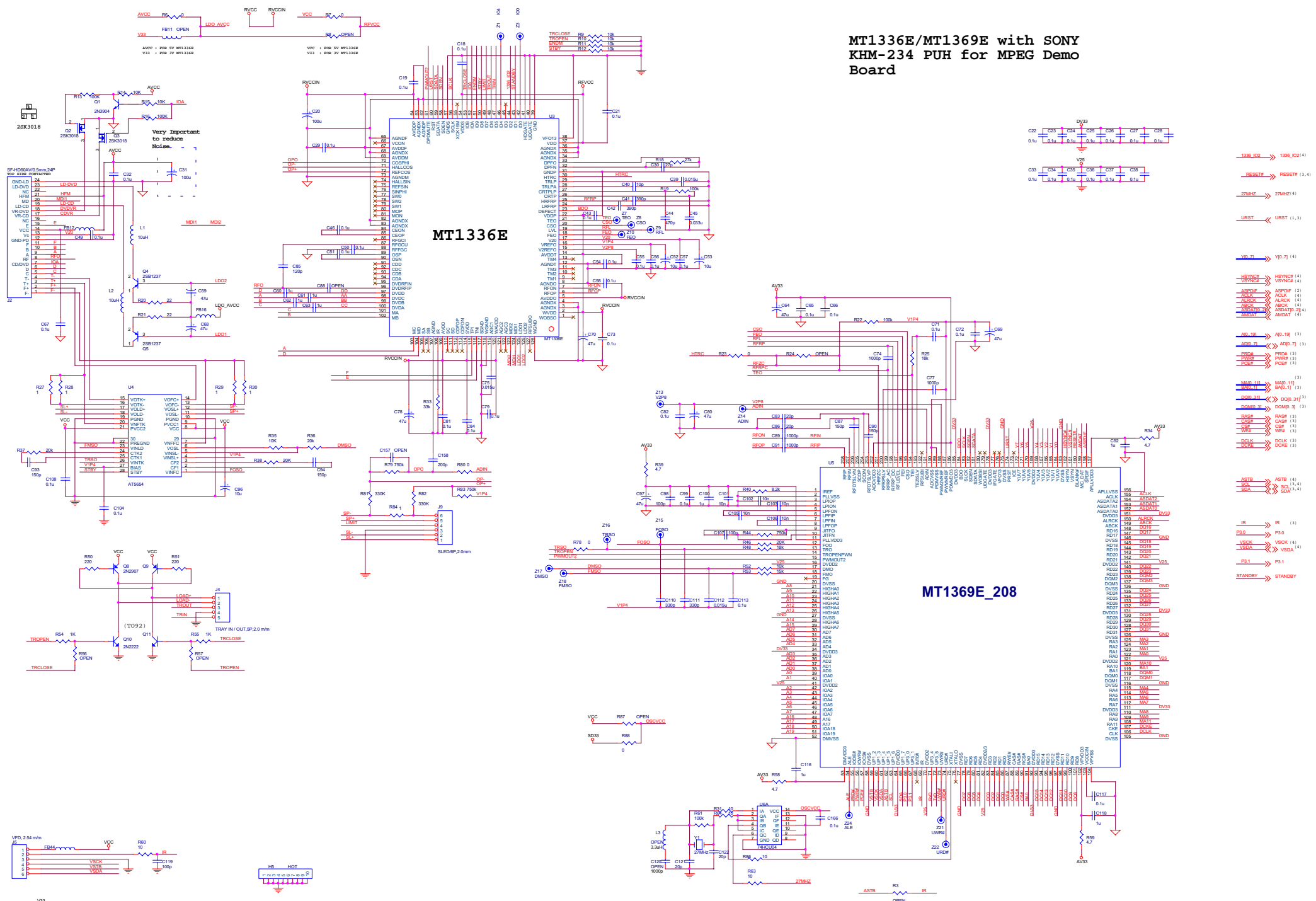
- RESET# >>> RESET# (3, 4)
- URST >>> URST (2, 3)
- 1336_IO3 >>> 1336_IO3(2)
- STANDBY >>> STANDBY



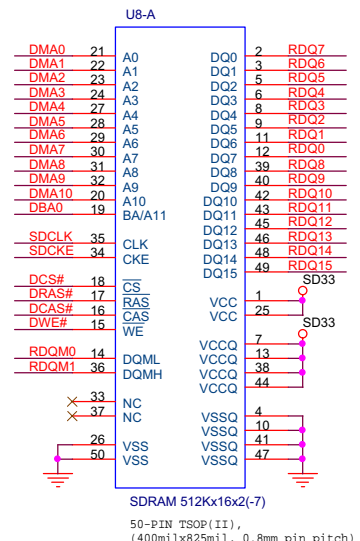
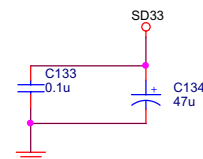
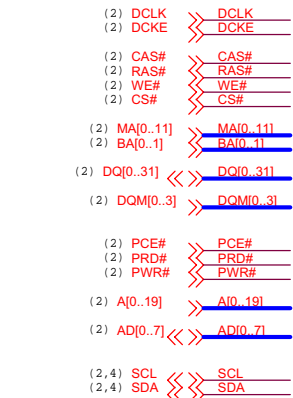
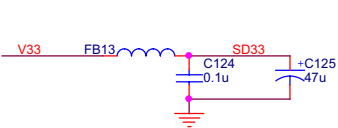
MediaTek Inc. / E-Smart

Title	Index	
Size	Document Number	Rev
	MT1369E_208 MP Board (MP1369_HD6_E2T4.DSN)	E2T4
Date	Monday, July 22, 2002	Sheet 1 of 4

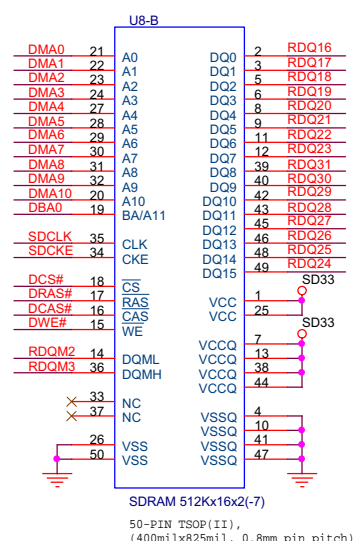
MT1336E/MT1369E with SONY
KHM-234 PUH for MPEG Demo
Board



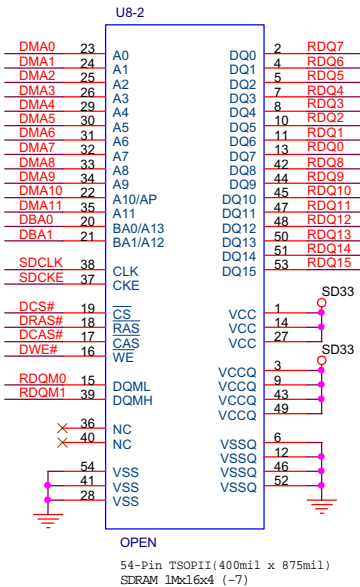
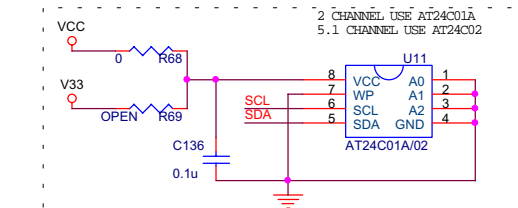
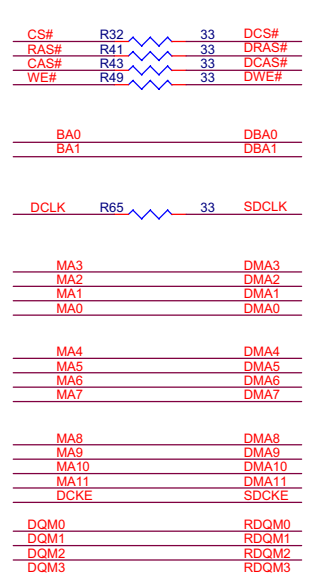
- 133E_K02 >> 133E_K02 (4)
- RESET# >> RESET# (1,4)
- 27M#Z >> 27M#Z (4)
- URST >> URST (1,3)
- YD_71 >> YD_71 (4)
- HEVNC# >> HEVNC# (4)
- 133E_K02 >> 133E_K02 (4)
- ASDF# >> ASDF# (2)
- ACK# >> ACK# (4)
- ALCK# >> ALCK# (4)
- ABCK# >> ABCK# (4)
- ASDAT# >> ASDAT# (4)
- AMDAT# >> AMDAT# (4)
- AD_19 >> AD_19 (3)
- ADD_71 >> ADD_71 (3)
- PRD# >> PRD# (3)
- PCIF# >> PCIF# (3)
- MA#_11 >> MA#_11 (3)
- MA#_11 >> MA#_11 (3)
- DD#_31 >> DD#_31 (3)
- DD#_31 >> DD#_31 (3)
- RAS# >> RAS# (3)
- CAS# >> CAS# (3)
- CS# >> CS# (3)
- WE# >> WE# (3)
- DLK# >> DLK# (3)
- DCKE >> DCKE (3)
- ASTB >> ASTB (4)
- SCL >> SCL (4)
- SDA >> SDA (4)
- IR >> IR (3)
- P3.0 >> P3.0
- VSDA >> VSDA (4)
- VSDA >> VSDA (4)
- FS.1 >> FS.1
- STANDBY >> STANDBY



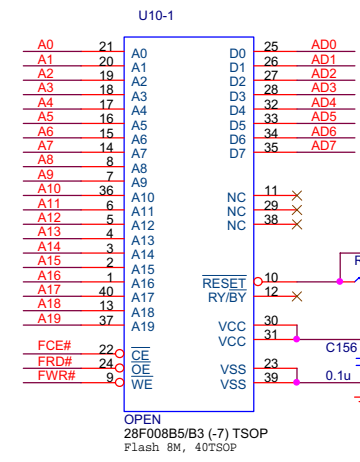
SDRAM 512Kx16x2(-7)
50-PIN TSOP(II),
(400milx825mil, 0.8mm pin pitch)



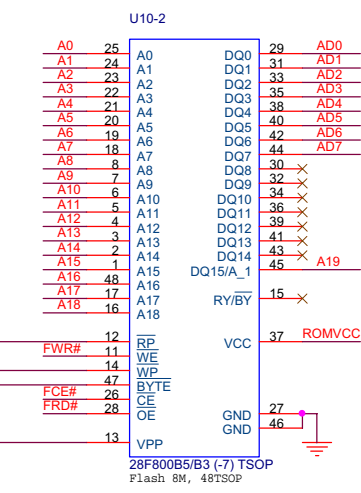
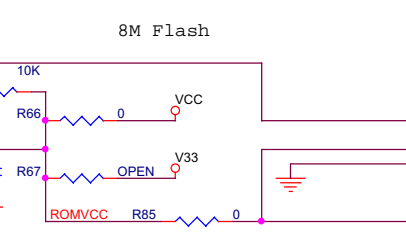
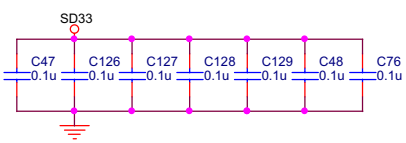
SDRAM 512Kx16x2(-7)
50-PIN TSOP(II),
(400milx825mil, 0.8mm pin pitch)



SDRAM 1Mx16x4(-7)
54-Pin TSOP(II)(400mil x 875mil)

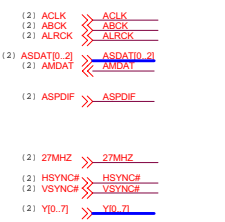
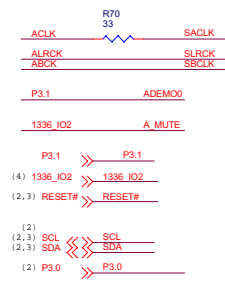


OPEN
28F008B5/B3 (-7) TSOP
Flash 8M, 40TSOP

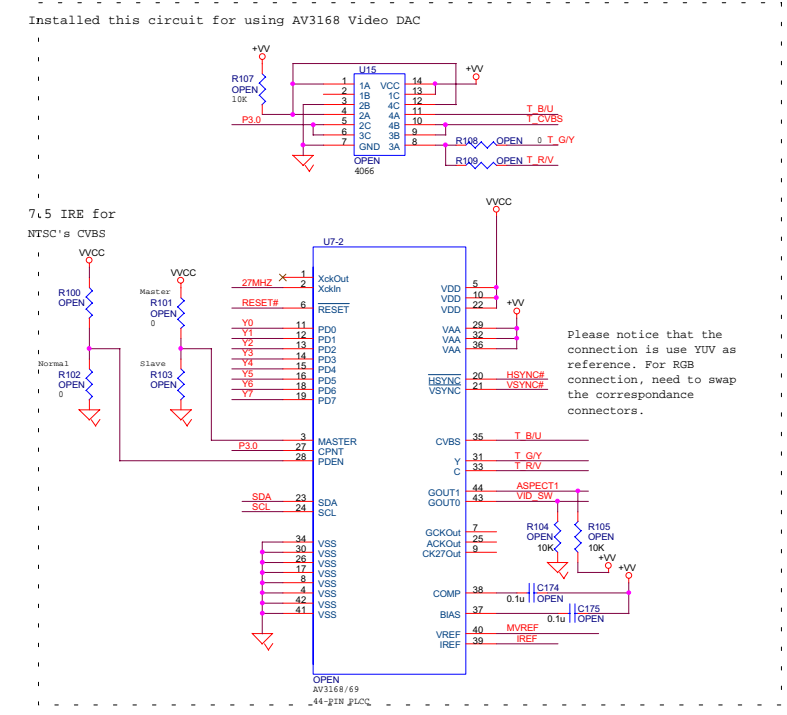
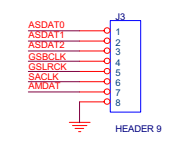
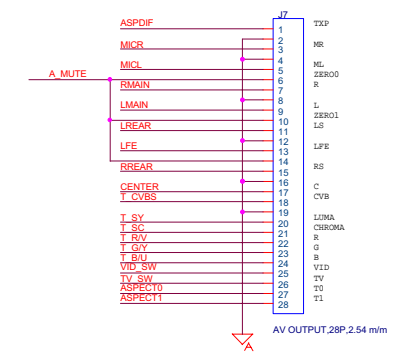
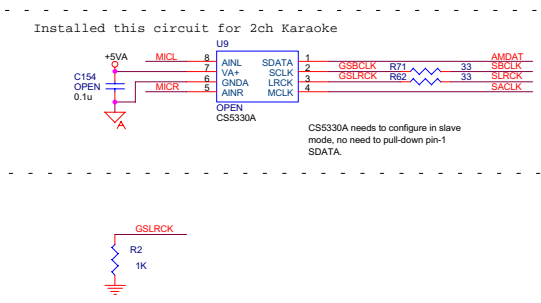
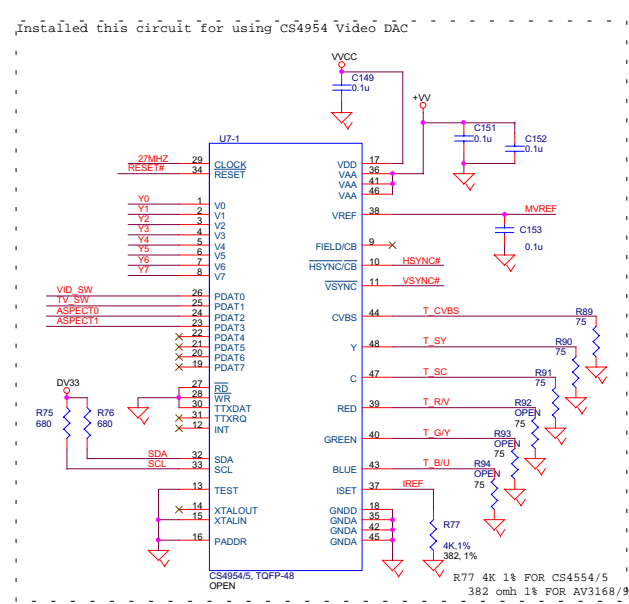
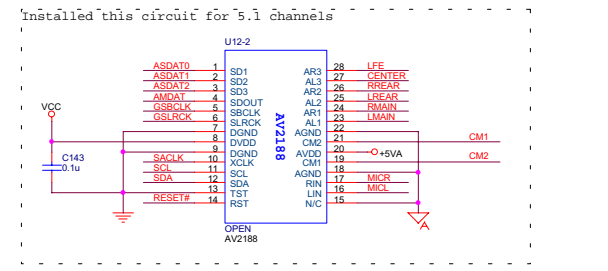
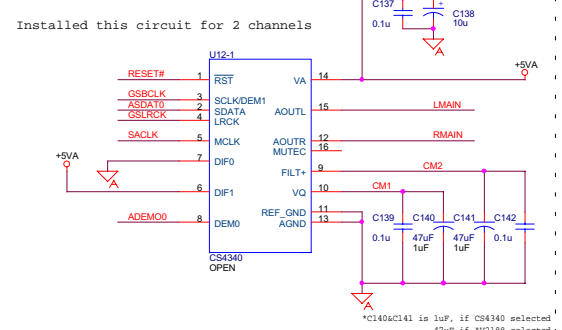
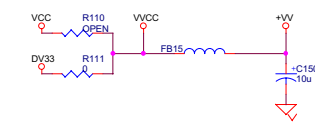


28F800B5/B3 (-7) TSOP
Flash 8M, 48TSOP

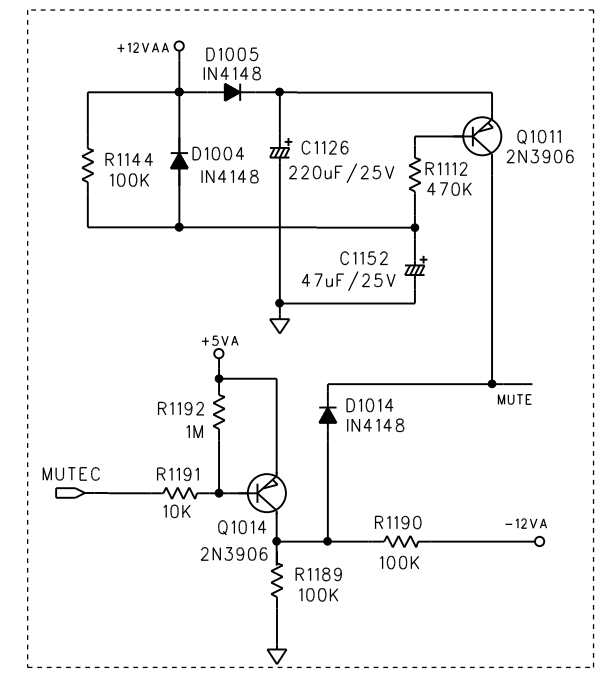
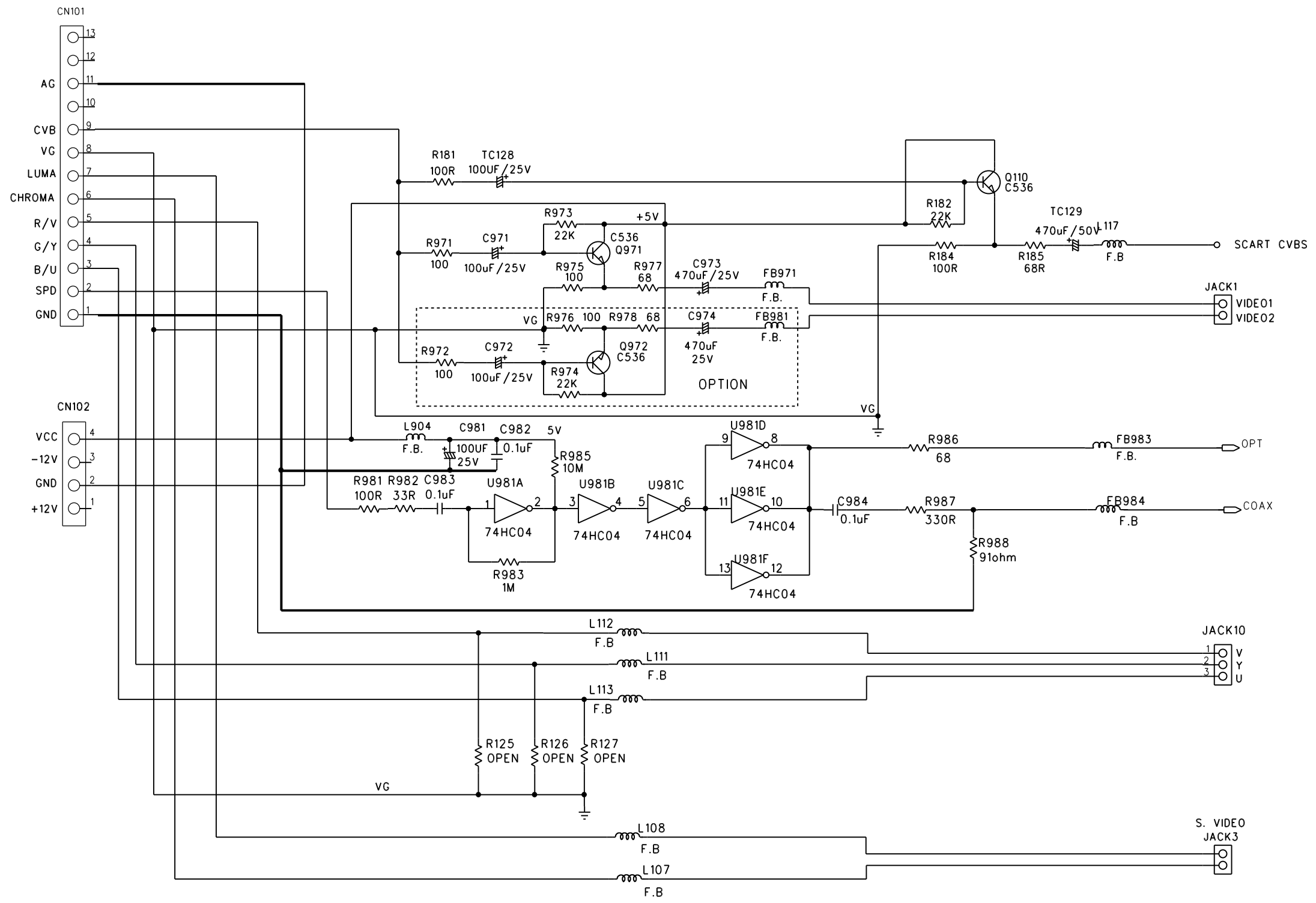
MediaTek Inc. / E-Smart		
Title		
Memory		
Size	Document Number	Rev
	MT1369E_208 MP Board (MP1369_HD6_E2T4.DSN)	K2T4
Date:	Monday, July 22, 2002	Sheet 3 of 4



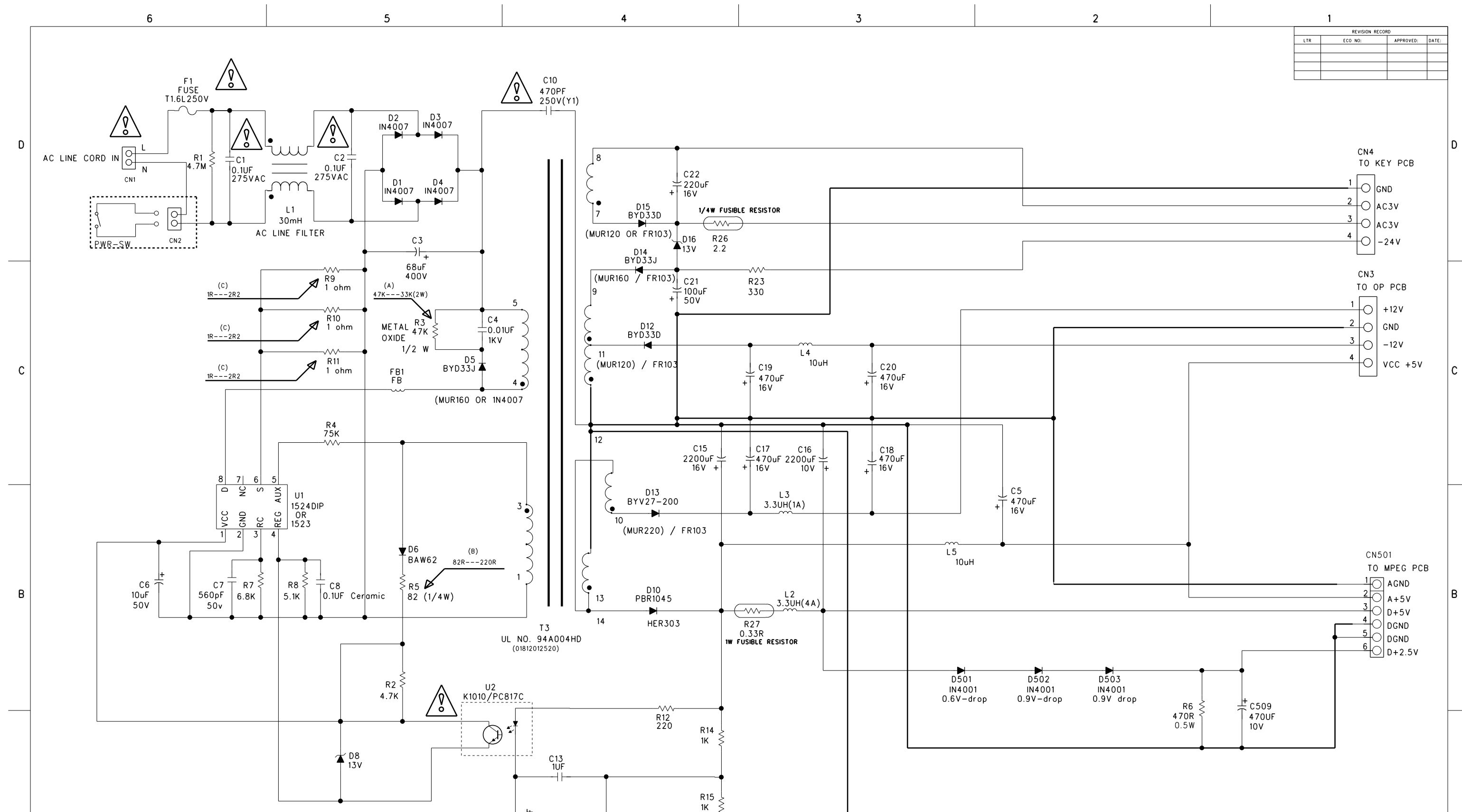
Short R110 for AV3168/3169
Short R111 for CS4954/4955



REVISION RECORD			
LTR	ECO NO:	APPROVE	DATE:



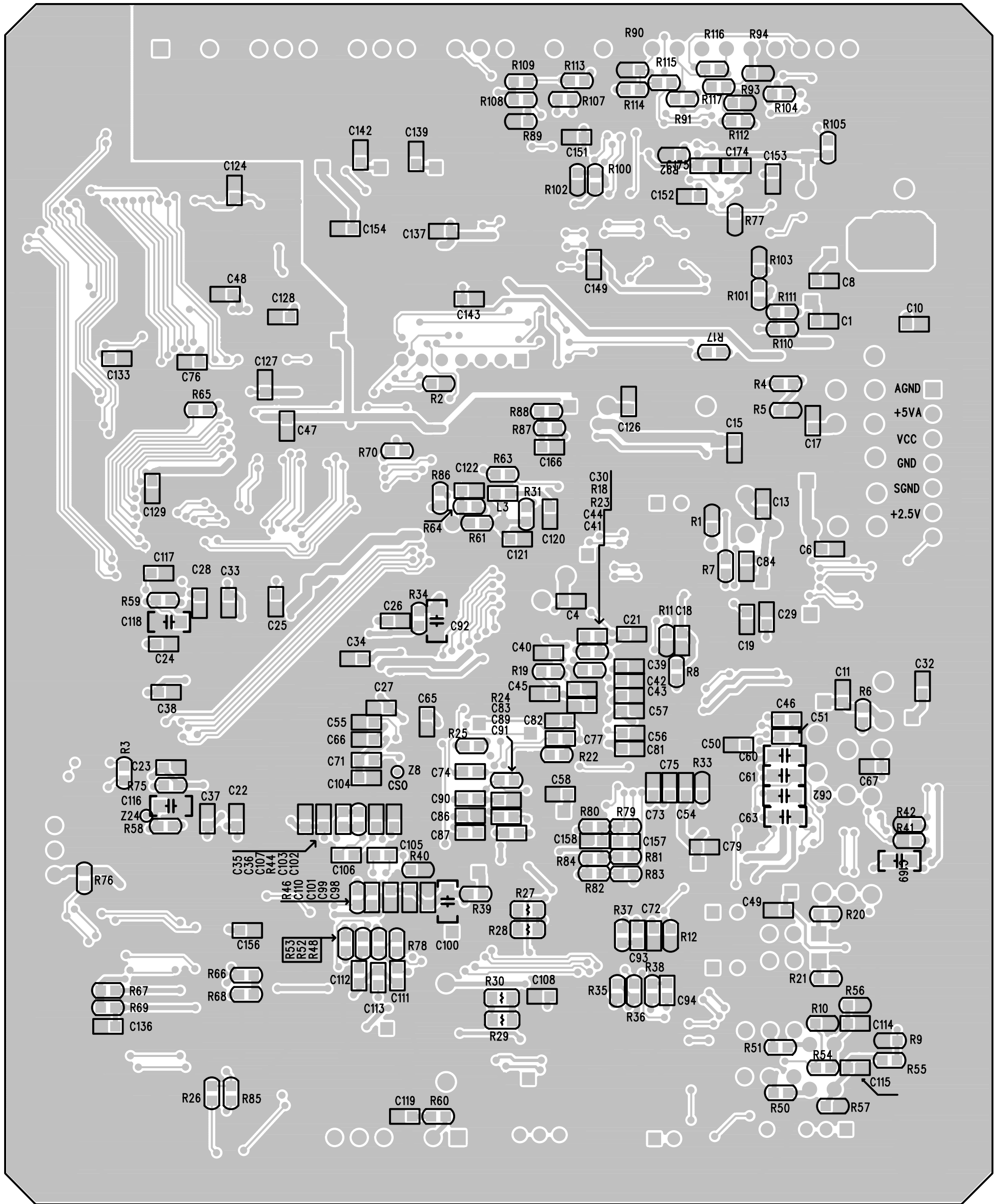
COMPANY: TONIC ELECTRONIC LTD.				
TITLE: T352/T205 OUTPUT CIRCUIT(SCART)				
DRAWN: P.T.LEONG	DATED: 29/3/2002	CODE:	SIZE: D	DRAWING NO: T172-OUTPUT.SCH
CHECKED: ANTHONY TO	DATED: 29/3/2002	SCALE:	SHEET:	
QUALITY CONTROL:	DATED:			
RELEASED:	DATED:			

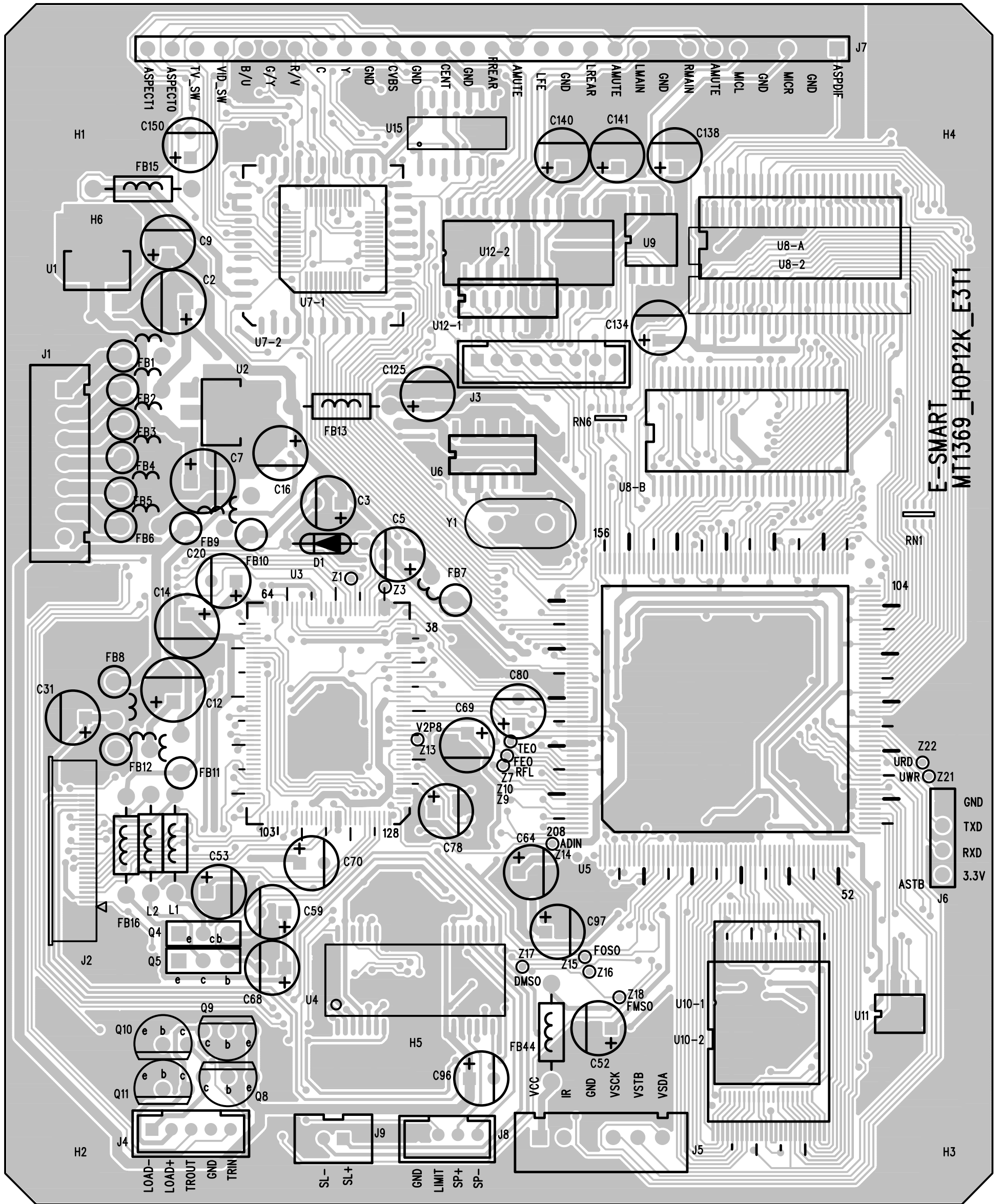


REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

MODIFICATION :
 (A) R3 FROM 47K(2W) TO 33K(2W)
 (B) R5 FROM 82ohm TO 220ohm
 (C) R9, R10, R11 FROM 1ohm to 2.2ohm

COMPANY:		TONIC ELECTRONIC LTD	
TITLE:		PWR SUP (MT w/o heatsink+diode)	
DRAWN:		T123/T172/T179/T205/T218/T221/T236/T252/T270	
CHECKED:		T289/T290/T291/T306/T307/T311/T319/T330	
QUALITY CONTROL:	DATE:	CODE:	SIZE:
RELEASED:	DATE:	A	A4
SCALE:		DRAWING NO: PCB: 001-01230-400 001-02050-400 TRANSFORMER: 018-12012-520	
SHEET:		DF	

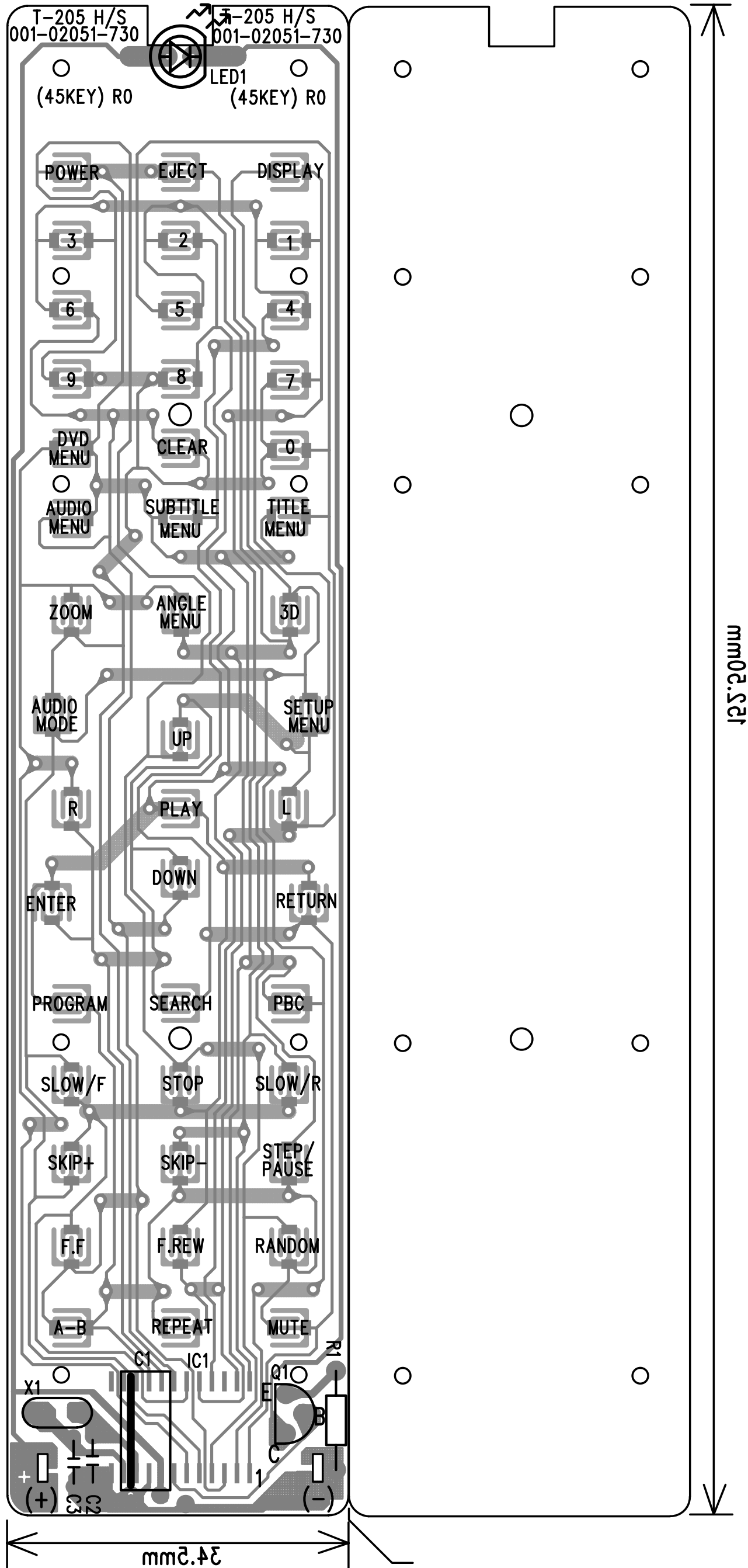


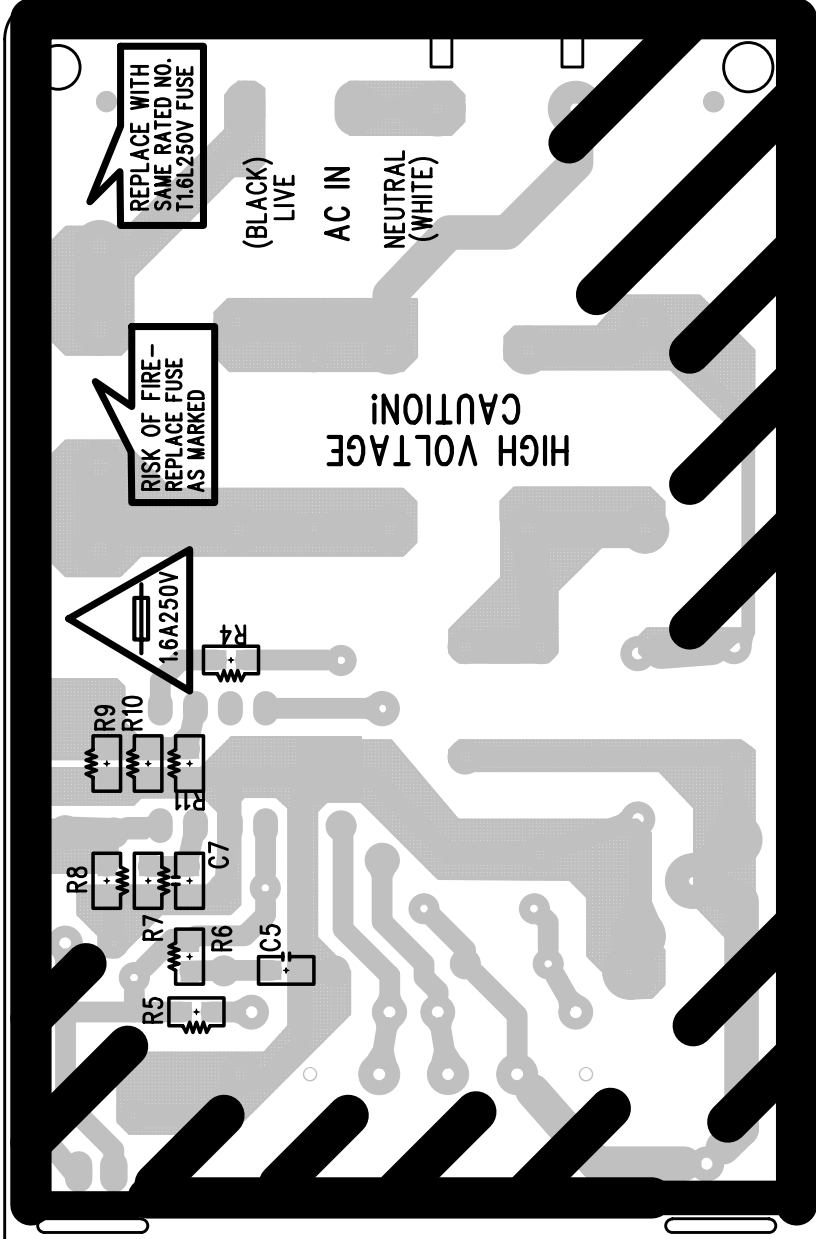
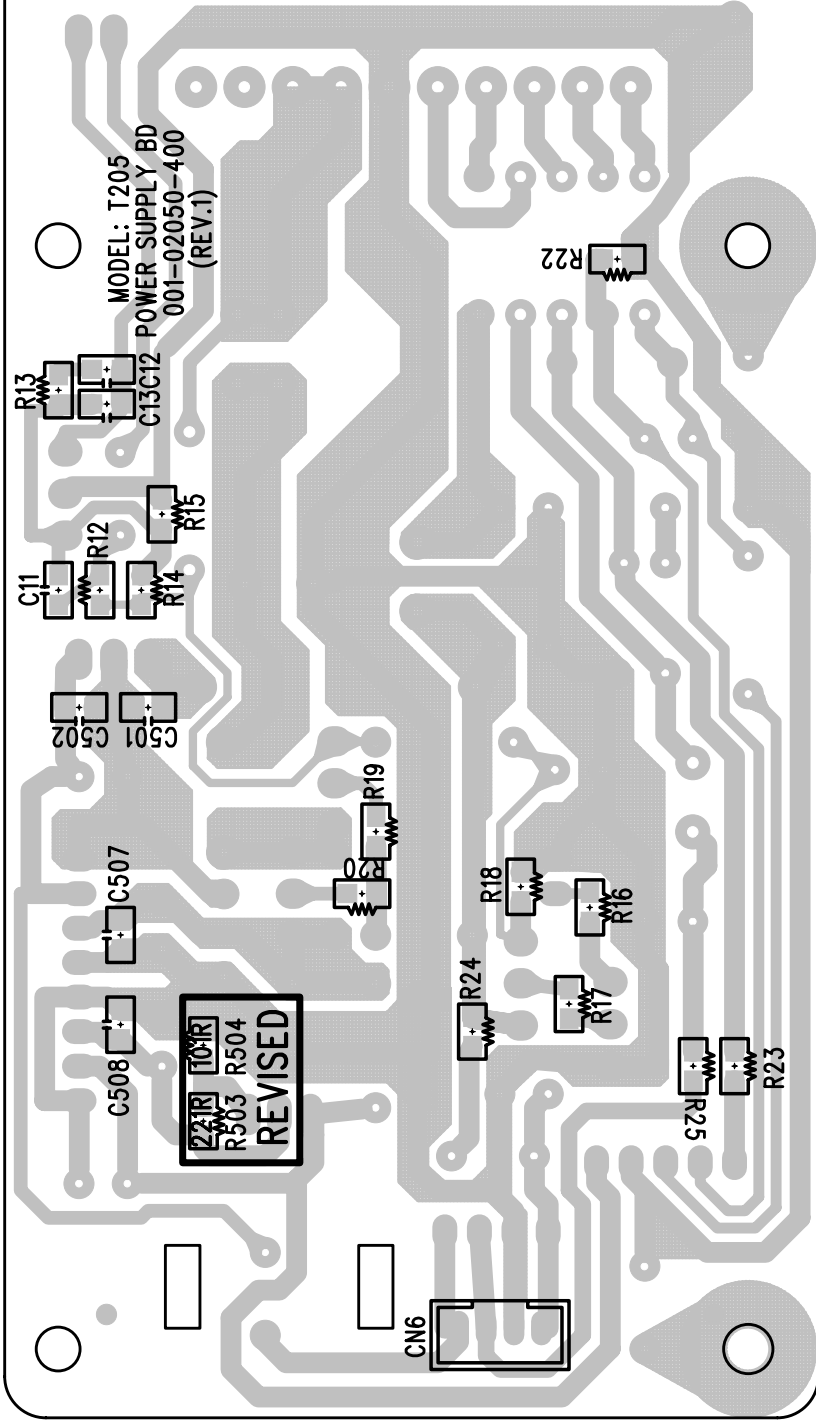


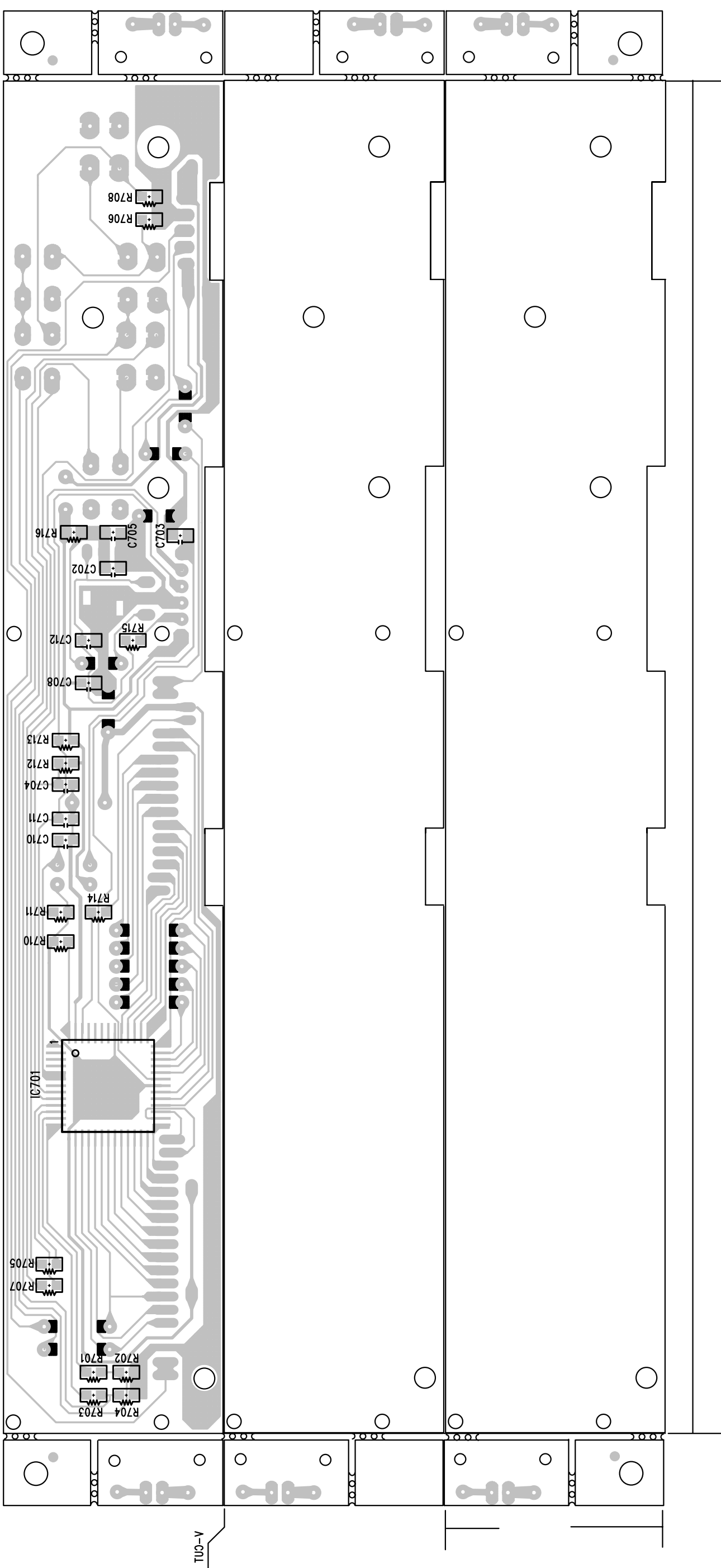
TONIC ELECTRONIC LTD.
 MODEL: T-205(45key)
 TITLE: HAND SET
 P/N: 001-02051-730
 DATE: 26-JULY-2003

TONIC ELECTRONIC LTD.
 MODEL: T-205(45KEY)
 TITLE: HAND SET
 P\N: 001-02051-730
 DATE: 26-JULY-2003

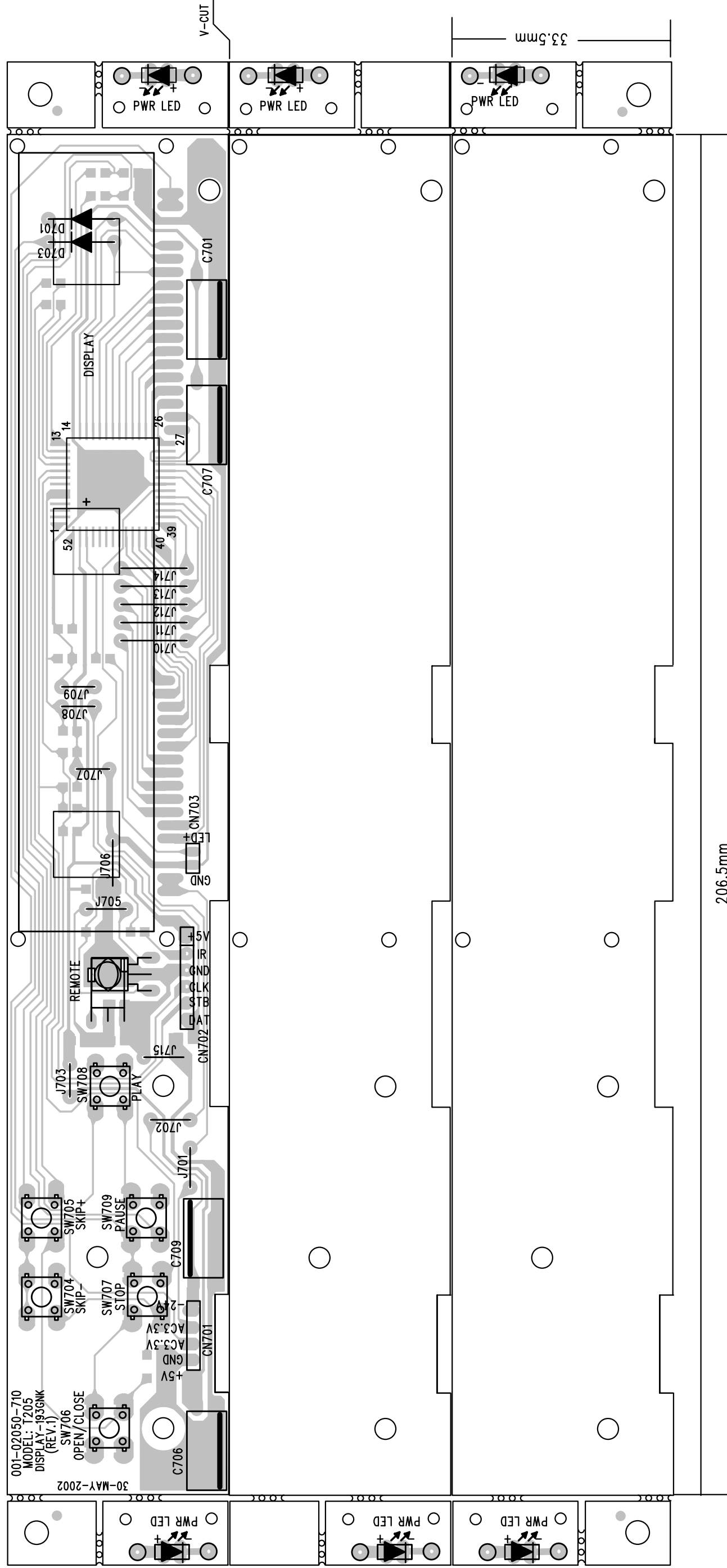
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 TITLE: HAND SET
 P\N: 001-02051-730
 DATE: 26-JULY-2003

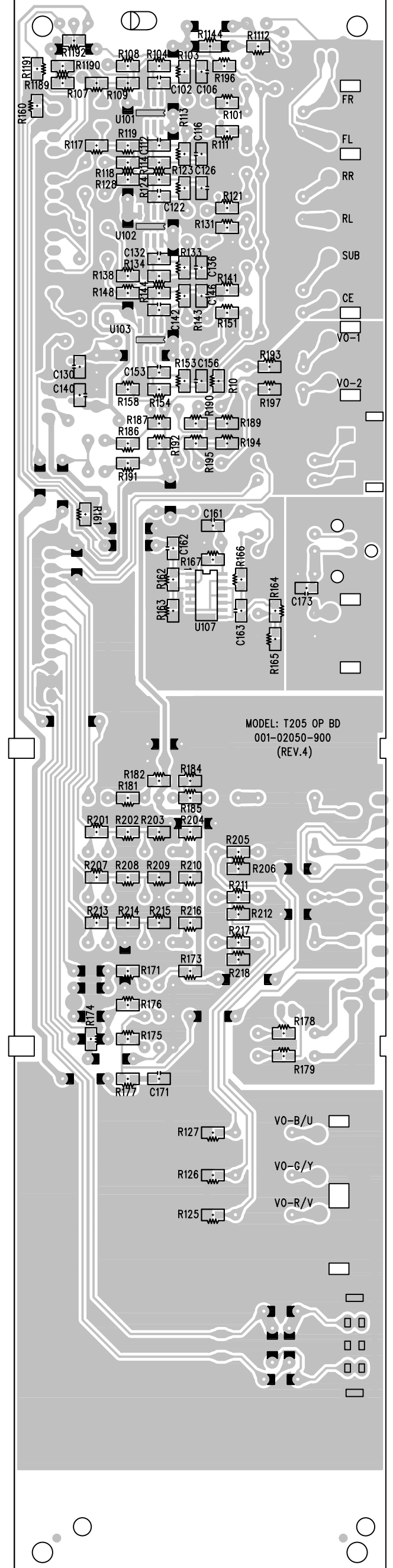




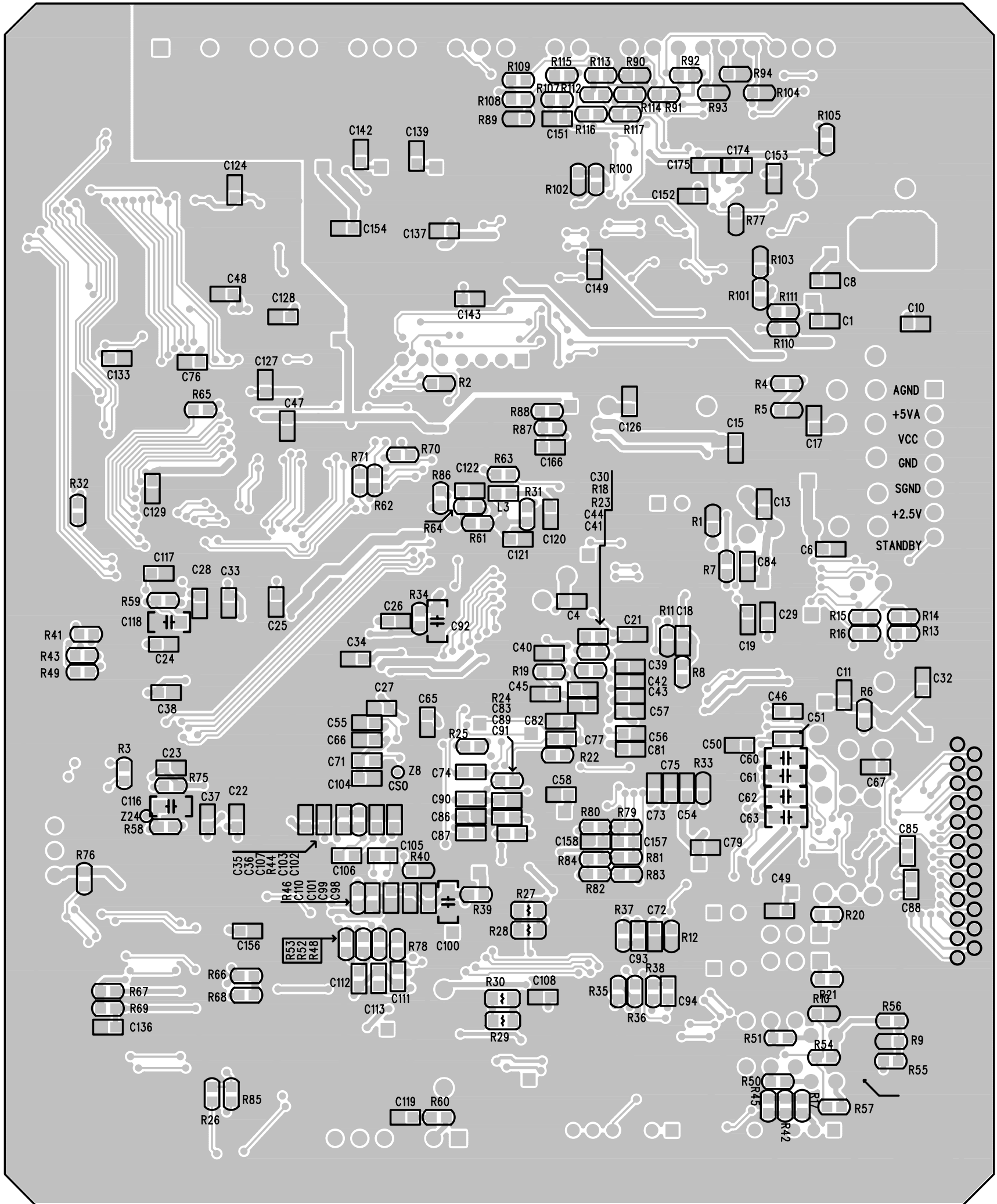


TONIC ELECTRONIC LTD.
 MODEL: T205
 TITLE: KEY CONTROL BD.
 P/N: 001-02050-710
 LAYER: COMPONENT SIDE (TOP)



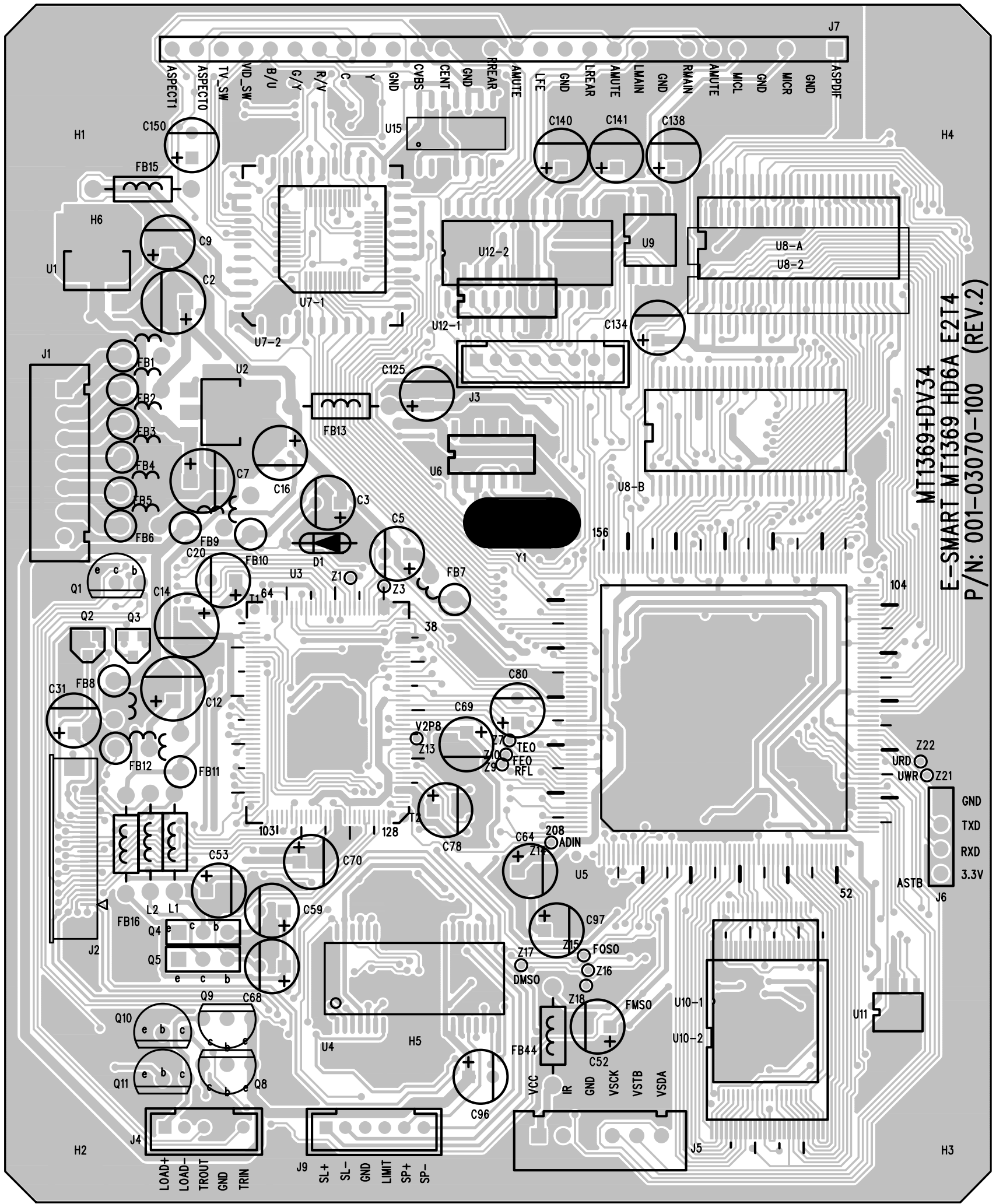


mm2.001



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MT1369+DV34
 E-SMART MT1369 HD6A E2T4
 P/N: 001-03070-100 (REV.2)

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