

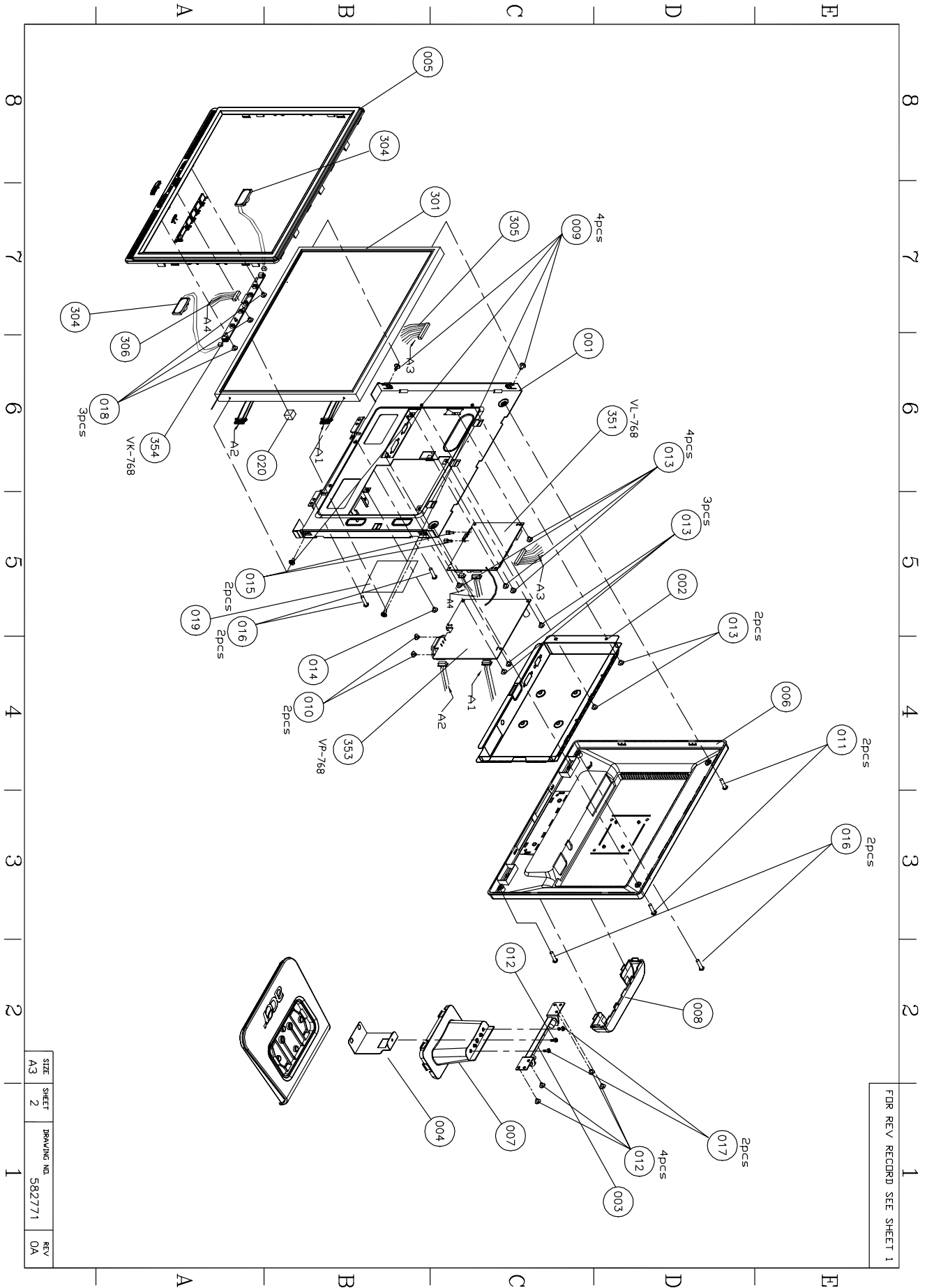
FRU (Field Replaceable Unit) list

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of AL1712. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

NOTE : Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel(<http://aicsl.acer.com.tw/spl/>). For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how best to dispose it, or follow the rules set by your regional Acer office on how to return it.

Model: AA677



FOR REV RECORD SEE SHEET 1







SIZE	SHEET	DRAWING NO.	REV
A3	2	582771	0A

Part list

A. For AA677 (Acer model:AL1717 Ams)

No.	Photo	Part Name	Description	Part No.
1		Back Cover Screws	M4X0.7+6P-ZK M4X0.7+6P-ZK(GP)	MAA20093300 MAA2009330I
2		BaseASSY(FOOT)	AA671D(ABS94HB,MBK56) AA671D(ABS94HB,MBK56)GP	FAAA671D000 FAAA671D00I
3		Stand Screws	M4X0.7+11P-MC WASHER DIM 8.0 (GP)	MAA7000240I
4		NECK COVER	AA6732(ABS94HB MBK56) AA6732(ABS94HB MBK56)GP	FAAA6732000 FAAA673200I
6		NECK BRACKET	AA6731(SECC 0.8) AA6731(SECC 0.8)GP	ECAA6731000 ECAA673100I
7		HINGE ASSY	AA671E AA671(GP)	ECAA671E000 ECAA671E00I
8		NECK	AA6721(ABS94HB MBK56) AA6721(ABS94HB MBK56)GP	FAAA6721000 FAAA672100I
9		SCREWS	M3X0.5+5I-ZN M3X0.5+5I-ZN(GP)	MAA00001260 MAA0000126I
10		Function Board	VK-583 LAR577Y	454AAP30001
11		BACK COVER, Neck & Neck Bracket, Chassis & Bezel	TPP-4.0+10P-ZK TPP-4.0+10P-ZK(GP)	MAB20074202 MAB2007422I

12		Back Cover ASM	AA6714(PC+ABS,MBK56) AA6714(PC+ABS,MBK56)GP	FAAA6714000 FAAA671400I
13		Hinge Screws	TPP-4+12B-MC TPP-4+12B-MC(GP)	MAB80002401 MAB8000240I
14		Mainboard & Chassis	4#40UNCX12.7 PLS-WASHER 4#40UNCX12.7 PLS-WASHER(GP)	MAAA0019400 MAAA001940I
15		Speaker (R/L)	2W 40HM 37.5X17X9.5mm 50mm	CG10021V920 CG10021V930
16		POWER SOCKET &CHASSIS	M3x0.5+6F-ZK M3X0.5+9F-ZK(GP)	MAA10022007 MAA1002200I
17		Power&Inverter Board	VP-768 LAA677	453AC930001
18		Key/B & Bezel	TPP2X3+10B-MC TPP2X3+10B-MC(GP)	MAB800014400 MAB80001440I
19		POWER BOARD &CHASSIS(EARTH)	M4.0X0.7+8BTF-MC M4.0X0.7+8BTF-MC(GP)	MAA80014400 MAA8001440I
20		Function board to Mainboard cable	AR577 CTRL-KEY 13P	DC020162300
21		EMI	AA678(TIN 0.3t) AA678(TIN 0.3t)GP	ECAA6718000 ECAA671800I
22		Mainboard and Power Board Screws	M3X0.5+4C-NI(NL) M3X0.5+4C-NI(GP)	MAA70003100 MAA7000310I

23		Mainboard	VL-731 LAR577Y	461AAI300E1
24		ASM	AA6712(PC+ABS,MCG28+MSV41) AA6712(PC+ABS,MCG28+MSV41)GP	FAAA6712000 FAAA671200I
25		Main Frame/CHASSIS	AA6716(SECC,1mm) AA6716(SECC,1mm)	ECAA6716000 ECAA671600I
26		Mainboard to LCD Cable	JP577 PANEL-CTRL 30P	DC020160700
27		LCD Panel(F)	HT17E12-200 17"(HYDIS)	AC6V0000200
28		LCD Panel(B)	HT17E12-200 17"(HYDIS)	AC6V0000200

POWER/Inverter Board

Description

This specification defined the performance and characteristic of power/inverter board.

It supplies the following outputs :

- 1). 5Vdc: Logic power.
- 2). 5Vaudio: Audio power.
- 3). 15Vinv: Inverter power.

Features

Input Voltage: 100 ~ 240 \pm 10%Vac

Input Frequency: 47 ~ 63Hz

Input power consumption: Less than 1.2W @ minimum load

Total output power: 40Wmax

Inverter brightness adjustment: Burst mode

Protection function: auto-recovery type

Interface Signals

Input

1. AC Inlet: HUAJIE SA-4S-066 or compatible.
2. J701: SC SCJ-0345-1-X-9 3.6D BLU 3P or compatible.

Output Connector & Pin Assignment:

1. The connector was pitch 2.0mm

PIN NO.	Function	Function
1	+5Vaudio	Audio power (optional).
2	GND	Audio ground
3	GND	Ground
4	GND	Ground
5	Vbri	Brightness control from logical board (0.4V to 3.3V)
6	----	-----
7	Ven	Inverter enable signal from logical board (high active , >3V)
8	+5Vdc	+5Vdc supply for logical board
9	+5Vdc	+5Vdc supply for logical board
10	+5Vdc	+5Vdc supply for logical board

2. Inverter-side connector : SM02B-BHSS-1-TB(JST) for AA677

PIN NO.	Function	Comment
1	Cth	VBLH(High voltage)
2	Ctl	VBLL(Low voltage)

Electrical Specification:

AC-DC Electrical specification

Input Specification

No	Item	Condition	Min.	Typ.	Max.	Unit
1	Input Voltage	----	100	---	240	Vac
2	Input Frequency	----	47	---	63	Hz
3	Input Current	----	---	---	1.0	Arms
4	Inrush Current	Cold Start @Vin=100Vrms	---	---	30	A _{0-P}
		Cold Start @Vin=240Vrms			50	A _{0-P}
5	Hold Up Time	@full load & 100Vac input	10	---	---	ms
6	Turn on time	Vin =110Vac	---	1.0	---	S
7	Efficiency	Full load	---	70	---	%
8	Consumption	Vin=240Vac,@ no load	---	---	1	W

AC-DC Output Specification

Output Voltage	Tolerance	Output Current		Voltage Tolerance
		MIN	MAX	
+5Vdc	+5 /-3 %	0.05A	1.5A	4.85~5.25V dc
+15Vinv	+35/-5 %	0A	2A	20~14.3Vdc
+5Vaudio	±5%	0A	0.6A	4.75~5.25Vdc
Ripple	1. Measured at DC output terminals which are paralleled with a 10uf Ecap & 0.1uf Ceramic cap. 2. Band width is limited within 20MHz.	---	1%	+5Vdc:50mVp-p +15Vinv:150mVp-p
Noise		---	3%	+5Vdc:150mVp-p +15Vinv:450mVp-p
Dynamic Load Regulation	50~100% or 100~50% load change of any DC output @50% duty of 1MHz (min.)	---	±5%	---
Over / Under	@ Power line on/off	---	±5%	---

*+5Vdc load regulation test: the +15Vinv loading at 2.0A

*+15Vinv load regulation test: the +5Vdc loading at 1.5A

Protection function

- 1) SCP: Short circuit protection must be acted on both outputs
- 2) OPP: Should be protected when output power consumption is within 60W ~ 75W

Inverter Electrical Specification:

For LPL LM170E01-TLB3

	Condition	Min.	Typ.	Max.	Unit
Input Voltage	---	---	15	---	V
Input Current	---	---	1.5	---	A
Backlight ON/OFF Control	ON		3.3		V
	OFF		0		V
Brightness Adjust	Min. Luminance / Max. Luminance	---	30%	---	---
Output Voltage	Vin=15V, Iout=6.5mA	640	650	745	Vrms
Brightness	lamp current in 6.5mA		300		Cd/m ²
Output Current(Each connector)	Vbri=0.45V~3.6V	3	6.5	7	mA
Frequency	---	40	---	70	KHz
Lamp start voltage	@0°C	---	1000	1250	Vrms
Striking Time	---		1	---	S
Lamp Current Balance	---	---	±0.3	---	mA
Efficiency	Vin=15V	---	80	---	%
Operating Life Time	---	50000	---	---	Hr

For TOPPOLY TD170WGCB2

	Condition	Min.	Typ.	Max.	Unit
Input Voltage	---	---	15	---	V
Input Current	---	---	1.5	---	A
Backlight ON/OFF Control	ON		3.3		V
	OFF		0		V
Brightness Adjust	Min. Luminance / Max. Luminance	---	30%	---	---
Output Voltage	Vin=15V, Iout=6.5mA	---	655	---	Vrms
Brightness	lamp current in 6.5mA		300		Cd/m ²
Output Current(Each connector)	Vbri=0.45V~3.6V	3	7	8	mA
Frequency	---	40	---	60	KHz
Lamp start voltage	@0°C	---	1120	1460	Vrms
Striking Time	---		1	---	S
Lamp Current Balance	---	---	±0.3	---	mA
Efficiency	Vin=15V	---	80	---	%
Operating Life Time	---	40000	---	---	Hr

SAFETY

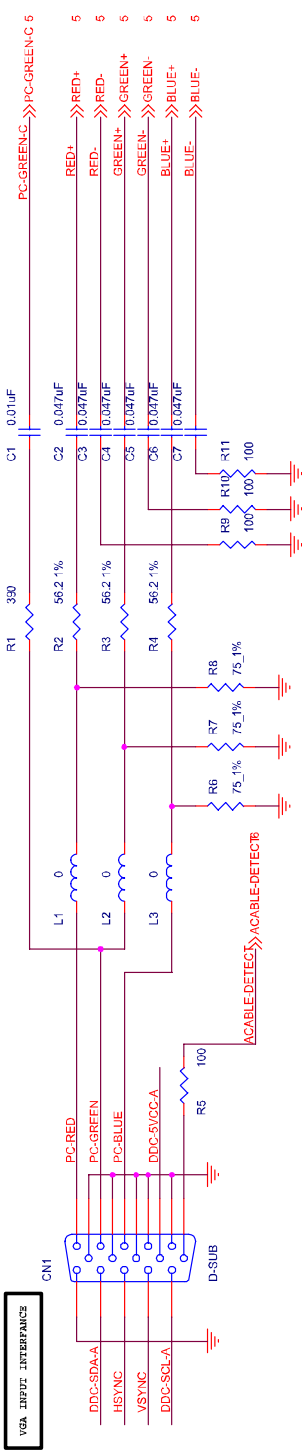
Leakage Current: 0.25mA @ 100Vac

Insulation Resistance: more than 3M ohms while withstanding a voltage of 500Vac

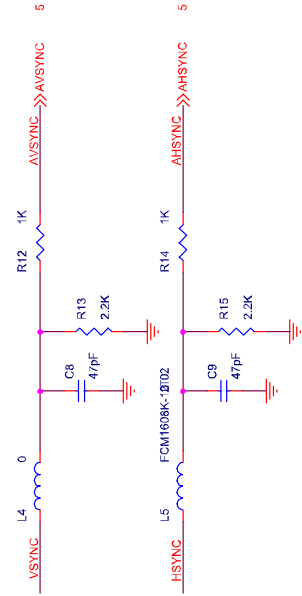
Hi-Pot: 3Kvac with using 3mA cut off current

Schematic Diagram

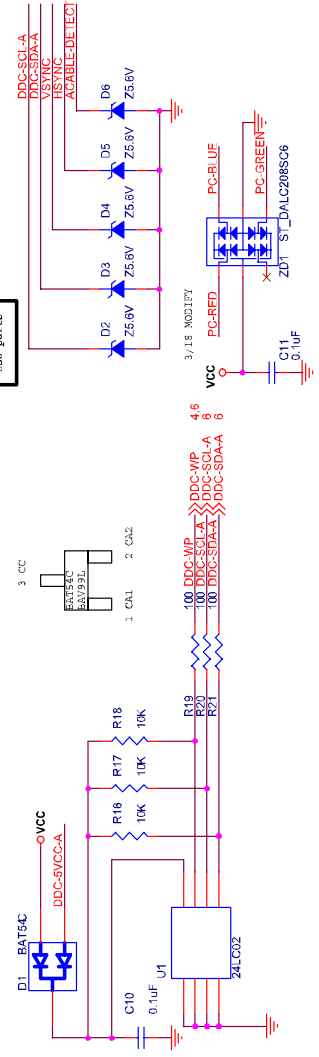
VGA INPUT INTERFERENCE



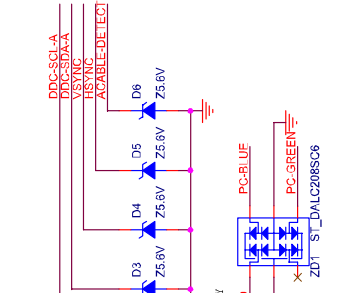
V-SYNC & H-SYNC BUFFER



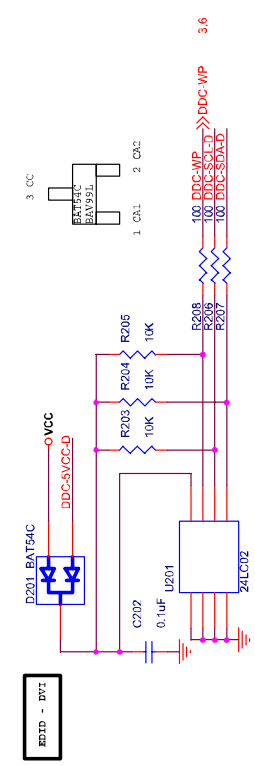
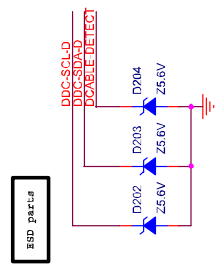
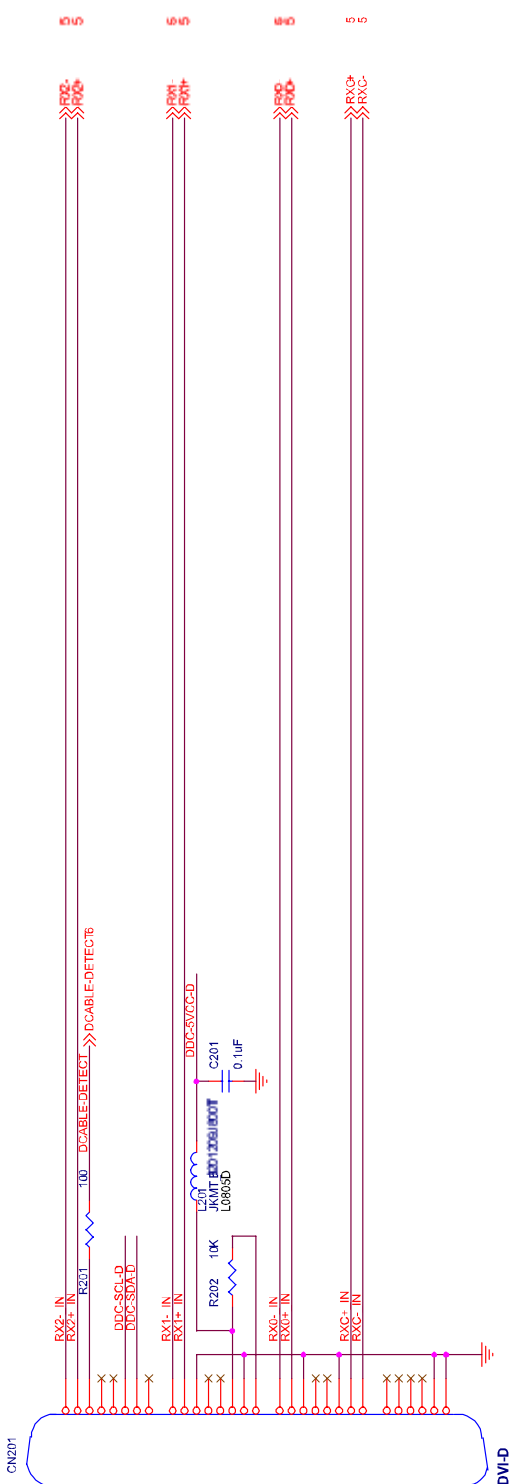
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RSD parts

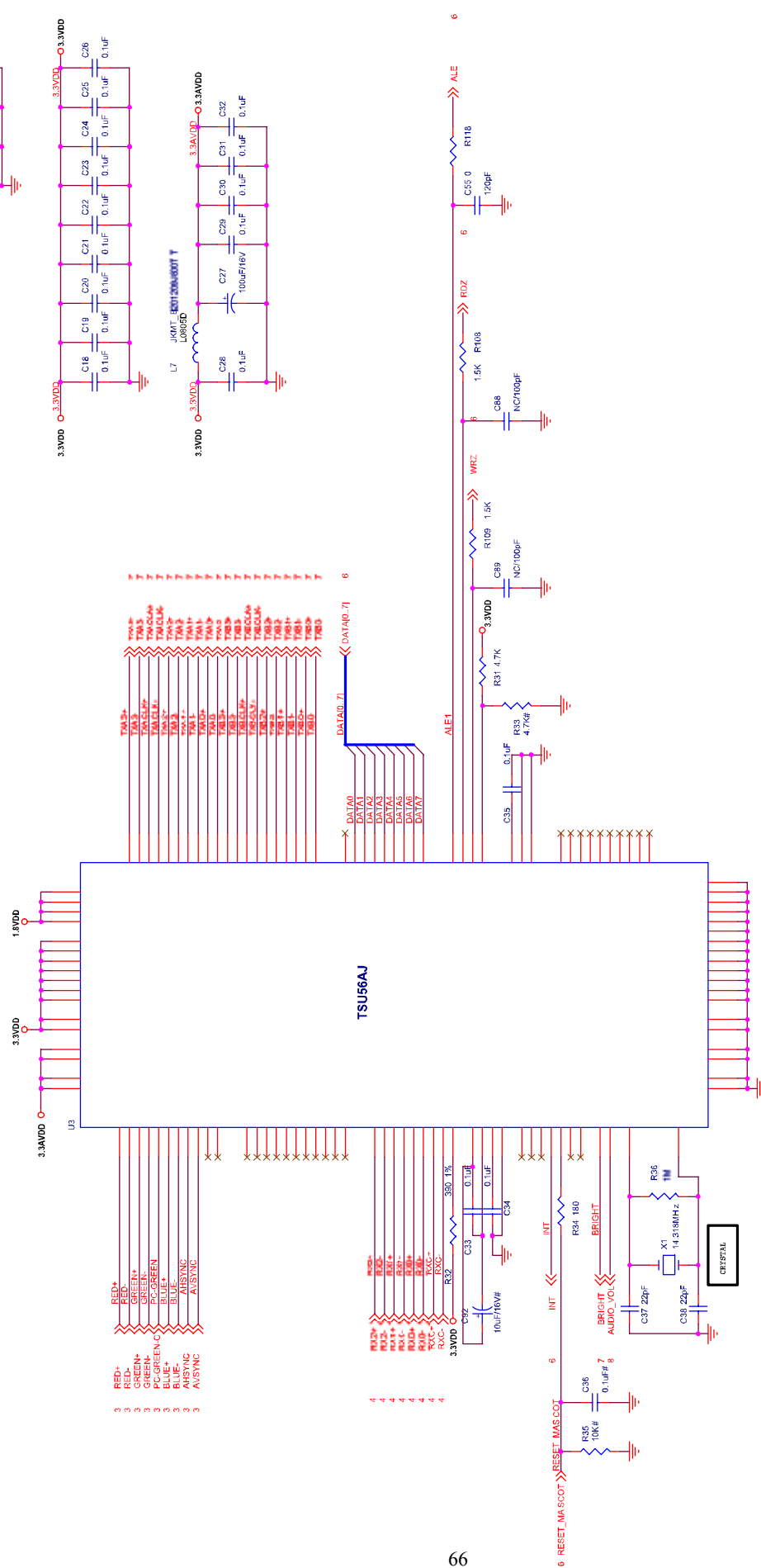


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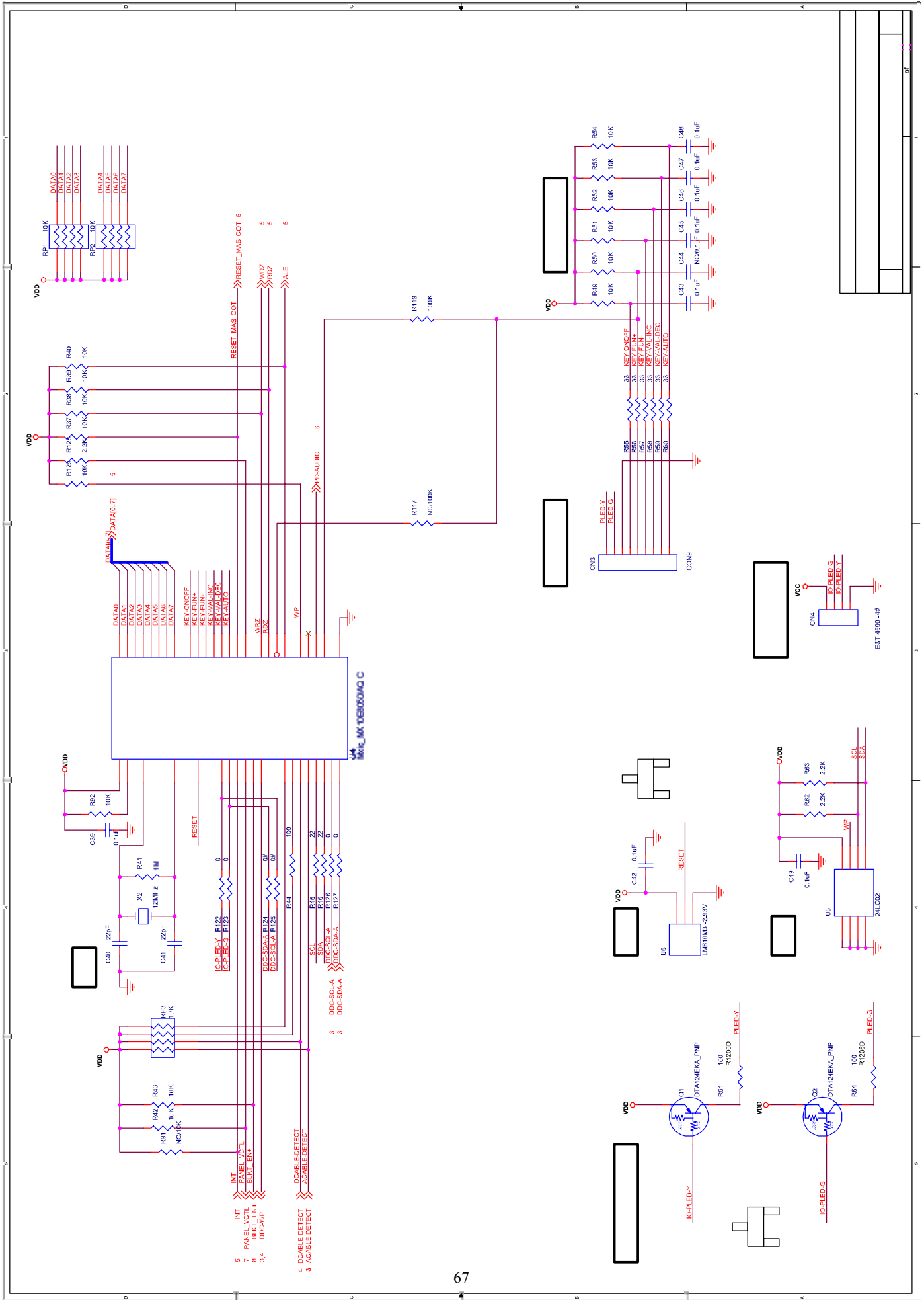


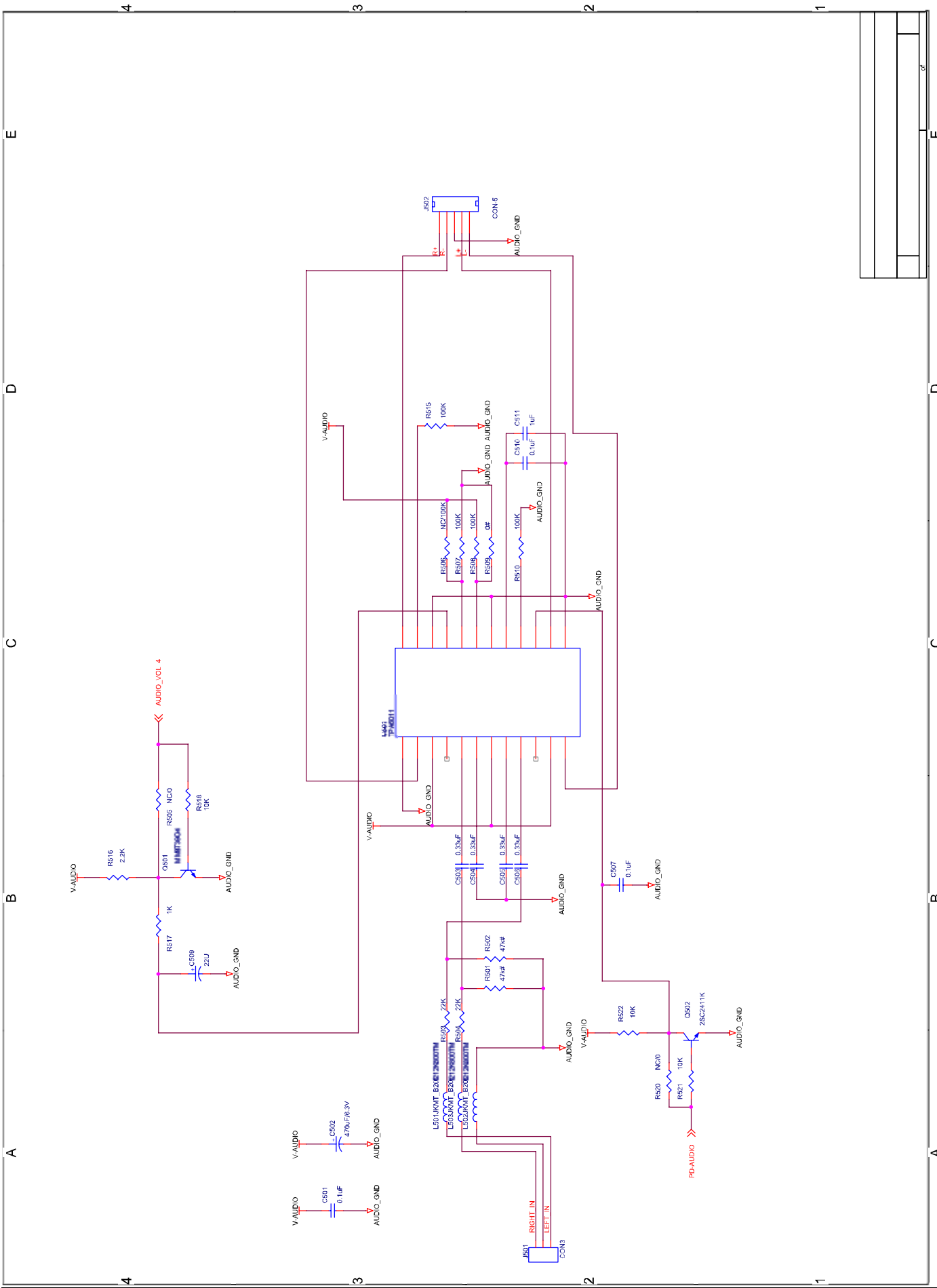
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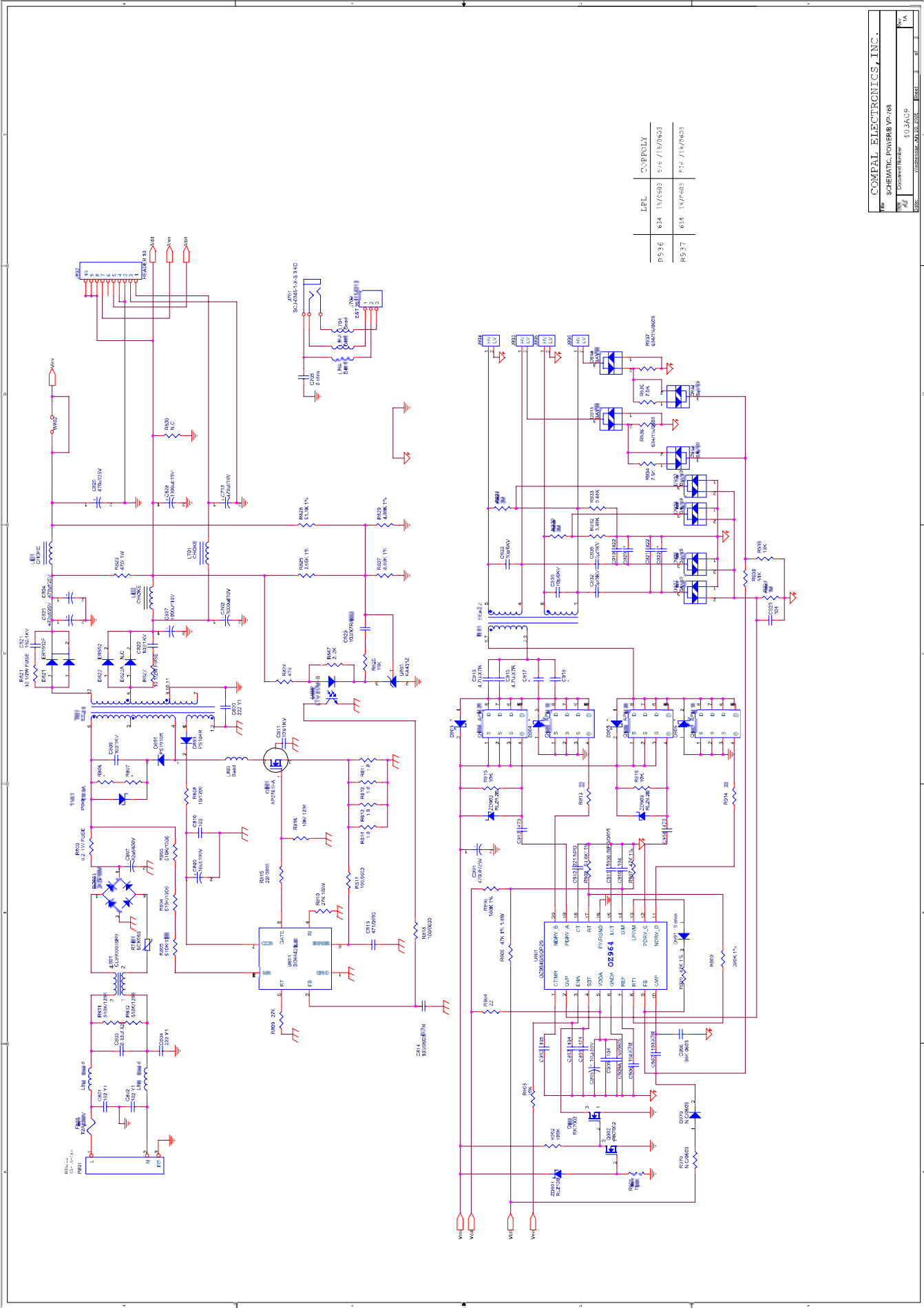
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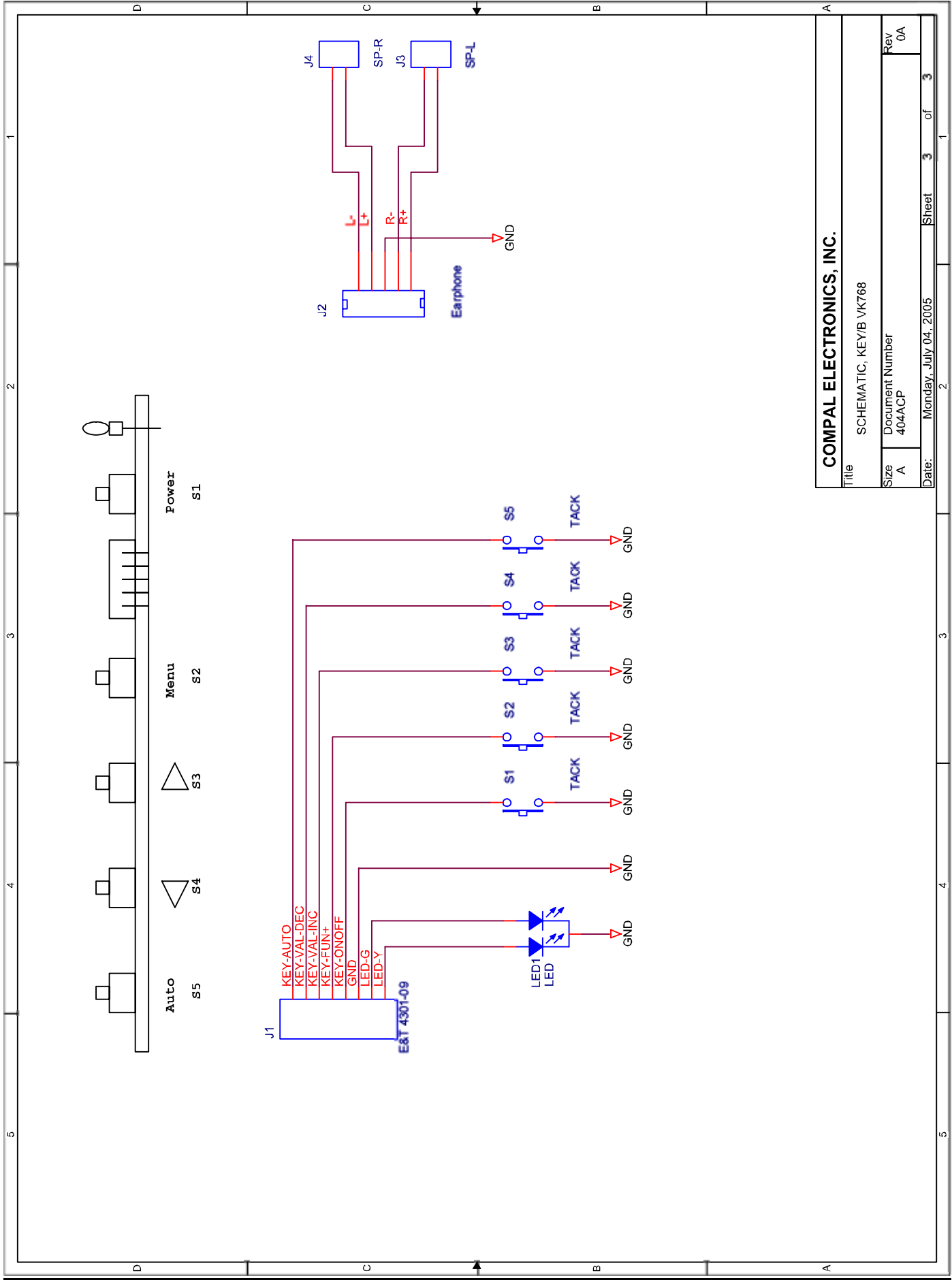






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3	03/13/03	LPL	DAK	REVISED

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