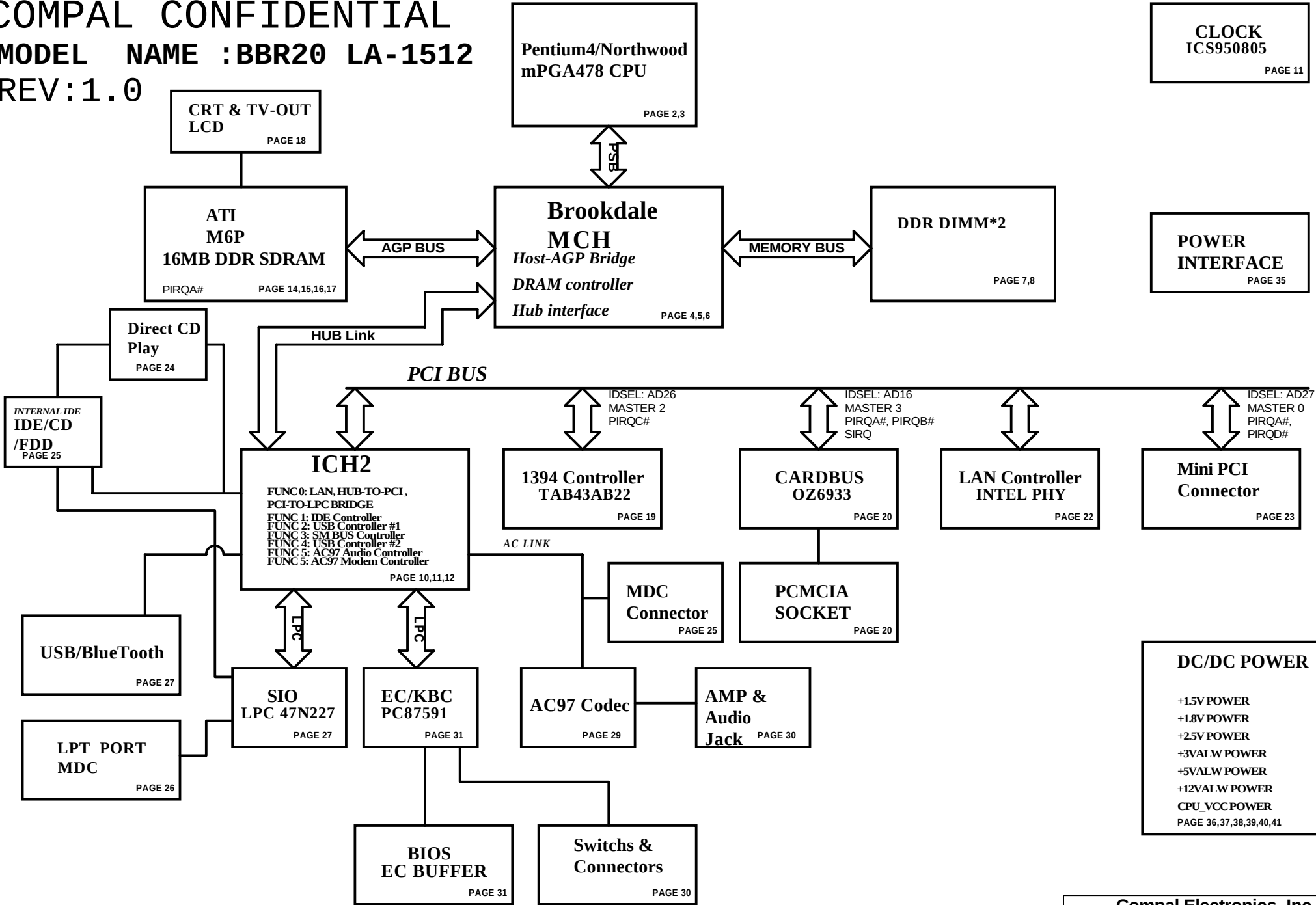
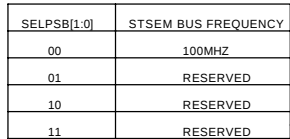


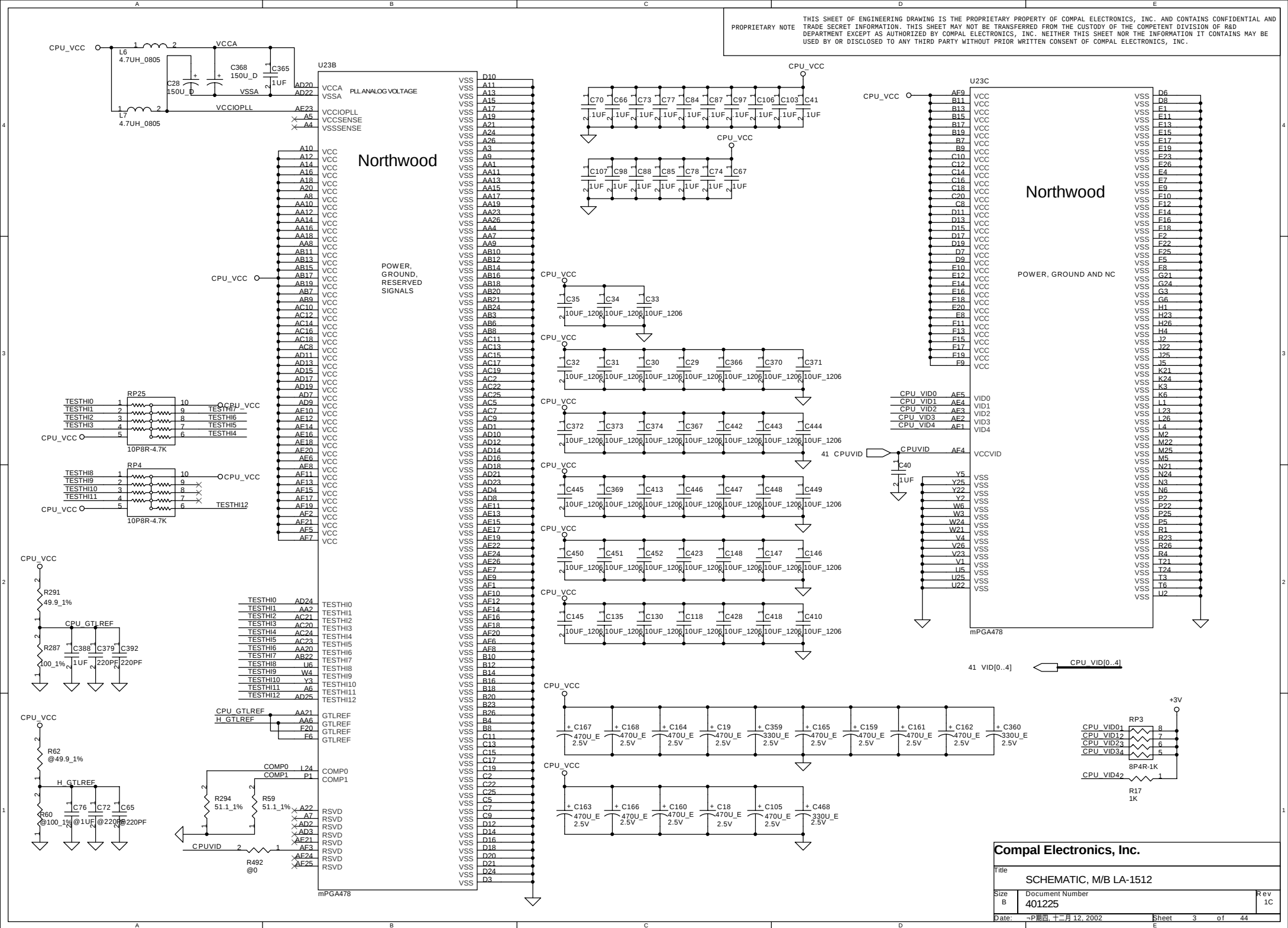
COMPAL CONFIDENTIAL
MODEL NAME :BBR20 LA-1512
REV:1.0



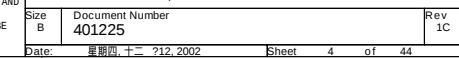
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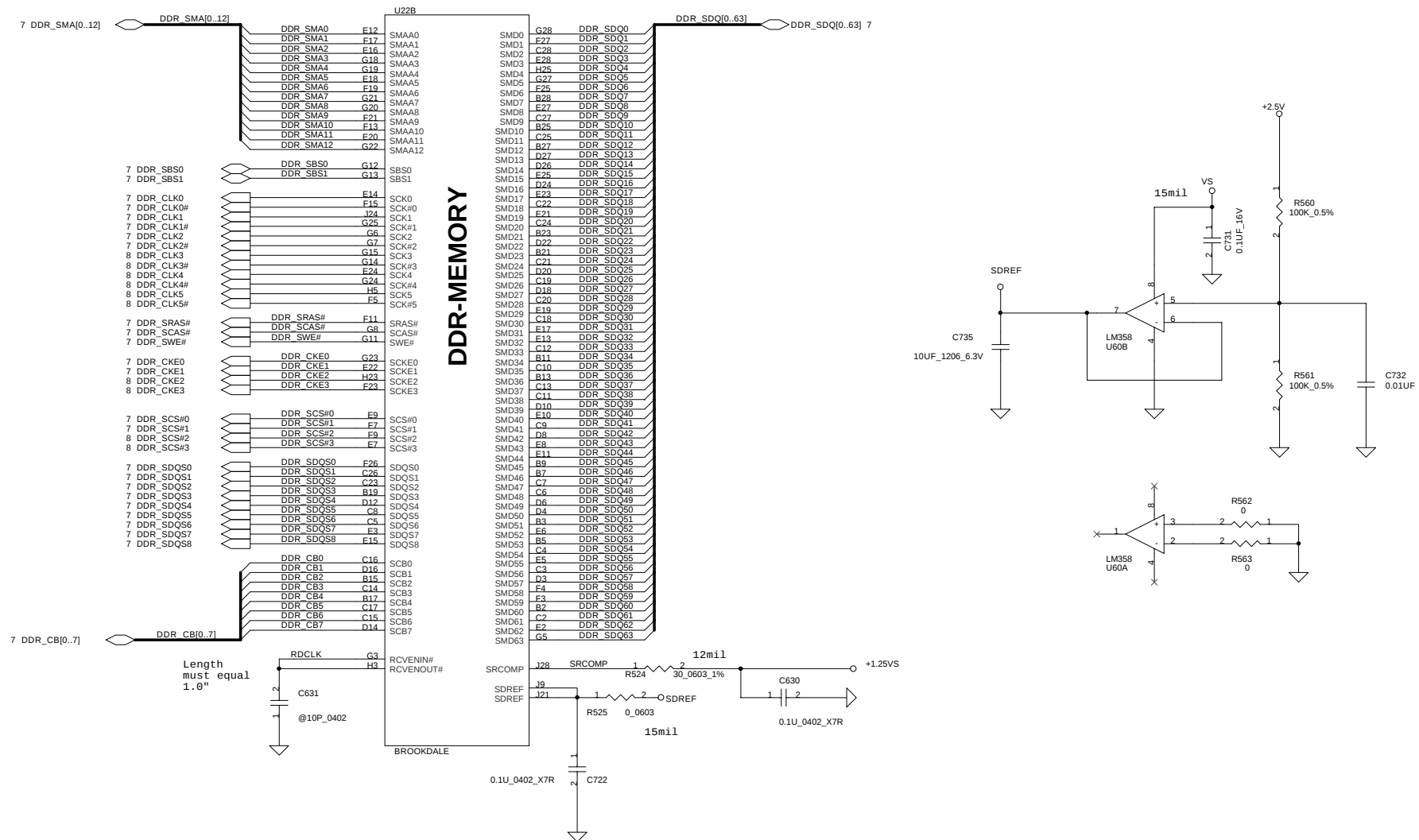
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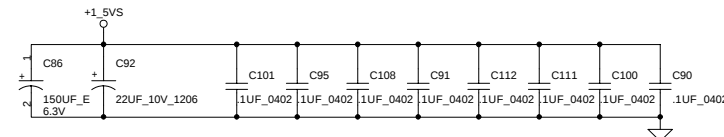
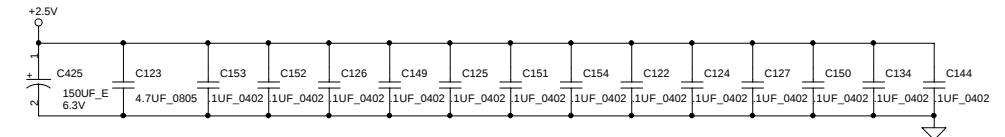
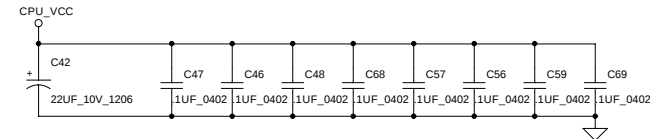
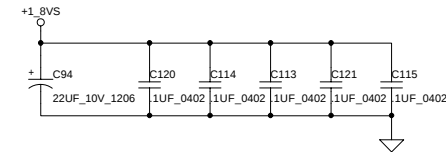
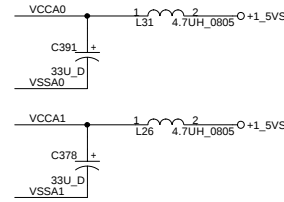
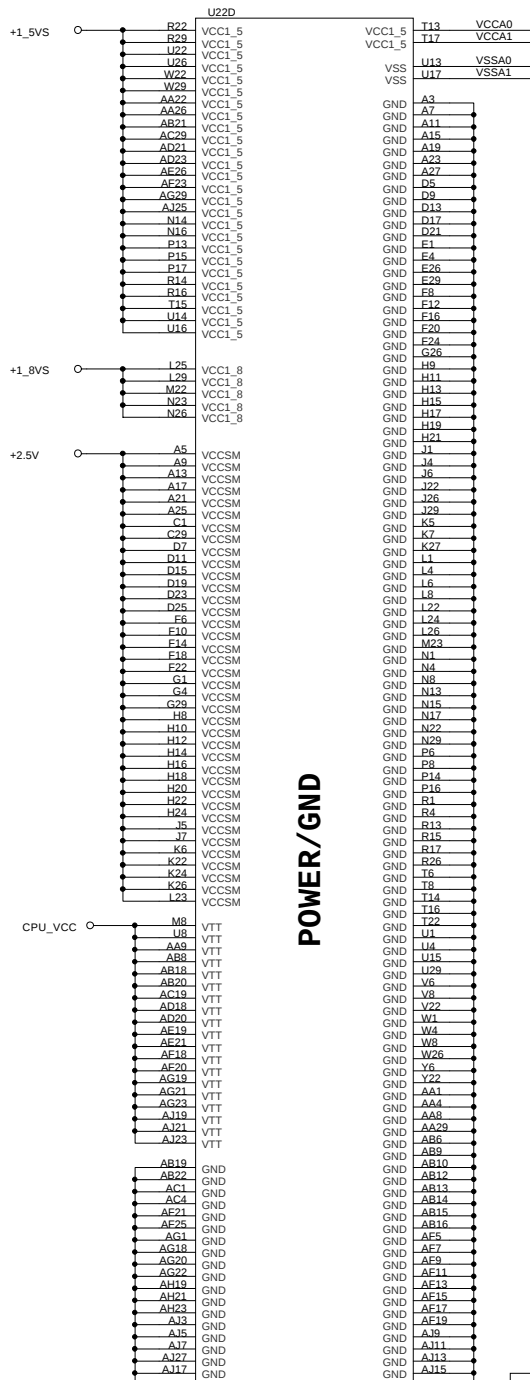


SCHEMATIC, M/B LA-1512





MCH-3/3(Power)



POWER/GND

Layout note

Place these resistor
closely DIMM0,
all trace length<750mil

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

Layout note

Place these resistor
closely DIMM0,
all trace length<750mil

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

Layout note

Place these resistor
closely DIMM0,
all trace length<750mil

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

Layout note

Place these resistor
closely DIMM0,
all trace length<750mil

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

5 DDR_SDQ[0..63] 5 DDR_CB[0..7] 5 DDR_SQS[0..8]

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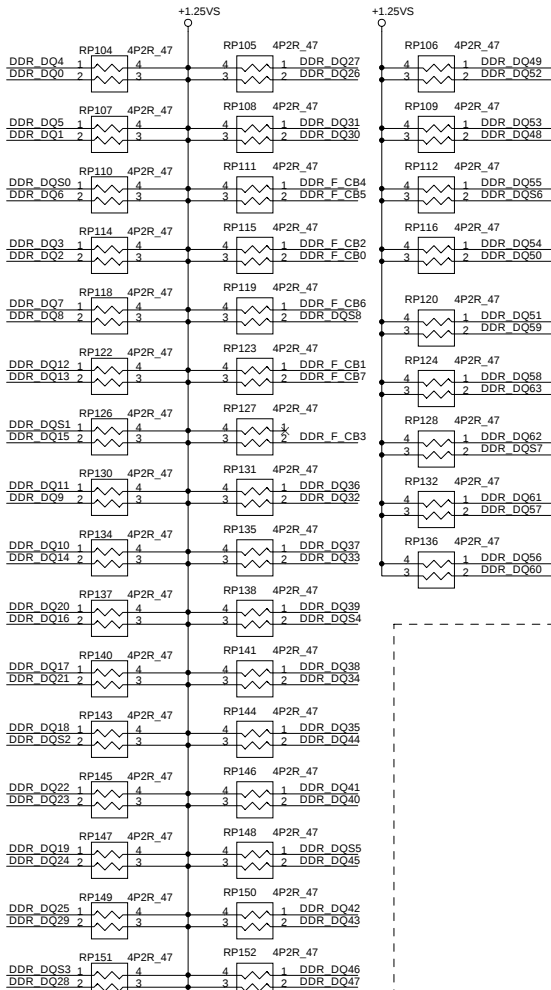
DIMM0 (STD)
Top side

Compal Electronics, Inc.

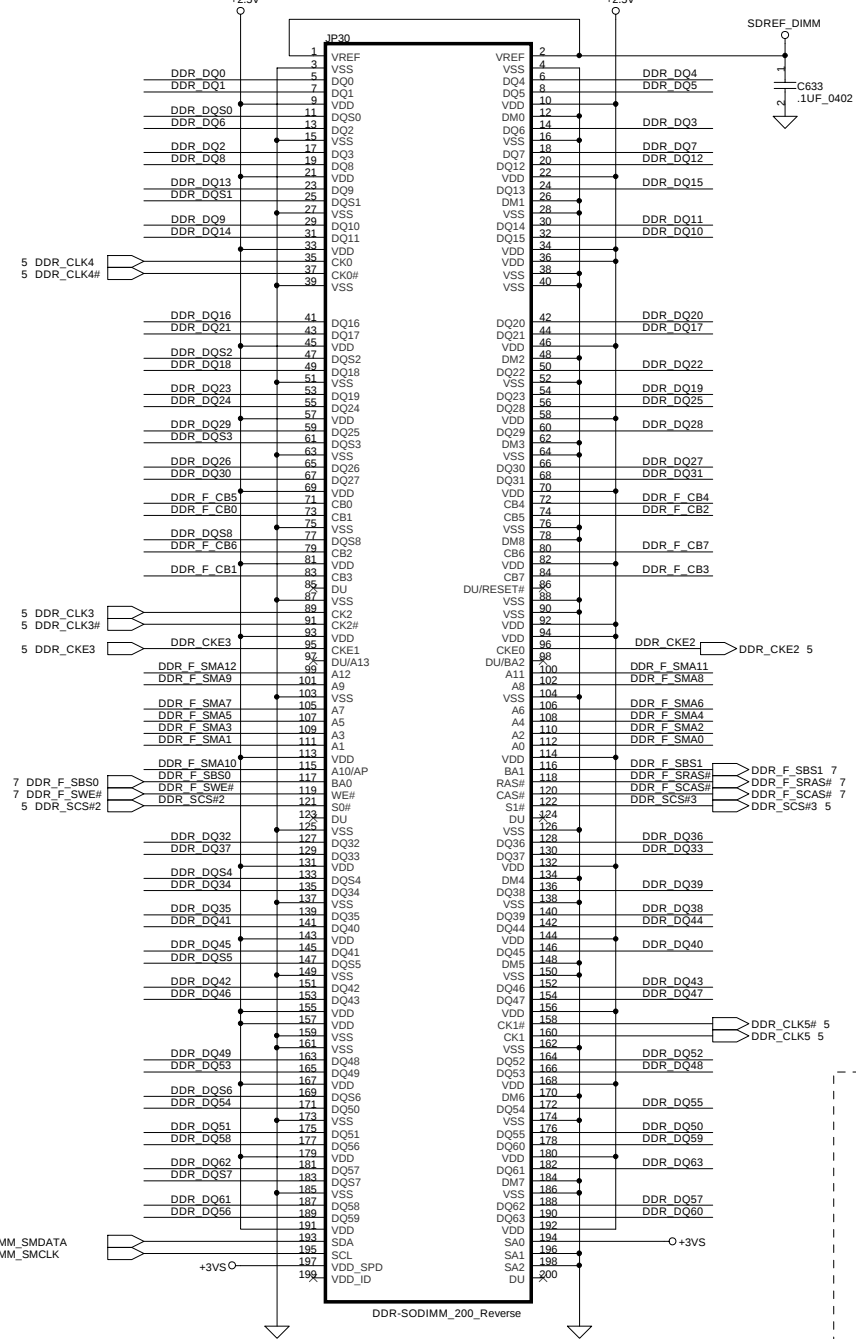
SCHEMATIC, M/B LA-1512

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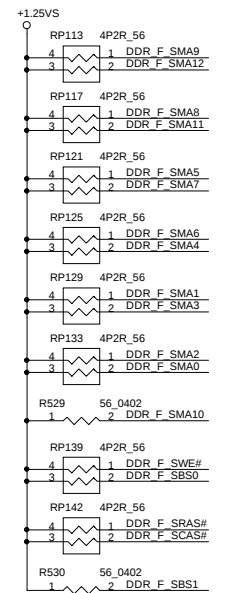
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Layout note
Place these resistor
closely DIMM1,
all trace
length<=800mil

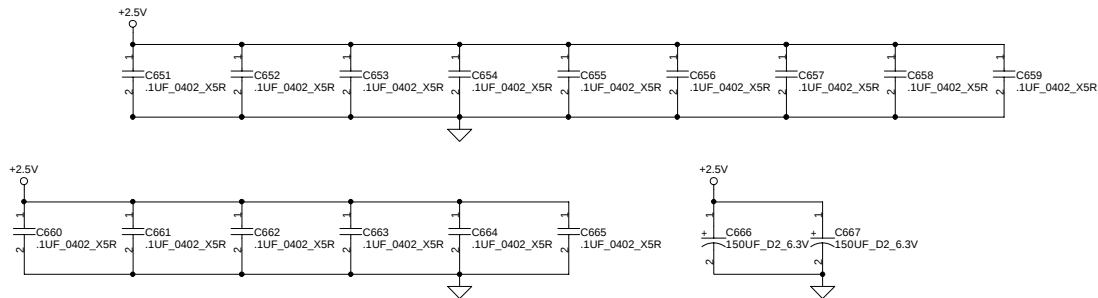


DIMM1 (REV)
Bottom side

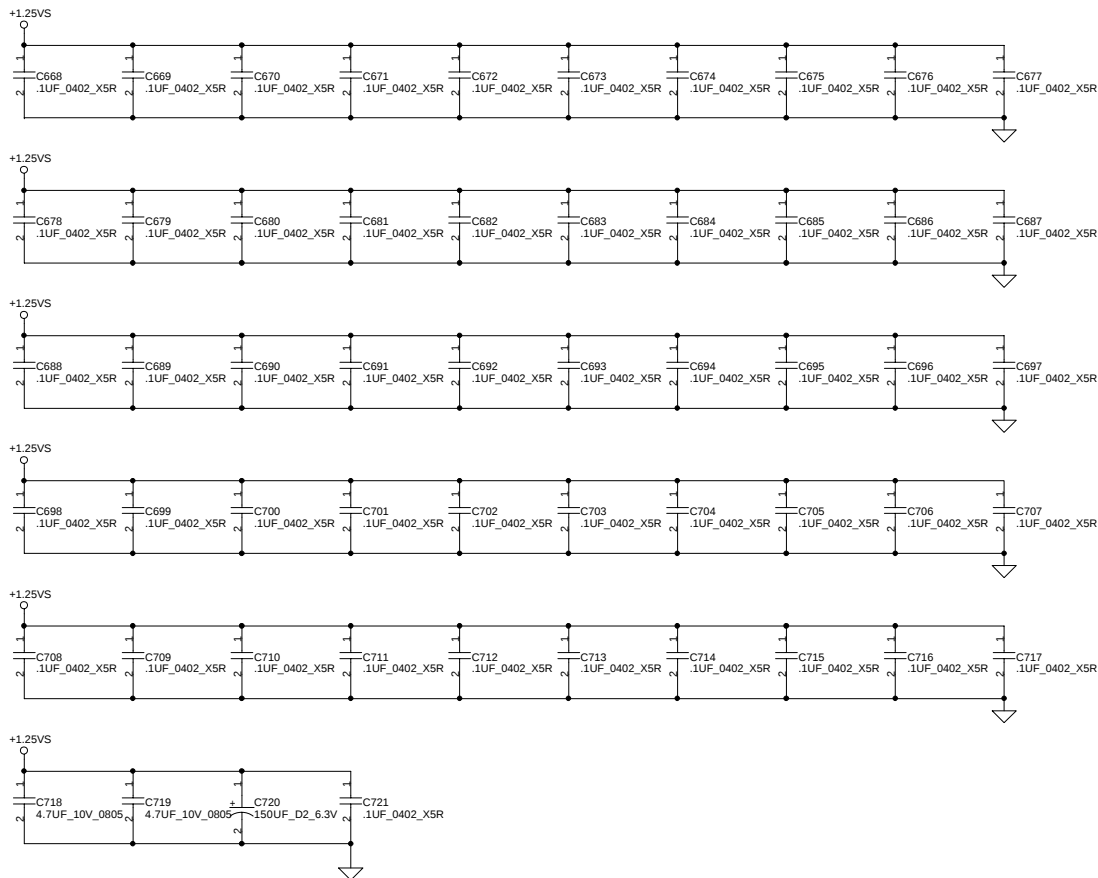


Layout note
Place these resistor
closely DIMM1,
all trace length
Max=1.3"

Layout note :
Distribute as close as possible
to DDR-SODIMM.



Layout note :
Place one cap close to every 2 pull up resistors termination to
+1.25V

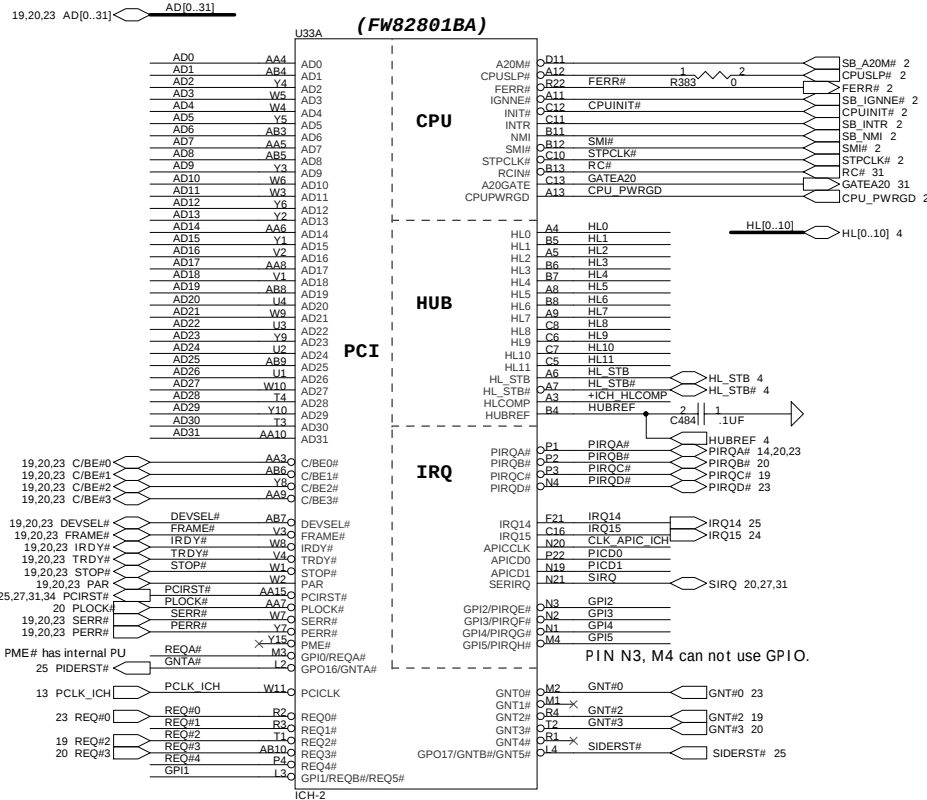


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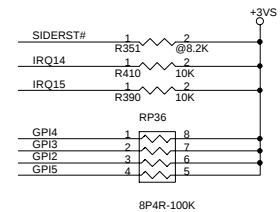
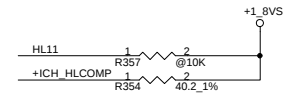
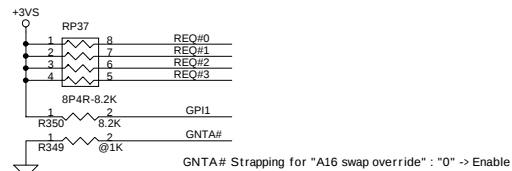
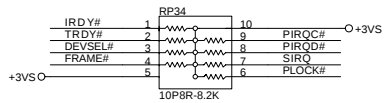
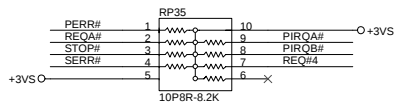
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Title			
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ICH-2

(FW82801BA)



PCI Pullups



Compal Electronics, Inc.

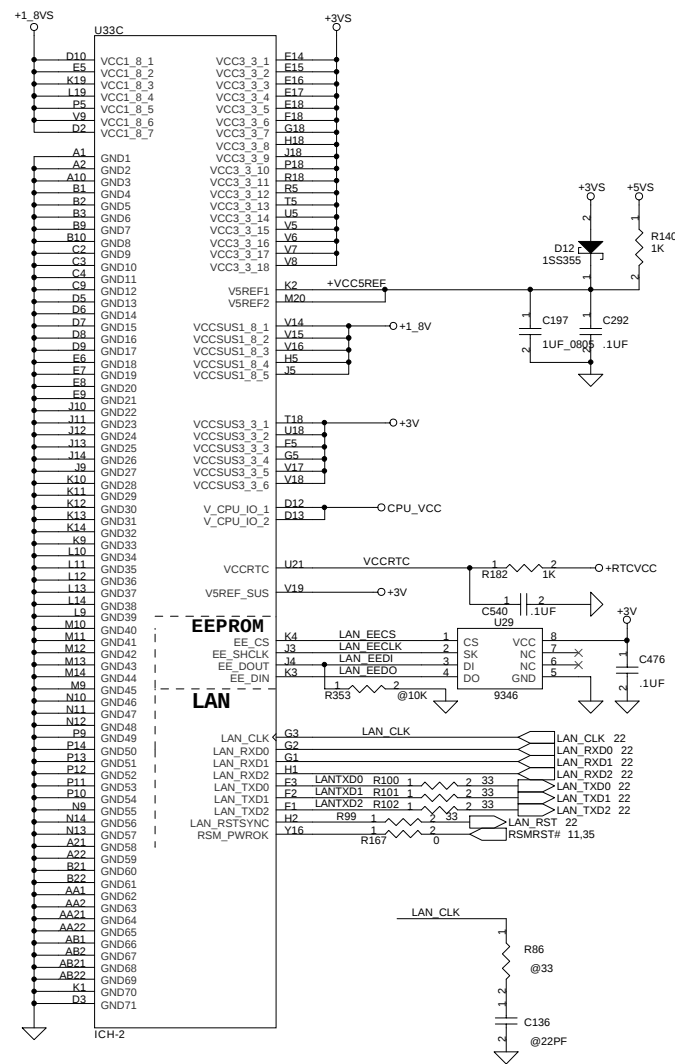
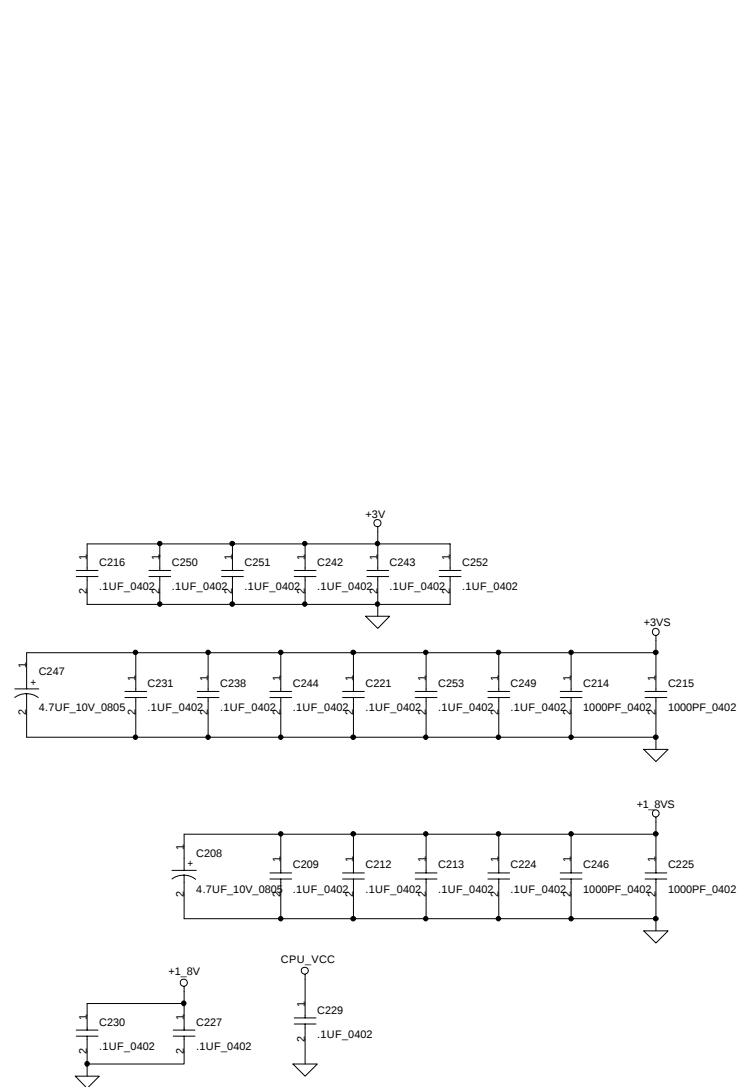
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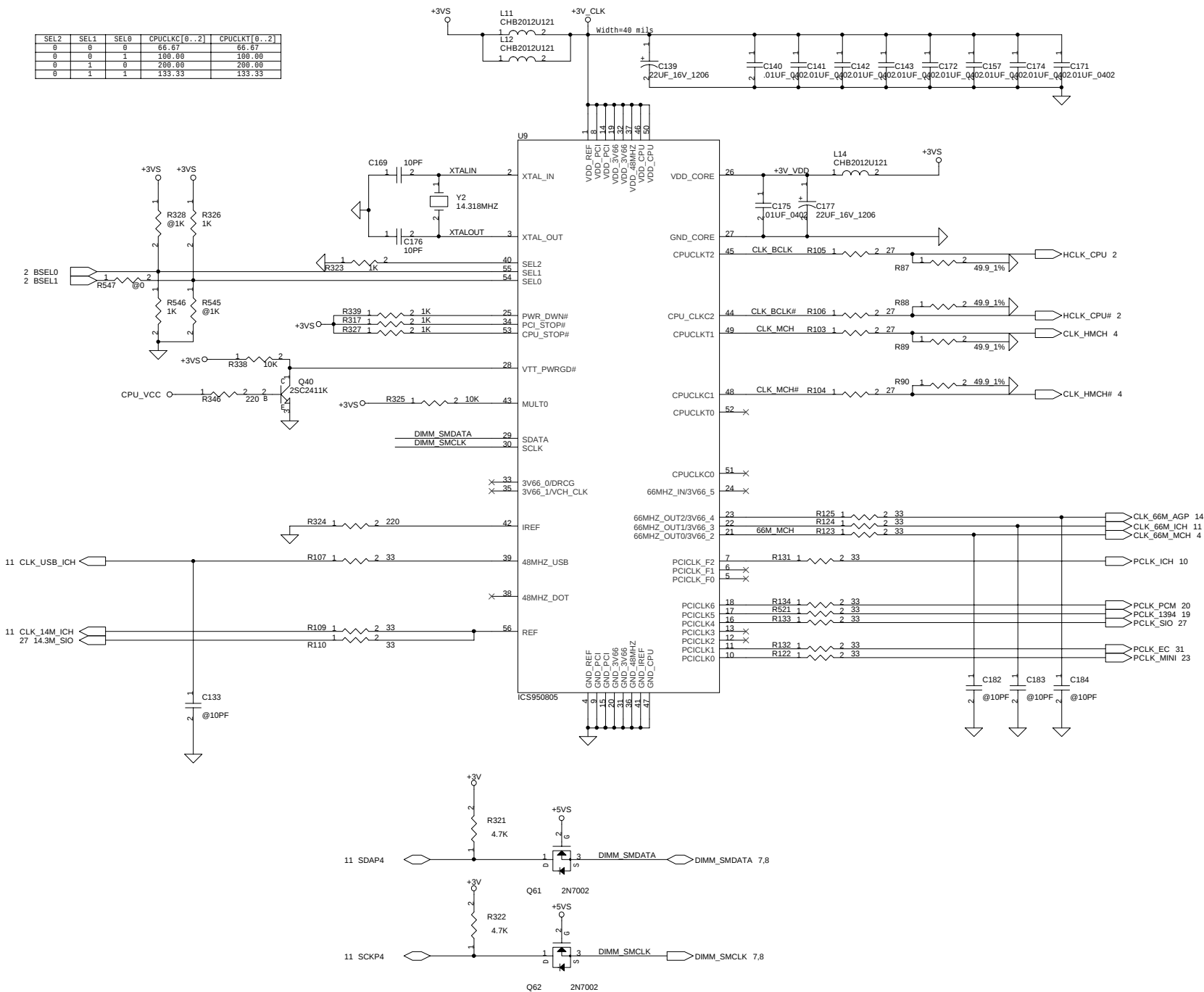
ICH2-C(LAN,Power)

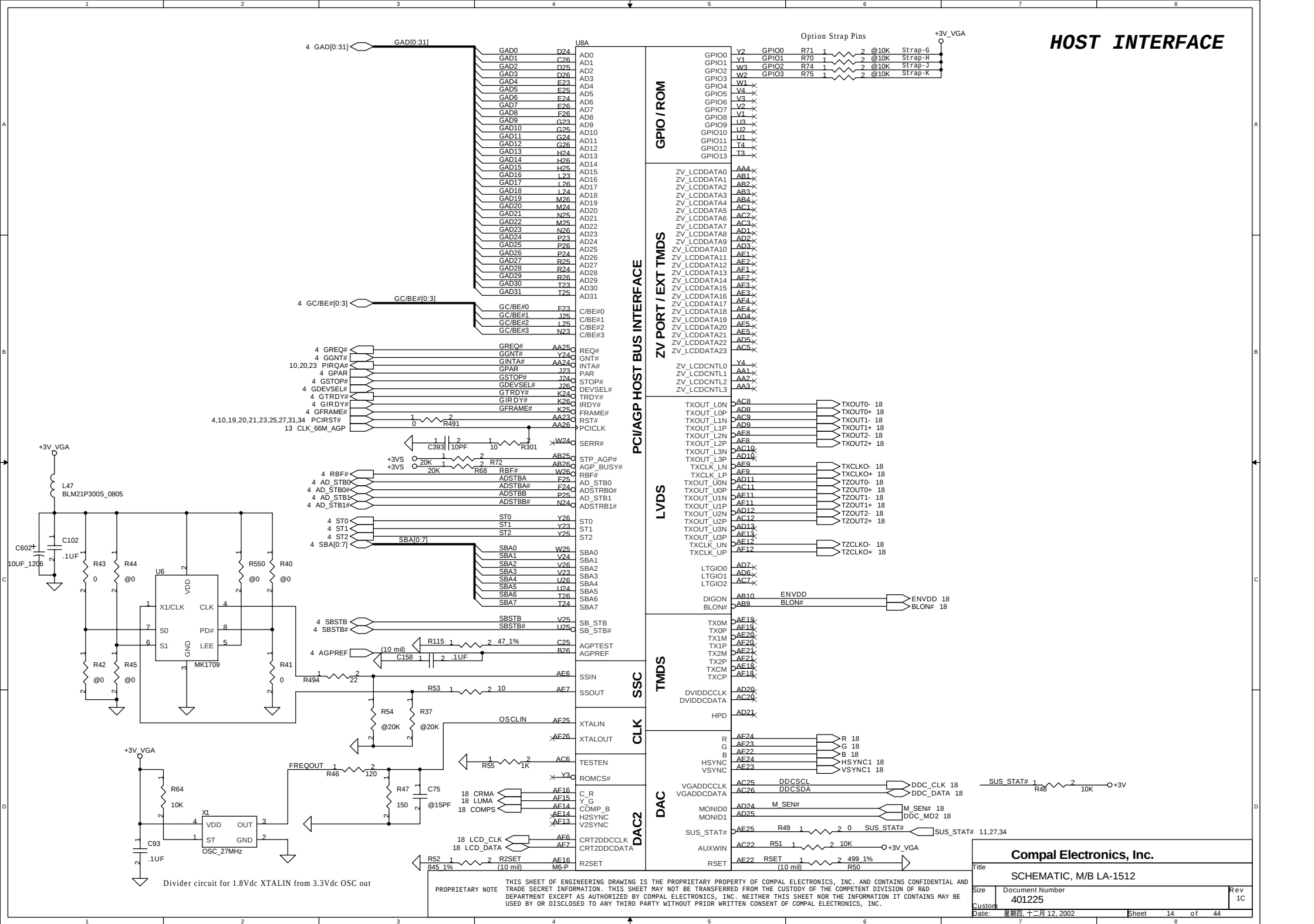


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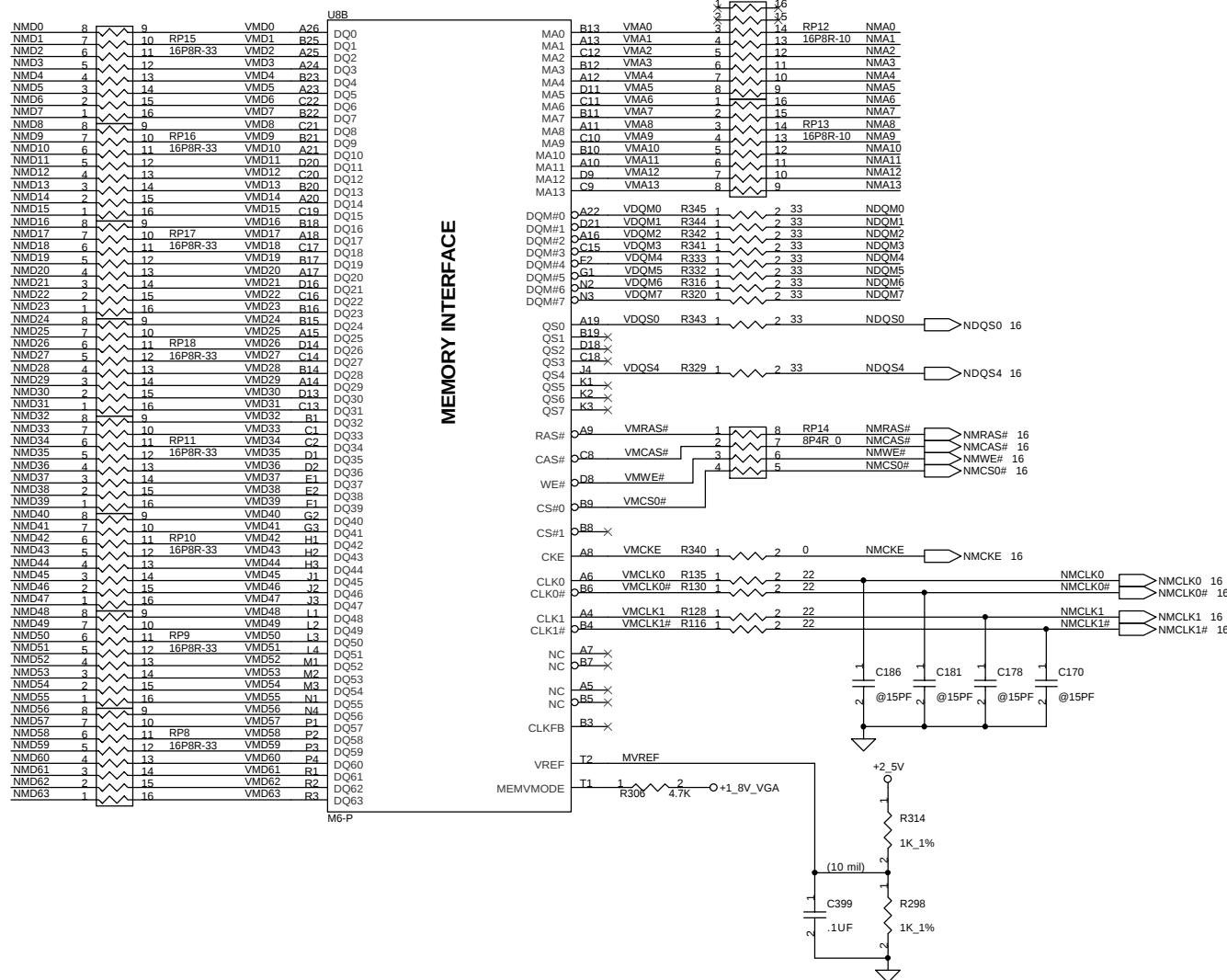
SEL2	SEL1	SEL0	CPUCLK[0..2]	CPUCLKT[0..2]
0	0	0	66.67	66.67
0	0	1	100.00	100.00
0	1	0	200.00	200.00
0	1	1	133.33	133.33





MEMORY INTERFACE

NMD[0:63] 16
NMA[0:13] 16
NDQM[0:7] 16



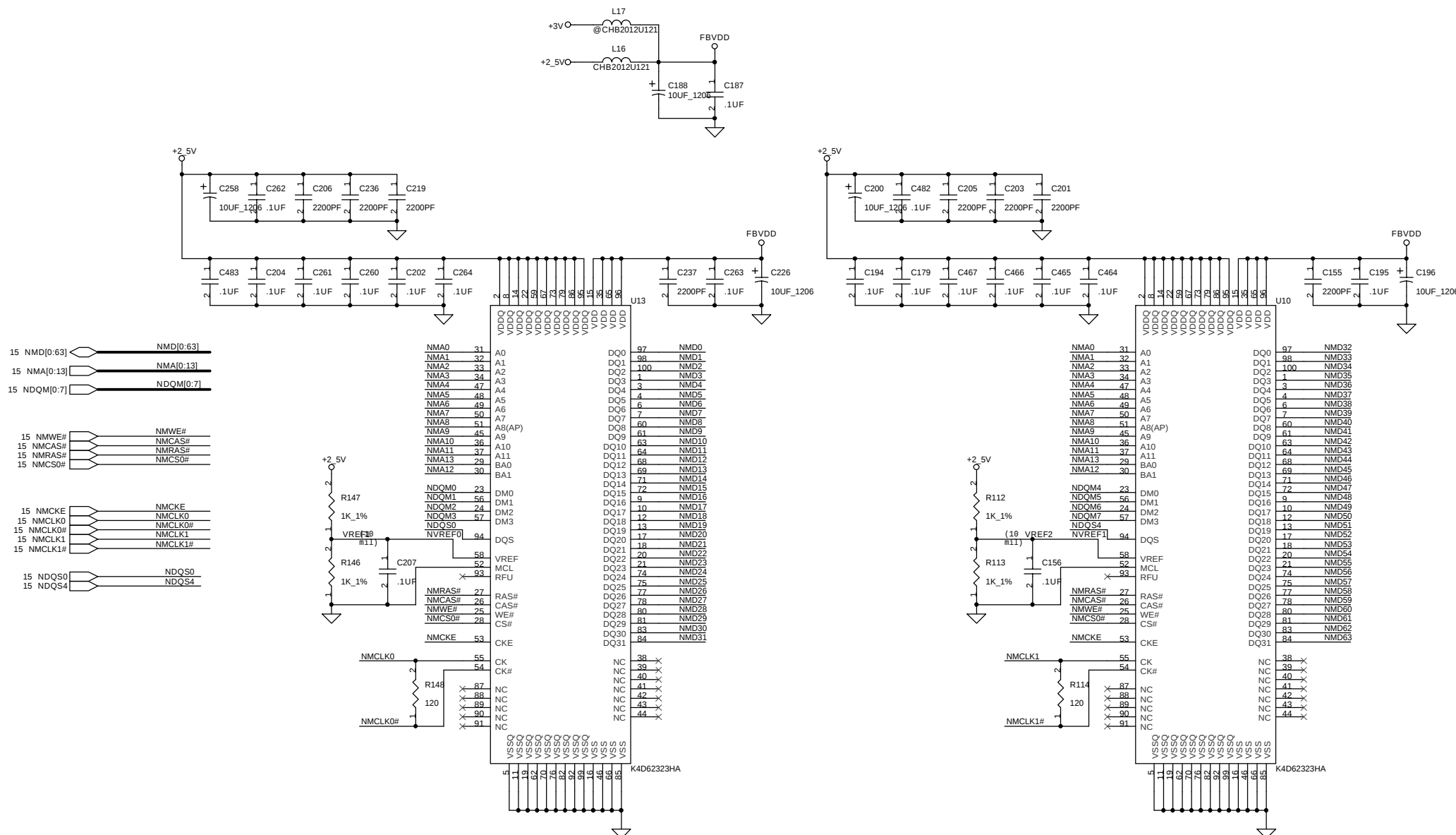
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DDR SDRAM



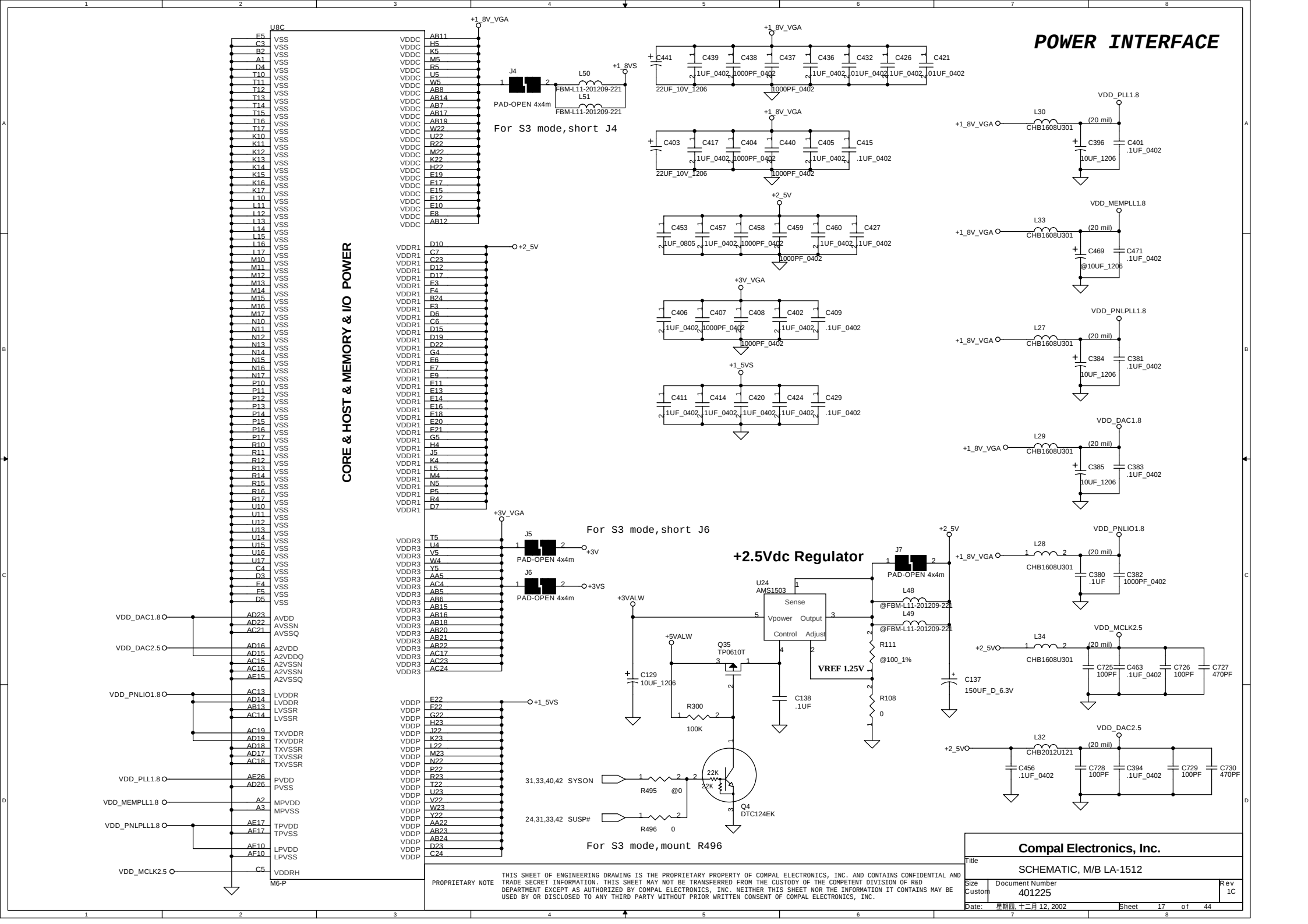
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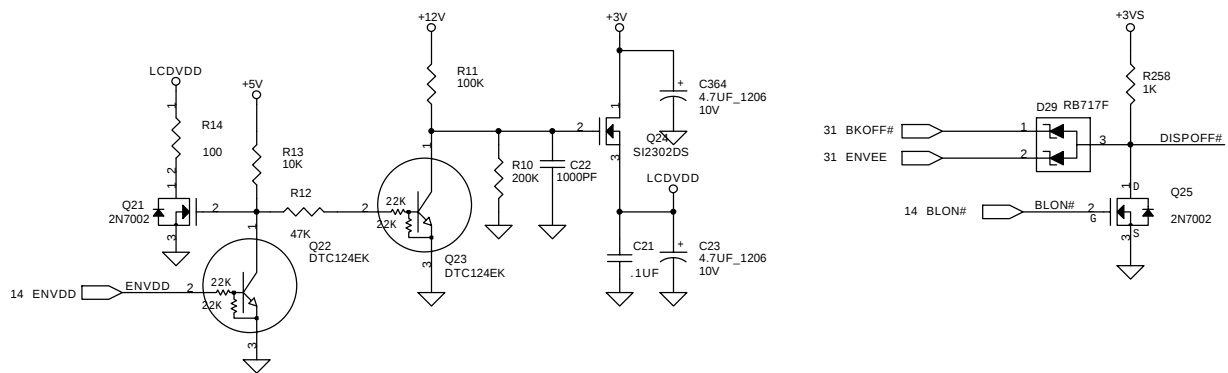
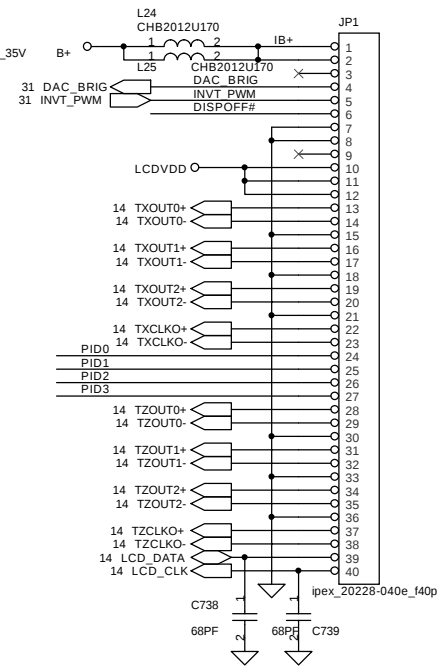
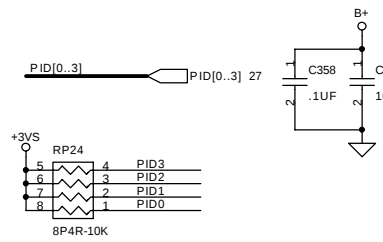
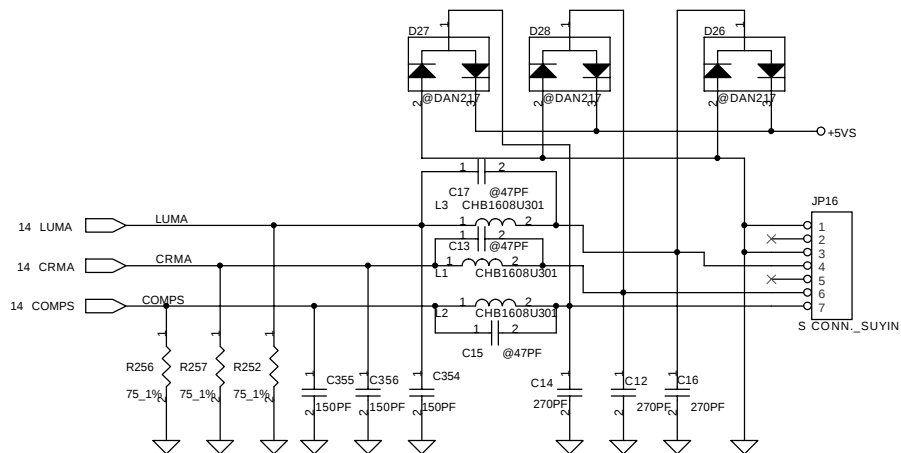
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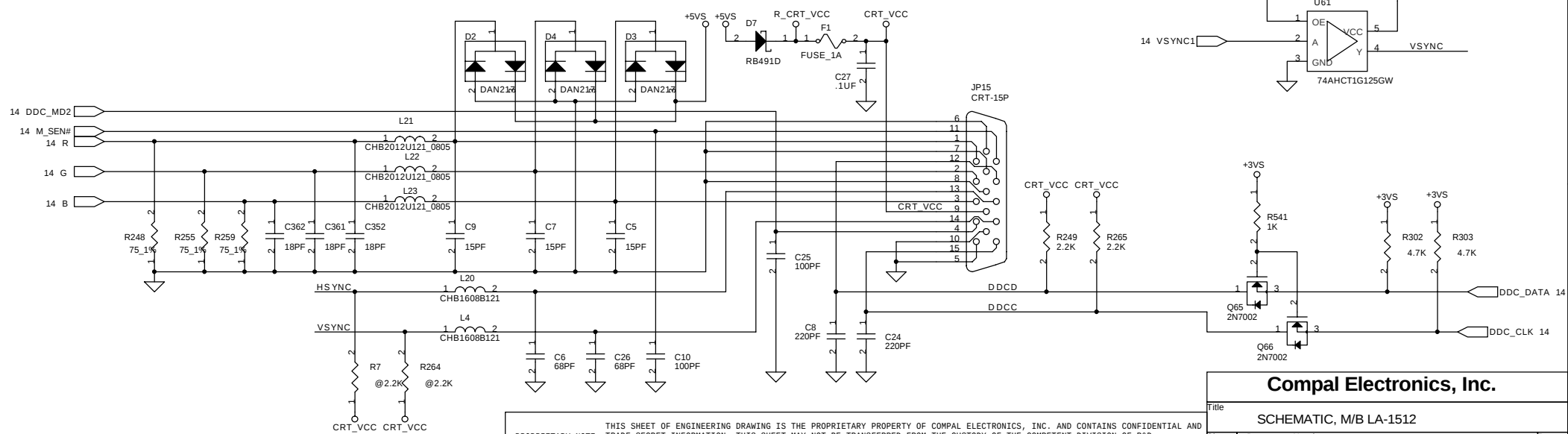
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CRT Connector



Compal Electronics, Inc.

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CardBus Controller OZ6933T (uBGA)

S1_IOWR#
S1_IORD#
S1_OE#
S1_CE2#

10,19,23 AD[0..31]

AD31 E1
AD30 E2
AD29 E3
AD28 F1
AD27 G5
AD26 H6
AD25 G2
AD24 G3
AD23 H2
AD22 H1
AD21 J1
AD20 J2
AD19 J3
AD18 J6
AD17 K1
AD16 K2
AD15 M5
AD14 N2
AD13 N1
AD12 N3
AD11 N6
AD10 P1
AD9 P3
AD8 P6
AD7 P8
AD6 R2
AD5 R3
AD4 R4
AD3 W4
AD2 R6
AD1 U5
AD0 P7

O₂ MICRO
CARDBUS CONTROLLER
OZ6933 209PIN CSP

PCI

10,19,23 C/BE#3
10,19,23 C/BE#2
10,19,23 C/BE#1
10,19,23 C/BE#0

13 PCLK_PCM
10,19,23 DEVSEL#
10,19,23 FRAME#
10,19,23 IRDY#
10,19,23 TRDY#
10,19,23 STOP#
10,19,23 PERR#
10,19,23 SERR#
10 REQ#3
10 GNT#3
10,14,23 PIRQA#
10 PIRQB#
10 PLOCK#
4,10,14,19,21,23,25,27,31,34 PCIRST#

31 PCM_PME#
11,19,23,27,31 CLKRUN#
31 RING#
30 PCM_SPK#
32 PCM1_LED
32 PCM2_LED
10,27,31 SIRQ

CLK_PCI_CB

R534

@33

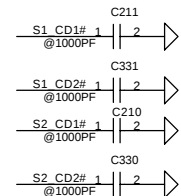
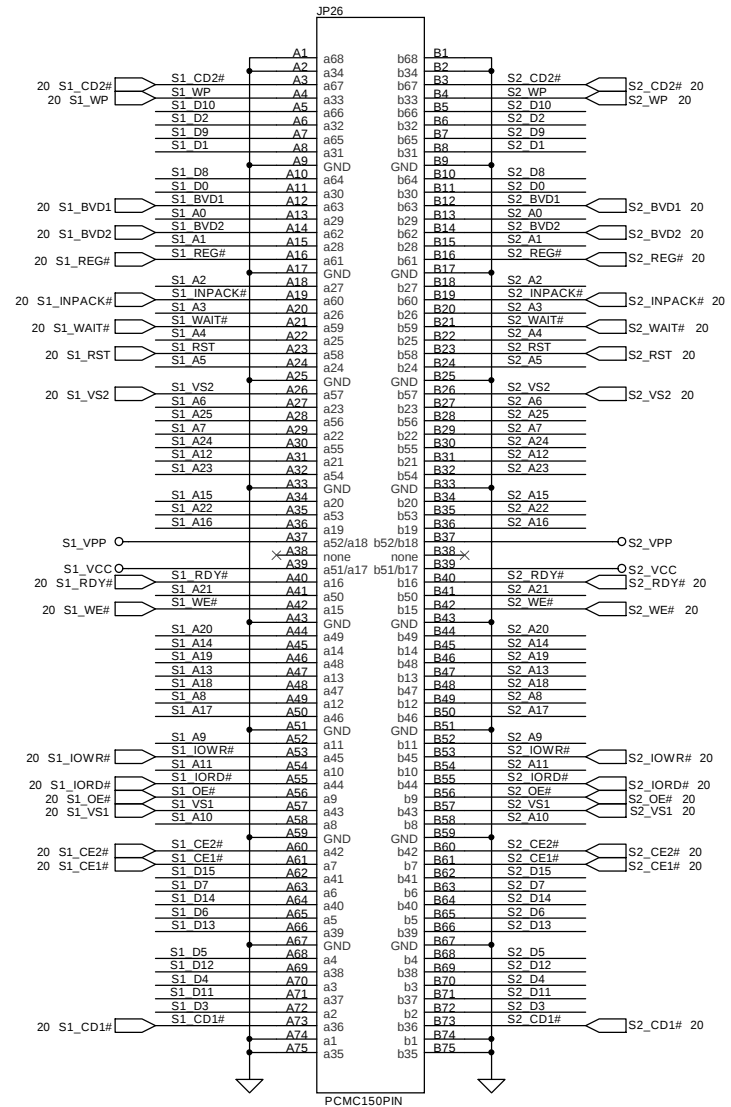
C649

@10PF

CardBus-OZ6933T-1

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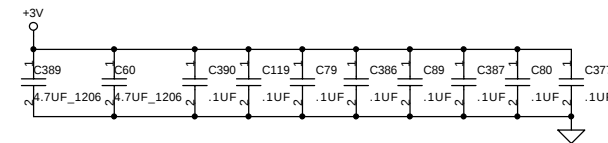
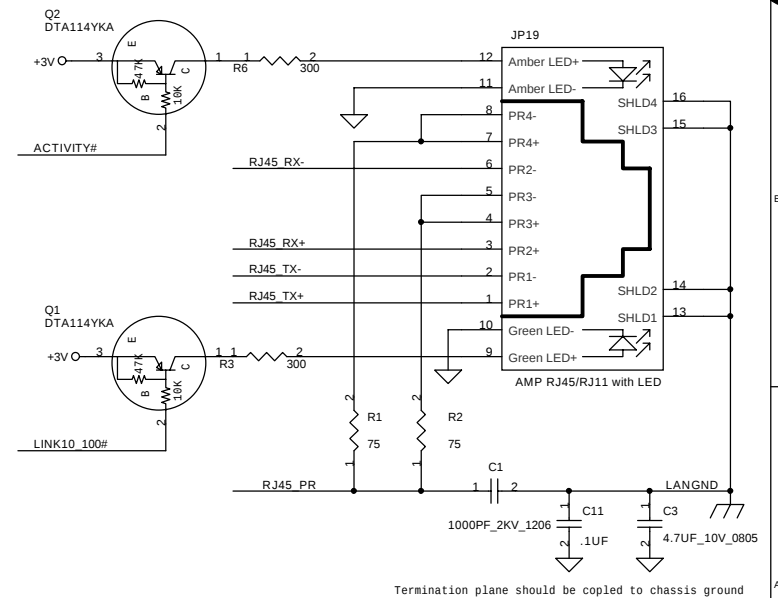
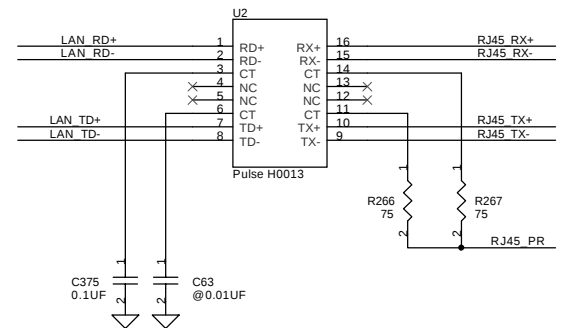
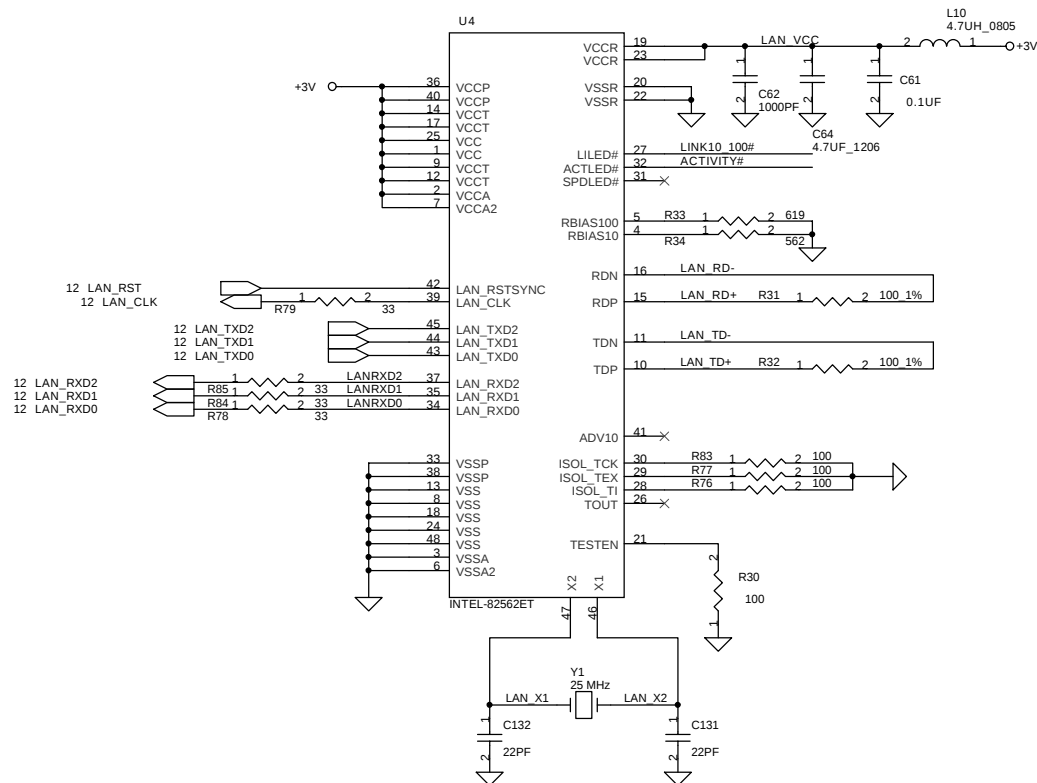
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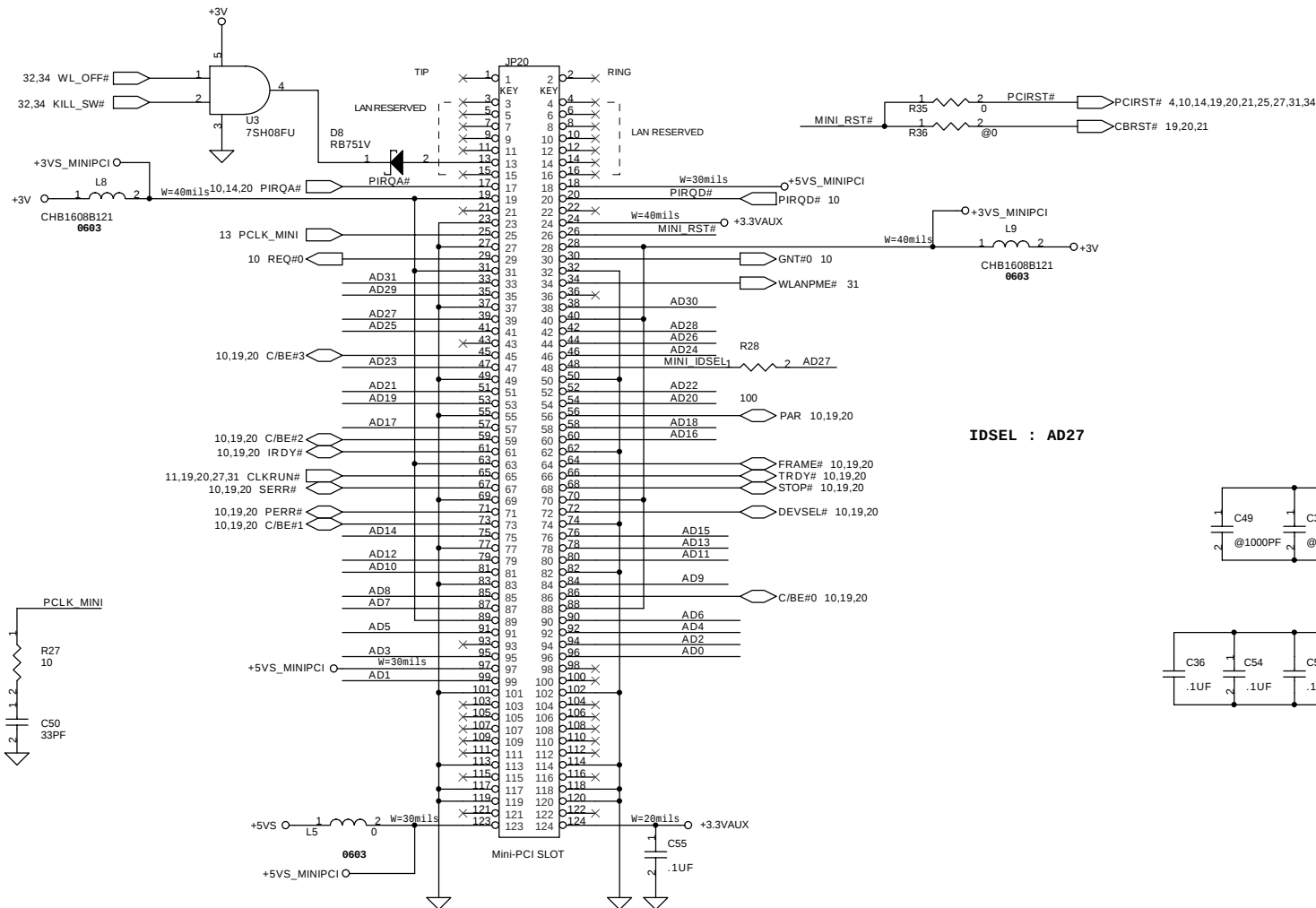
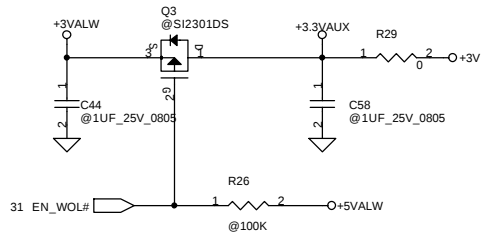
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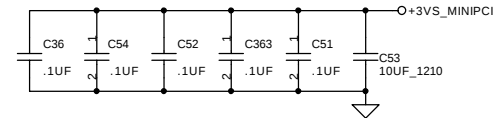
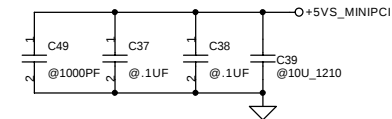
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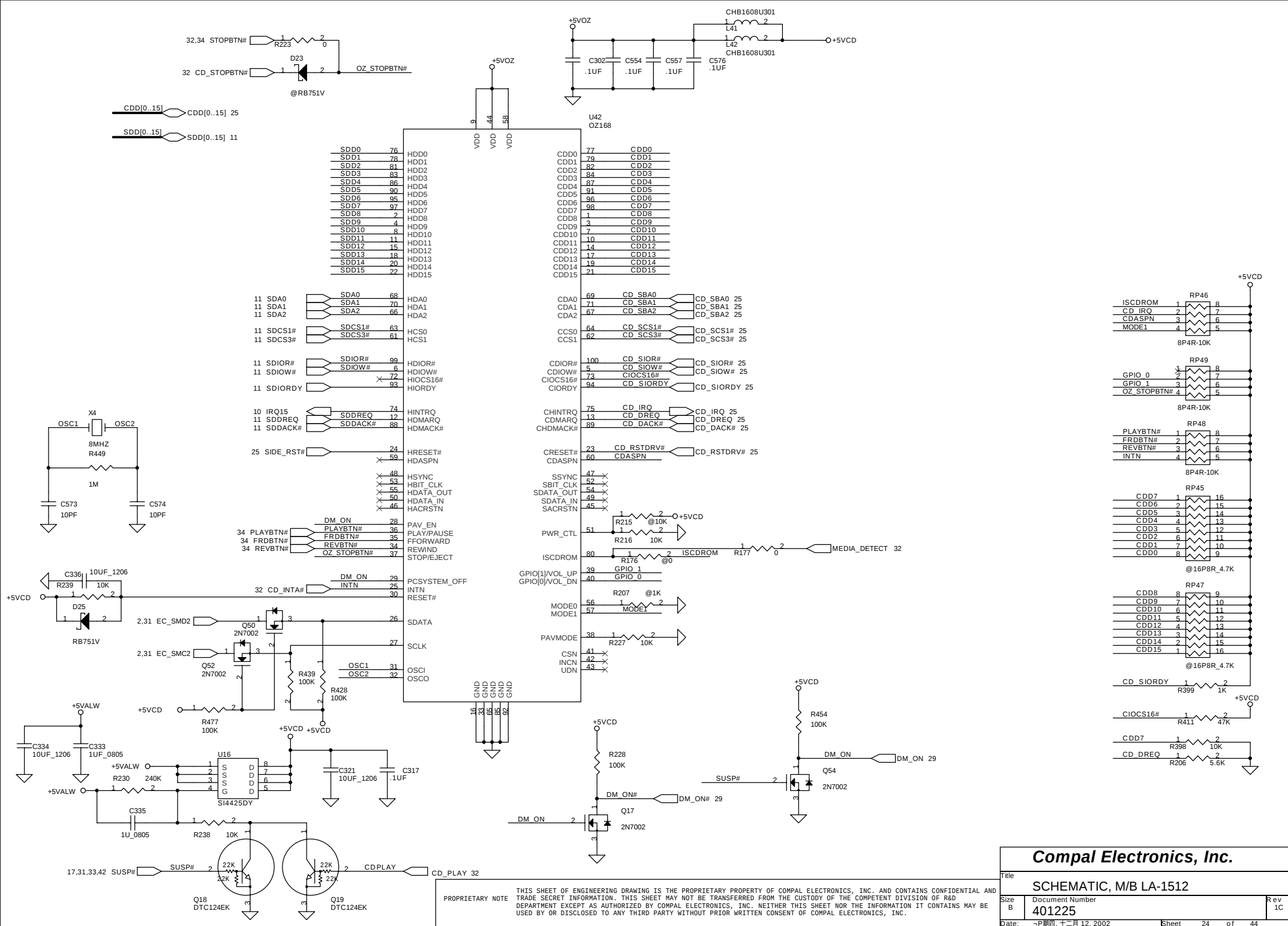


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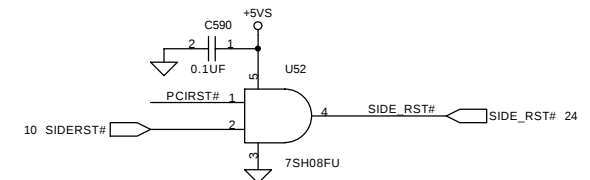
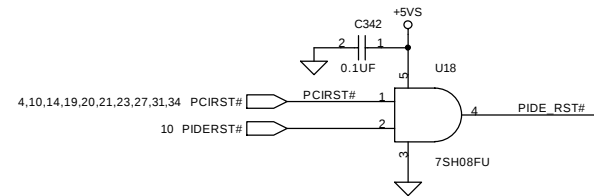
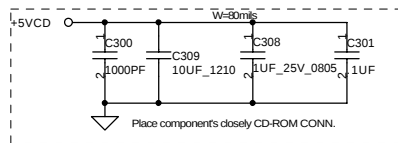
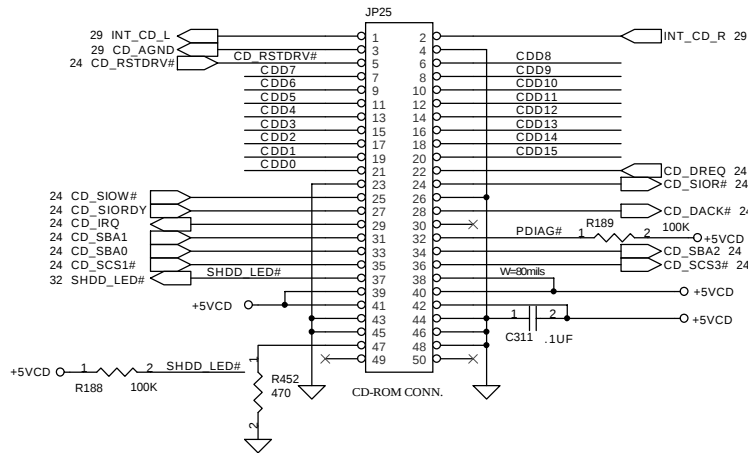
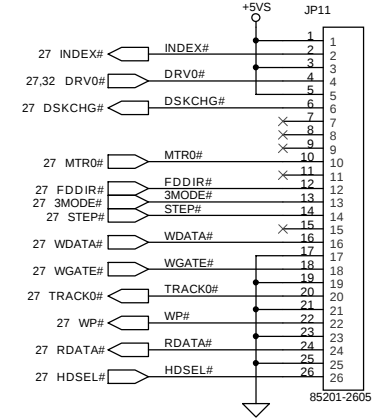
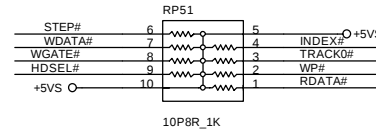
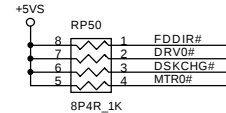
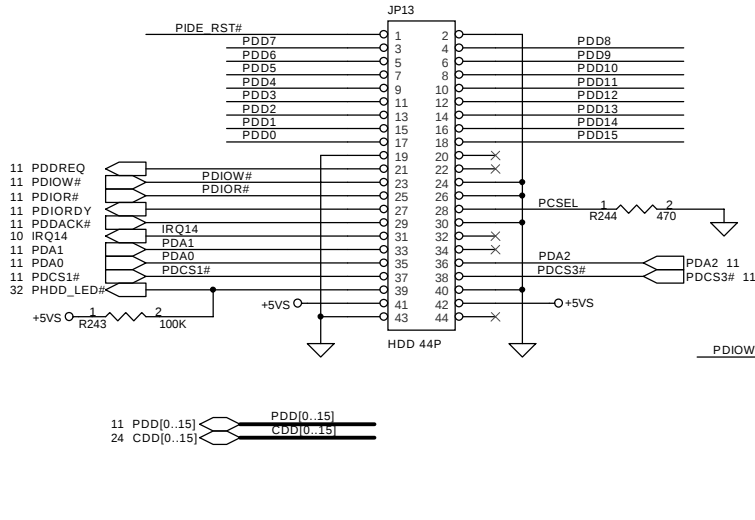
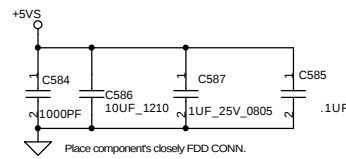
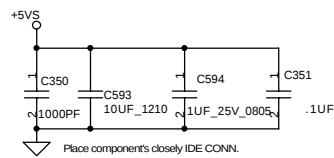
Compal Electronics, Inc.

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IDE,CD-ROM Module CONN.



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Title
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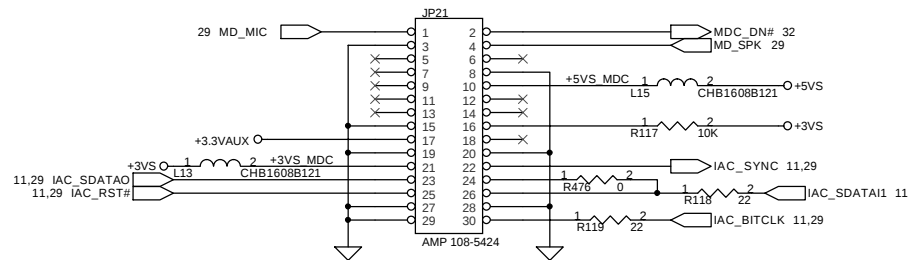
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Rev
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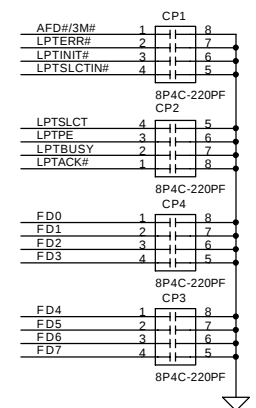
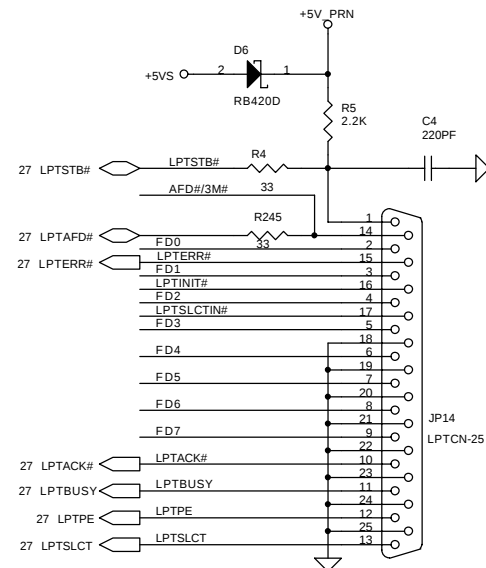
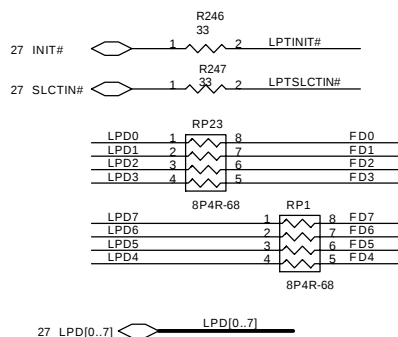
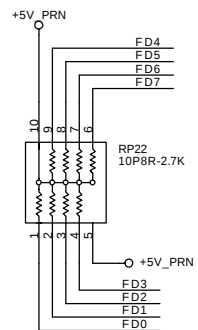
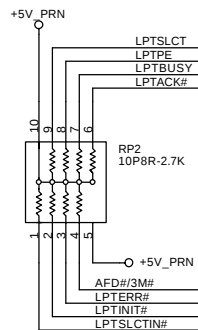
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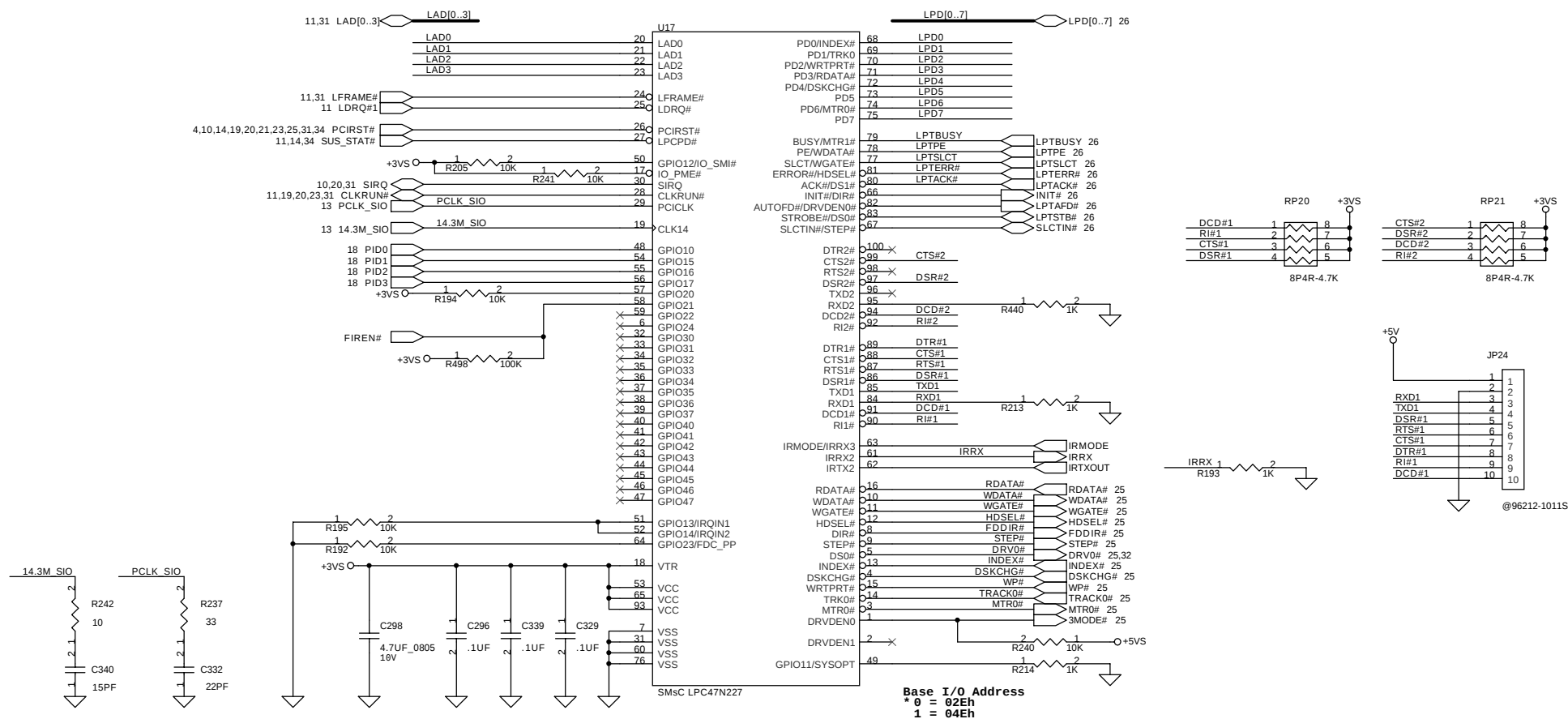


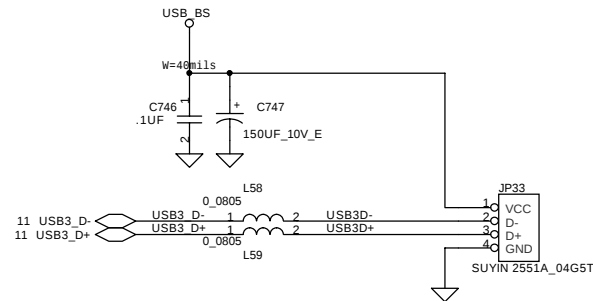
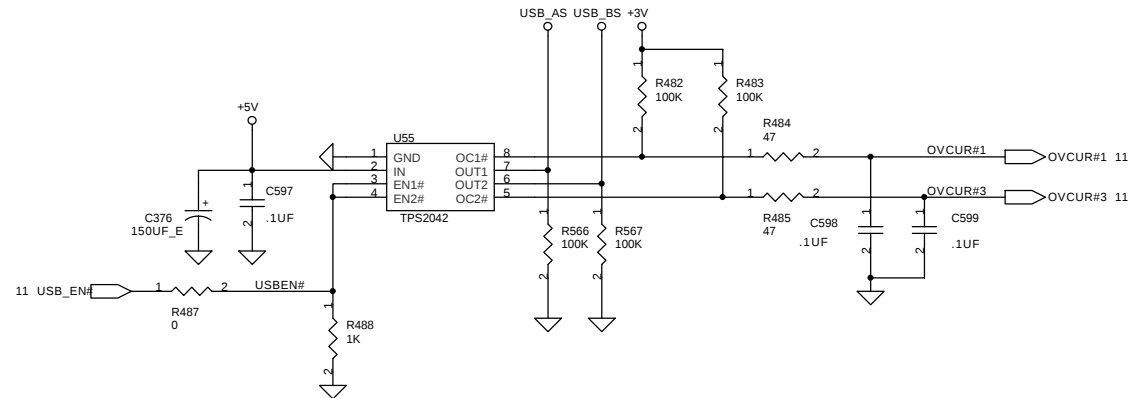
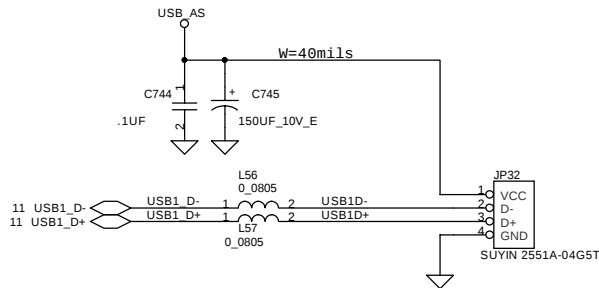
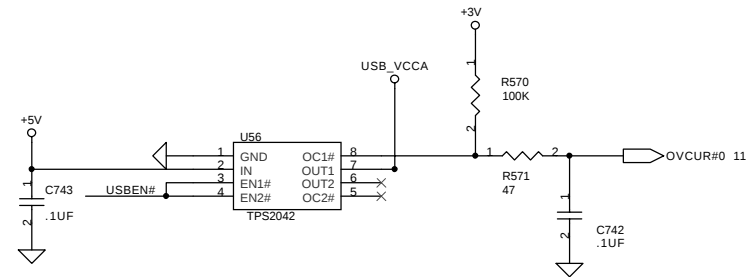
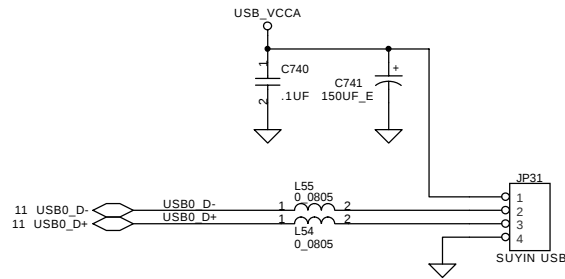
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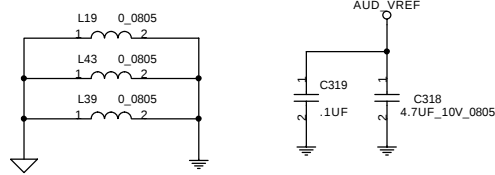
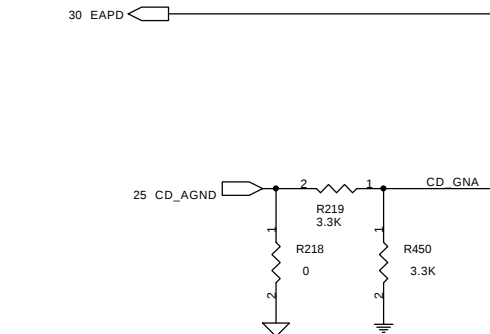
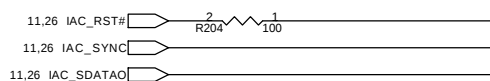
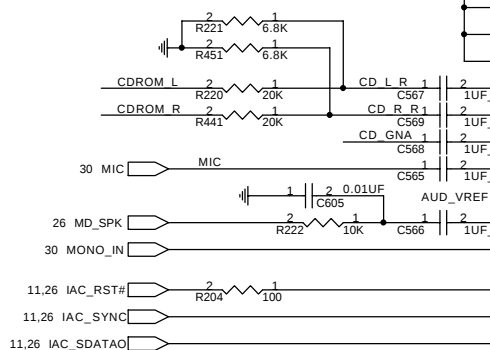
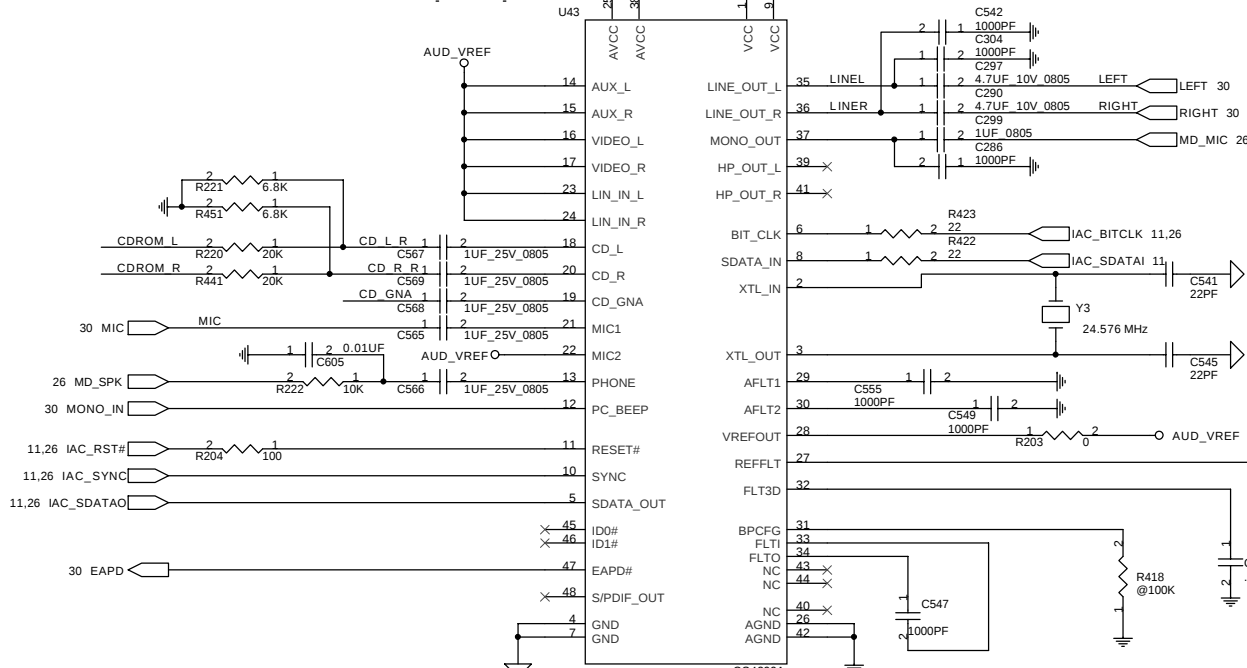
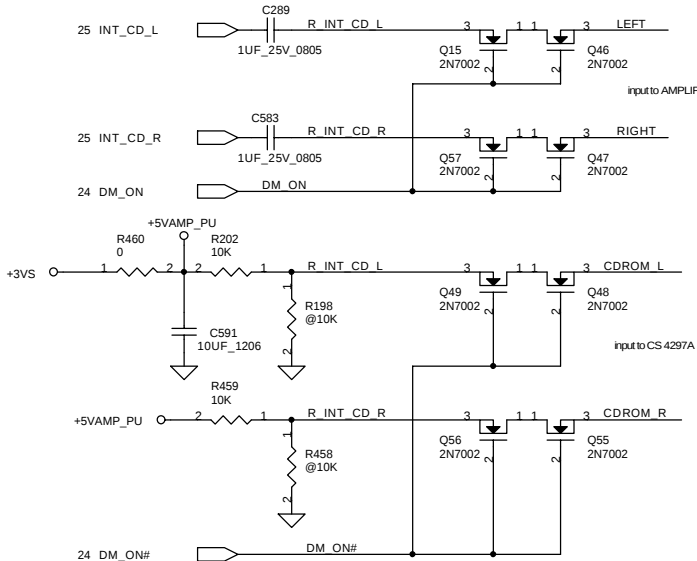
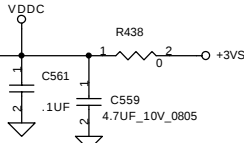
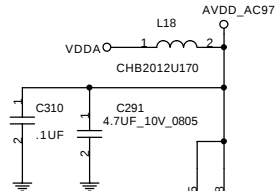
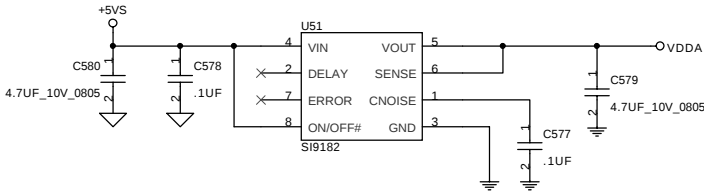


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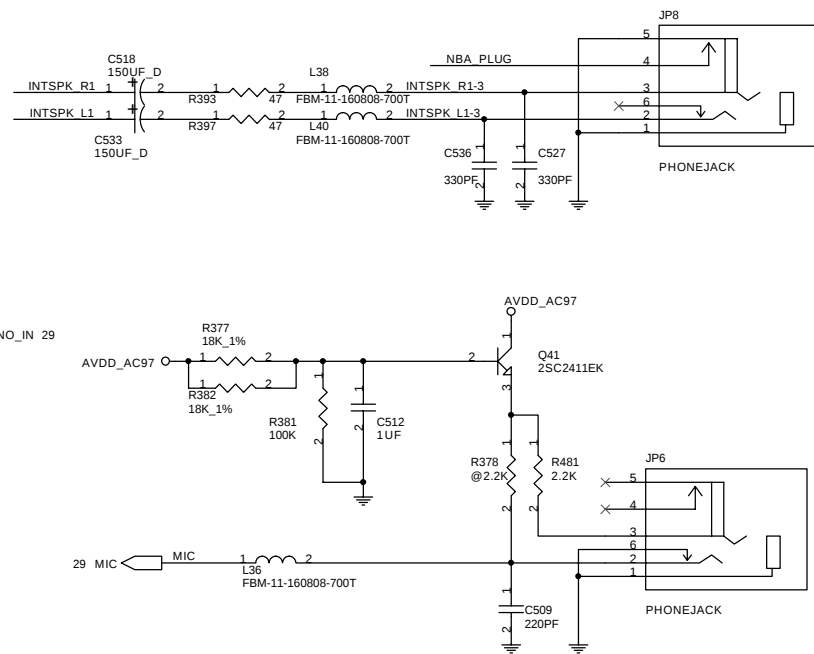
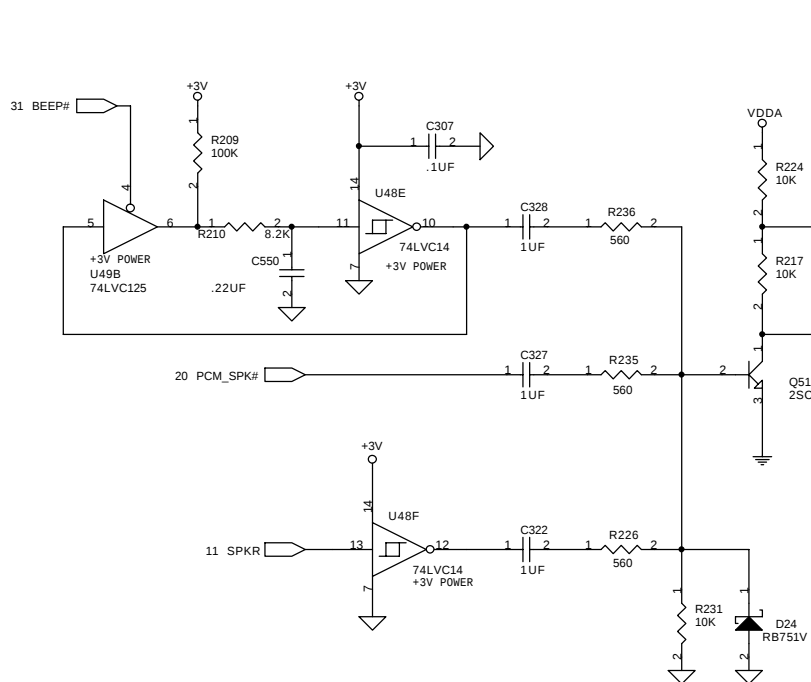
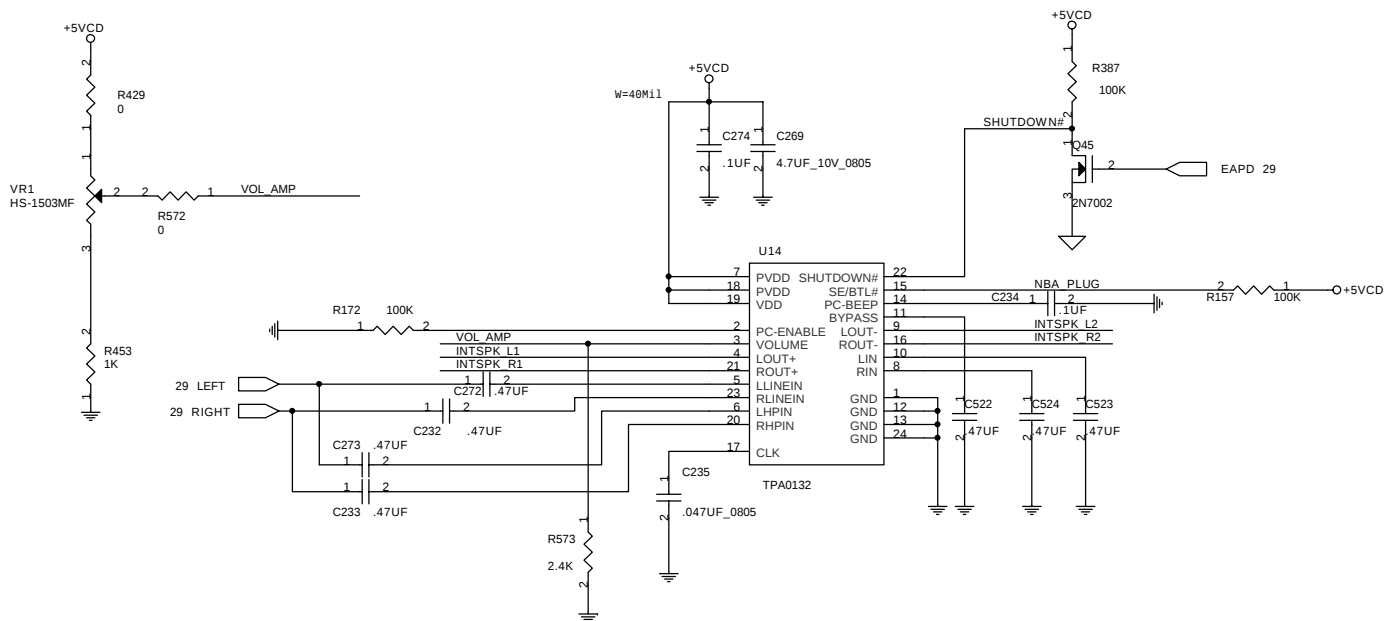
AC97 Codec



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AMP & Audio Jack

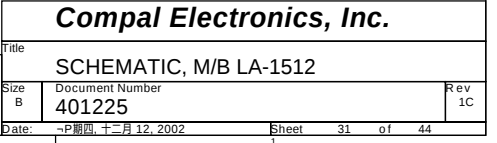


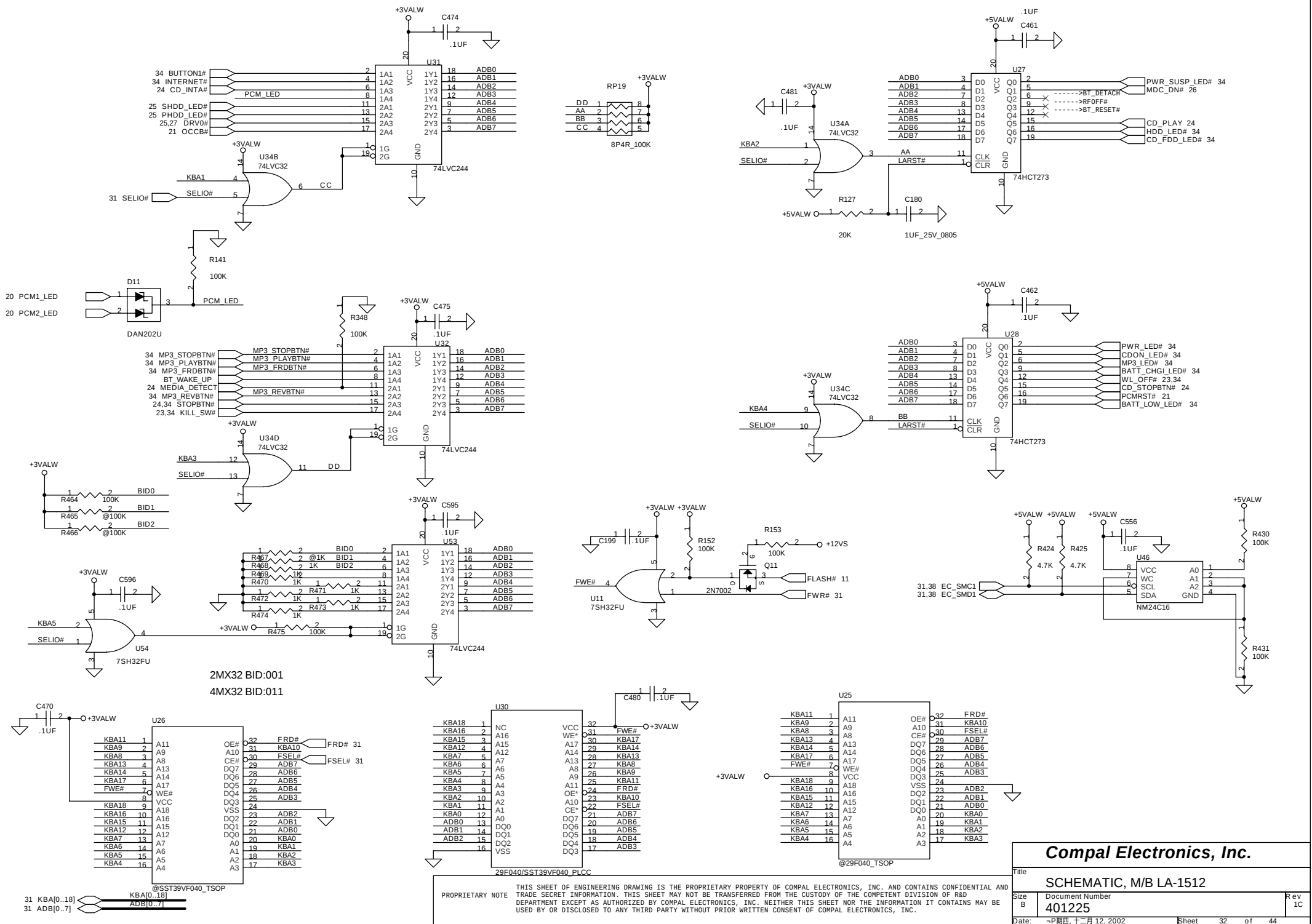
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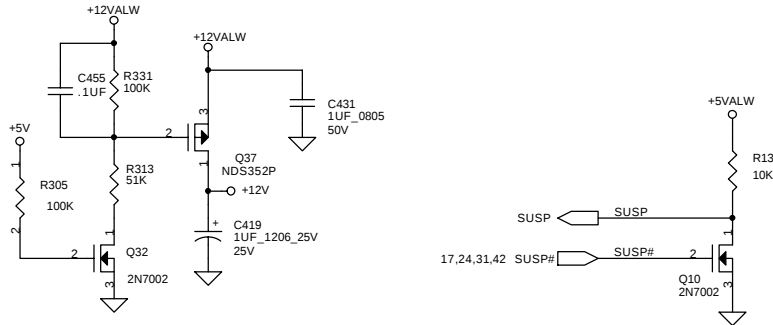
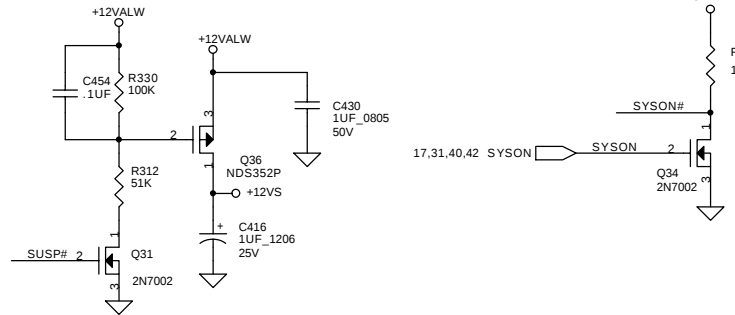
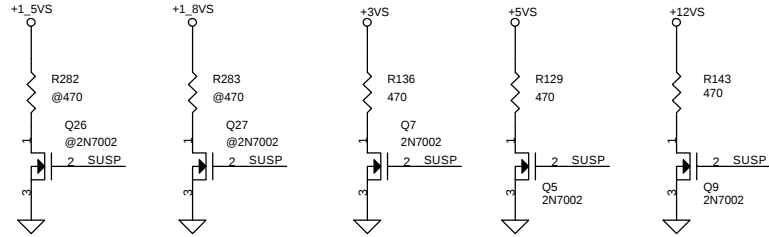
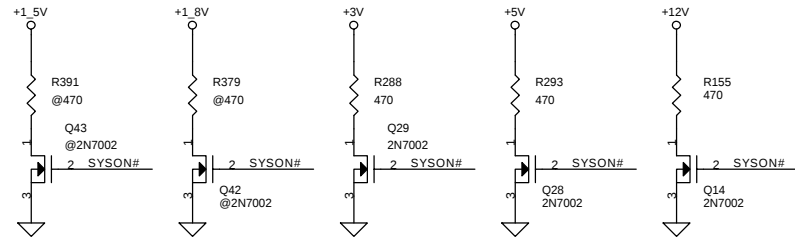
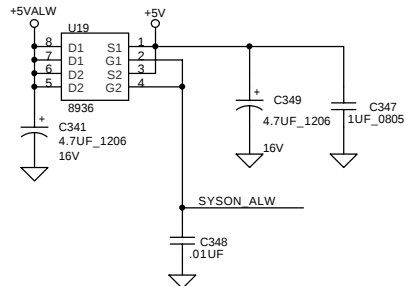
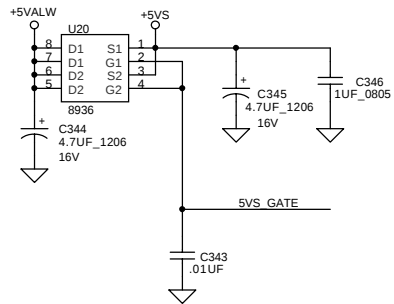
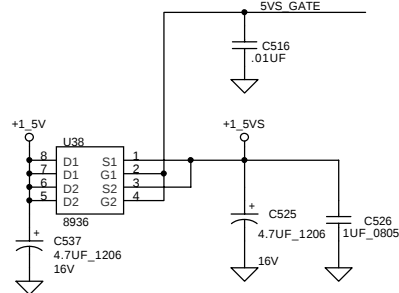
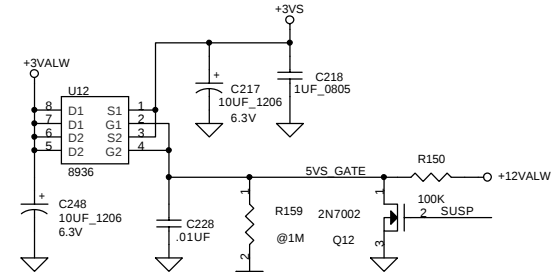
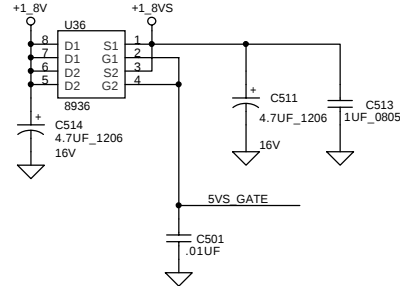
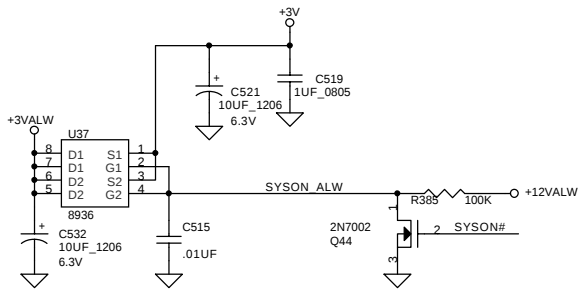
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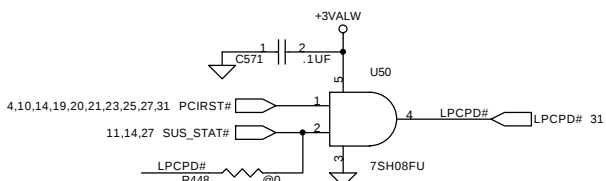
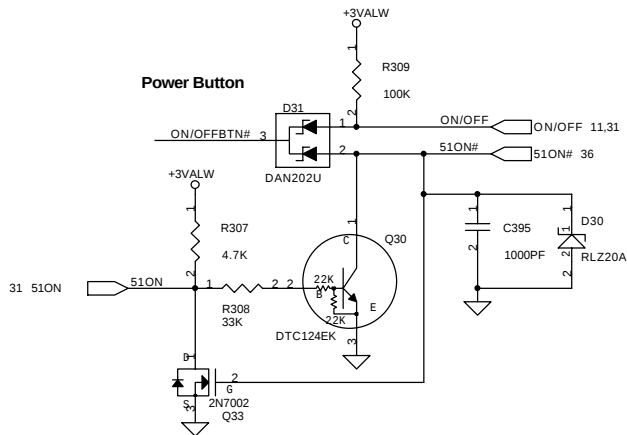
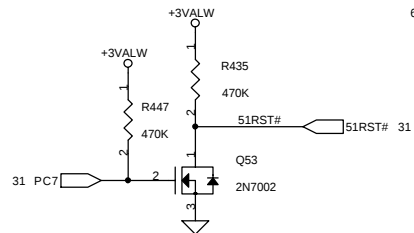
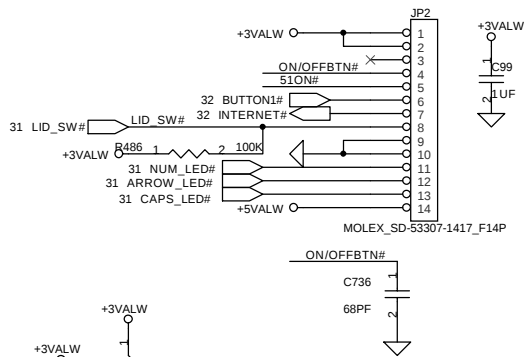




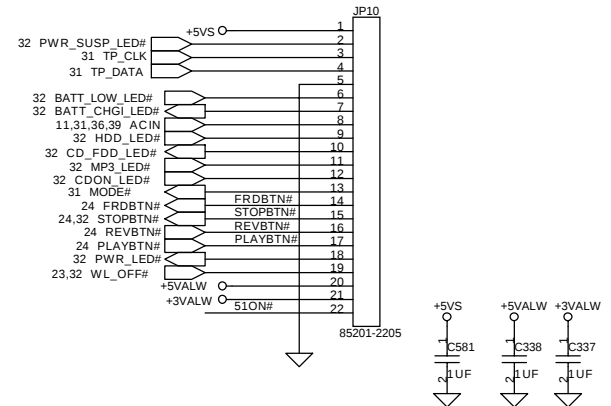
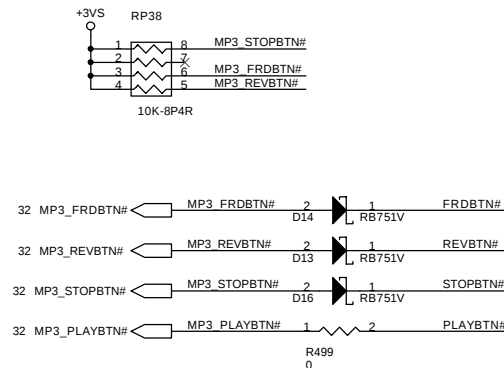
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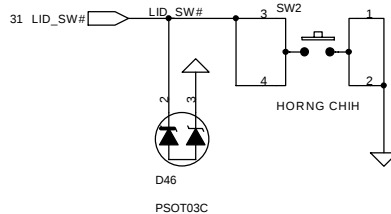
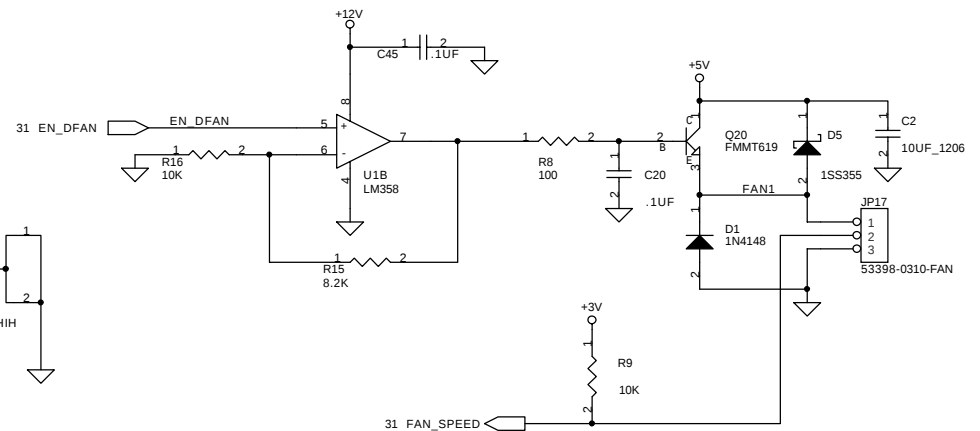
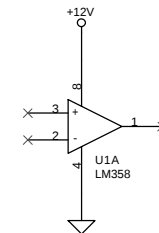
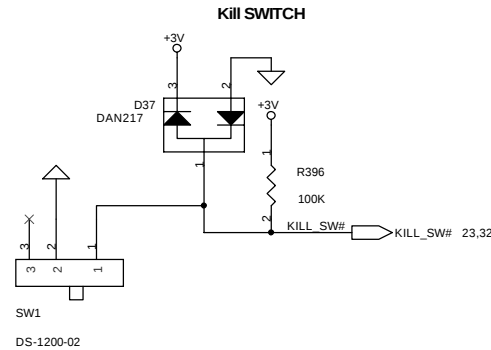
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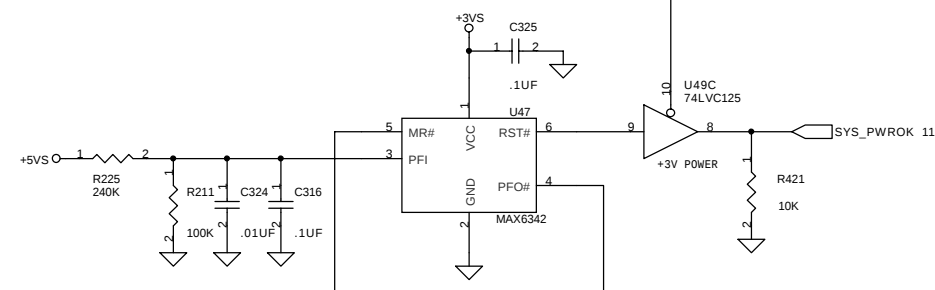
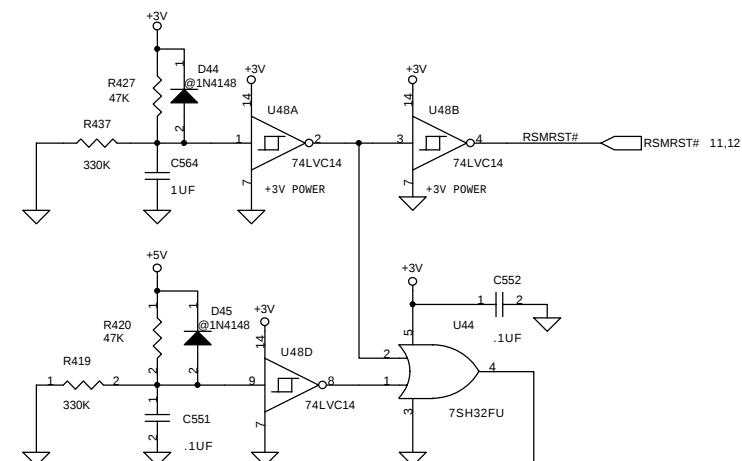
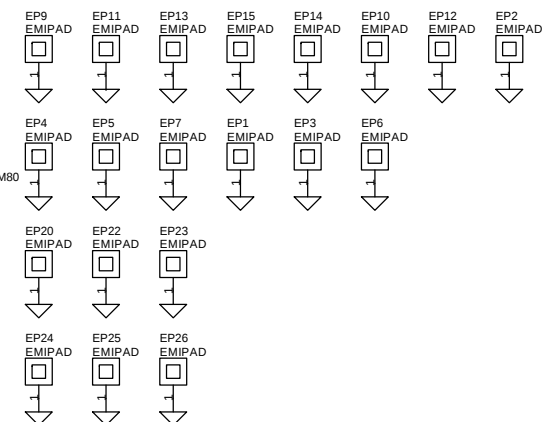
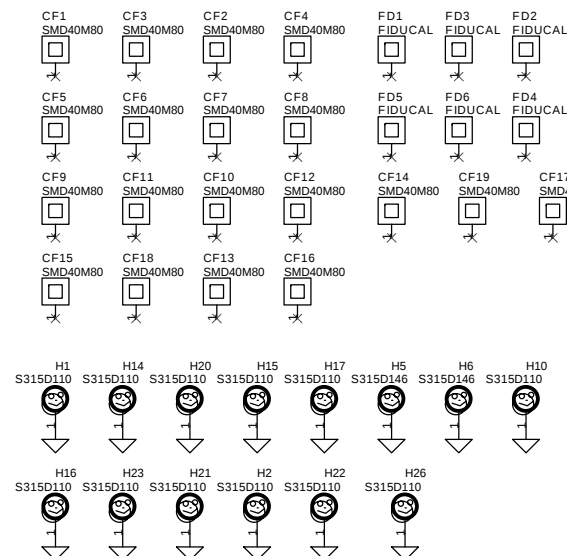
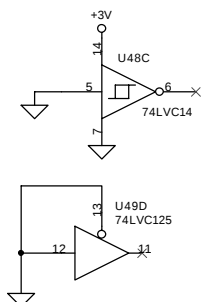
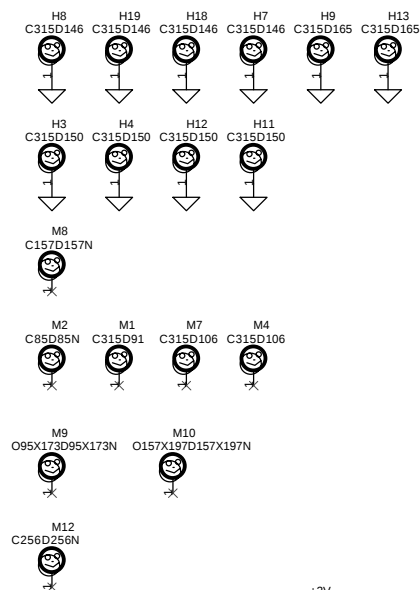
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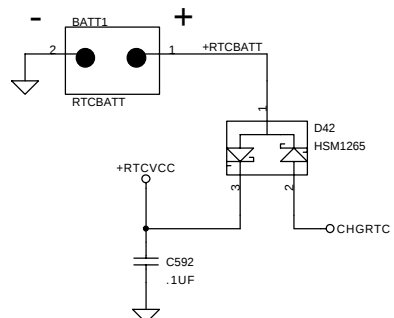
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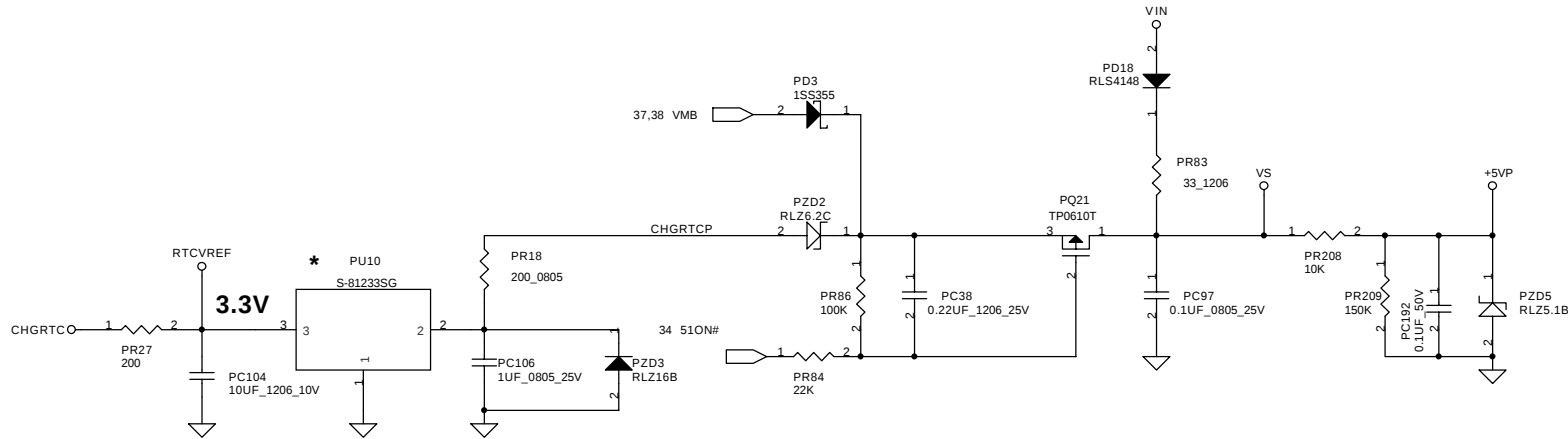
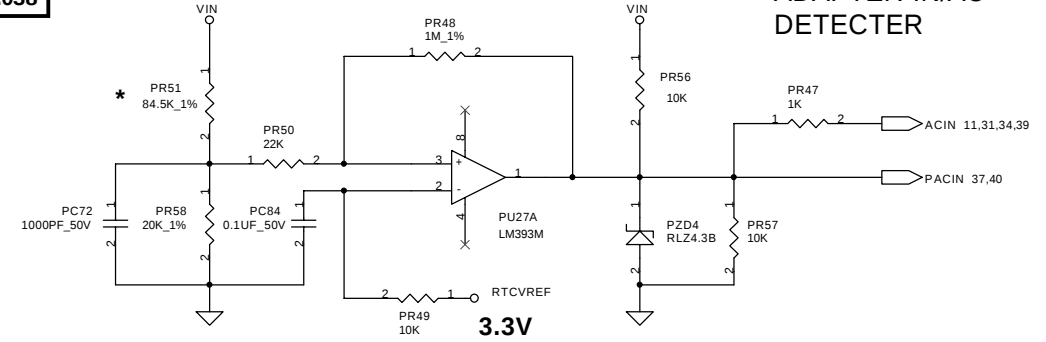
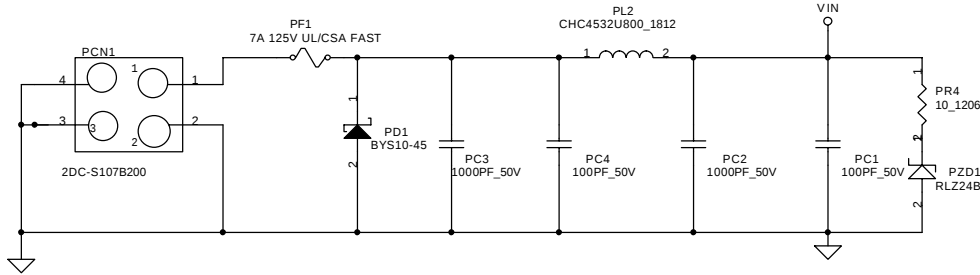


RTC BATT



Vin Detector

High 18.764 17.901 17.063
Low 17.745 16.903 16.038



+1.8VP 1 2 1_8V (3A,120mils ,Via NO.= 6)
3MMA

+12VALWP 2 1 12VALW (120mA,20mils ,Via NO.= 1)
JOPEN/+12V

+5VALWP 1 2 5VALW (5A,200mils ,Via NO.= 10)
PAD-OPEN 4x4m

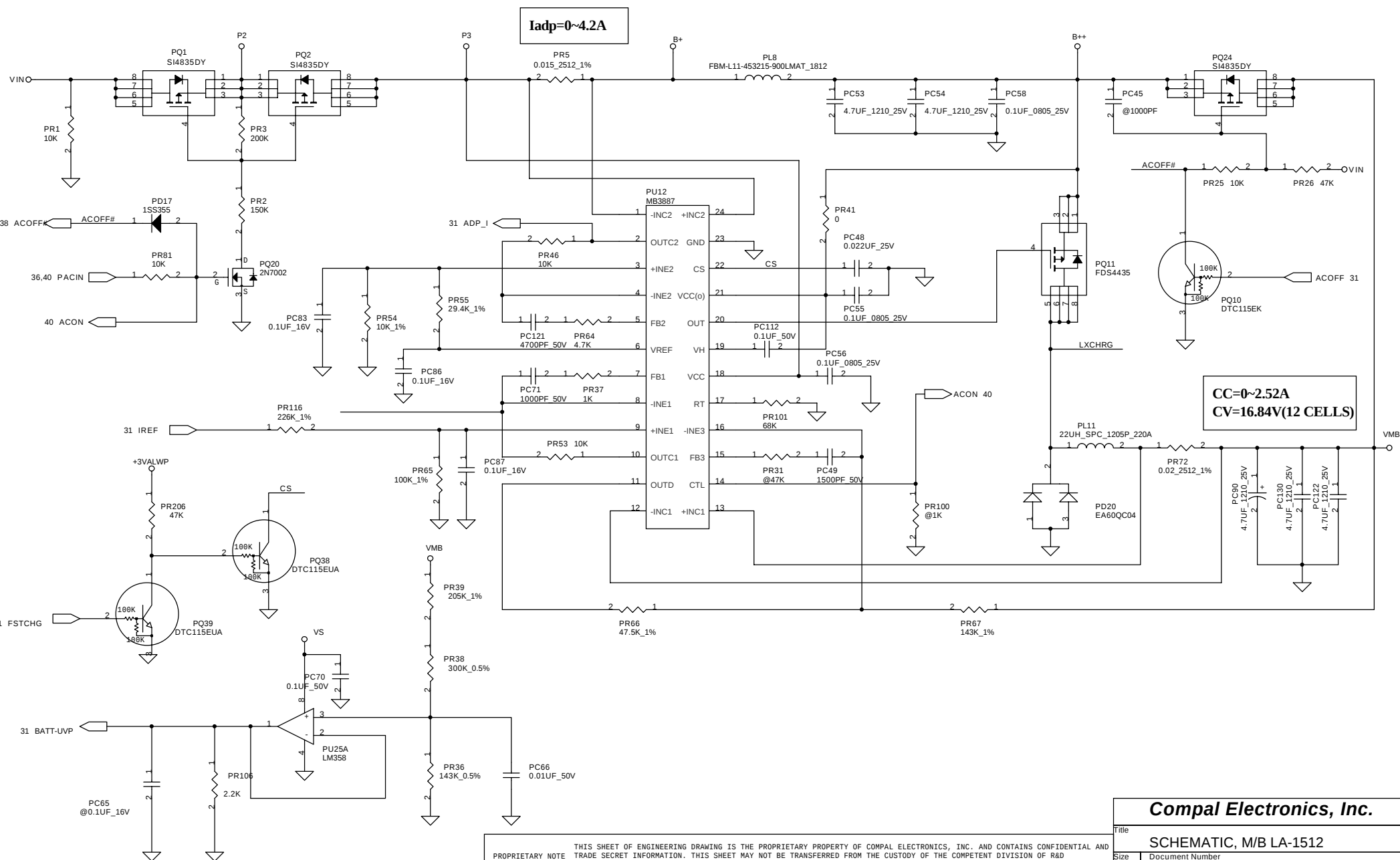
+3VALWP 1 2 3VALW (5A,200mils ,Via NO.= 10)
PAD-OPEN 4x4m

+1.5VP 2 1 1_5V (3A,120mils ,Via NO.= 6)
3MMA/CPU_IO

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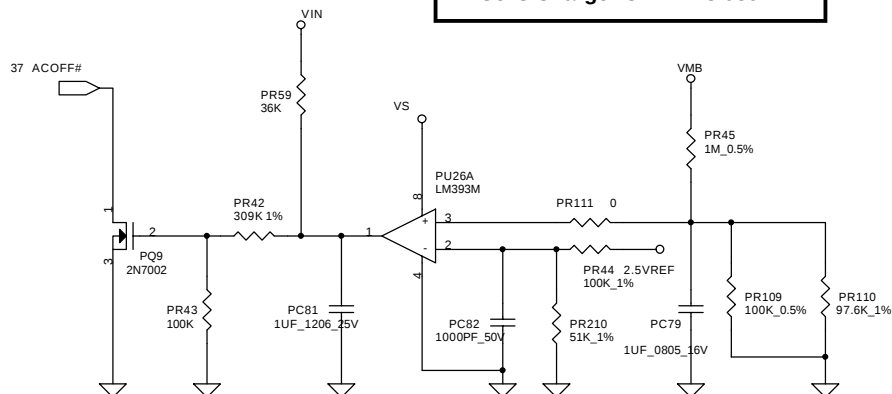
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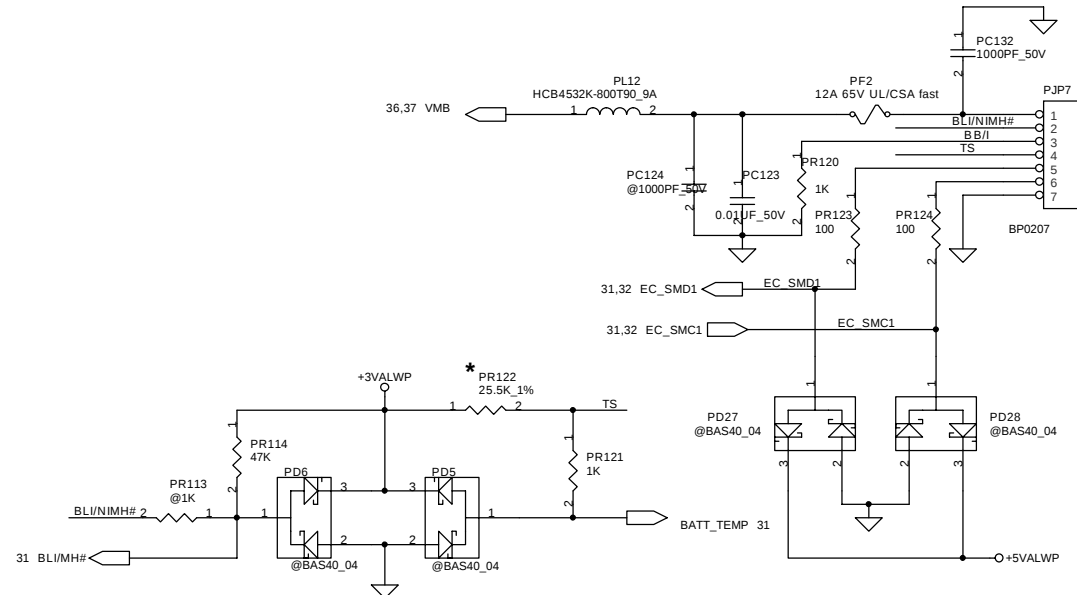
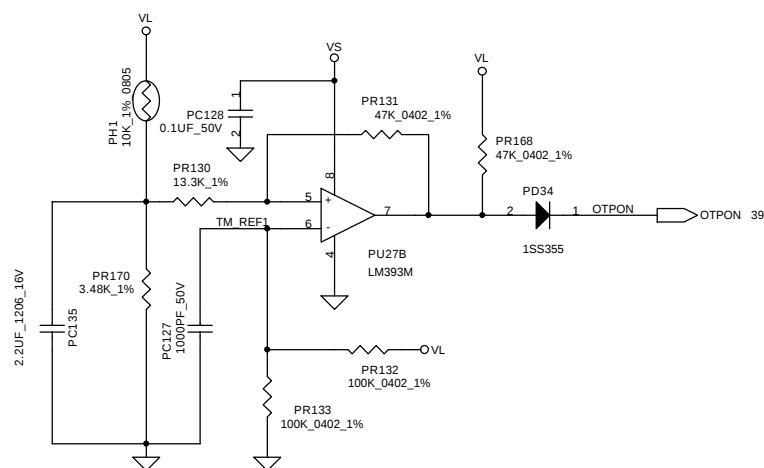
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12 Cells Charger OVP : 18.059V



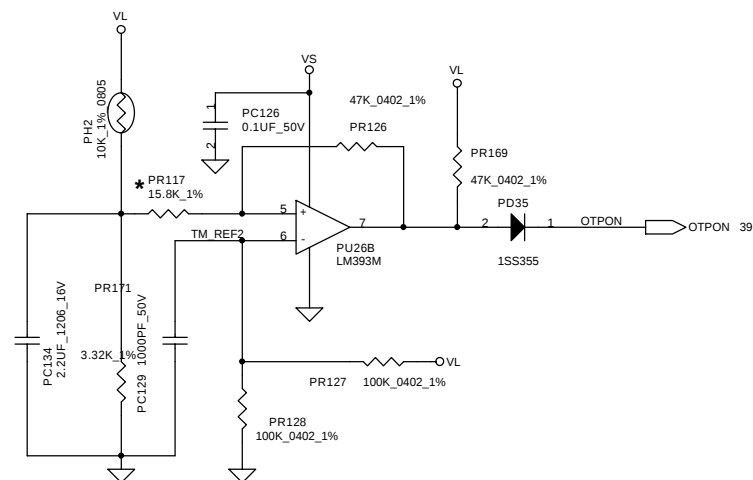
PH1 under CPU botten side :

CPU thermal protection at 76 degree C
Recovery at 45 degree C



PH2 near main Battery CONN :

BAT. thermal protection at 82 degree C
Recovery at 45 degree C

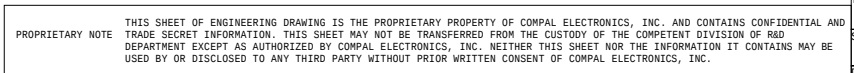


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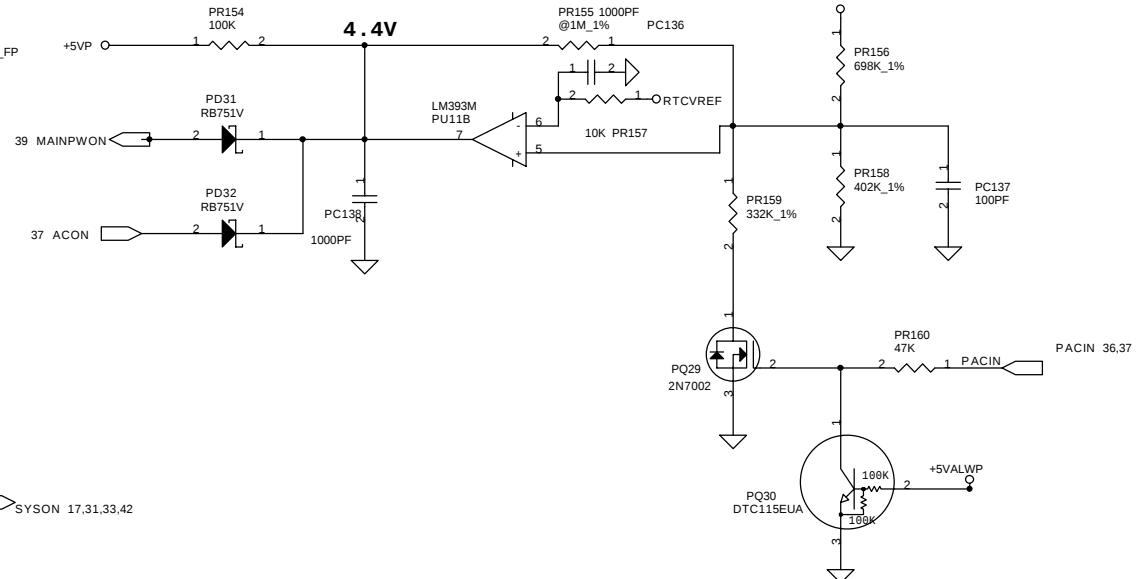
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Size	Document Number	Rev	
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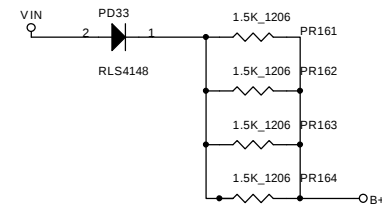
+5V I_{peak} = 6.66A ~ 10A



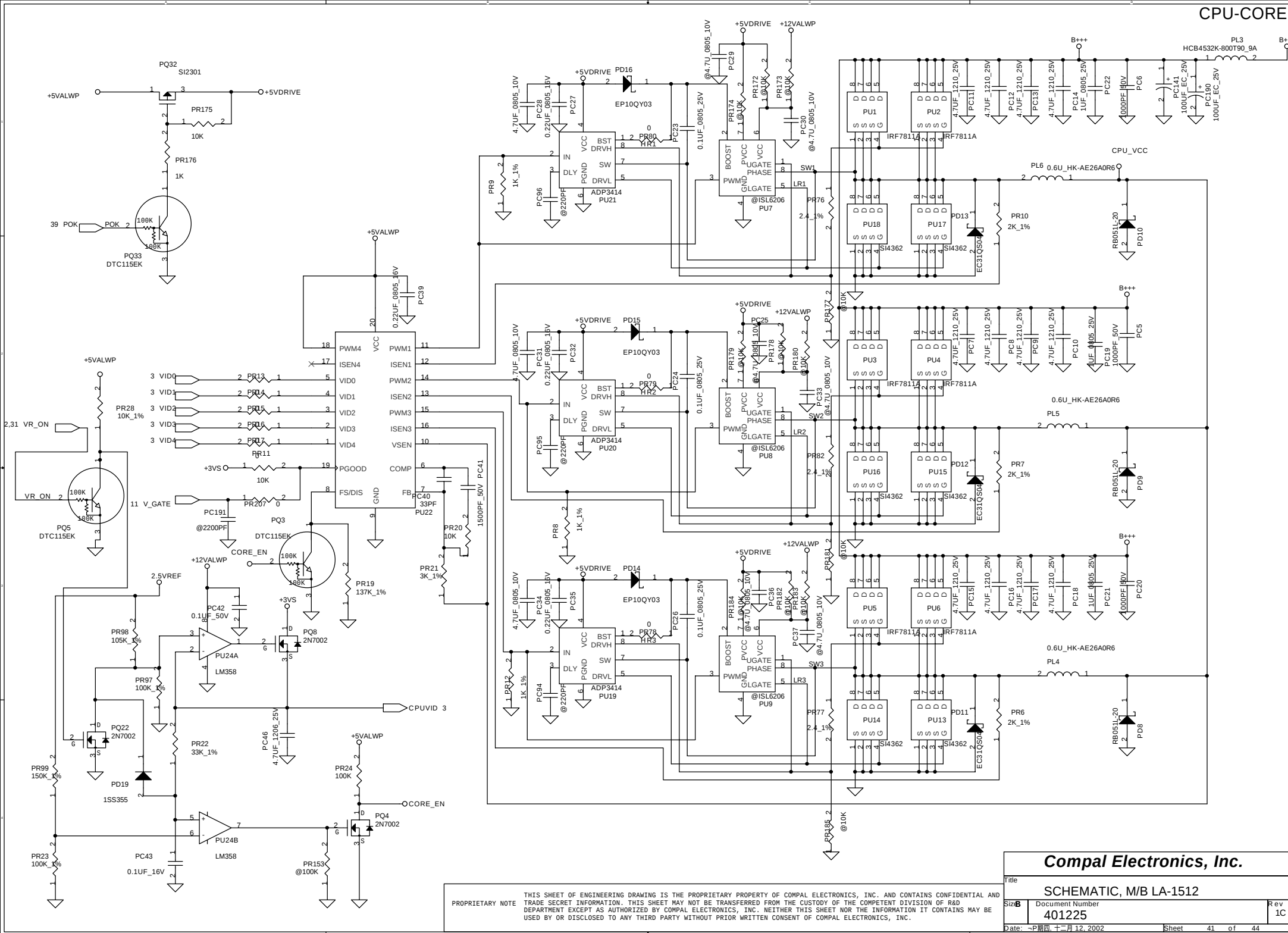
+1.8VP+-5%



+1.5VS+-5%



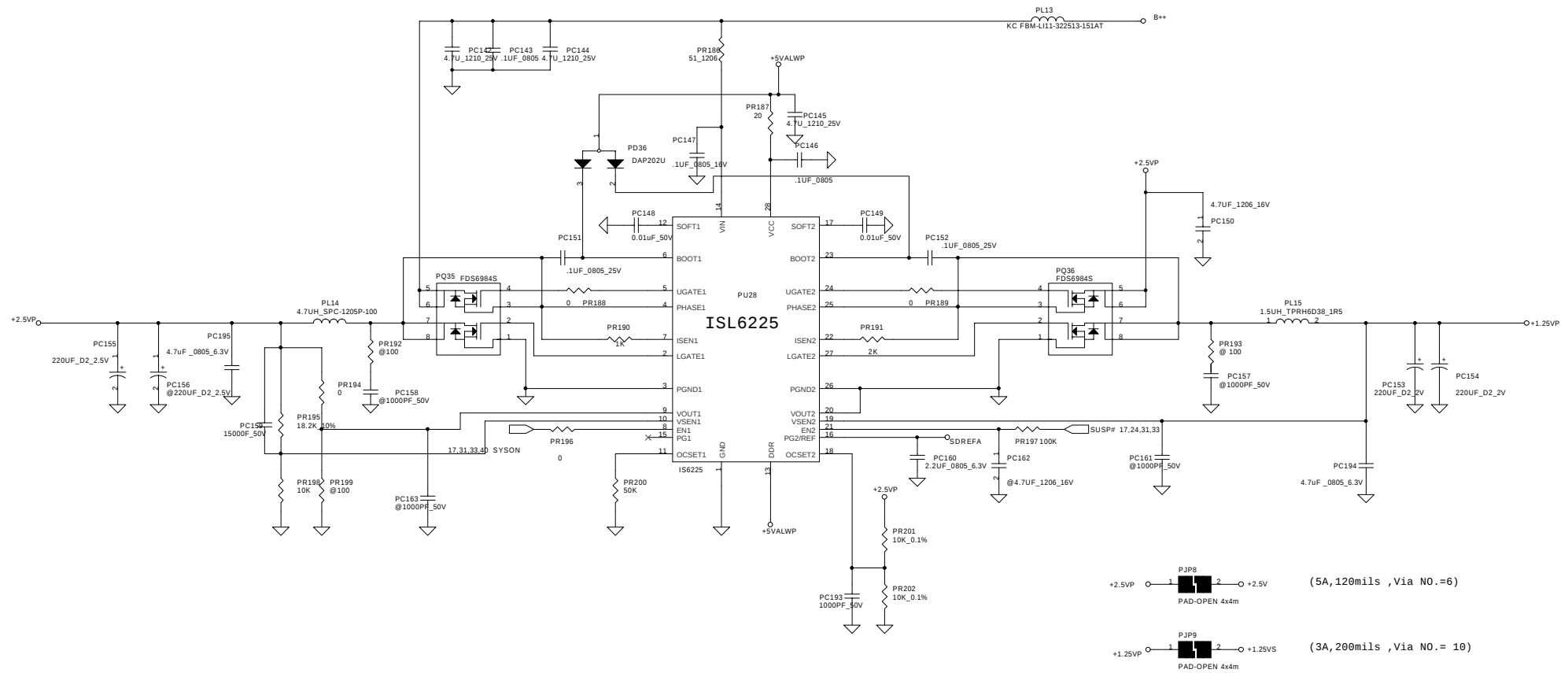
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+2.5V/+1.25V



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