A928 SCHEMATICS

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02. Pentium 4 CPU
03. Pentium 4 CPU
04. Pentium 4 CPU
05. SIS 650 (AGP/ HOST)
06. SIS 650 (VGA/ MULTI-IO)
07. SIS 650 (RAM CONTROLLER)
08. SIS 650 (POWER)
09. SIS 961 (PCI/ IDE/ MULTI-IO)
10. SIS 961 (MISC.)
11. SIS 961 (USB)
12. SIS 961 (POWER)
13. MAIN CLOCK GENEATOR
14. CLOCK BUFFER
15. CRT / COM PORT
16. DDR SODIMM
17. DDR TERMINATION
18. AC'97 CODEC
19. OP AMPLIFIER / AUDIO JACK
20. HDD / CDROM CONN.
21. LPC SUPER IO
22. KBC / TOUCH PAD/ ROM
23. LPT PORT
24. H/W MONITOR (W83784AR/785R)
25. SIS 301LV
26. LCD/TV CONN.
27. MINI PCI CONN.
28. LAN PHY/TRANSFORMER
29. RTC/ POWER SW
30. USB 2.0
31. USB PORTS/MODEM CONN.
32. 1394
33. DC IN
34. MAXIM 1632
35. CPU POWER
36. DDR POWER
37. HISTORY

P/N : KK0A928012030
GERBER : KK0A928012030.ZIP

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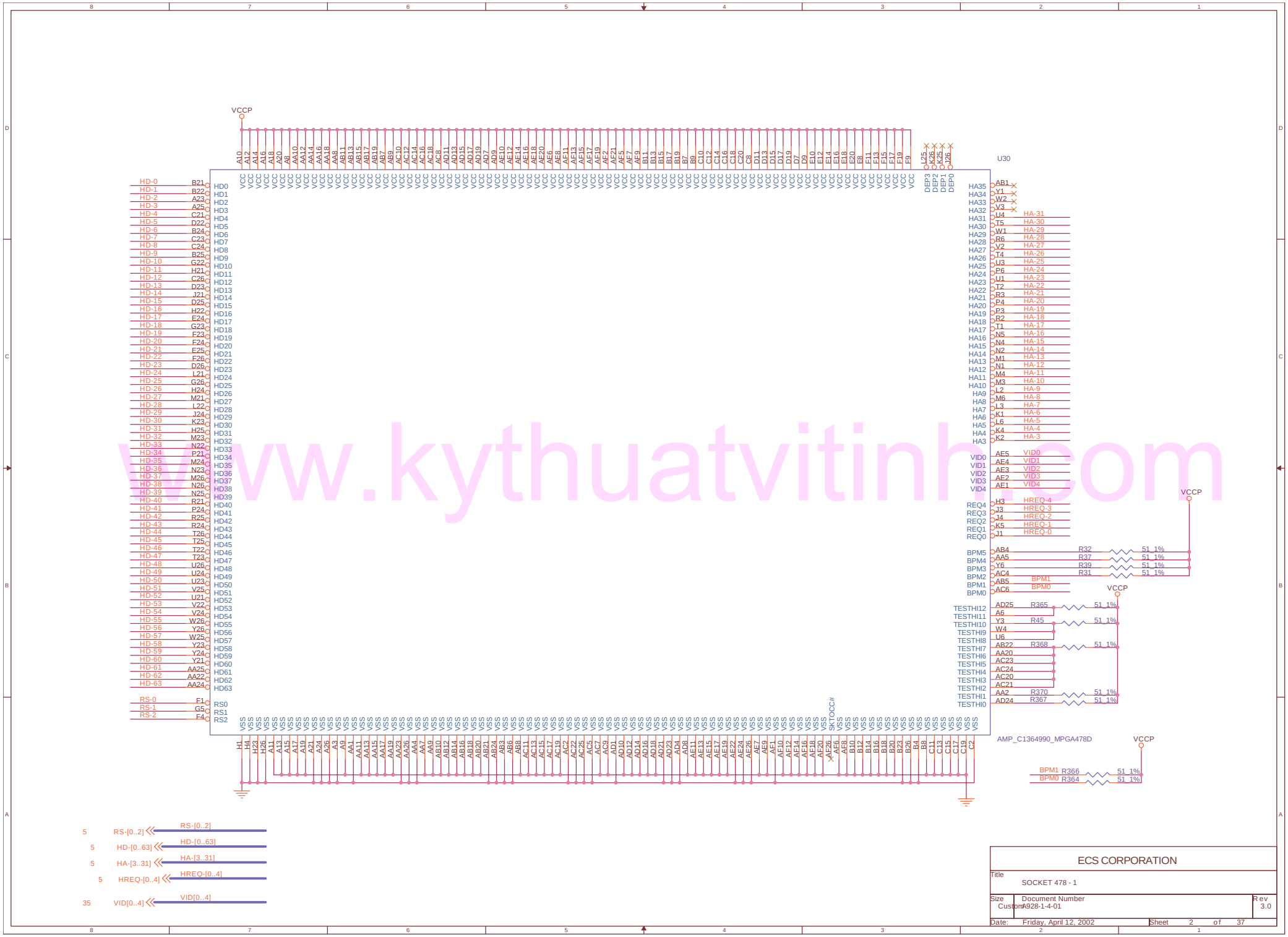
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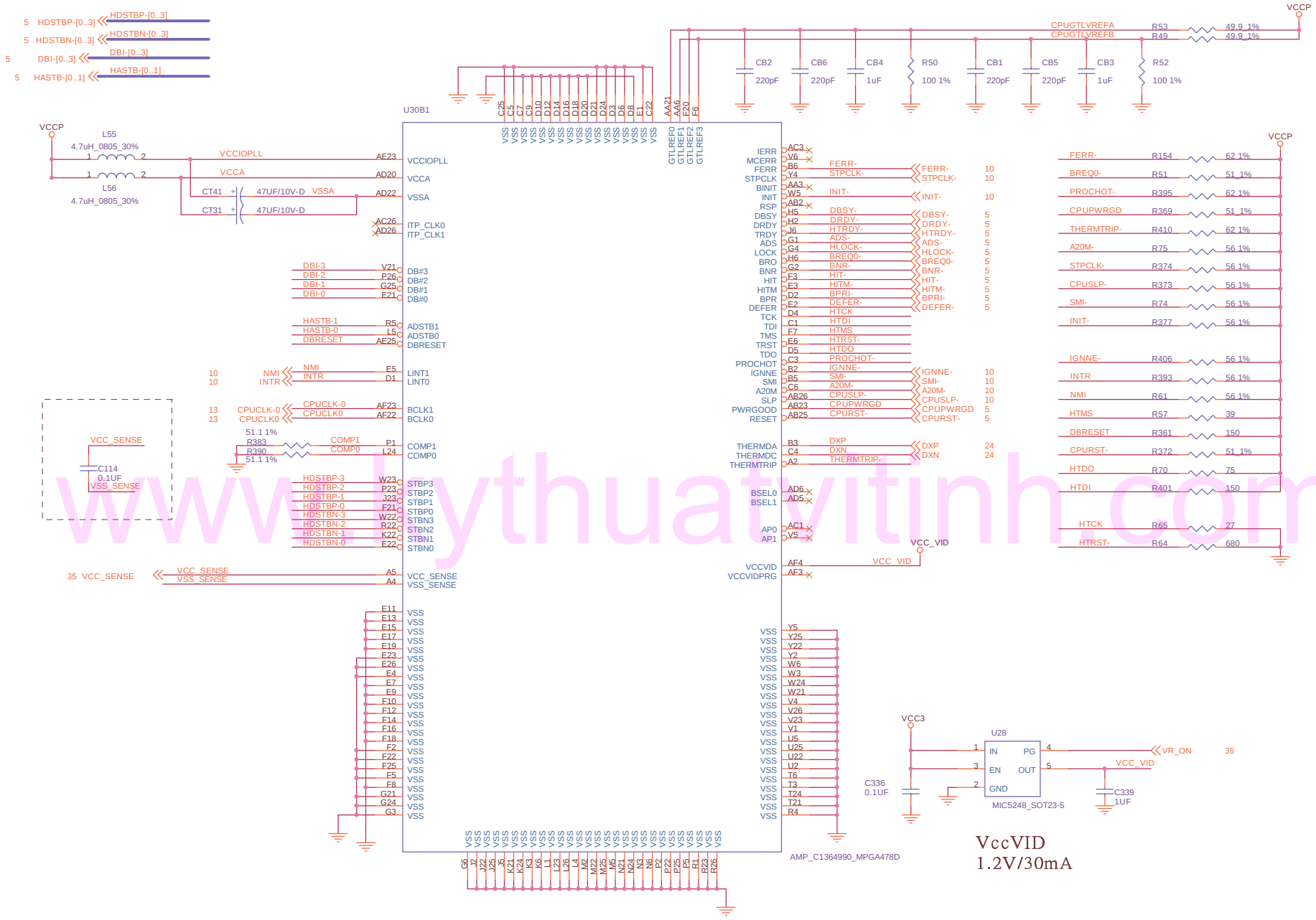
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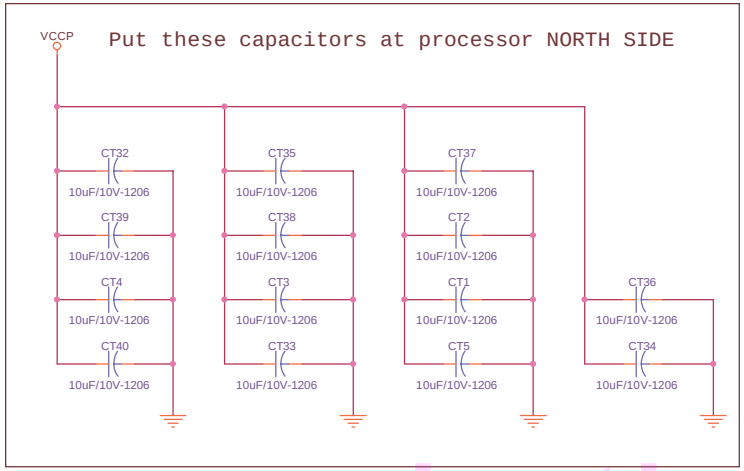
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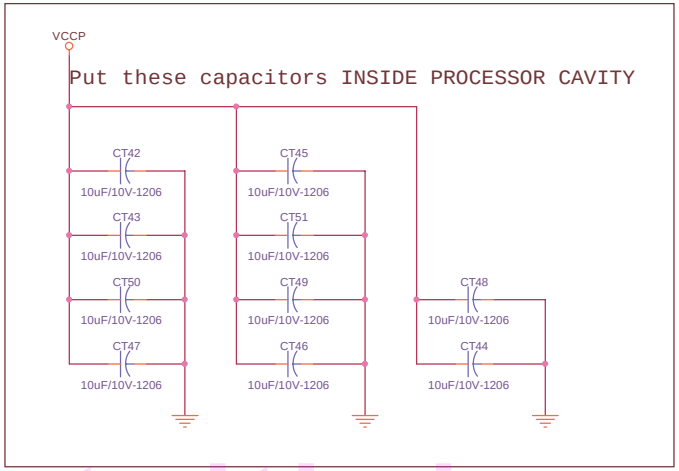
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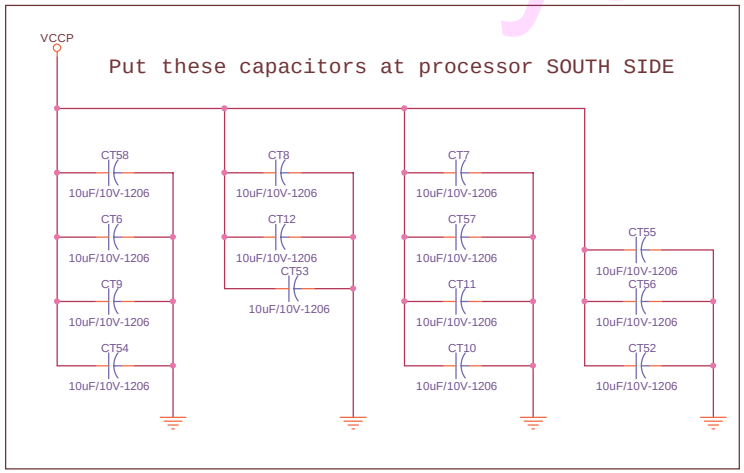
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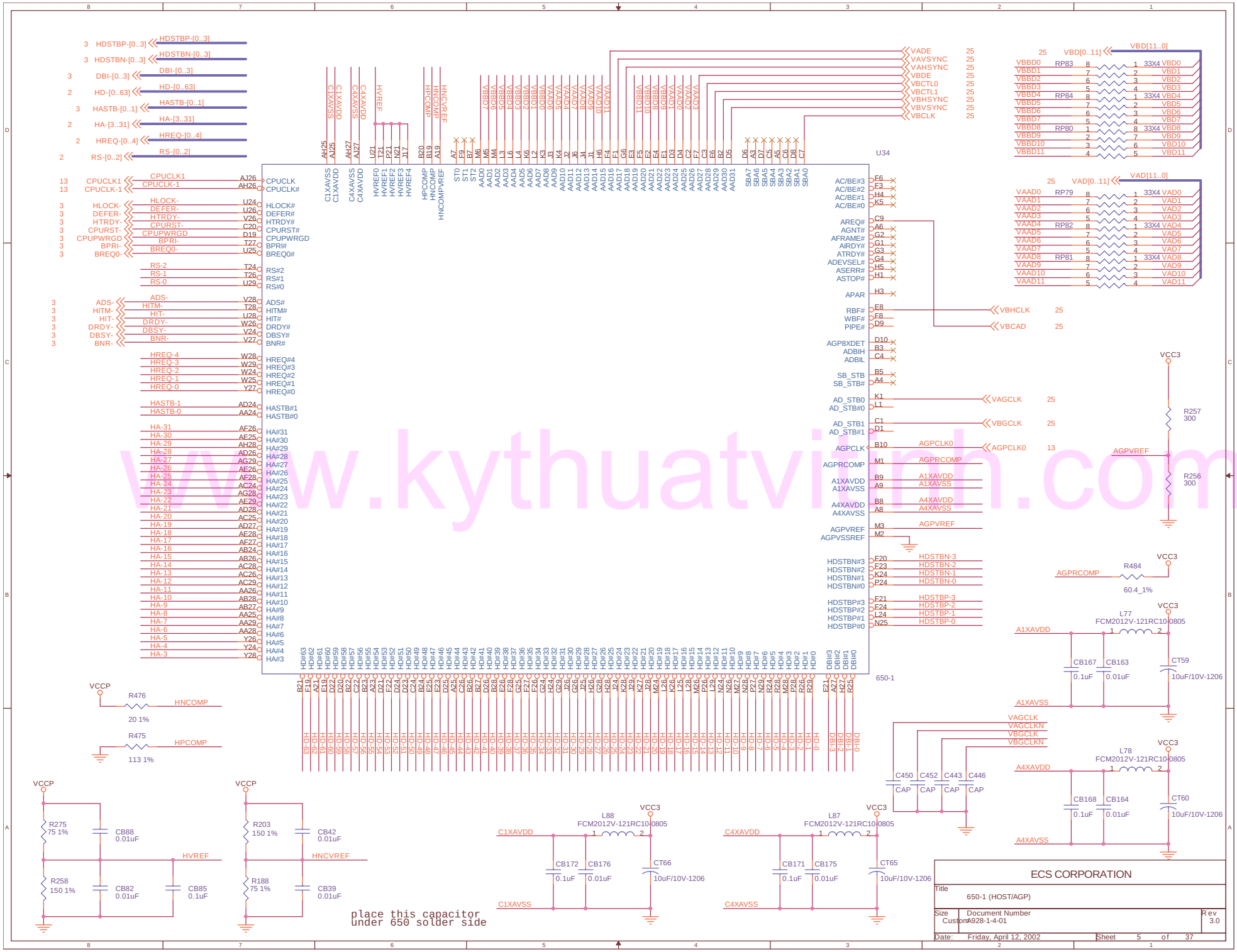




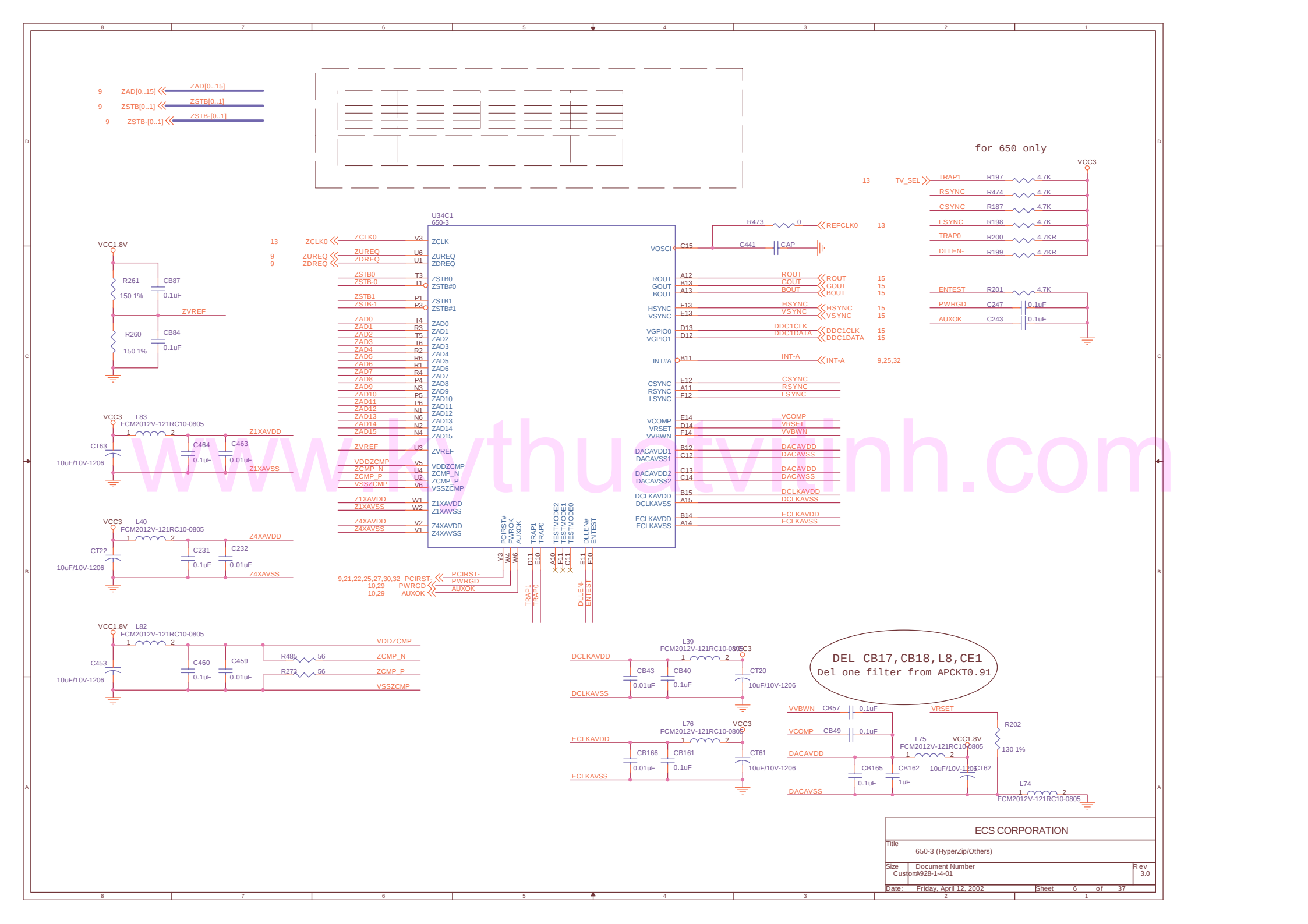


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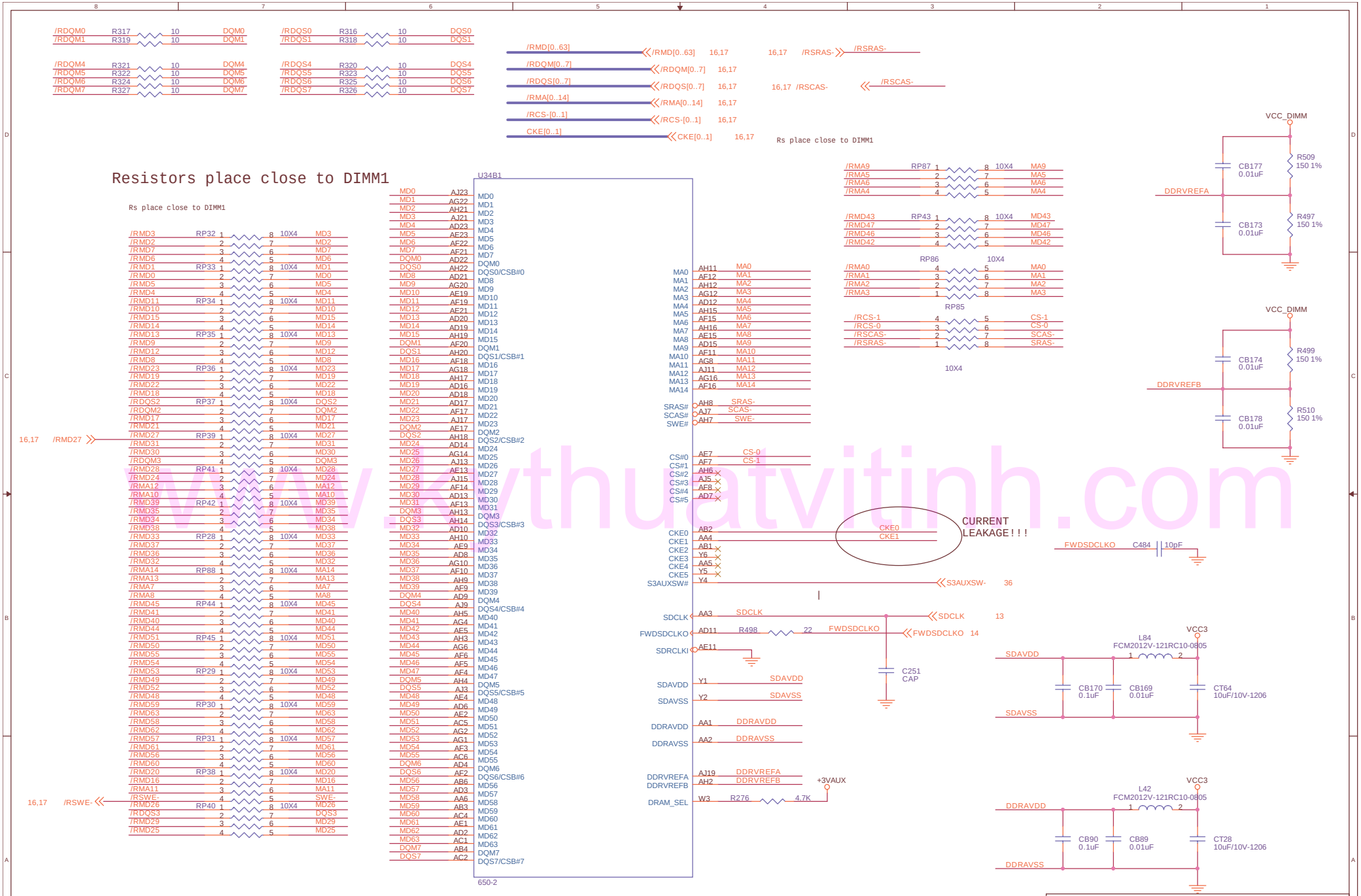
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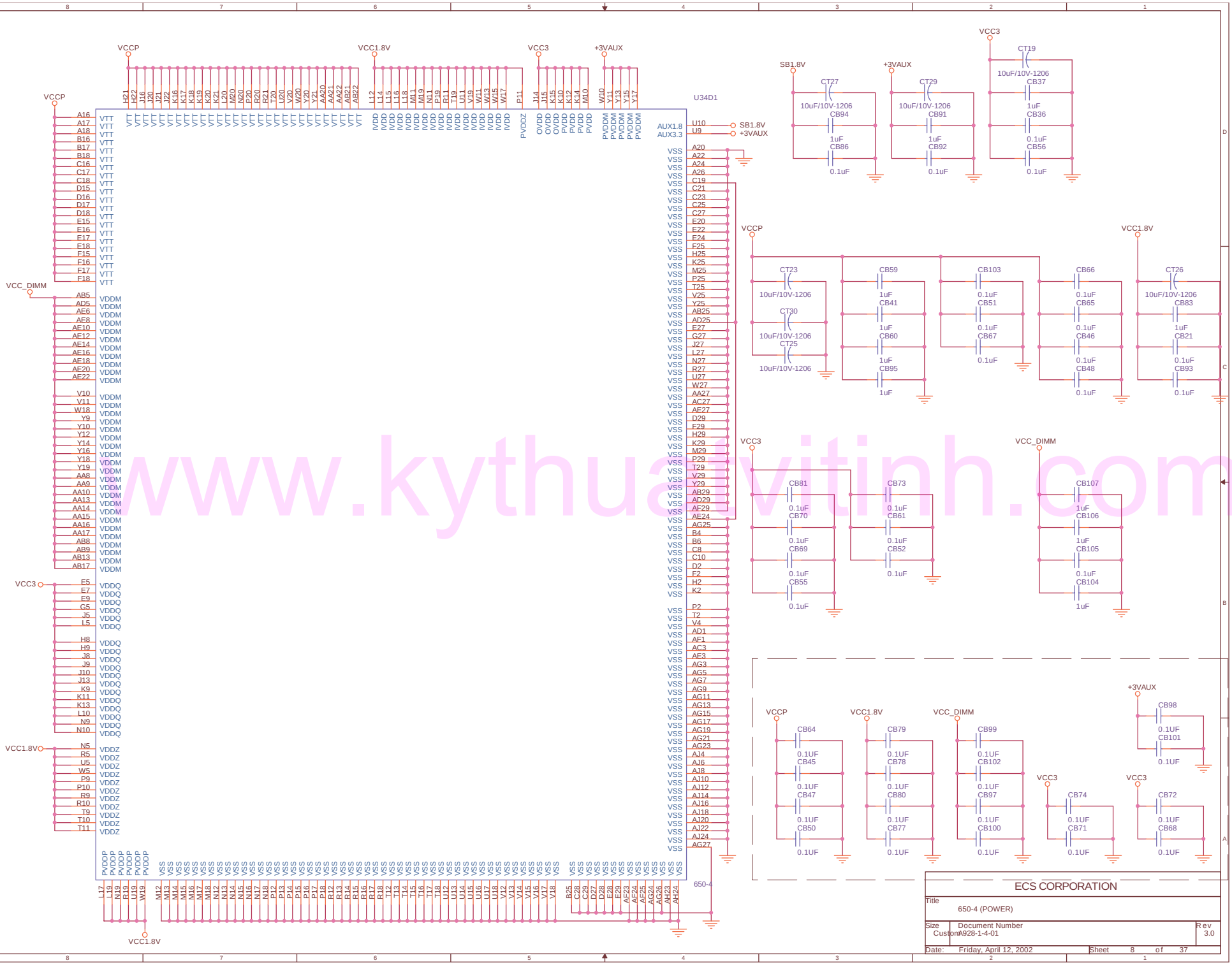
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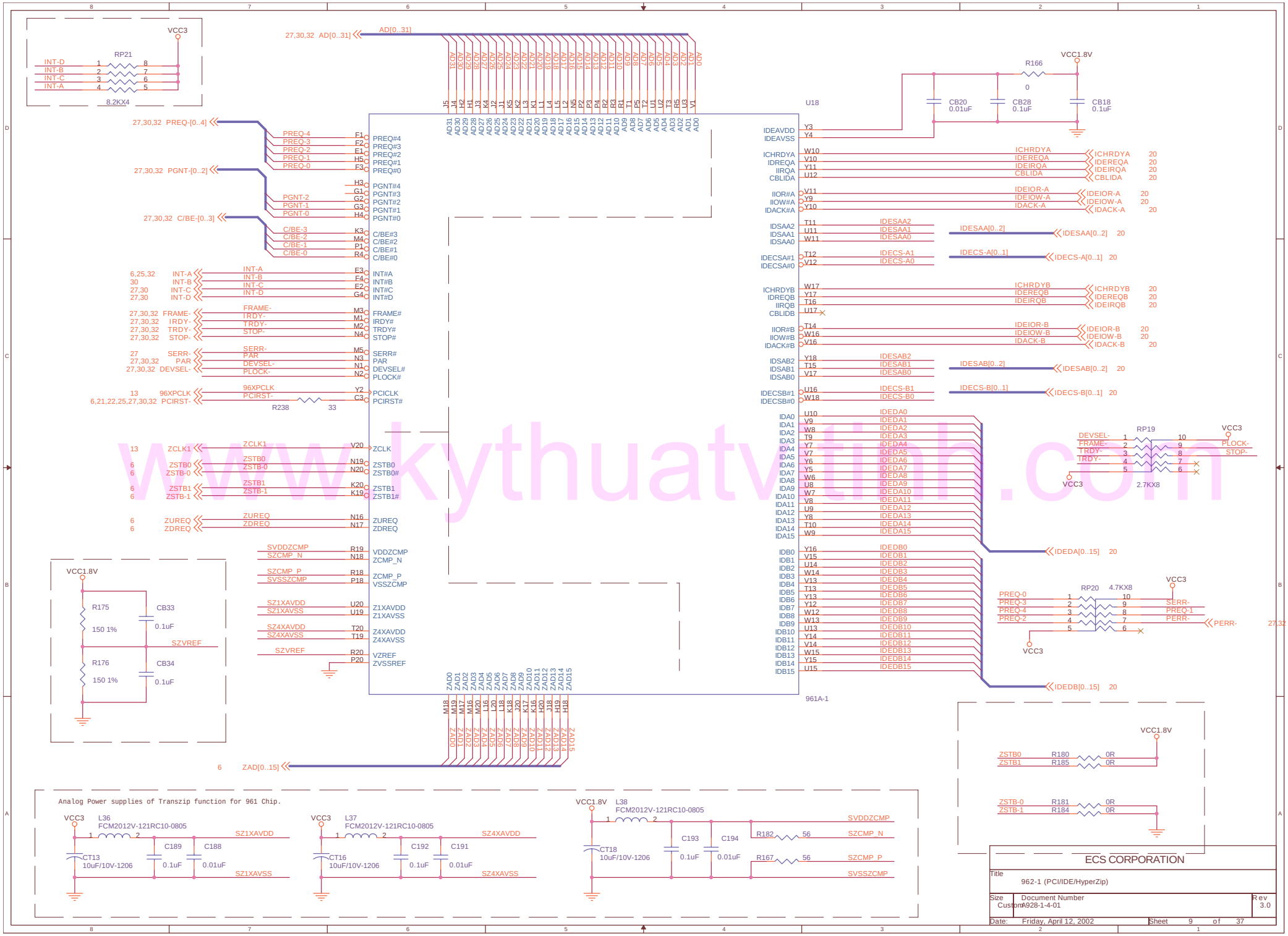


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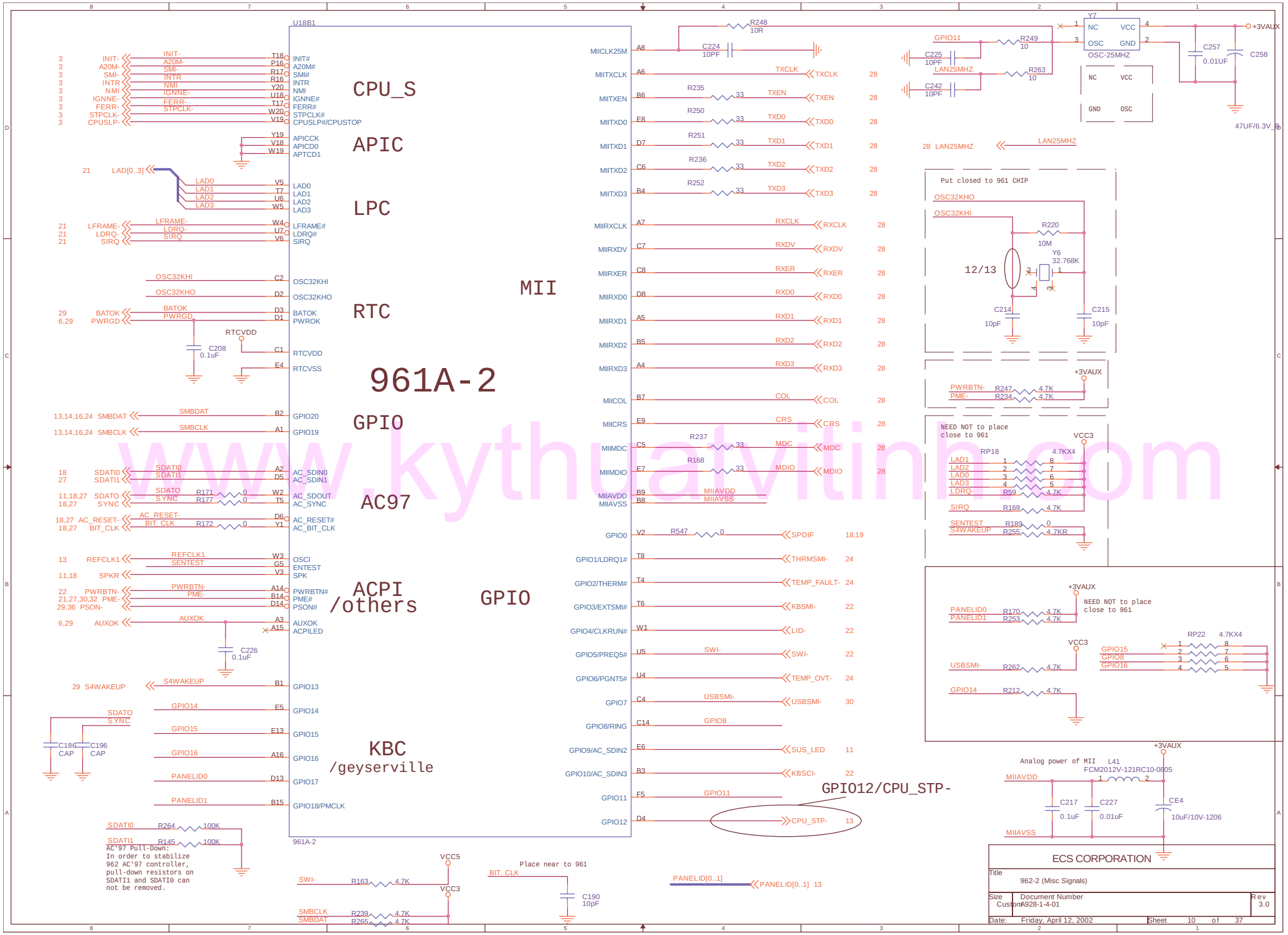


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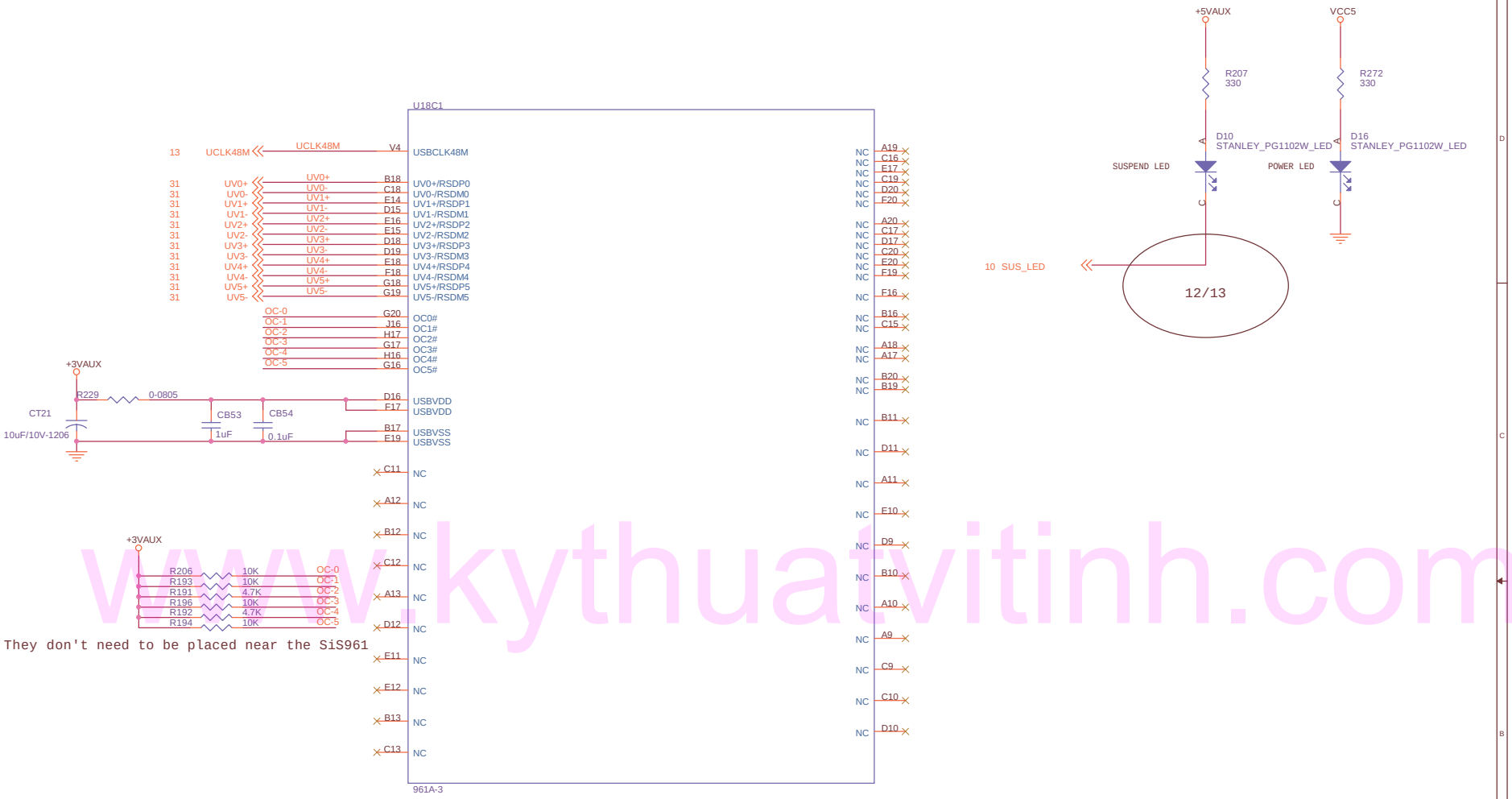
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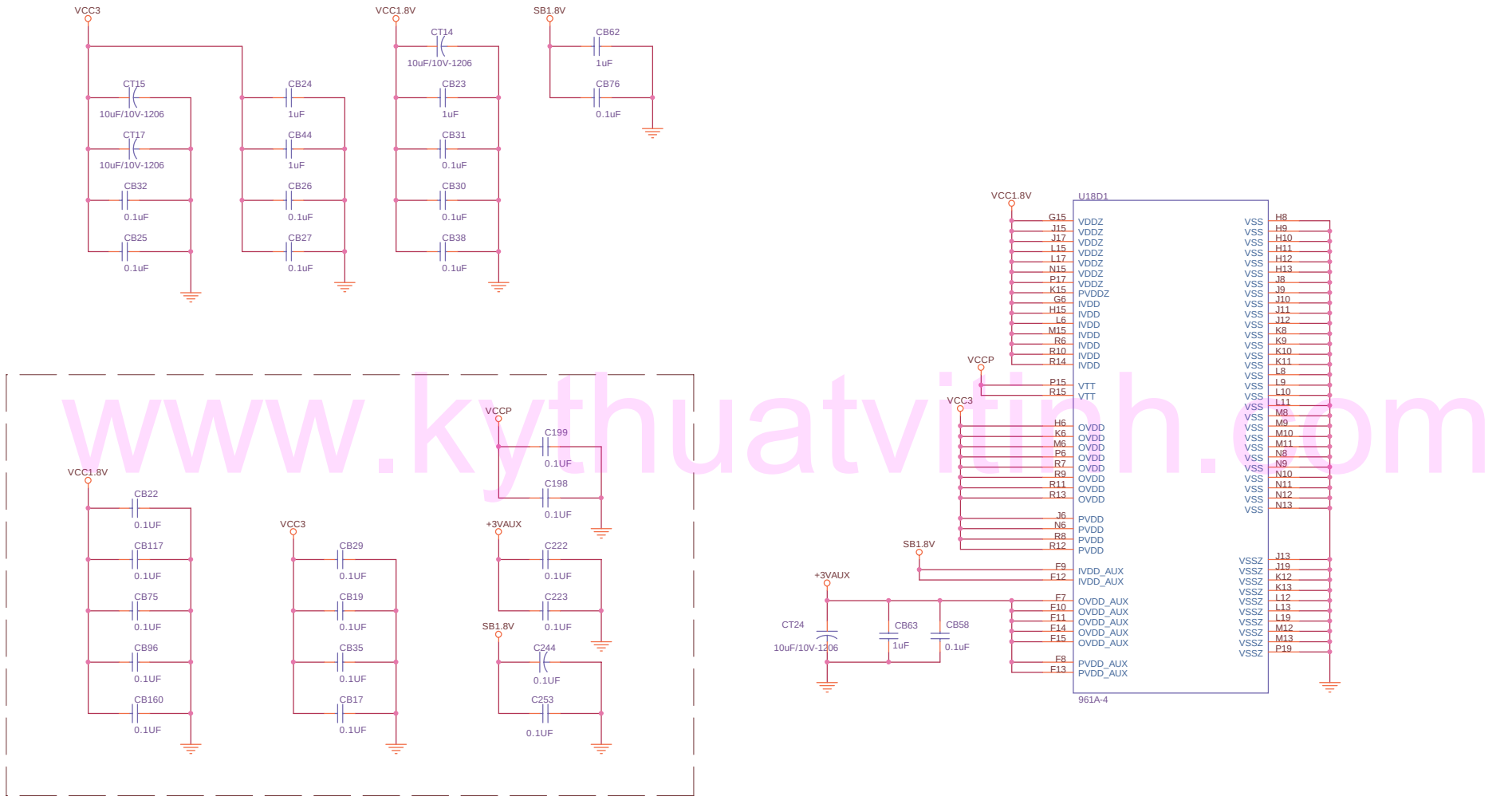
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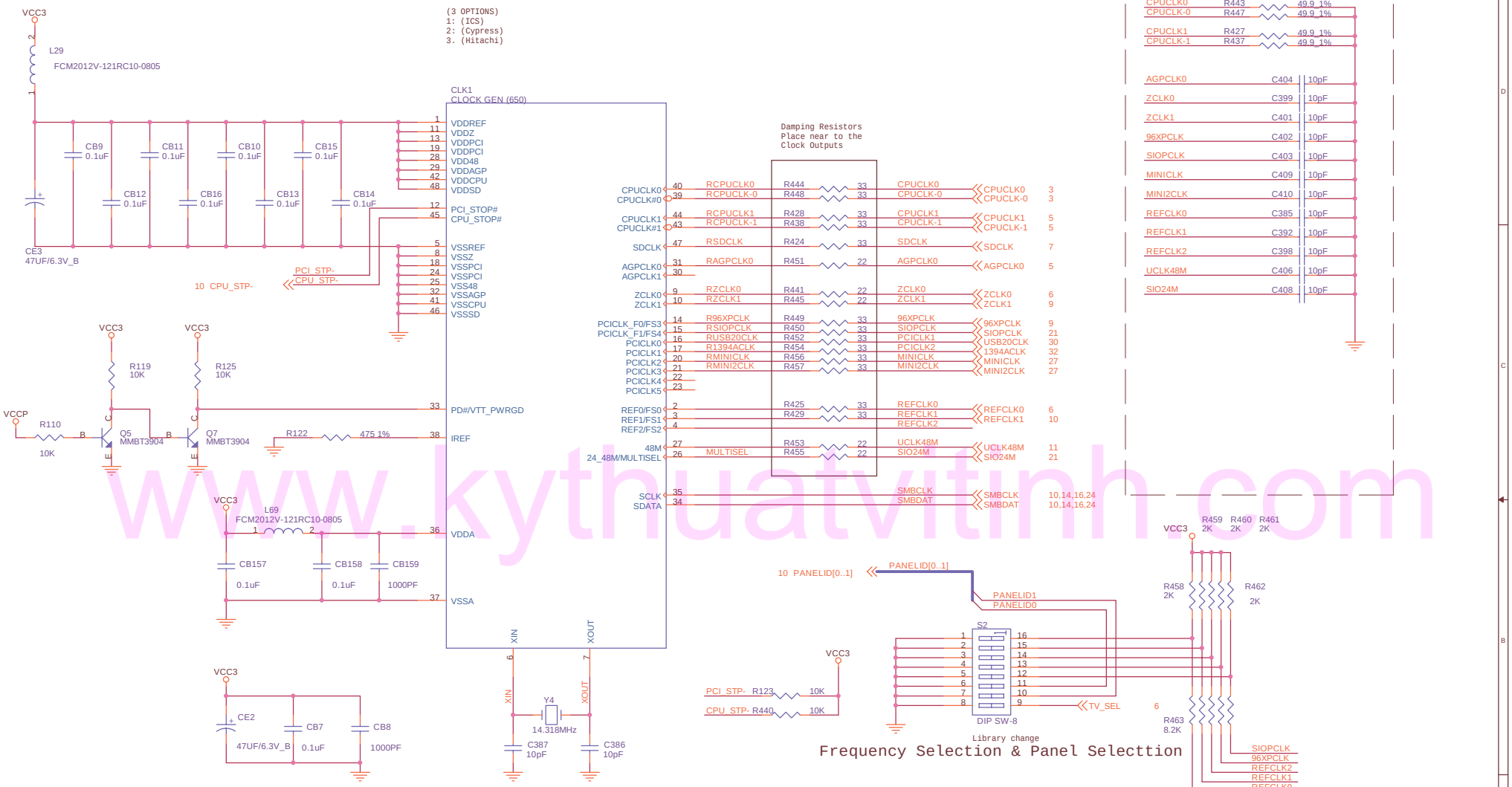


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Main Clock Generator

(3 OPTIONS)
1: (ICS)
2: (Cypress)
3. (Hitachi)



Library change

Frequency Selection & Panel Selecttion

SIS650 CLOCK

FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SDRAM (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)
0	0	0	0	0					
0	0	0	0	1					
0	0	0	1	0					
0	0	0	1	1					
0	0	1	0	0					
0	0	1	0	1					
0	0	1	1	0					
0	0	1	1	1					
0	1	0	0	0					
0	1	0	0	1					
0	1	0	1	0					
0	1	0	1	1					
0	1	1	0	0					
0	1	1	0	1					
0	1	1	1	0					
0	1	1	1	1					

SIS650 CLOCK

FS4	FS3	FS2	FS1	FS0	CPU (MHz)	SDRAM (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)
1	0	0	0	0					
1	0	0	0	1					
1	0	0	1	0					
1	0	0	1	1					
1	0	1	0	0					
1	0	1	0	1					
1	0	1	1	0					
1	0	1	1	1					
1	1	0	0	0					
1	1	0	0	1					
1	1	0	1	0					
1	1	0	1	1					
1	1	1	0	0					
1	1	1	0	1					
1	1	1	1	0					
1	1	1	1	1					

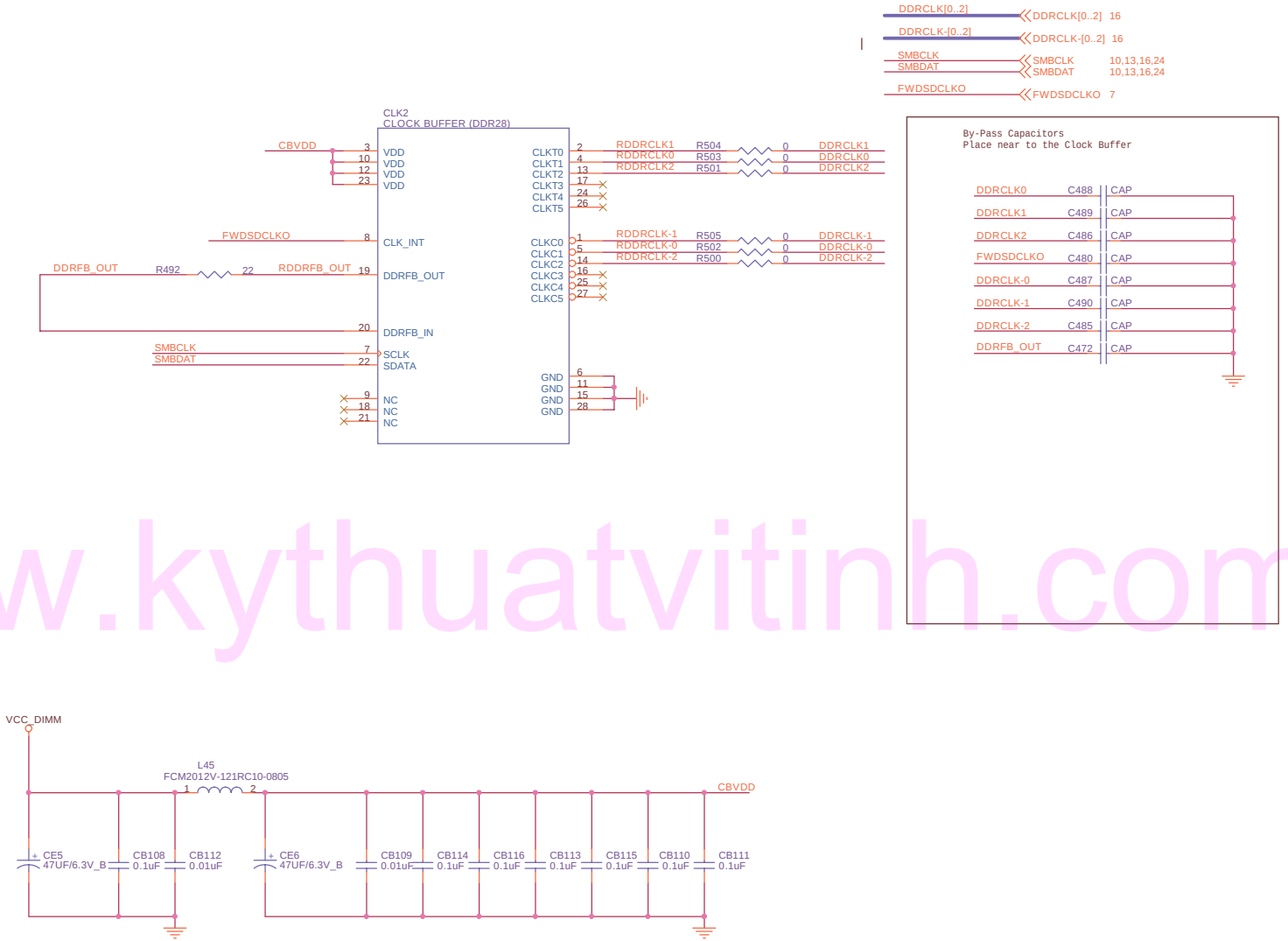
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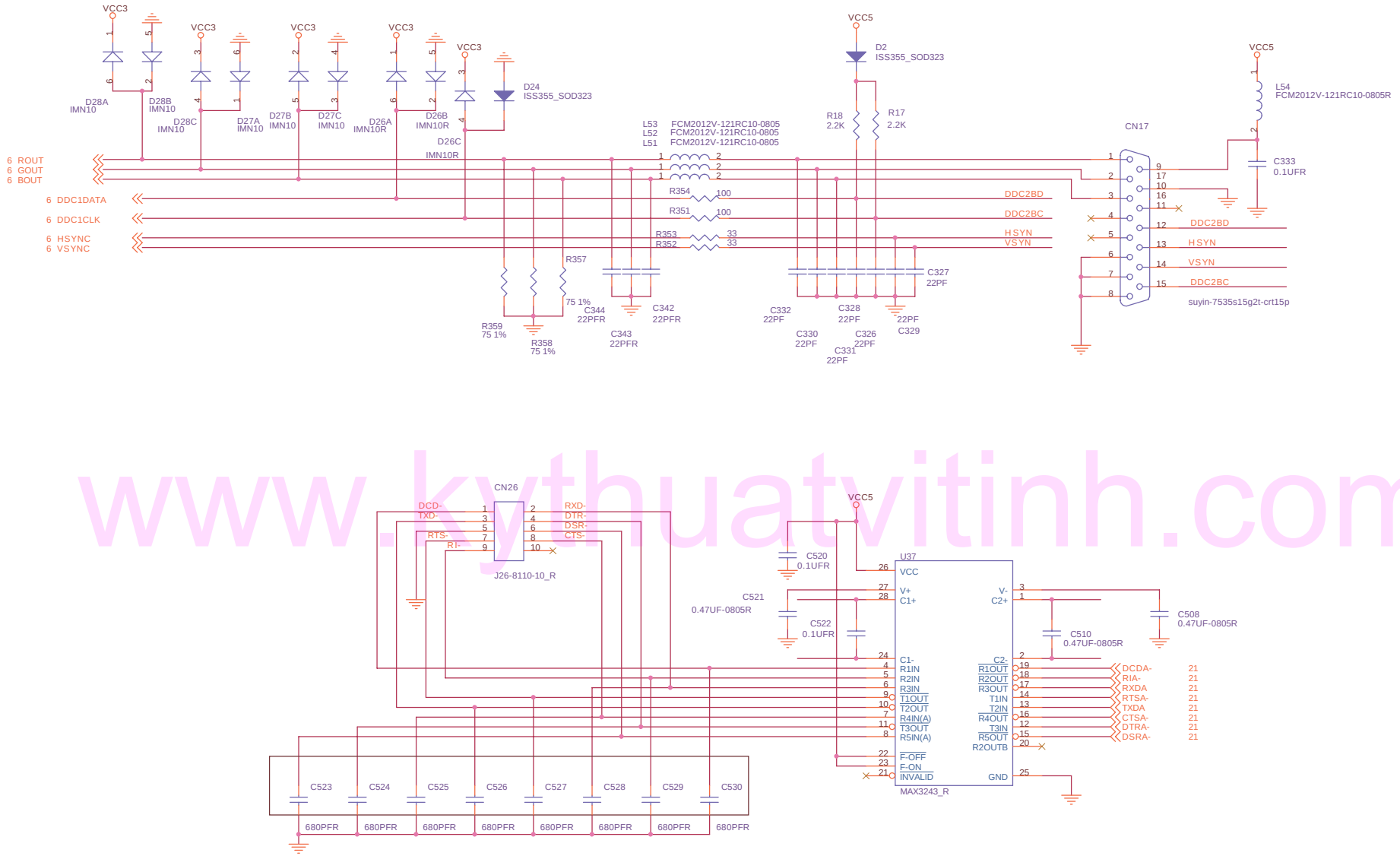
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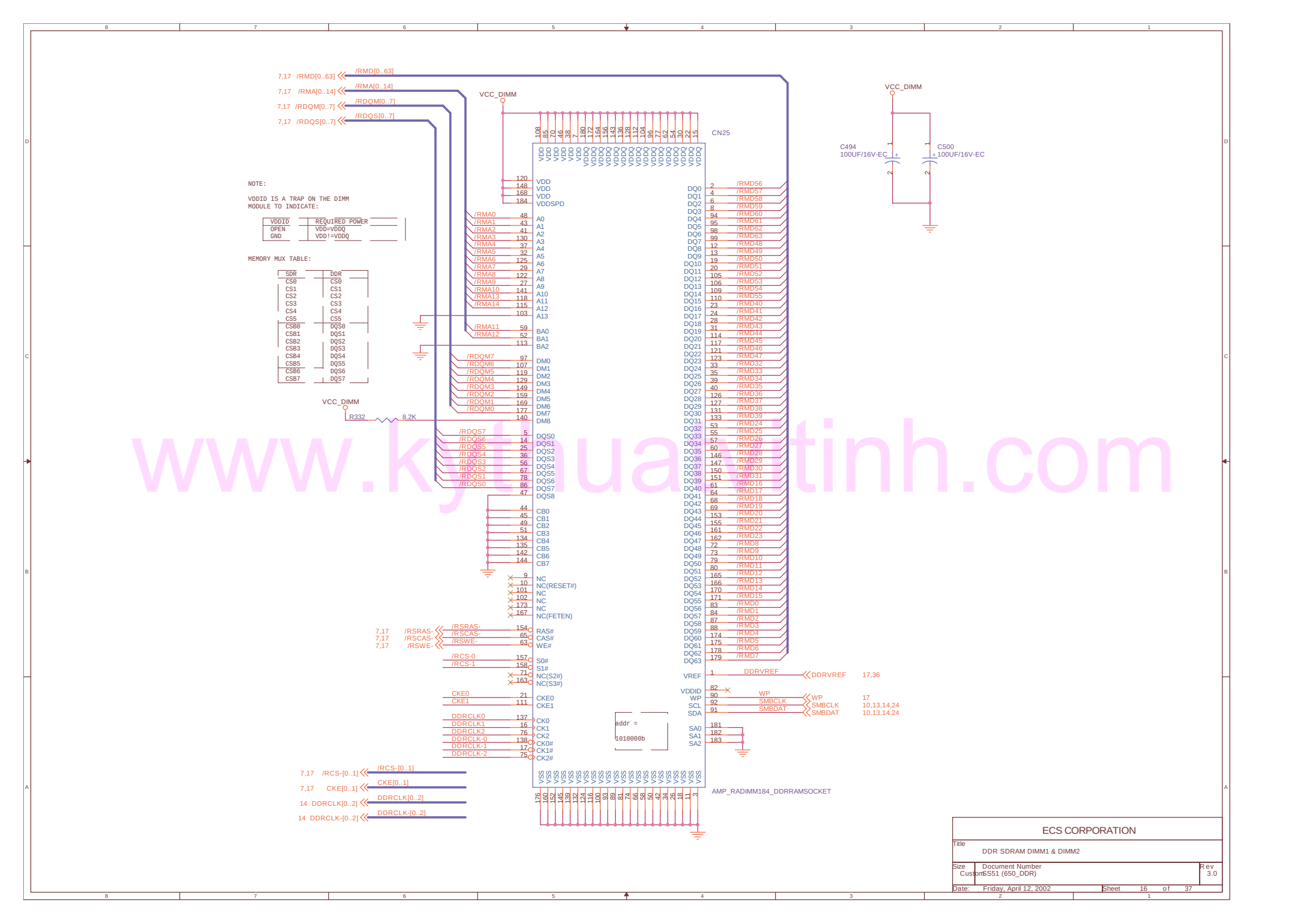
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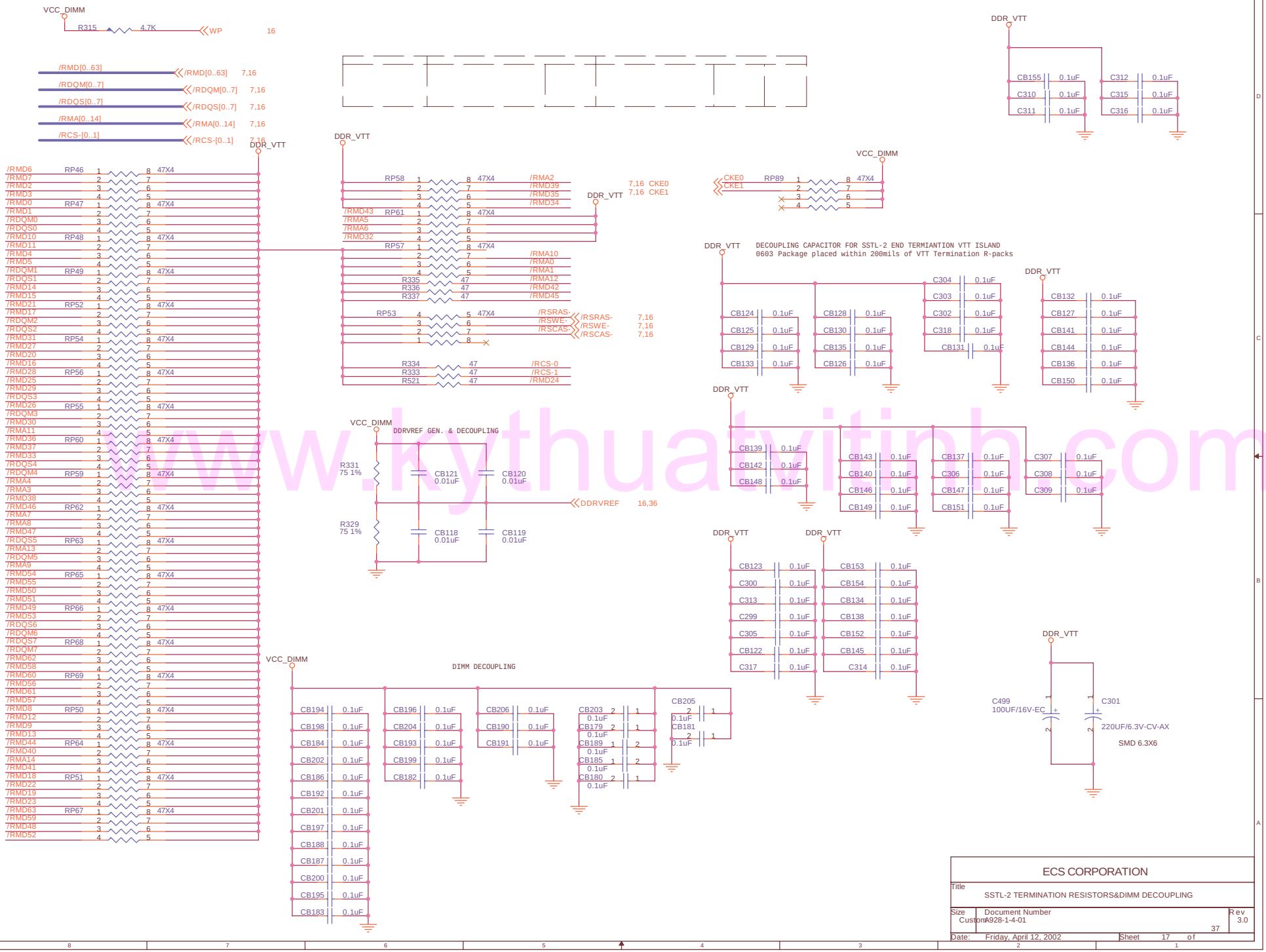
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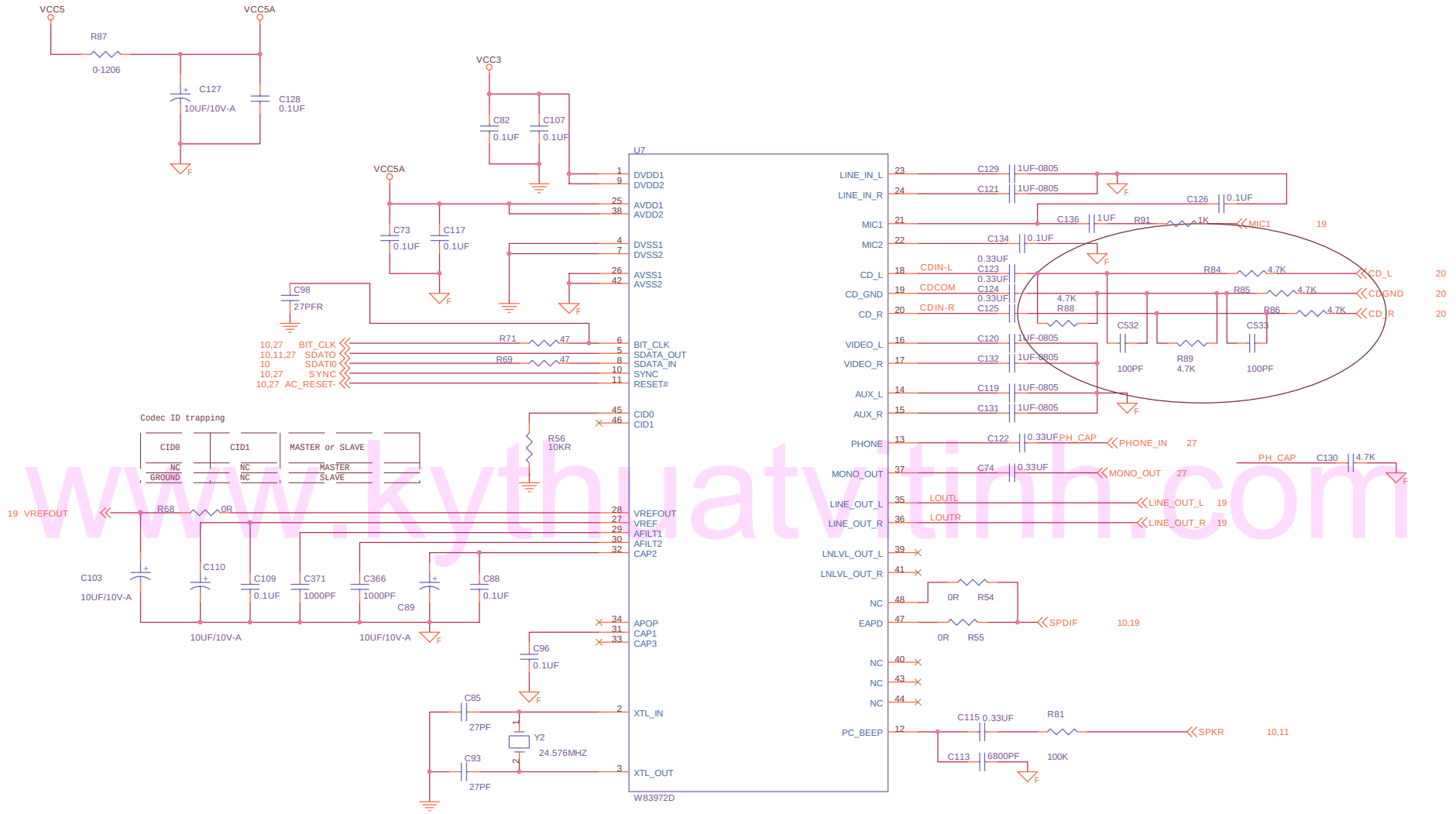
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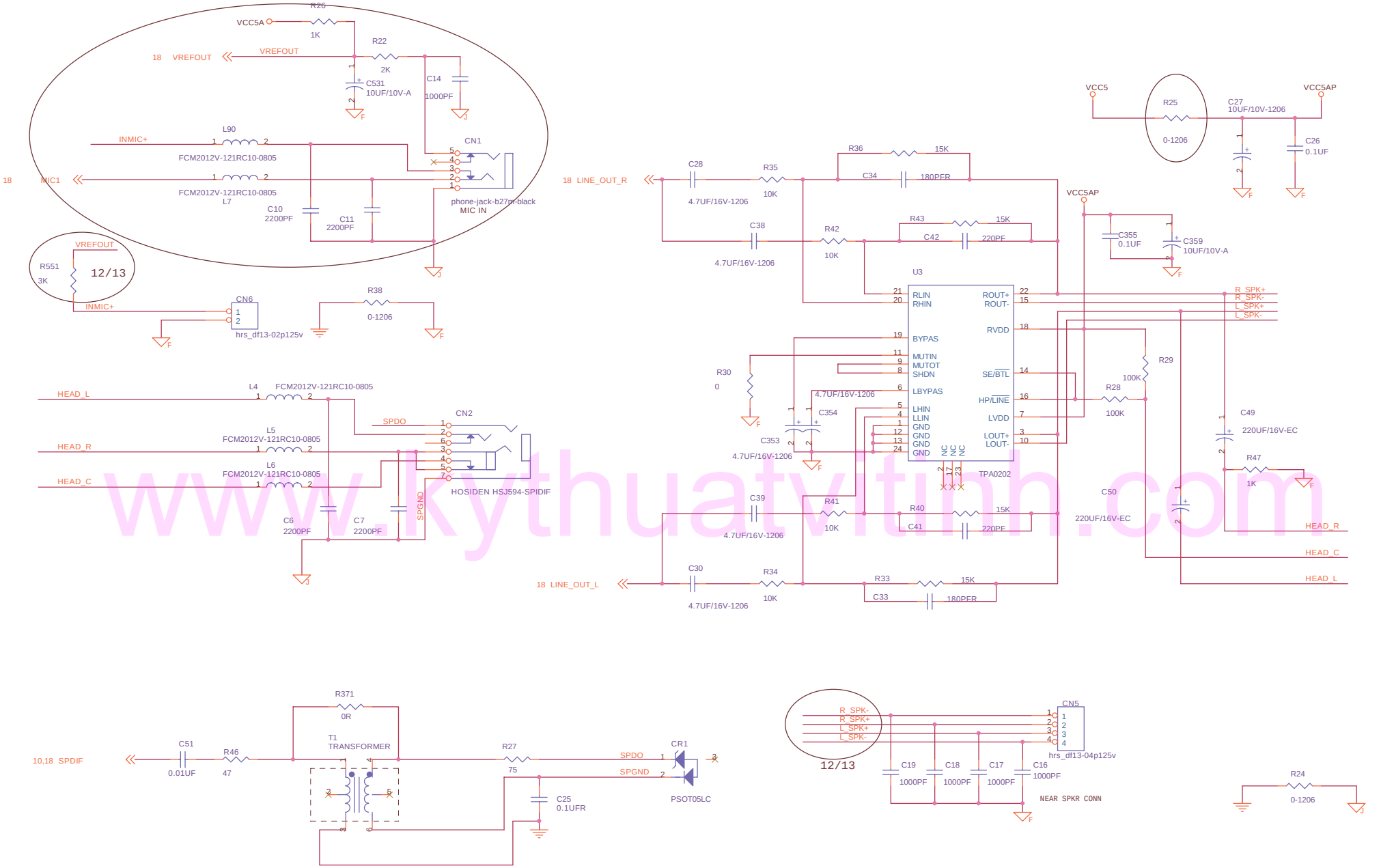
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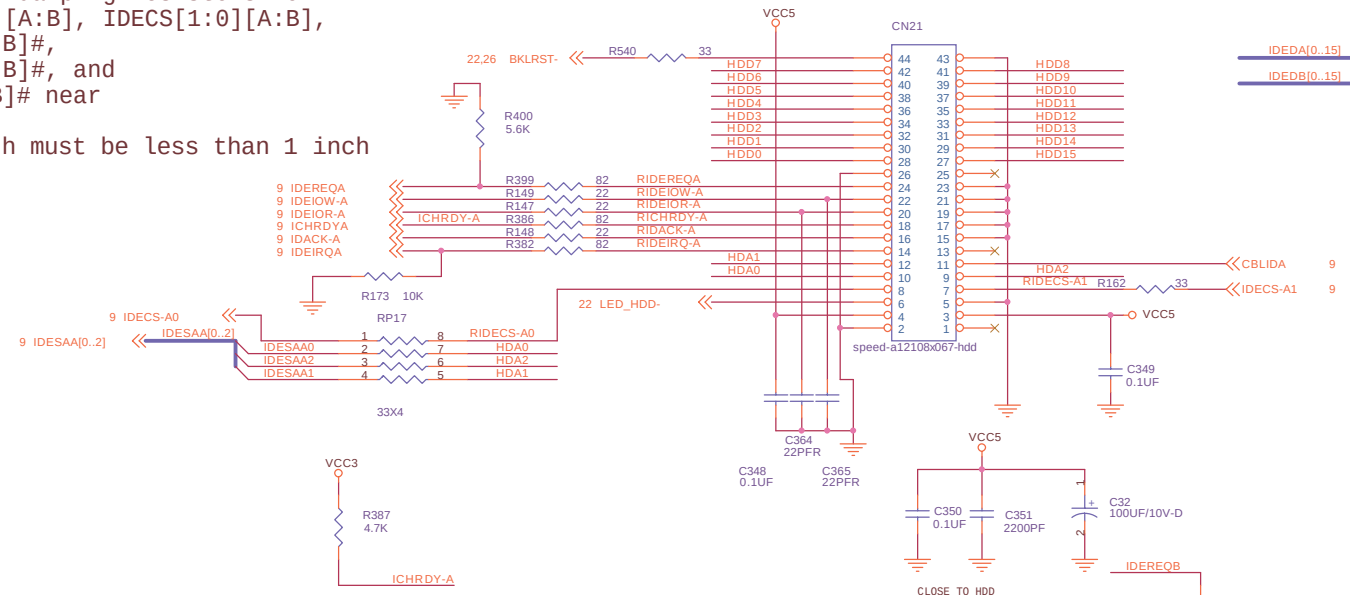
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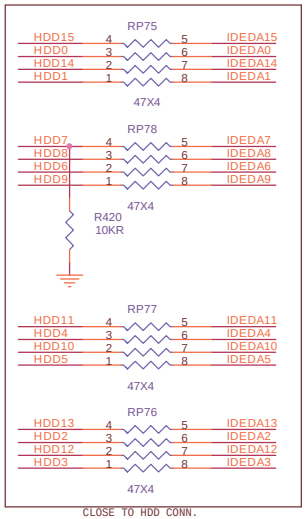


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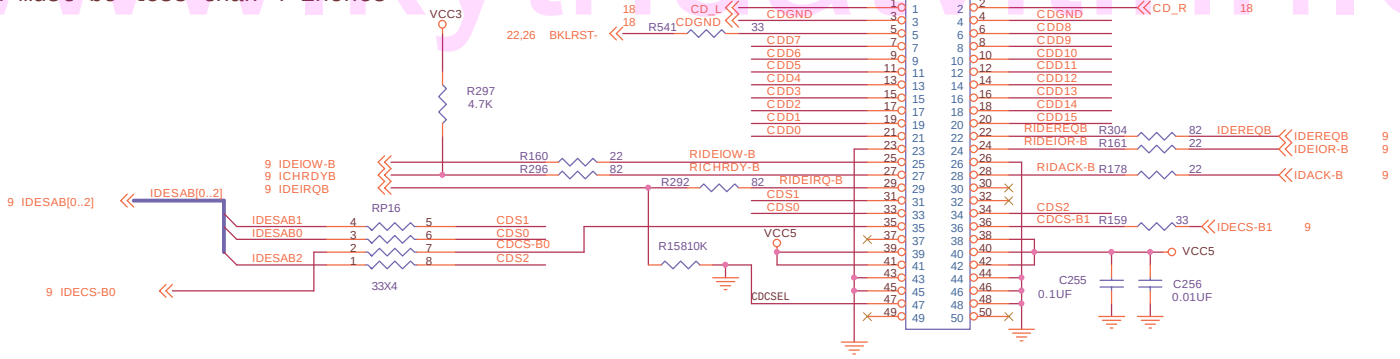
Place the damping resistors for
IDEA[2:0][A:B], IDECS[1:0][A:B],
IDEIOR[A:B]#,
IDEIOW[A:B]#, and
IDACK[A:B]# near
SiS650
The length must be less than 1 inch





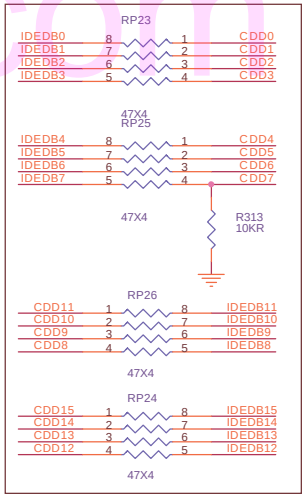
Place the damping resistors for IDED[15:0][A:B], IDREQ[A:B], ICHRDY[A:B], and

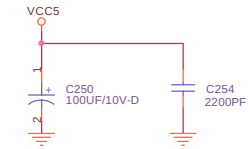
IDEIRQ[A:B] near IDE connectors
The length must be less than 4 inches



CSEL : "NC" ; "Hi" --> Master(CDROM)/Slave(DVDROM)

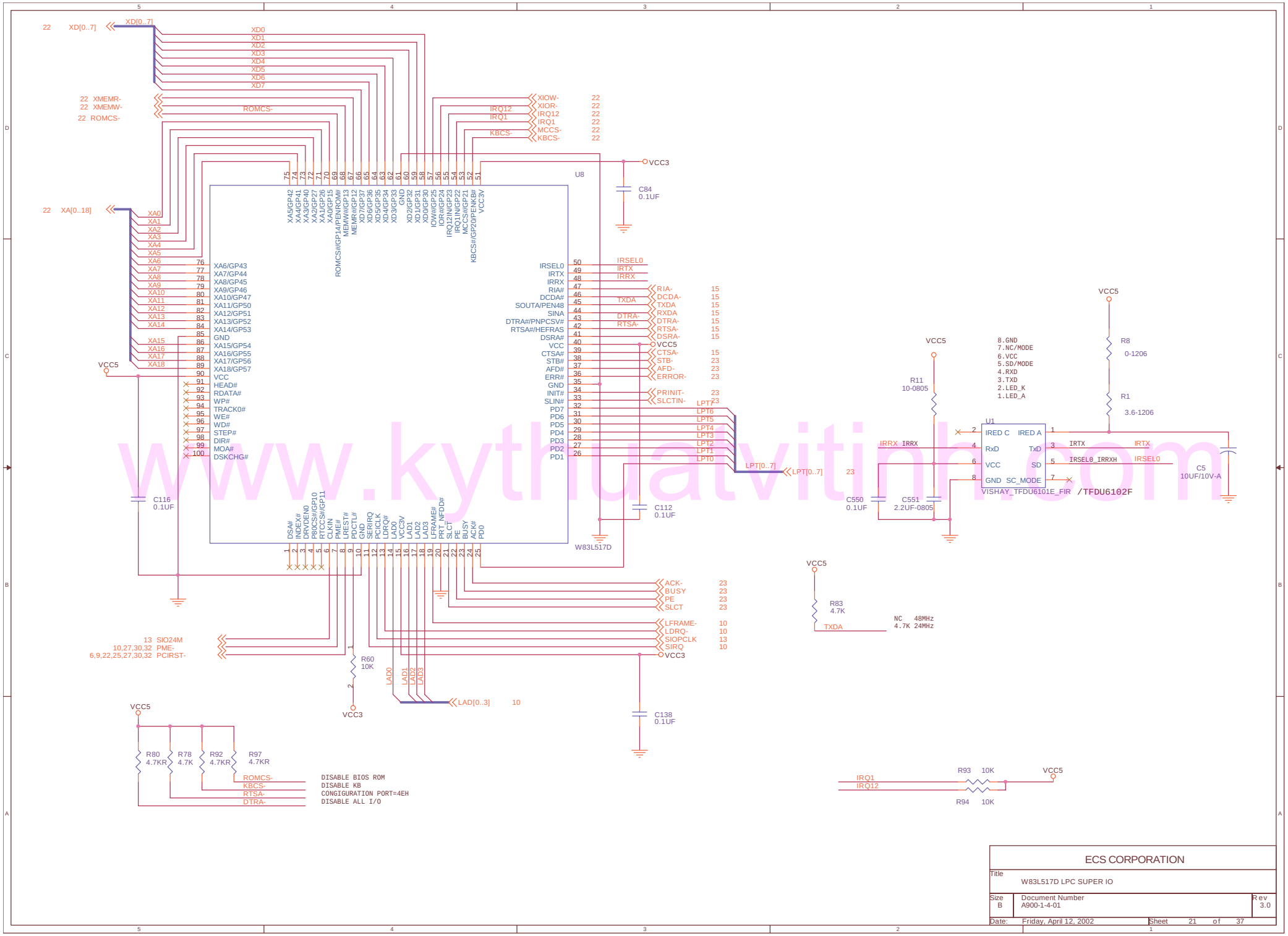
CSEL : "Low --> Slave(CDROM)/Master(DVDROM)





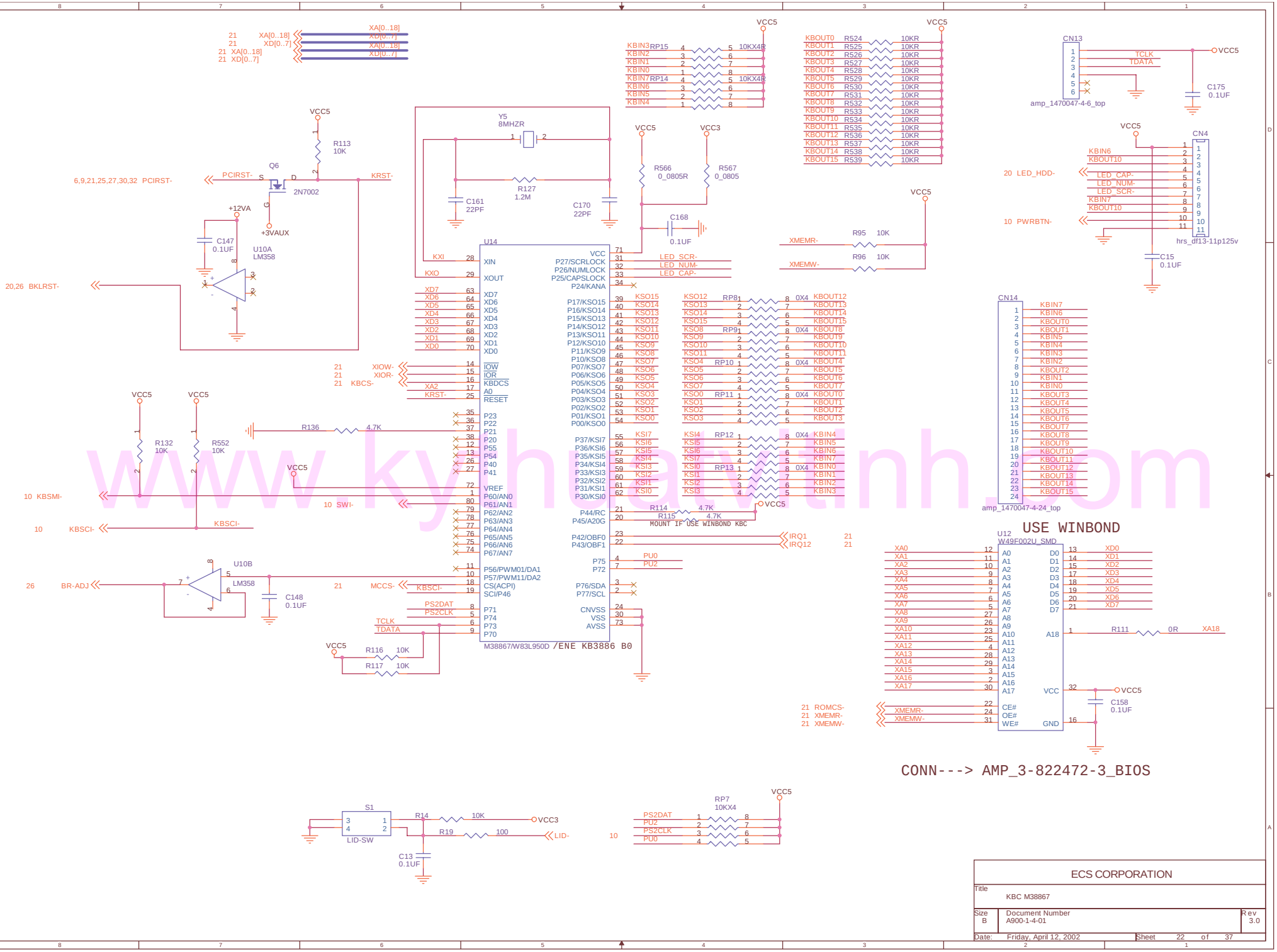
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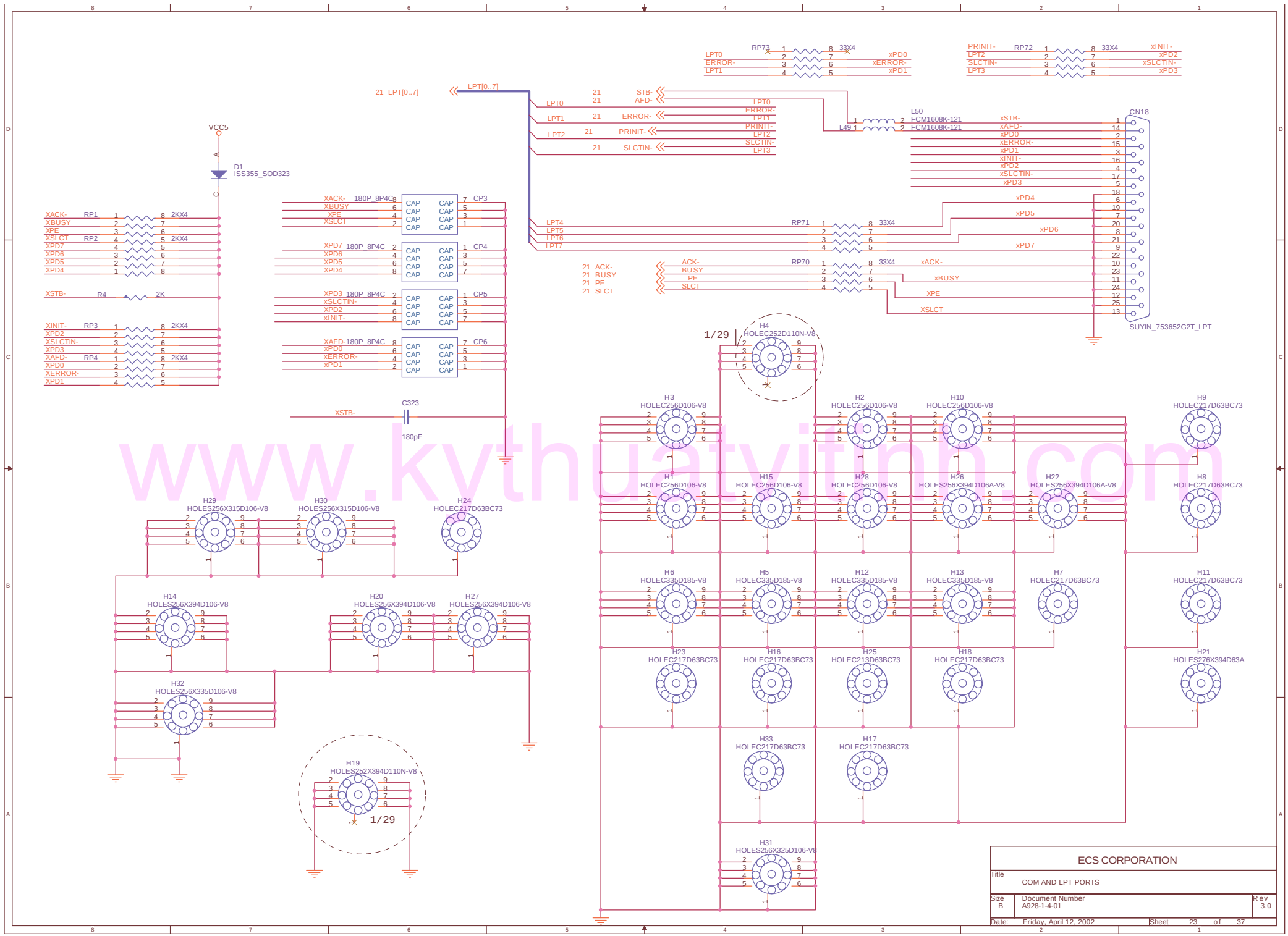
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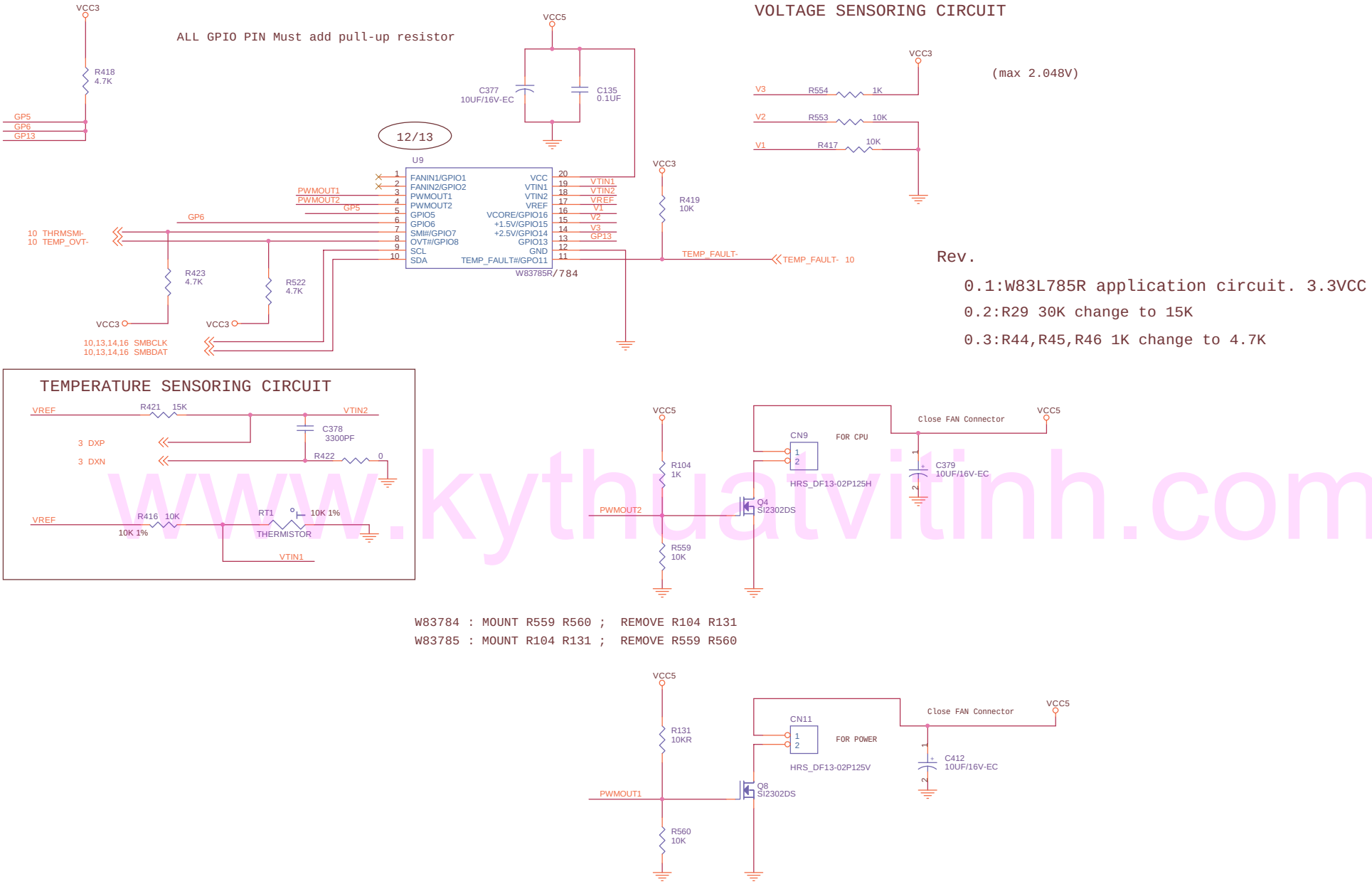


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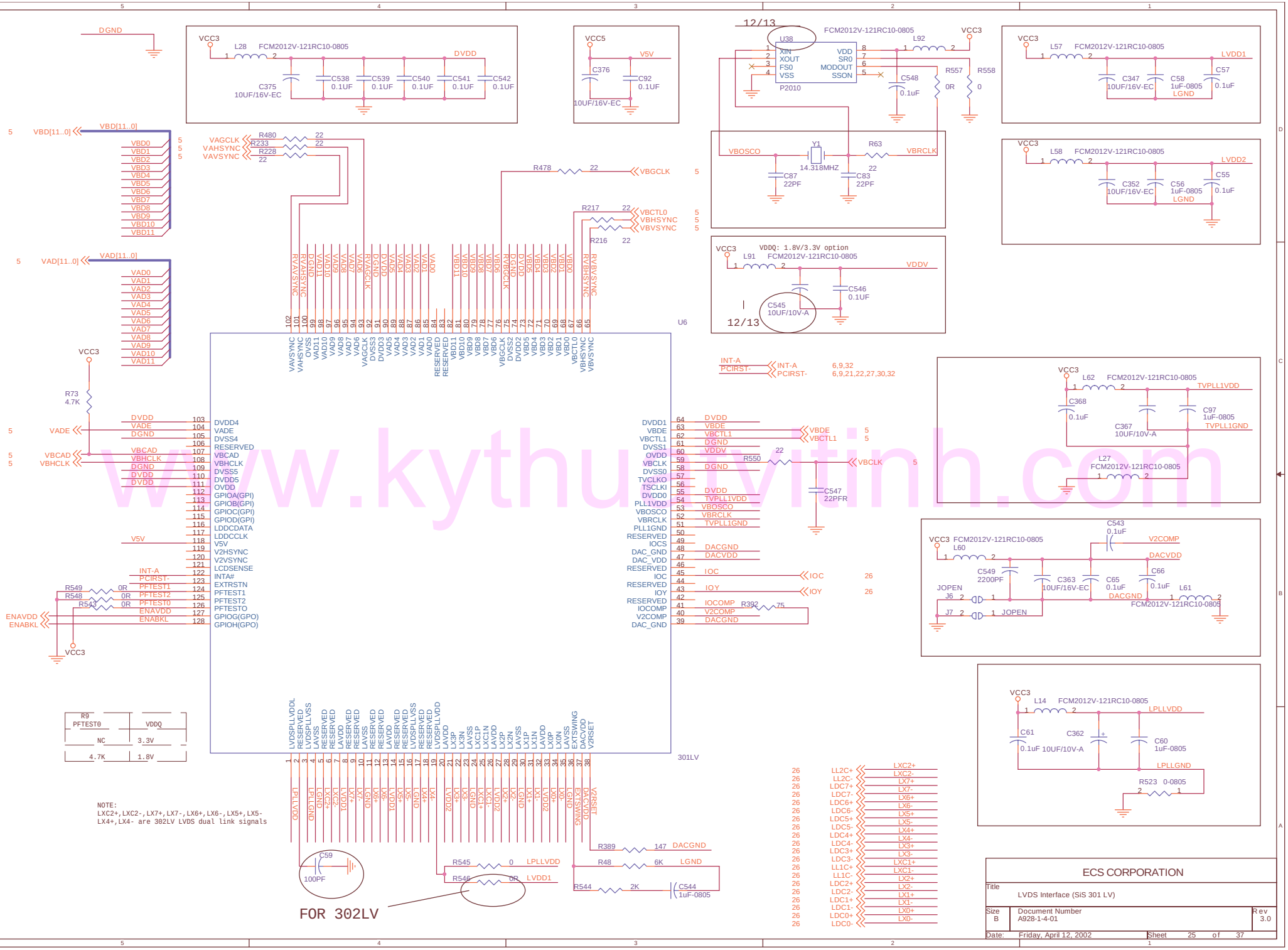


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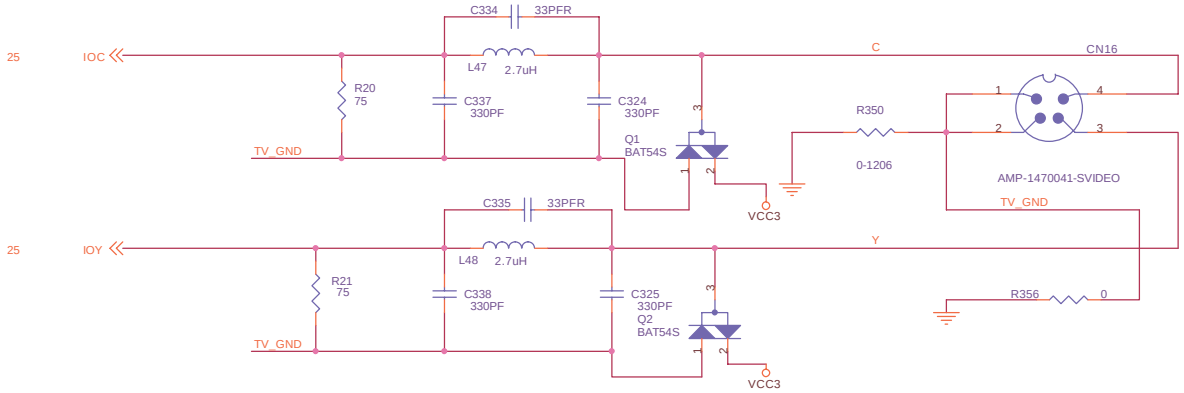


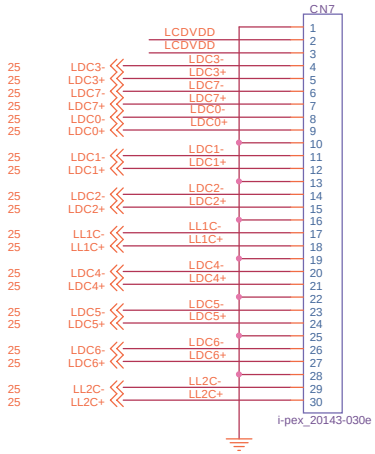
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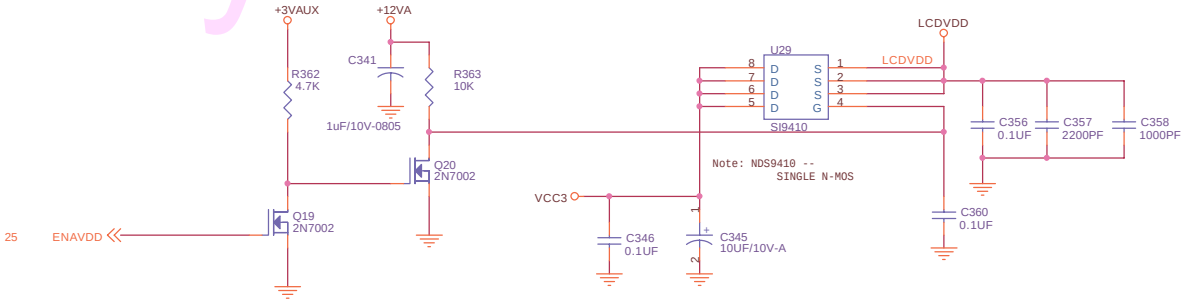


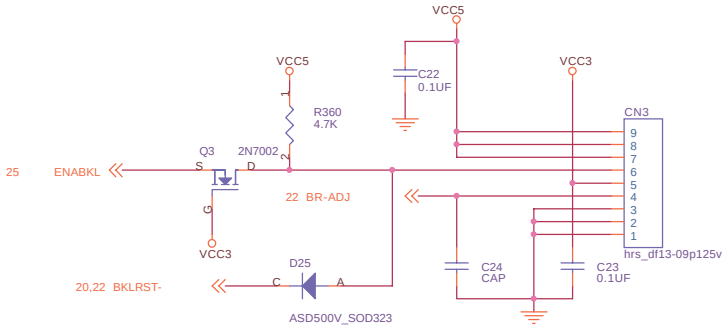
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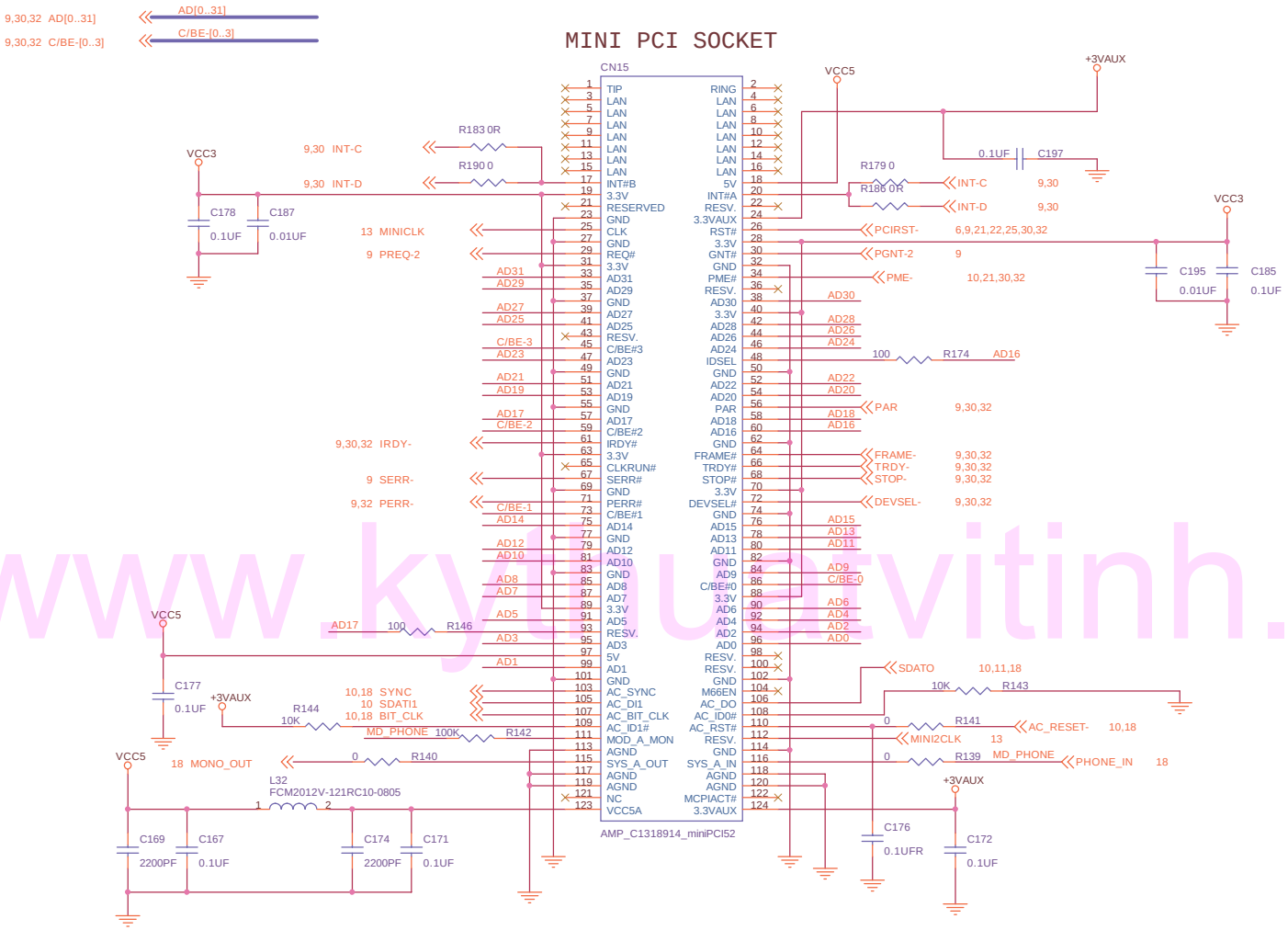


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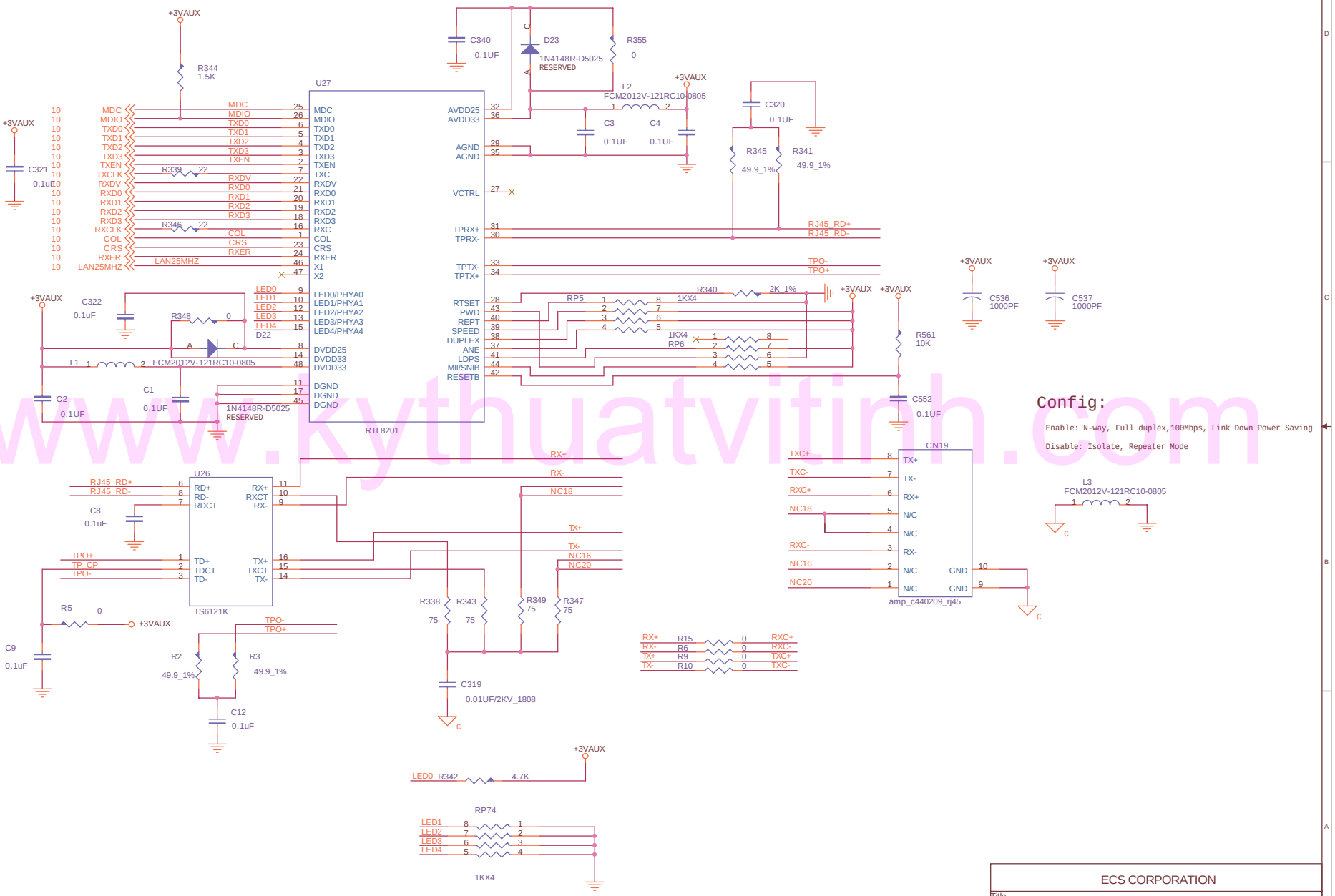


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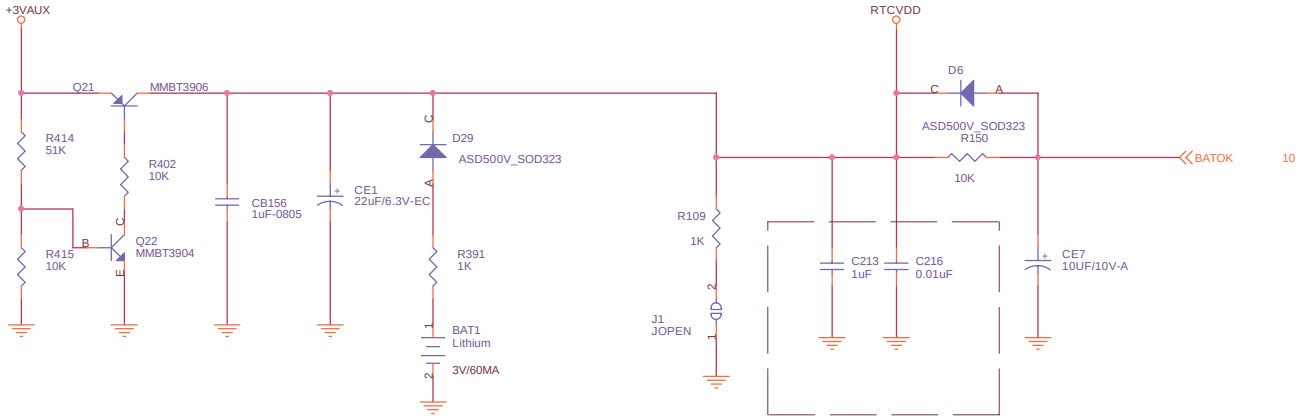


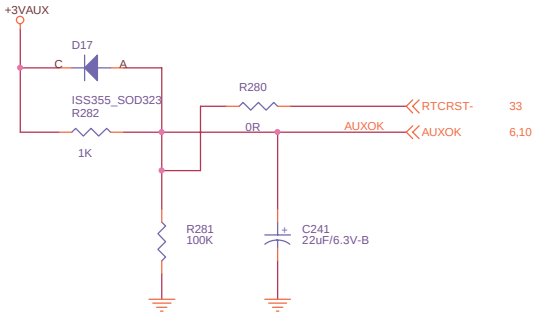
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RTC

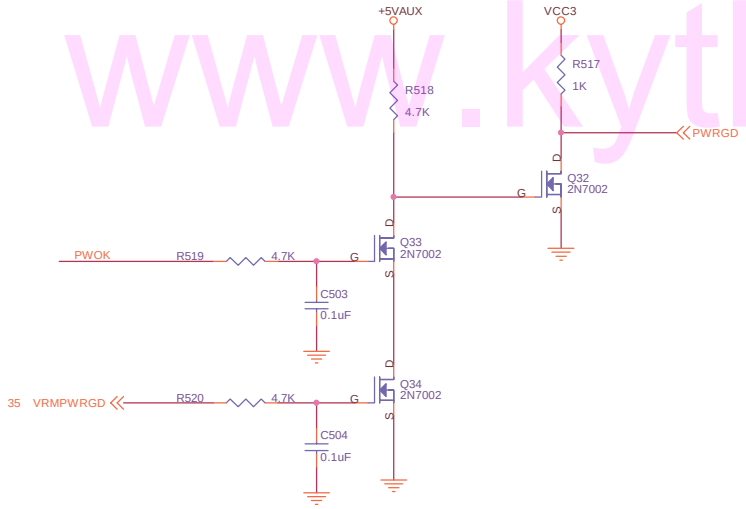
NOTE!
1.The RTCVDD is 3V
2.Decoupling capacitor must be close to 650 RTCVDD pin.
3.RTC circuit must strictly follow SiS's recommended design
SiS is not responsible for RTC problems from foreign designs.

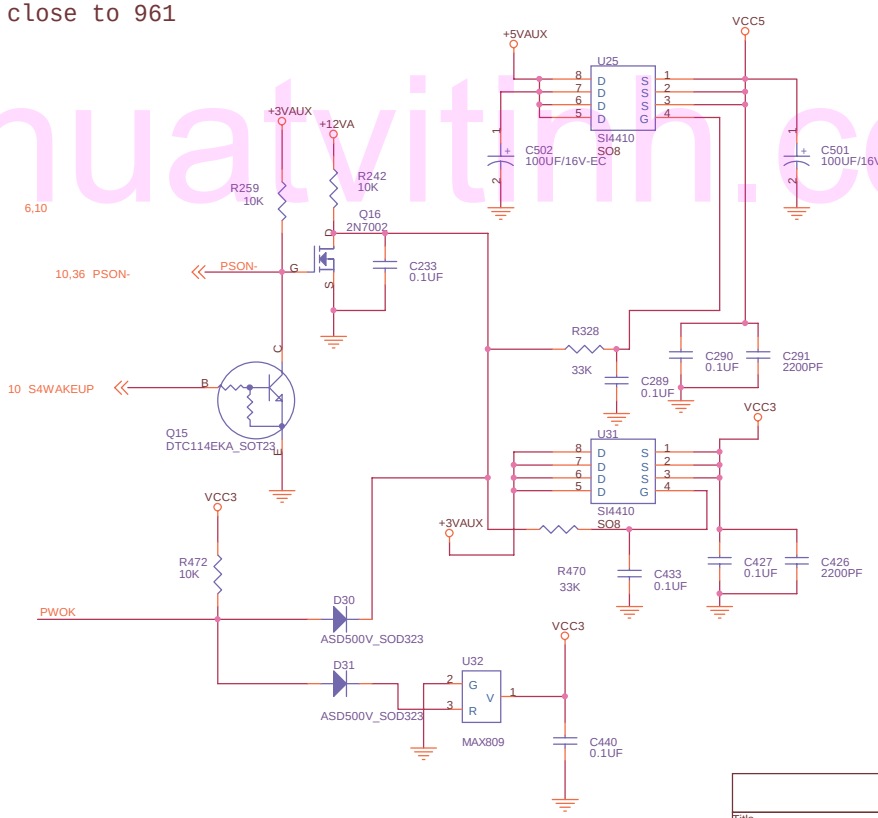


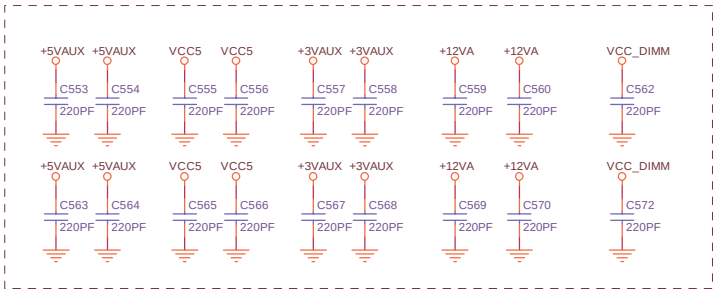


CONN---> LONGTRUMP_BH-8009G_RTC

Place close to 961



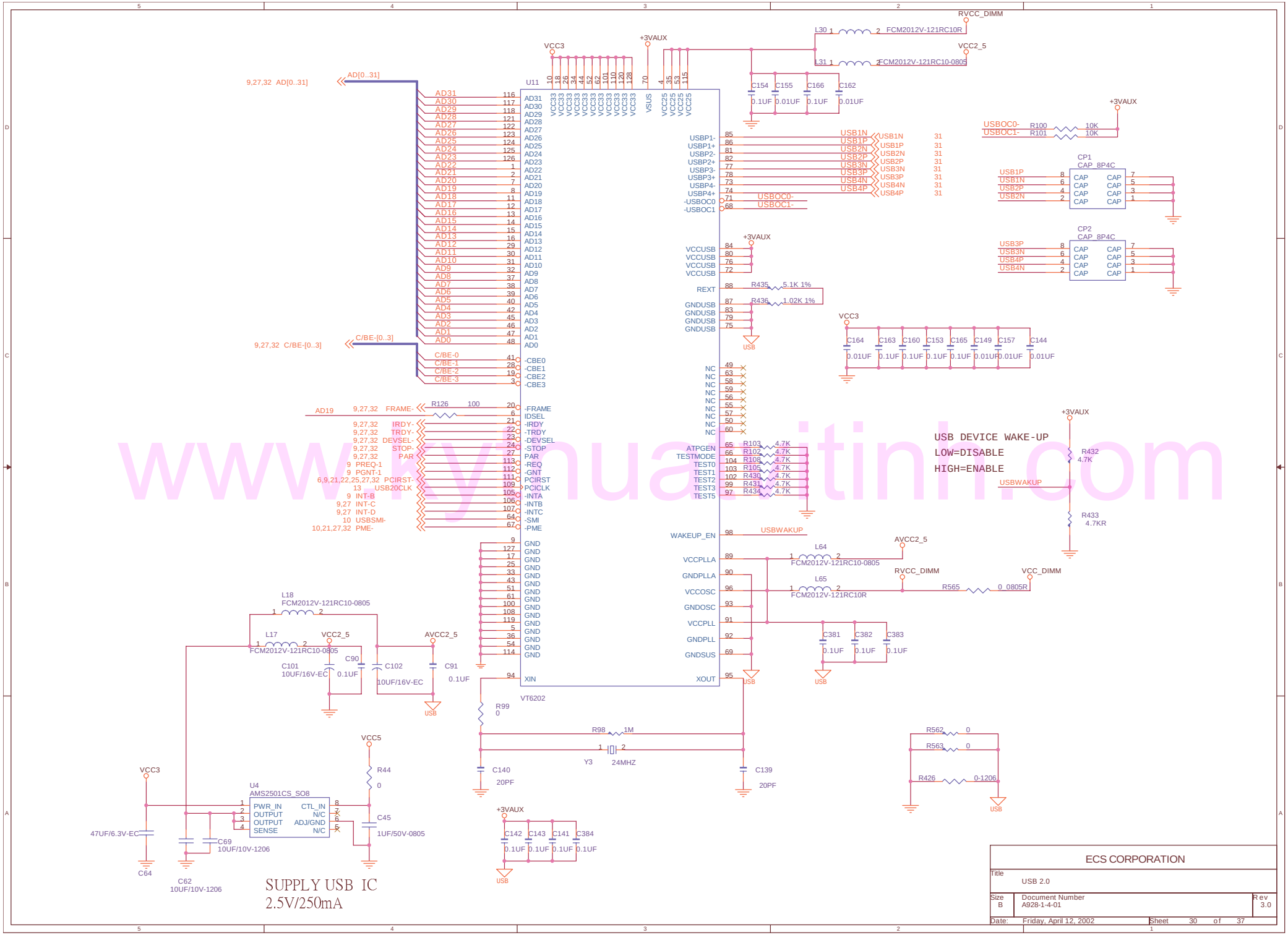




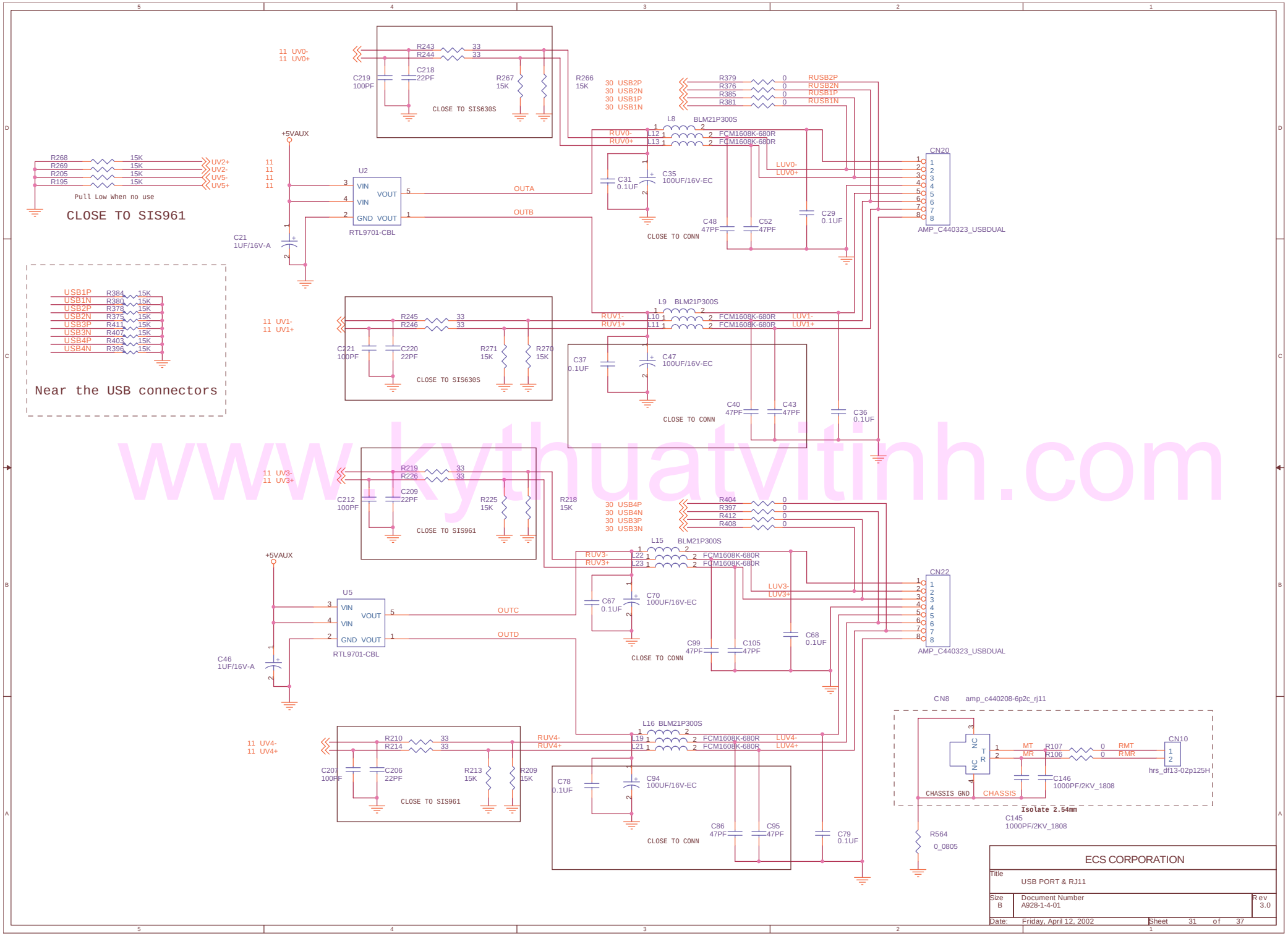
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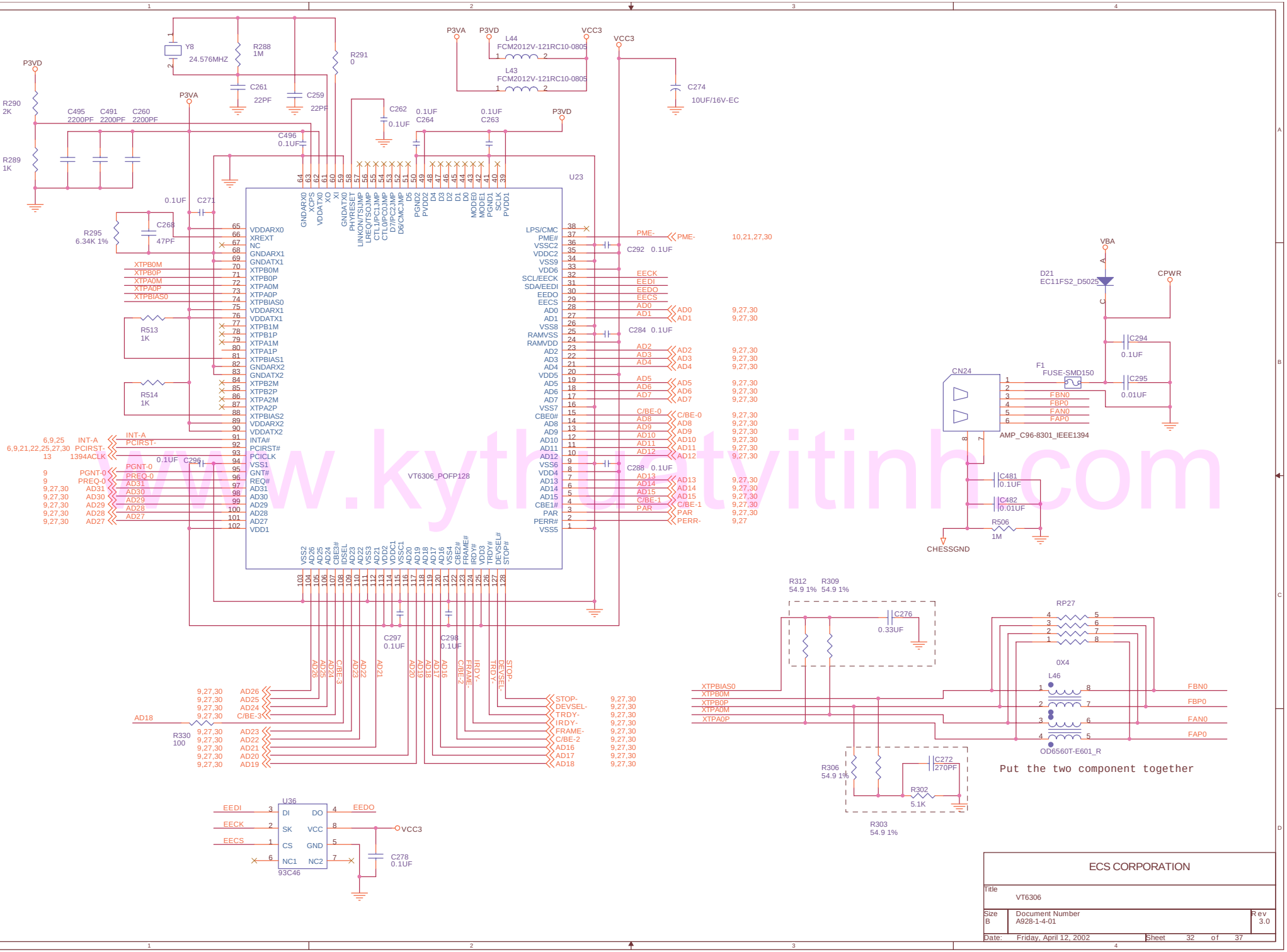
Title	RTC & POWER SW	
Size B	Document Number A928-1-4-01	Rev 3.0
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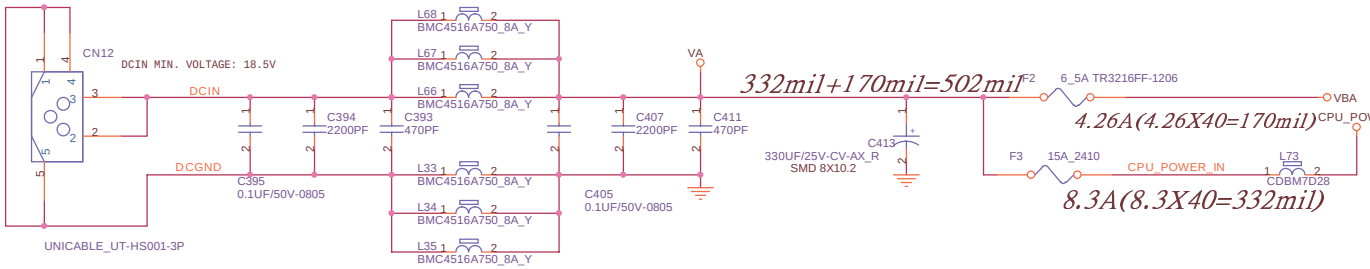
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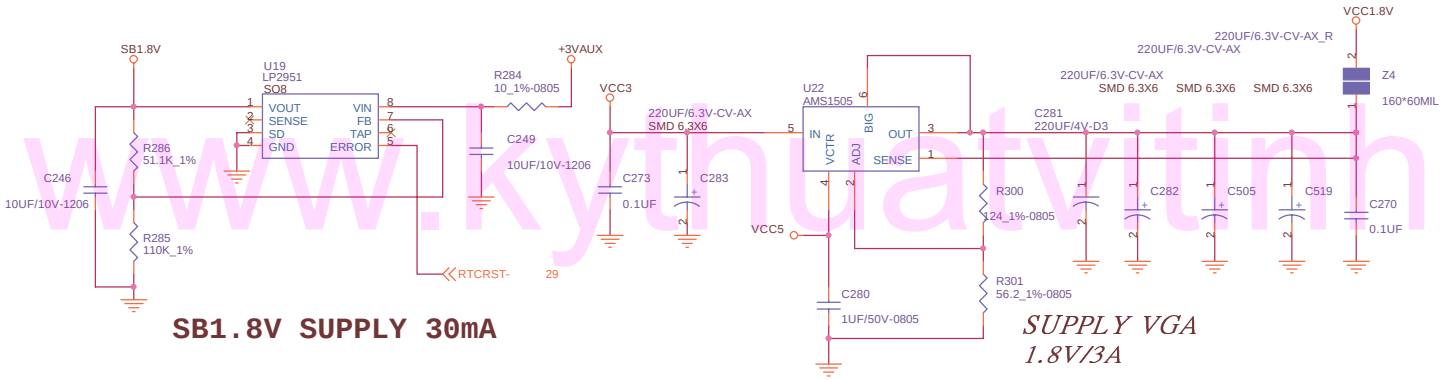


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3.3Vx5A+5Vx4.5A+2.5Vx3A+1.25Vx2A=49W
49W/11.5V= 4.26A
4.26A(4.26x40mil=170mil)

1.6Vx60A=96W
96W/11.5V=8.3A
8.3A(8.3x40mil=332mil)

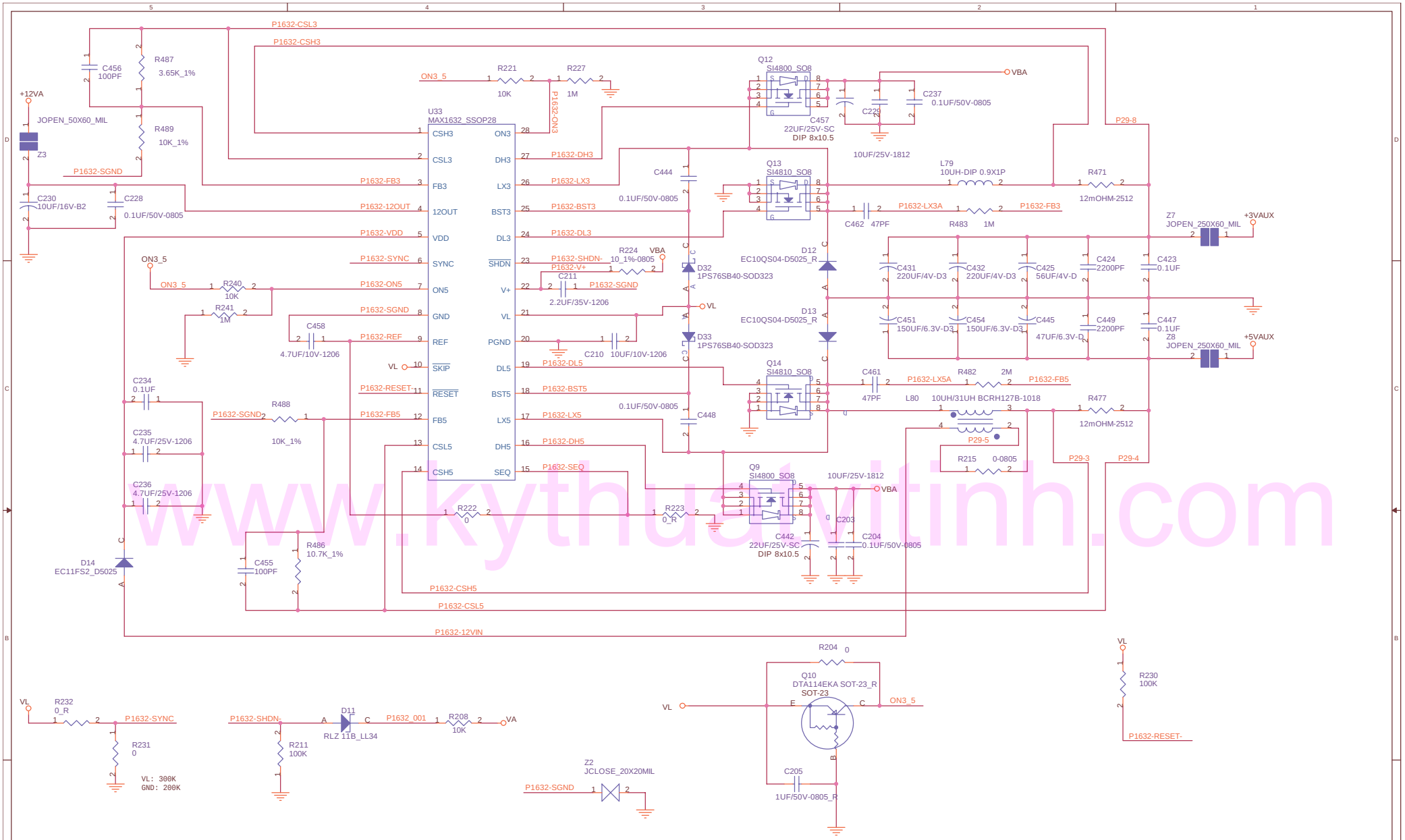


SB1.8V SUPPLY 30mA

SUPPLY VGA
1.8V/3A

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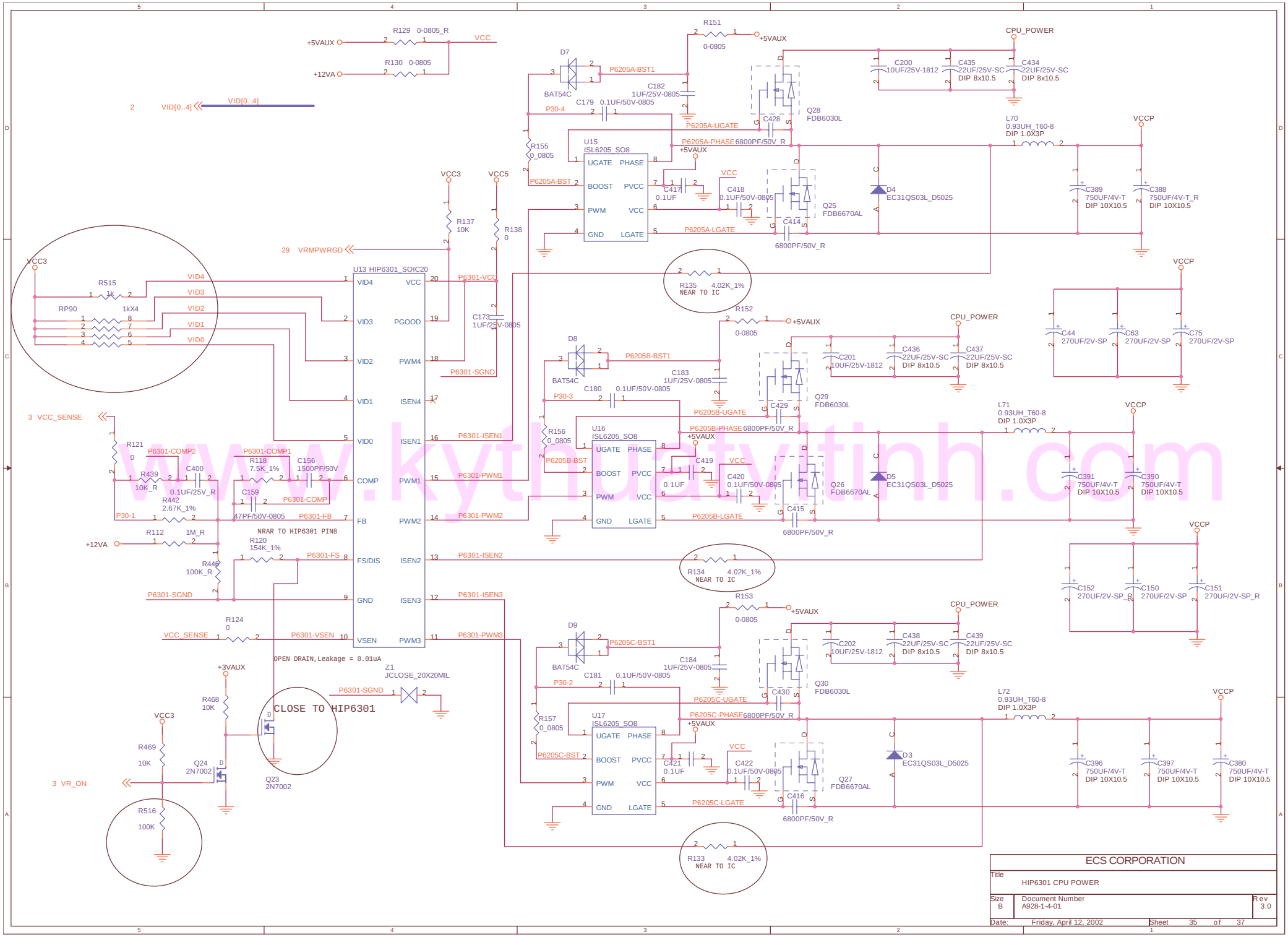
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Title: DC IN & VGA,CLOCK AUX,VTT		
Size: B	Document Number: A928-1-01-4	Rev: 3.0
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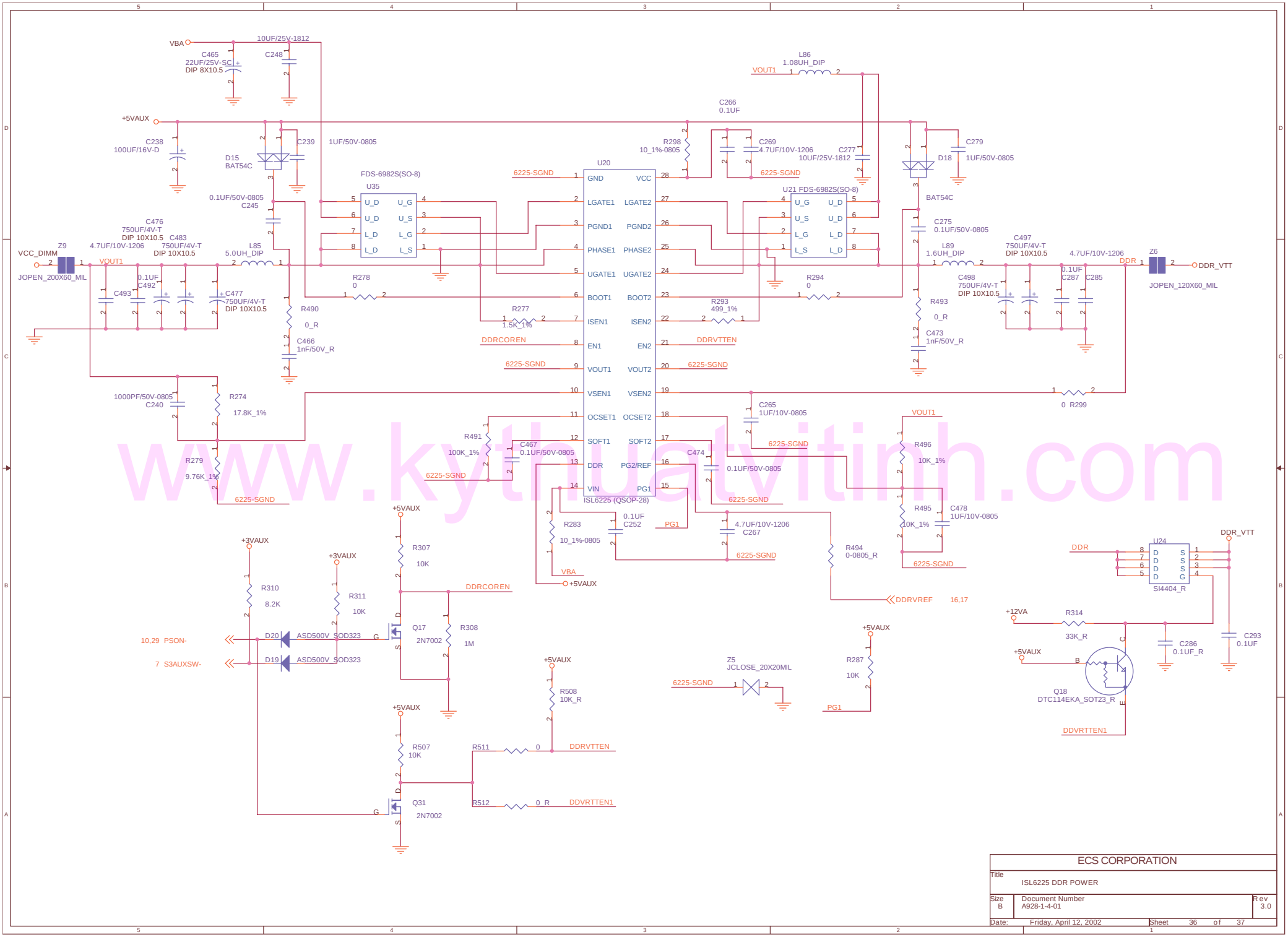
+5VAUX/3VAUX/+12VA SUPPLY

ECS CORPORATION		
Title: MAX 1632 SYSTEM POWER		
Size: B	Document Number: A928-1-4-01	Rev: 3.0
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Title	HIP6301 CPU POWER
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Title: ISL6225 DDR POWER		
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1.0 : Schematic Release.

2.0 : Schematic Release.

1. Add new source KBC(KB3668 B0,ENE).
2. Solution for EMI.
3. Solution for lan wake up error before suspend mode.

2.A : Schematic Release.

1. Modify page 24 ,U9 W83L785R change to W83L784AR
2. Modify page 36 ,add soft start time.C474,C467 change to 0.1UF/50V 0805

2.B : Schematic Release.

1. Modify page 22 ,Removing Y5,R567 component that short with cdrom device.

3.0 : Schematic Release.

1. Modify pcb layout to R3 version.
2. Resume R567 0 ohm 0805 because it's beem away cdrom.

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Title: HISTORY		
Size: B	Document Number: A928-1-4-01	Rev: 3.0
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