

A900 SCHEMATICS

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- 13.CRT & S-VIDEO
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- 25.CPU VCORE/VTT/VCC2.5V
- 26.VCC3/VCC5
- 27.VCC1.8V/AUX POWERS

PCB NO. : KK0A900011020

REV.: 2.0 (ECS M/B V2.1)

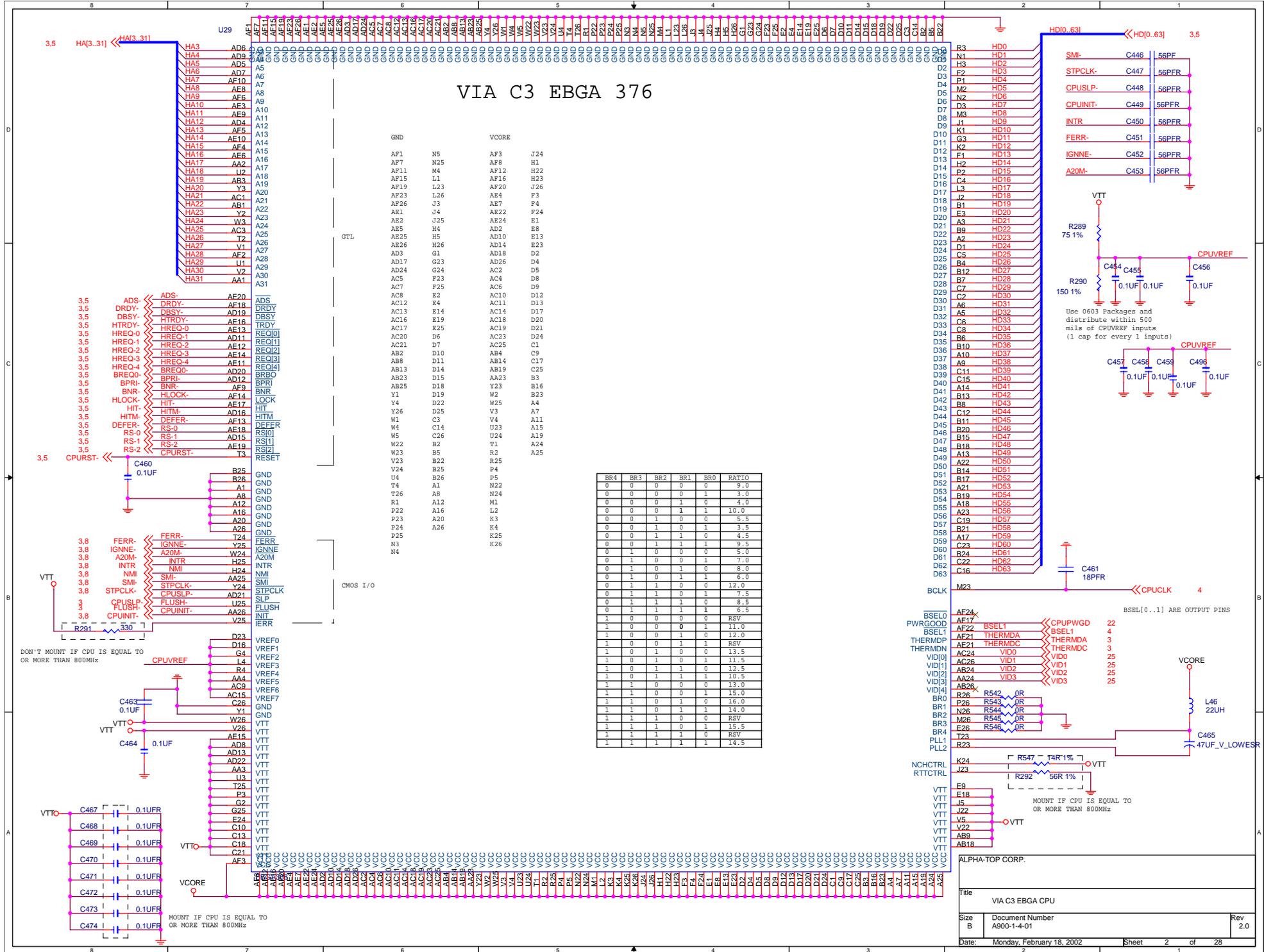
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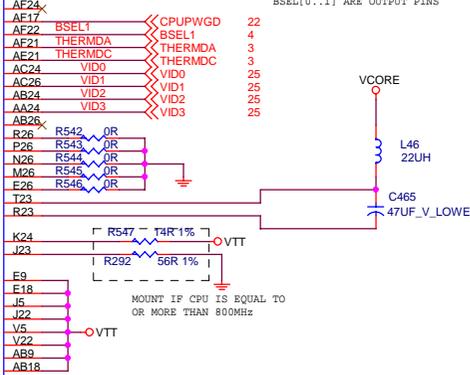
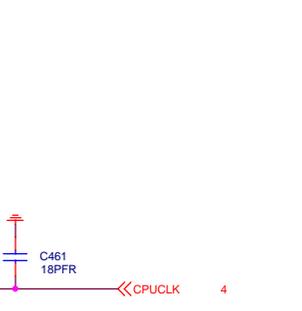
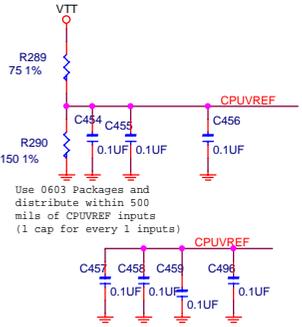
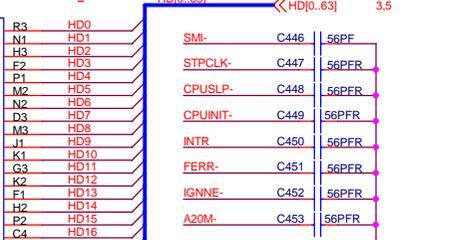
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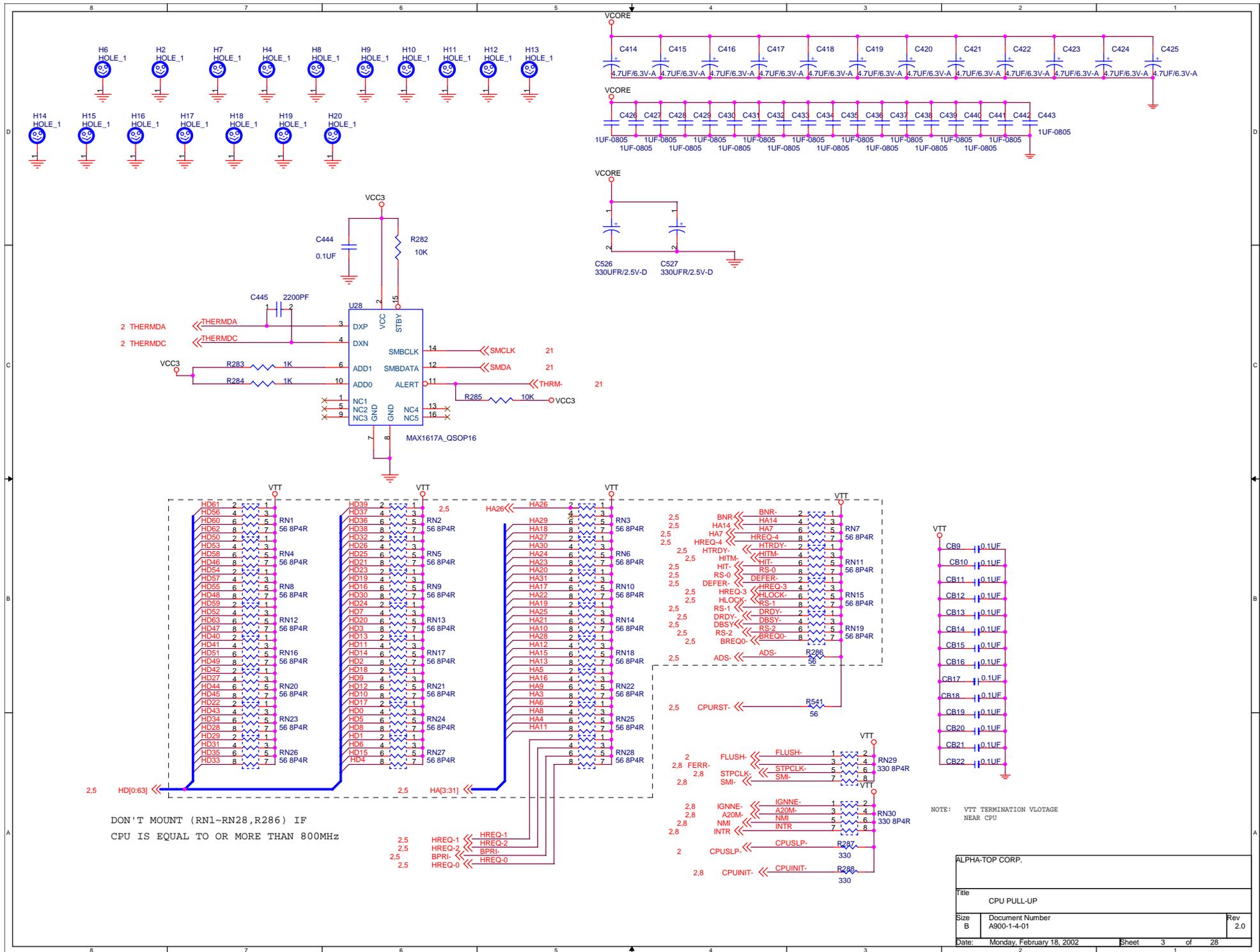
ALPHA-TOP CORP.			
Title A900 MAIN BOARD			
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VIA C3 EPGA 376



BR4	BR3	BR2	BR1	BR0	RATIO
0	0	0	0	0	3.0
0	0	0	1	0	4.0
0	0	0	1	1	10.0
0	0	1	0	0	5.5
0	0	1	0	1	3.5
0	0	1	1	0	4.5
0	0	1	1	1	9.5
0	1	0	0	0	5.0
0	1	0	0	1	7.0
0	1	0	1	0	8.0
0	1	0	1	1	6.0
0	1	1	0	0	12.0
0	1	1	0	1	7.5
0	1	1	1	0	8.5
0	1	1	1	1	6.5
1	0	0	0	1	11.0
1	0	0	1	0	12.0
1	0	0	1	1	RSV
1	0	1	0	0	13.5
1	0	1	0	1	11.5
1	0	1	1	0	12.5
1	0	1	1	1	10.5
1	1	0	0	0	13.0
1	1	0	0	1	15.0
1	1	0	1	0	16.0
1	1	0	1	1	14.0
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1	1	1	0	1	15.5
1	1	1	1	0	RSV
1	1	1	1	1	14.5



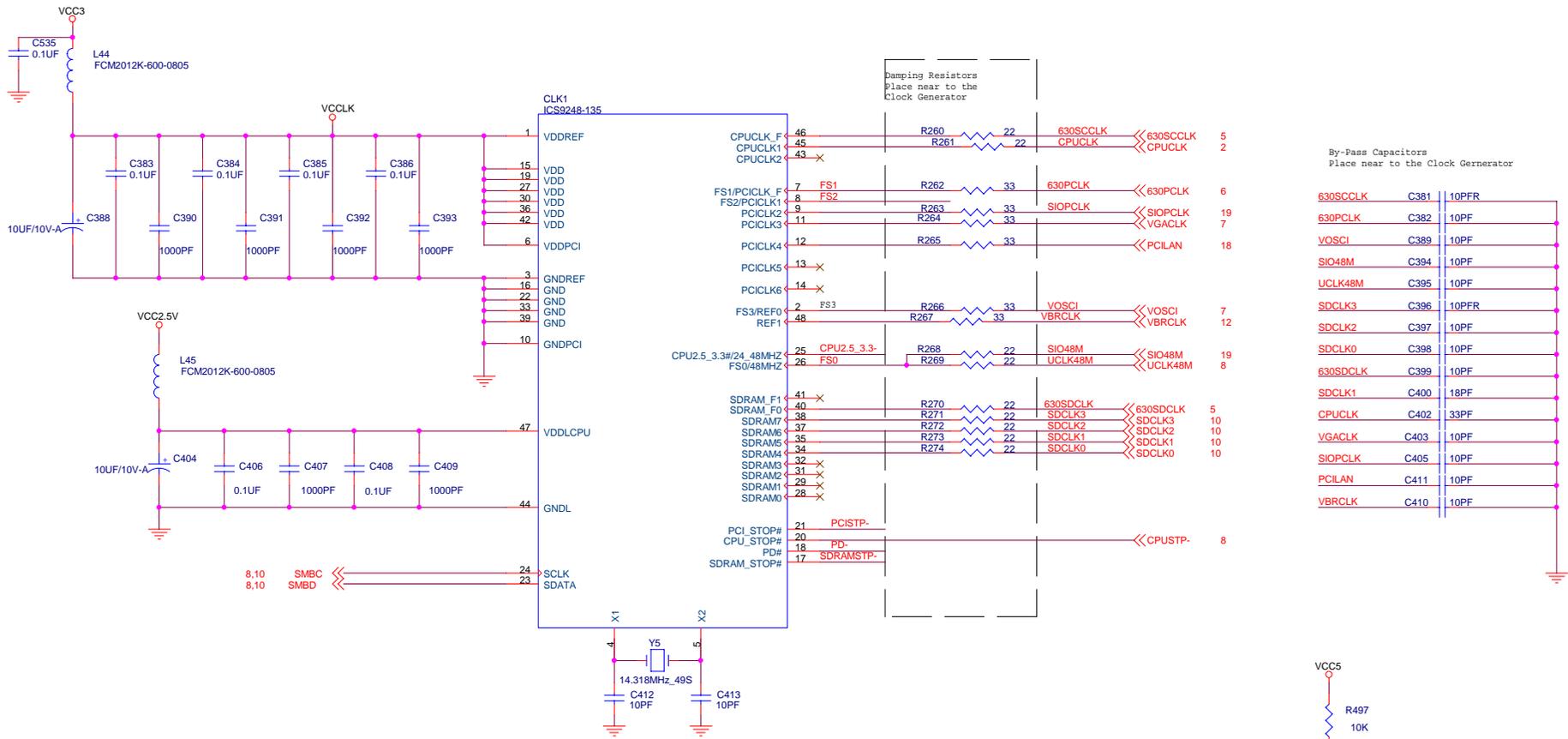


DON'T MOUNT (RN1~RN28,R286) IF CPU IS EQUAL TO OR MORE THAN 800MHz

NOTE: VTT TERMINATION VLOTAGE NEAR CPU

ALPHA-TOP CORP.		
Title CPU PULL-UP		
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Clock Generator



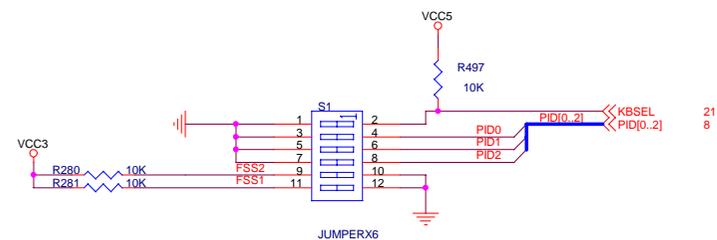
By-Pass Capacitors
Place near to the Clock Generator

630SCCLK	C381	10PFR
630PCLK	C382	10PF
VOSCI	C389	10PF
SIO48M	C394	10PF
UCLK48M	C395	10PF
SDCLK3	C396	10PFR
SDCLK2	C397	10PF
SDCLK0	C398	10PF
630SDCLK	C399	10PF
SDCLK1	C400	18PF
CPUCLK	C402	33PF
VGACLK	C403	10PF
SIO48M	C405	10PF
PCILAN	C411	10PF
VBRCLK	C410	10PF

FS0-FS3 AND CPU2.5_3.3- HAVE INTERNAL PULL-DOWN 120K TO GND

PD- HAS INTERNAL PULL-UP 120K TO VCC3

REF0 AND 48MHz HAS DOUBLE STRENGTH

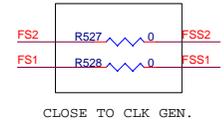
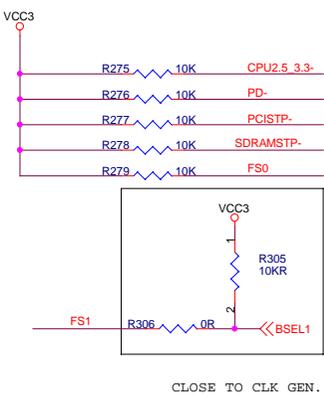


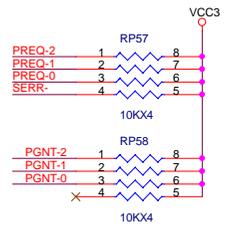
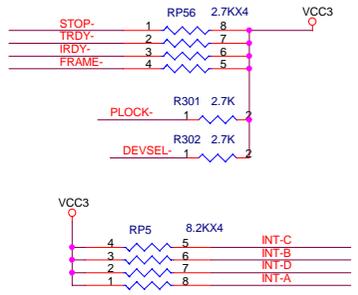
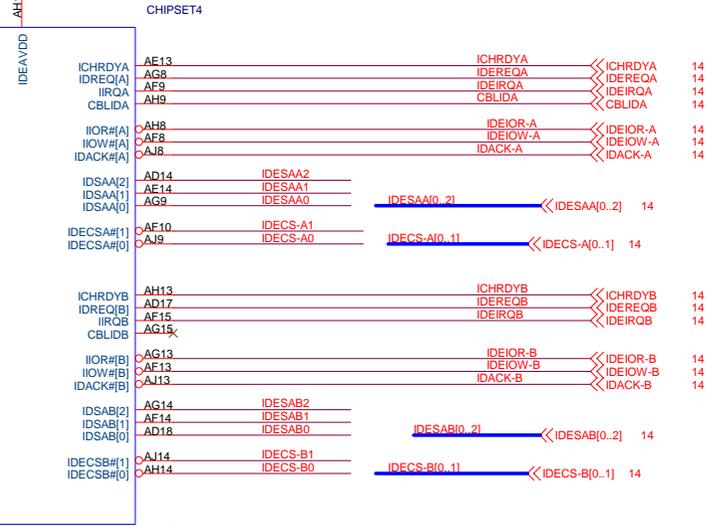
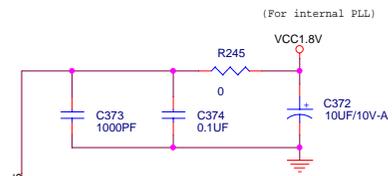
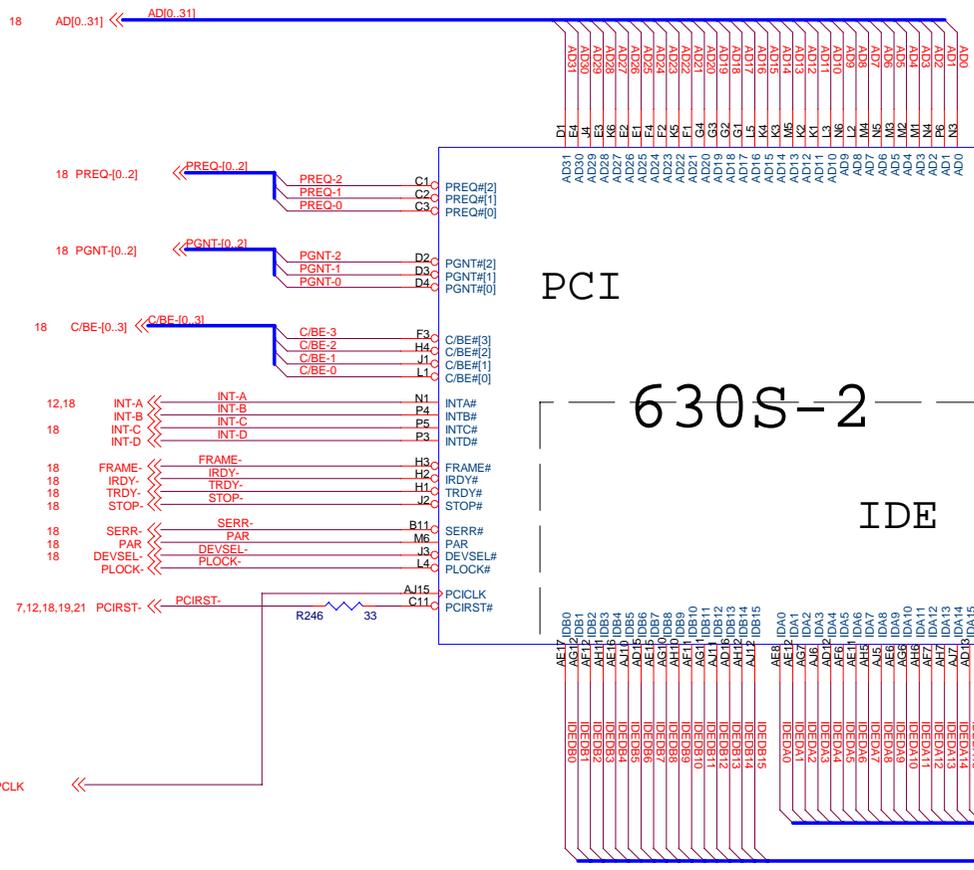
(1) OFF <-----> ON(0)

FS1 / FS2	FREQUENCY
0	100
1	133

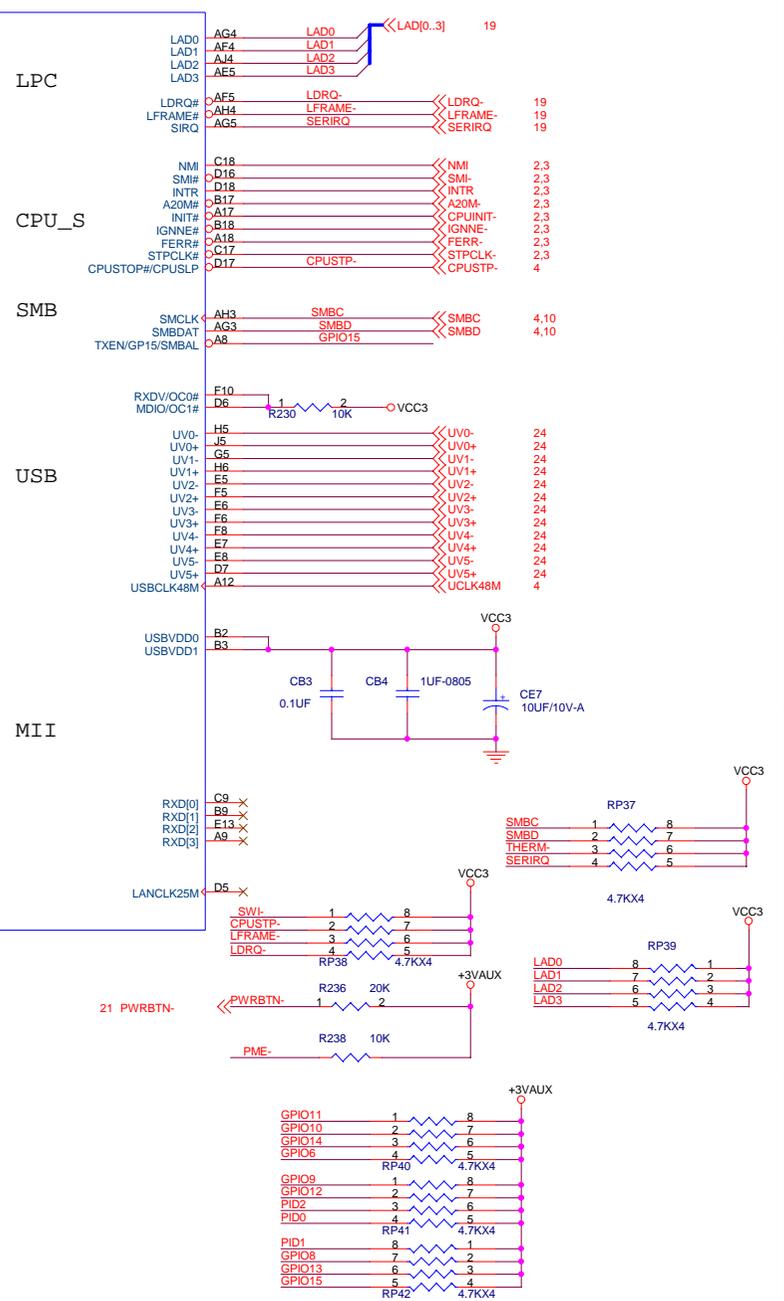
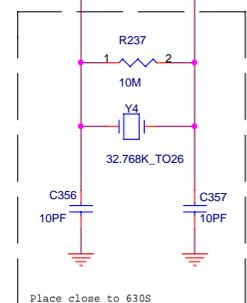
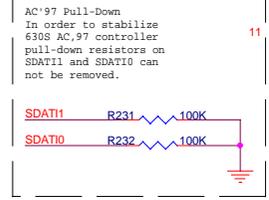
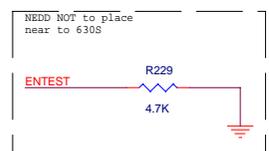
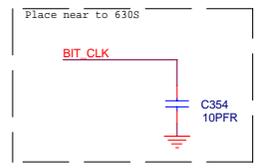
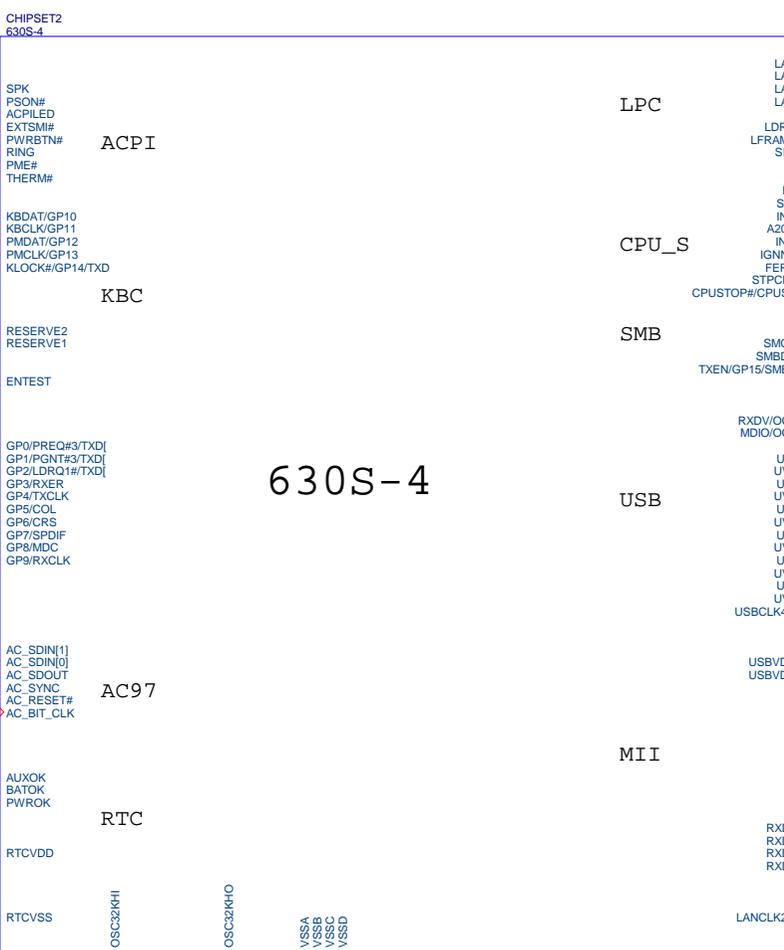
NOTE: FS1 CONTROLS CPU FREQUENCY
FS2 CONTROLS DRAM FREQUENCY

S1S630S CLOCK						
(FS3)	(FS2)	(FS1)	(FS0)	CPU (MHz)	SDRAM (MHz)	PCI (MHz)
0	0	0	1	100	100	33.3
0	0	1	1	133.3	100	33.3
0	1	0	1	100	133.3	33.3
0	1	1	1	133.3	133.3	33.3

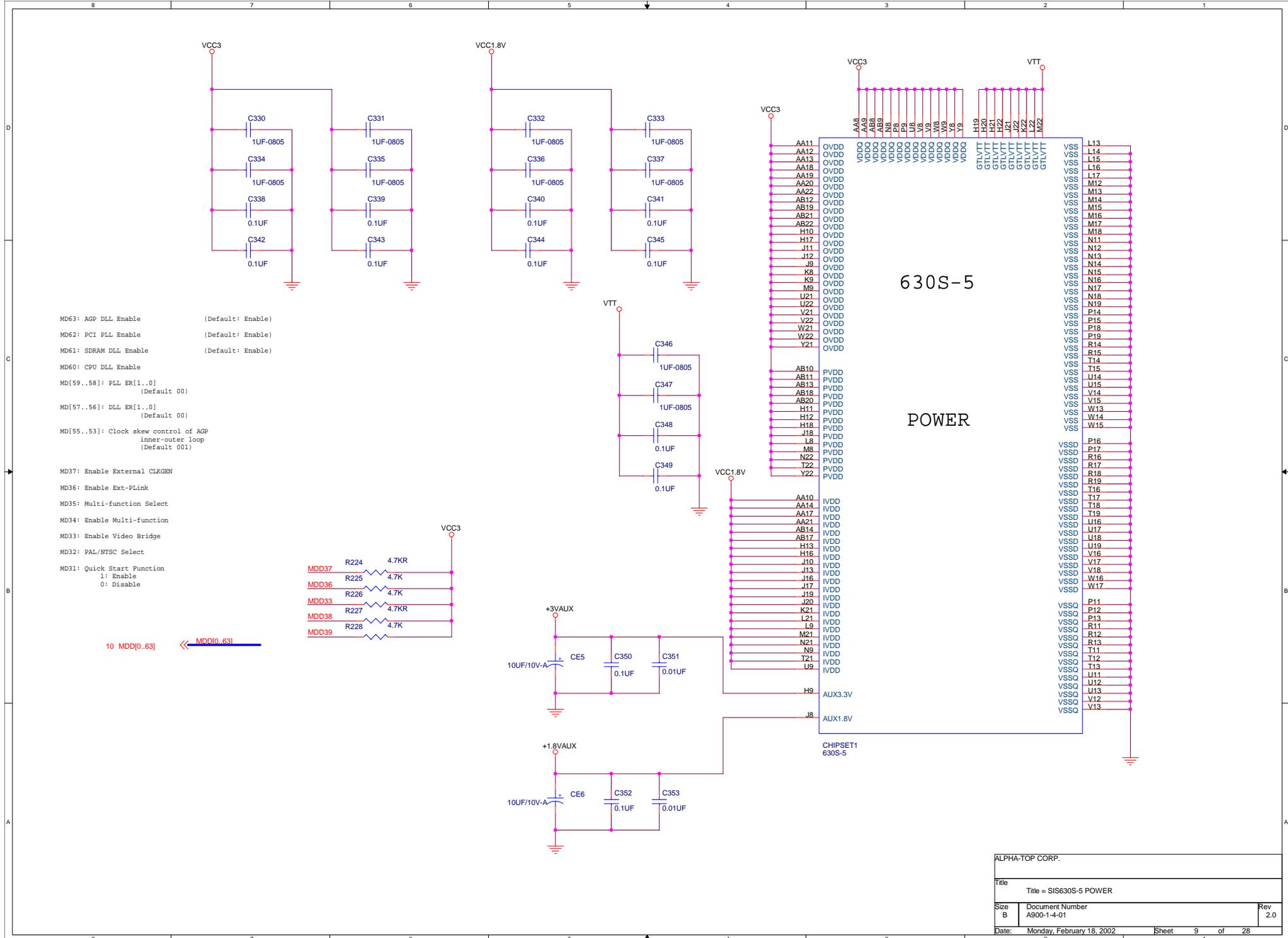




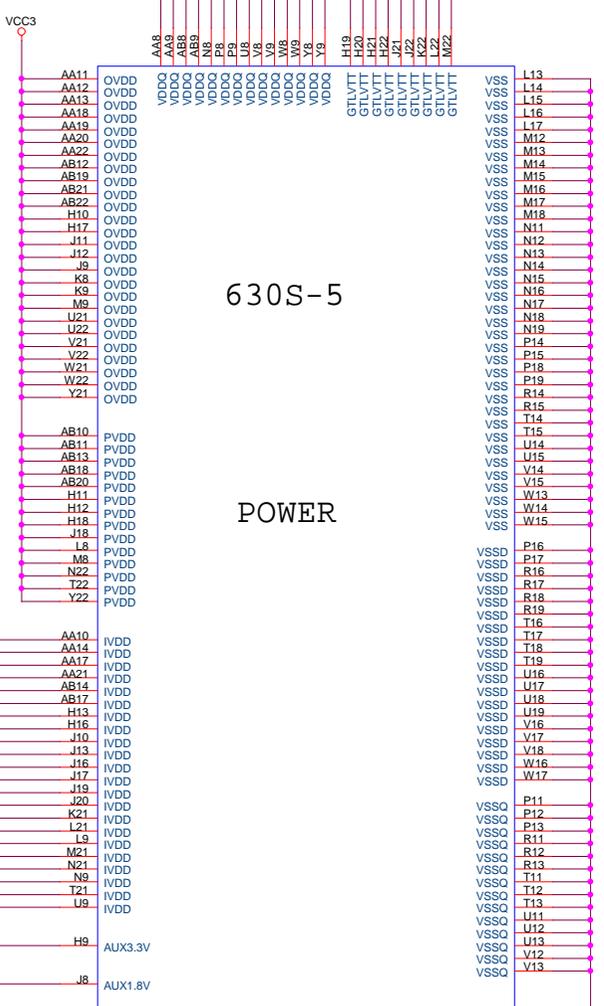
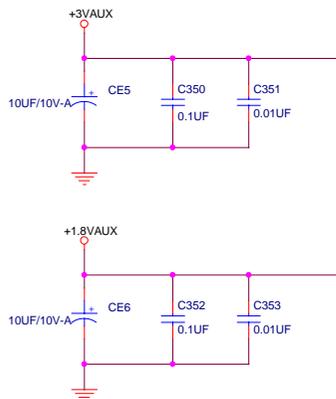
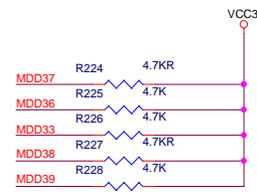
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Title SIS630S-4 SOUTH BRIDGE		
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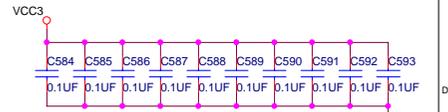
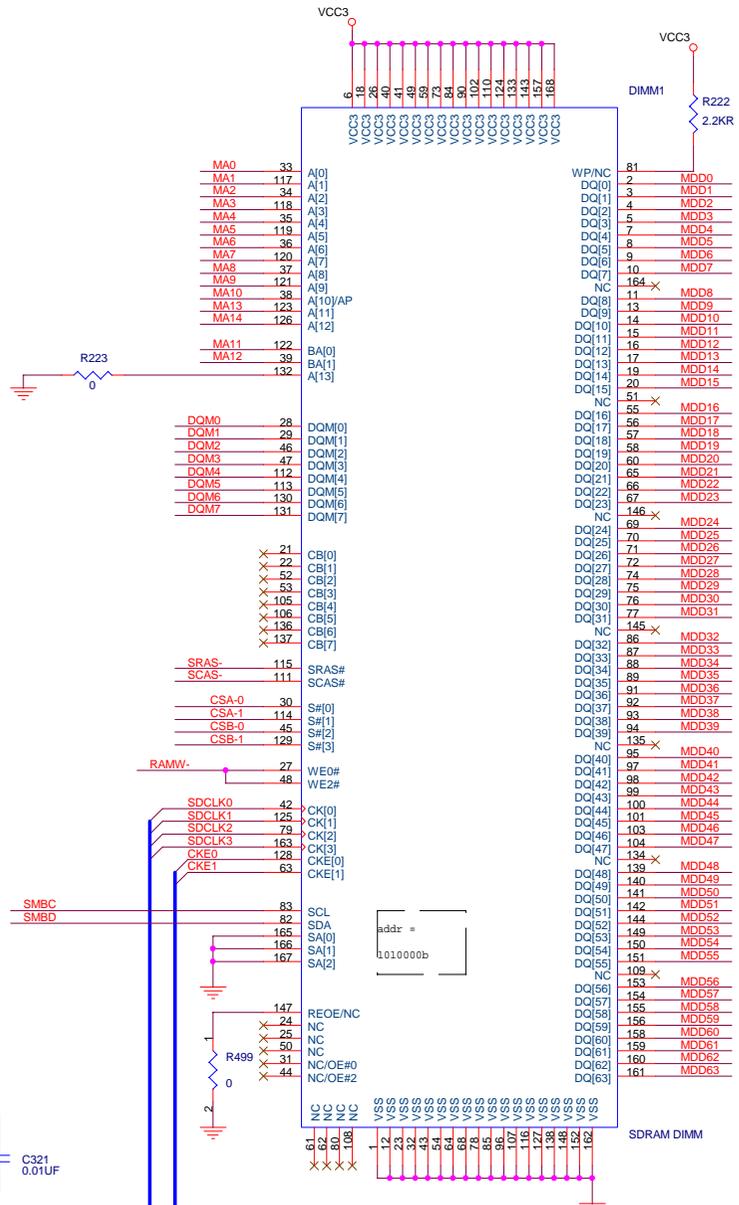
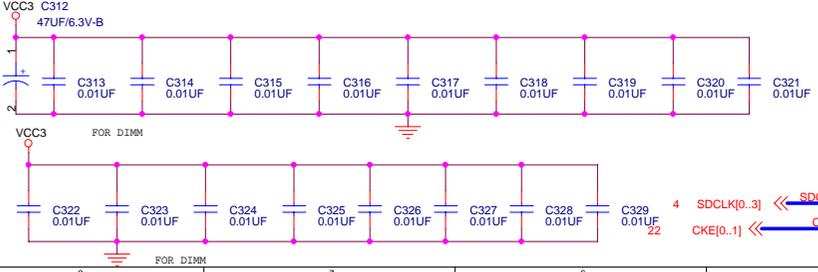
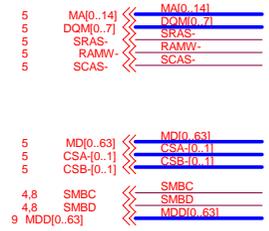
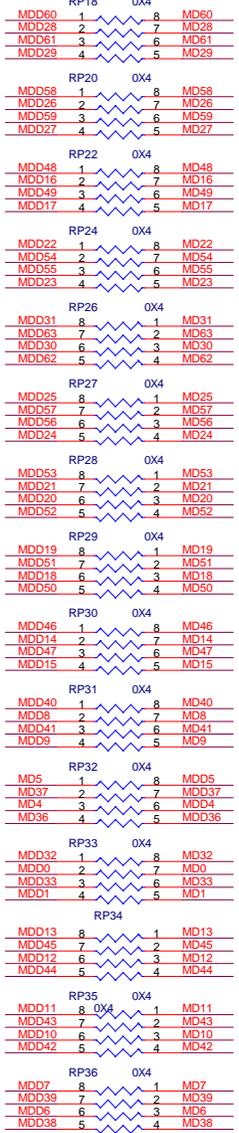


- MD63: AGP DLL Enable (Default: Enable)
- MD62: PCI PLL Enable (Default: Enable)
- MD61: SDRAM DLL Enable (Default: Enable)
- MD60: CPU DLL Enable
- MD[59..58]: PLL ER[1..0] (Default 00)
- MD[57..56]: DLL ER[1..0] (Default 00)
- MD[55..53]: Clock skew control of AGP inner-outer loop (Default 001)
- MD37: Enable External CLKGEN
- MD36: Enable Ext-PLink
- MD35: Multi-function Select
- MD34: Enable Multi-function
- MD33: Enable Video Bridge
- MD32: PAL/NTSC Select
- MD31: Quick Start Function
 - 1: Enable
 - 0: Disable



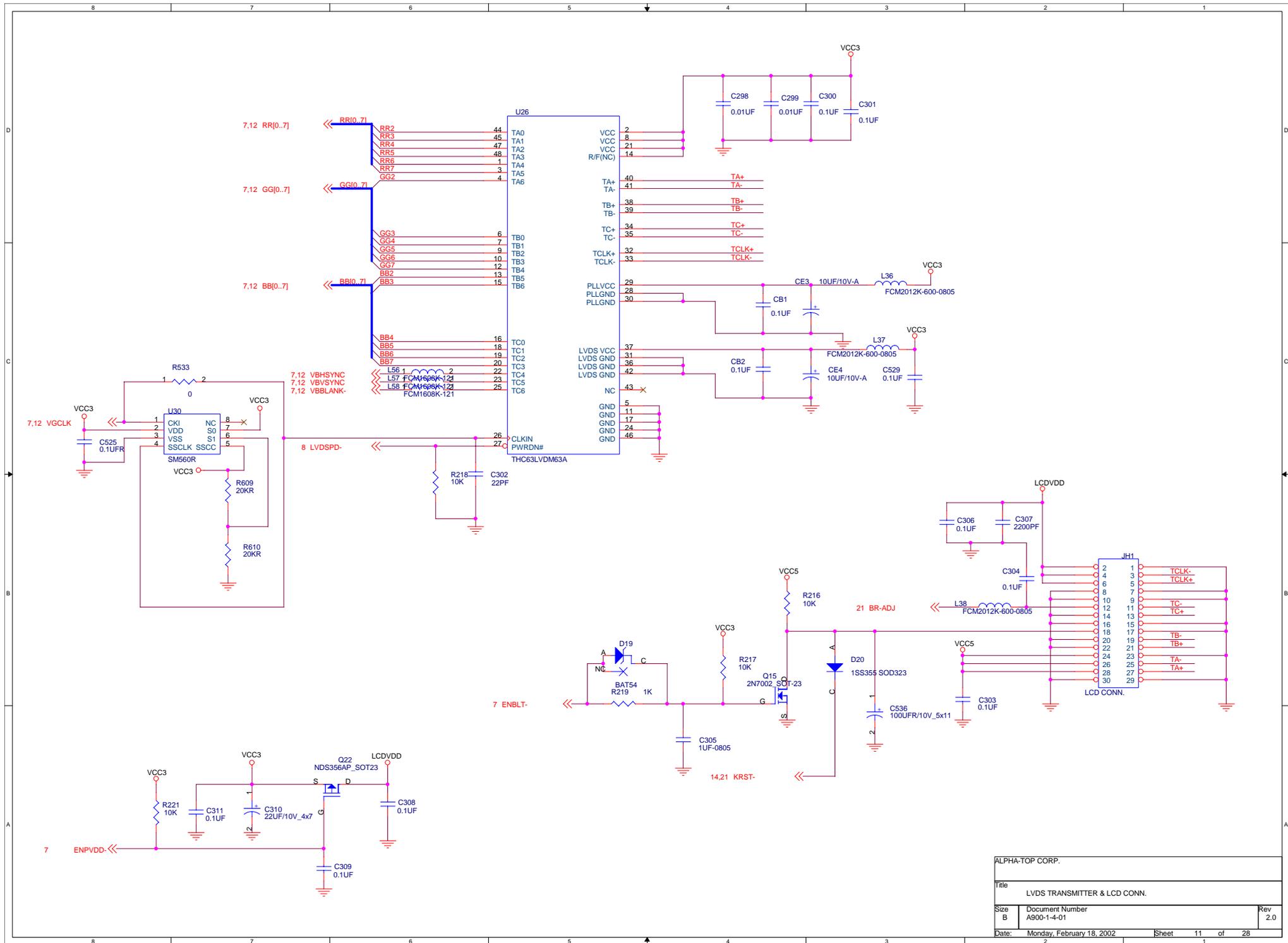
630S-5
POWER

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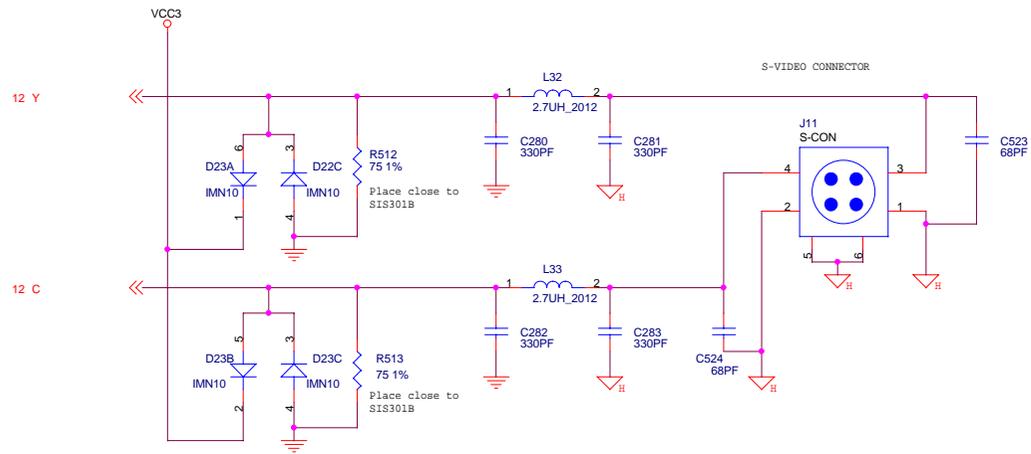
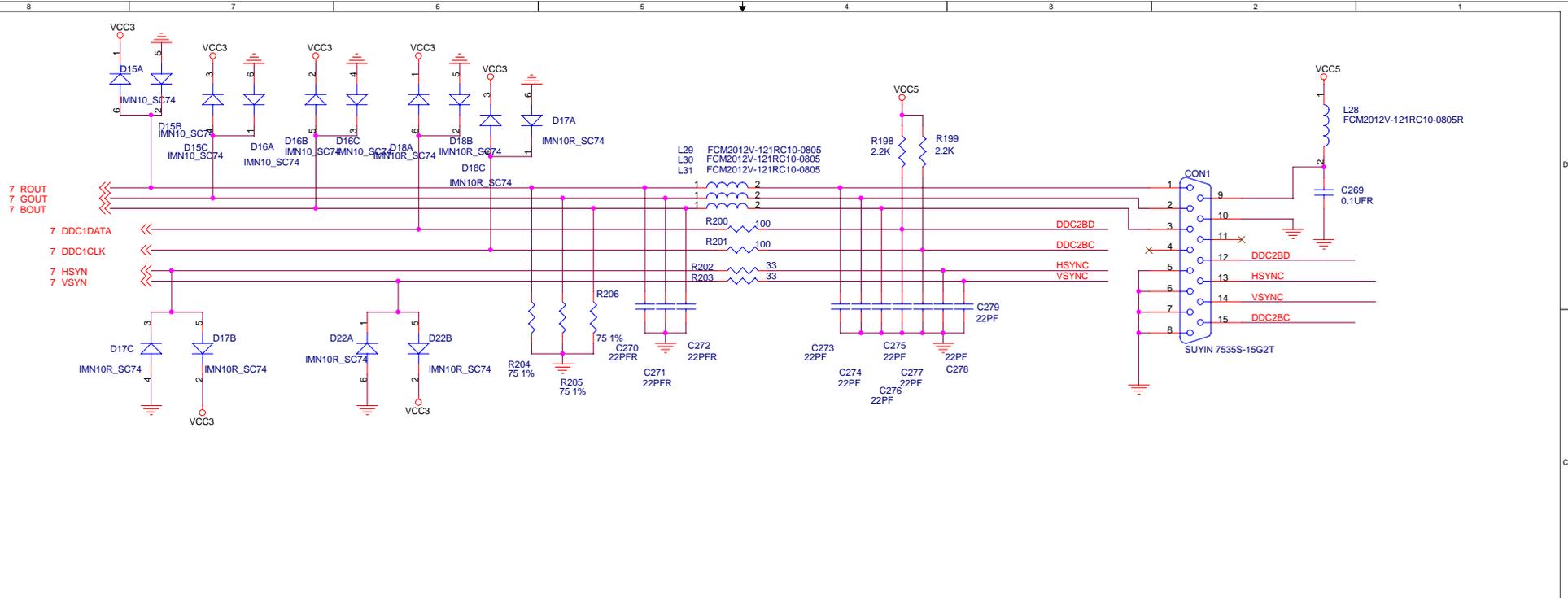


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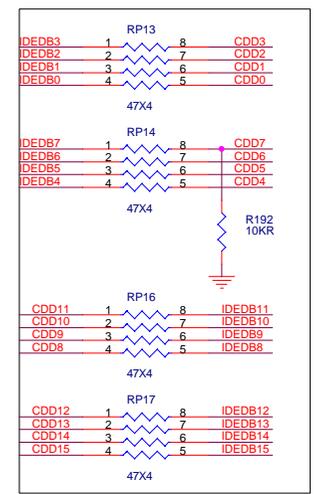
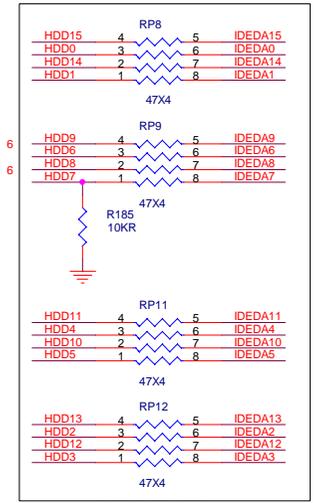
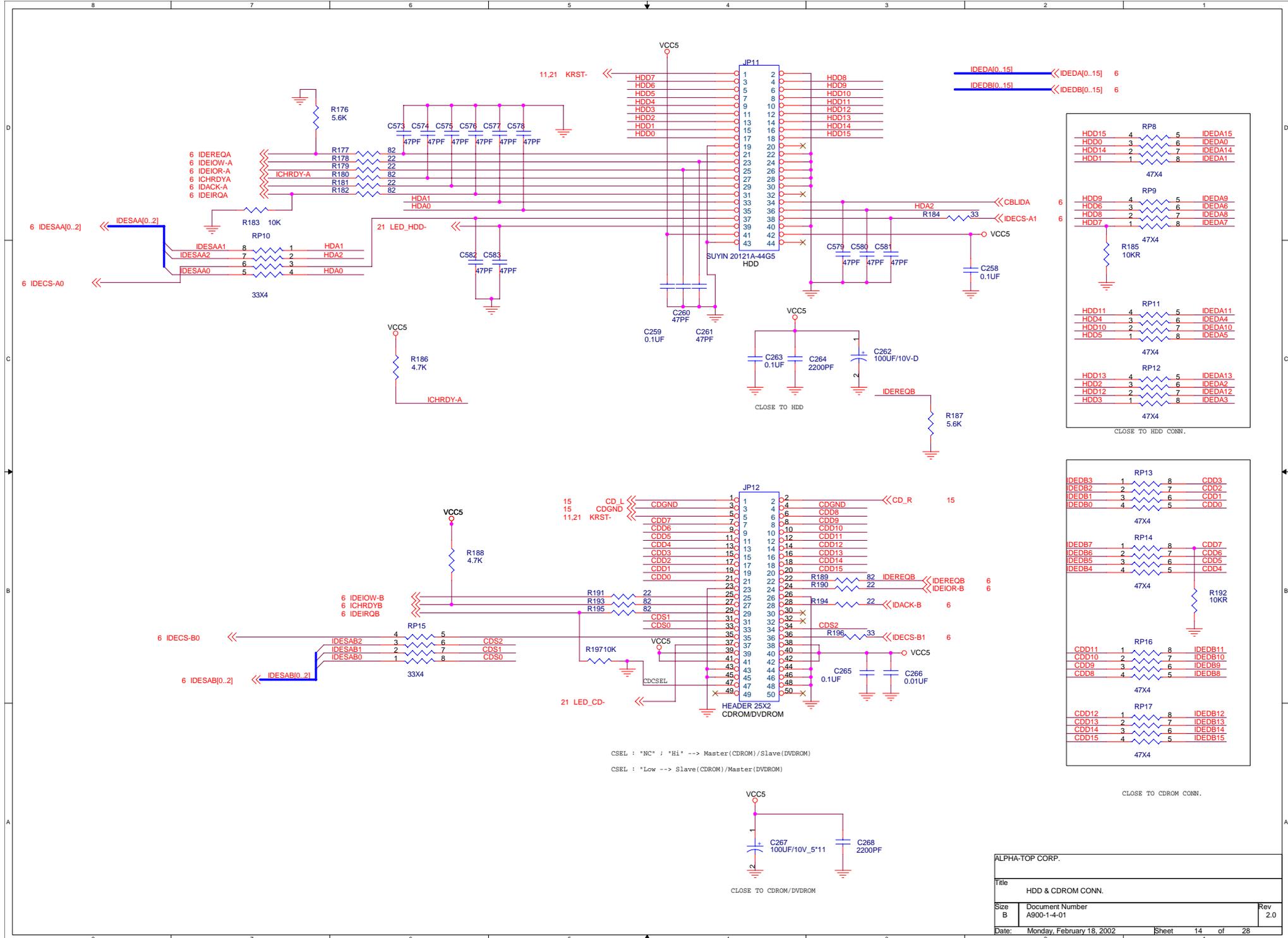
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Size	Document Number	Rev
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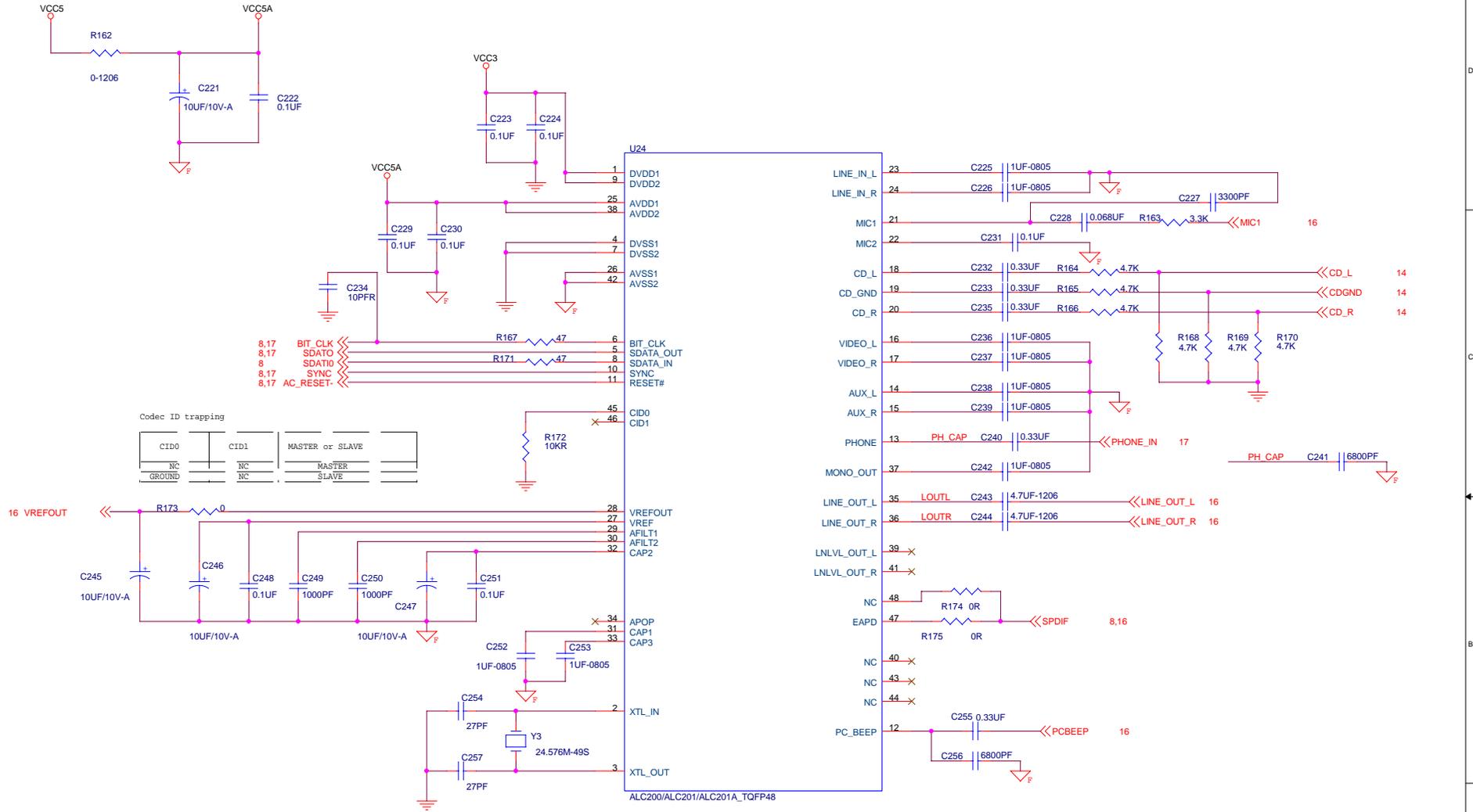


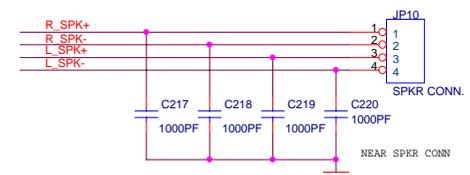
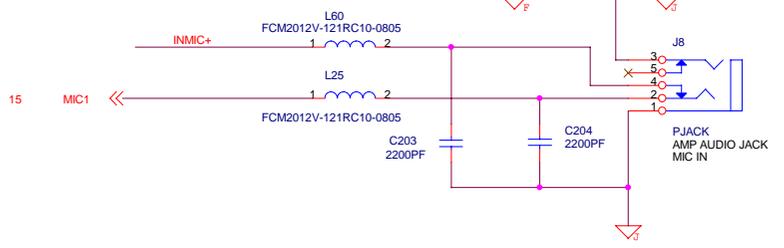
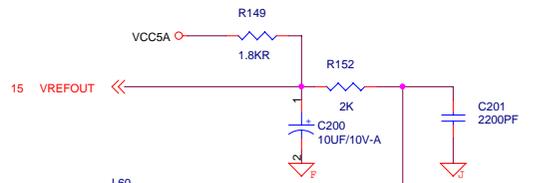
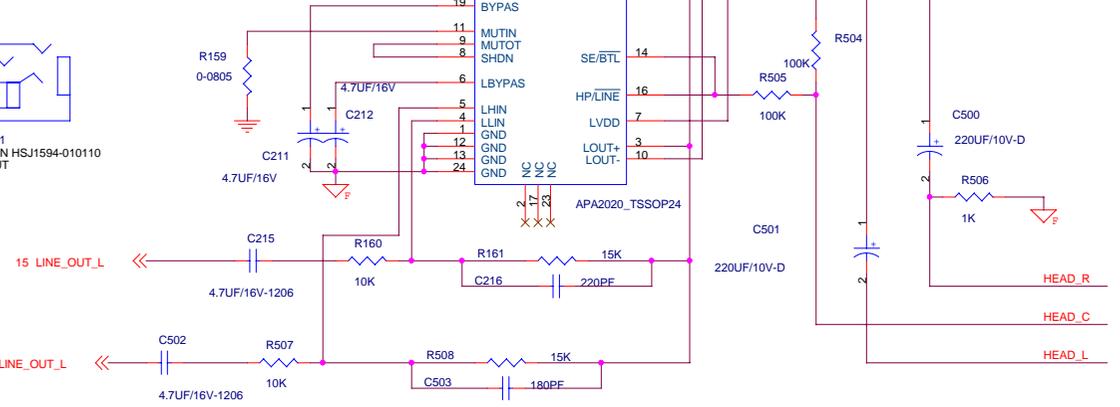
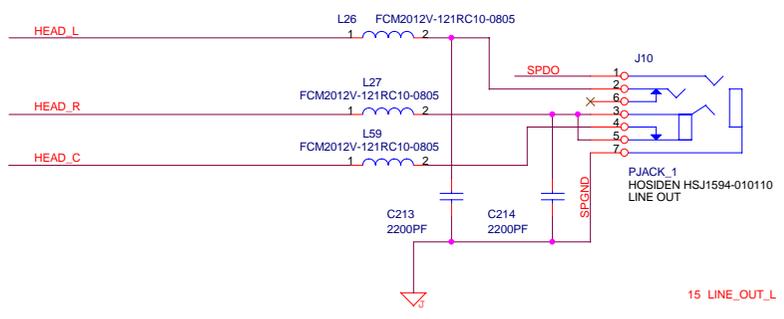
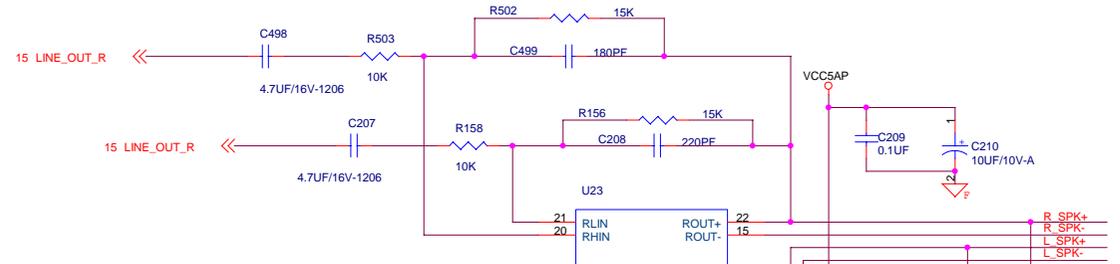
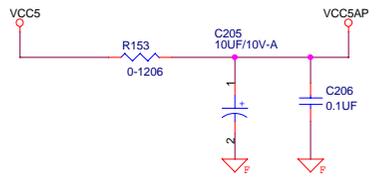
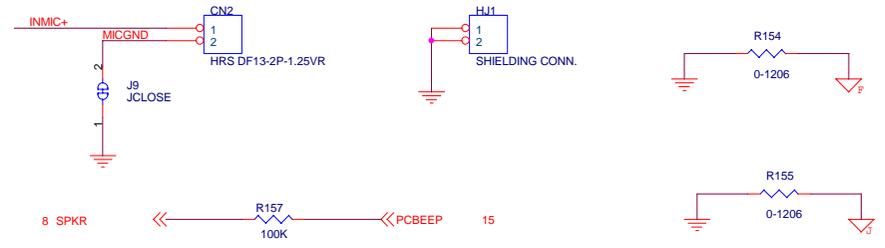
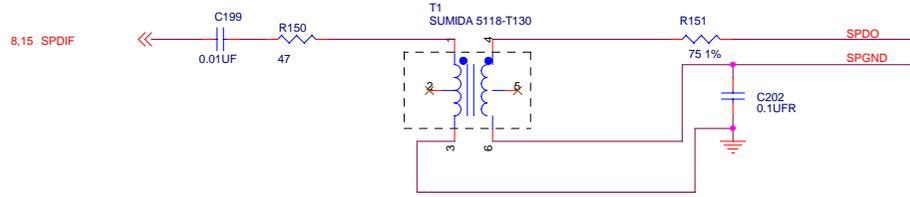
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Title CRT & S-VIDEO		
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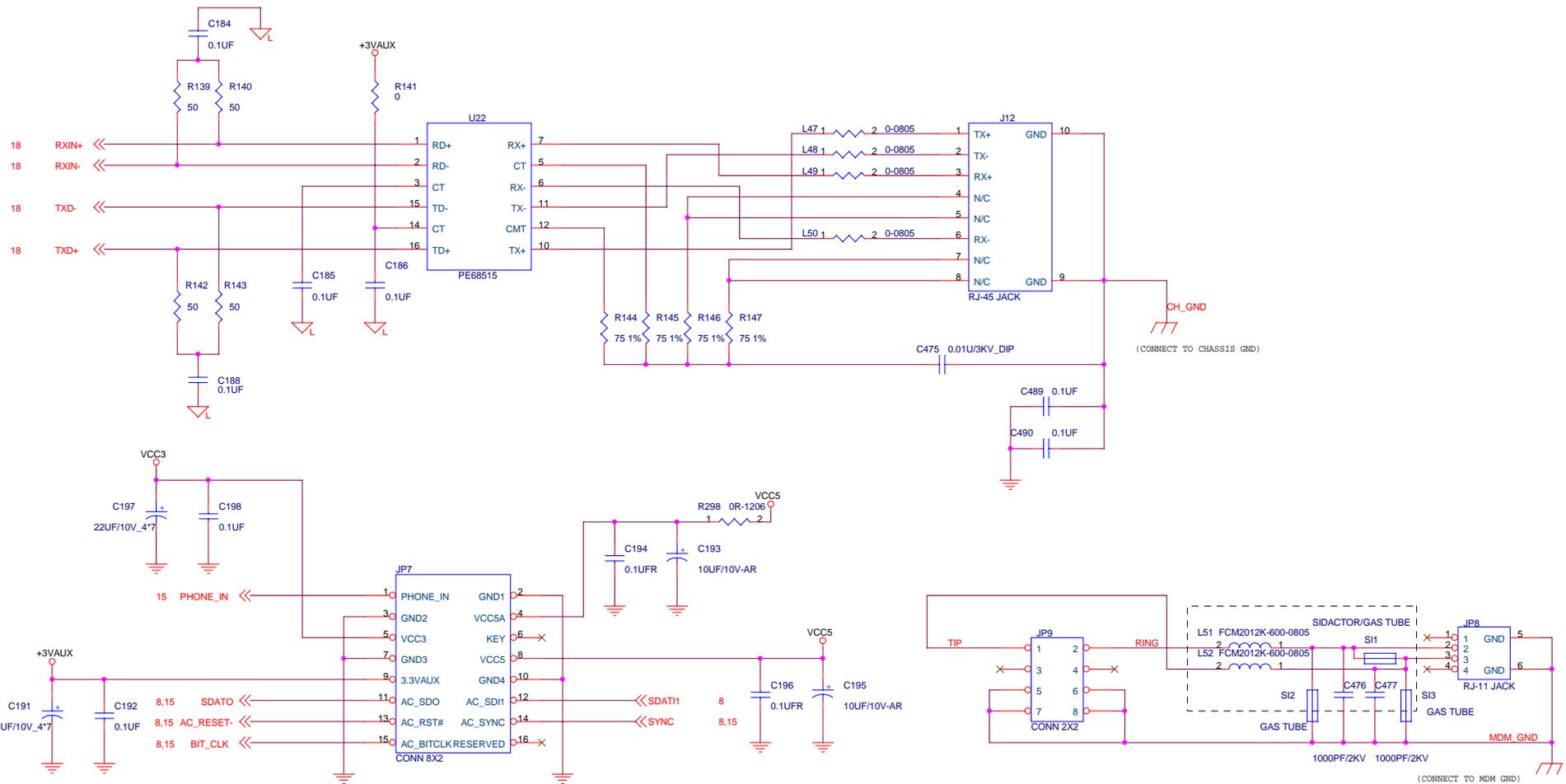
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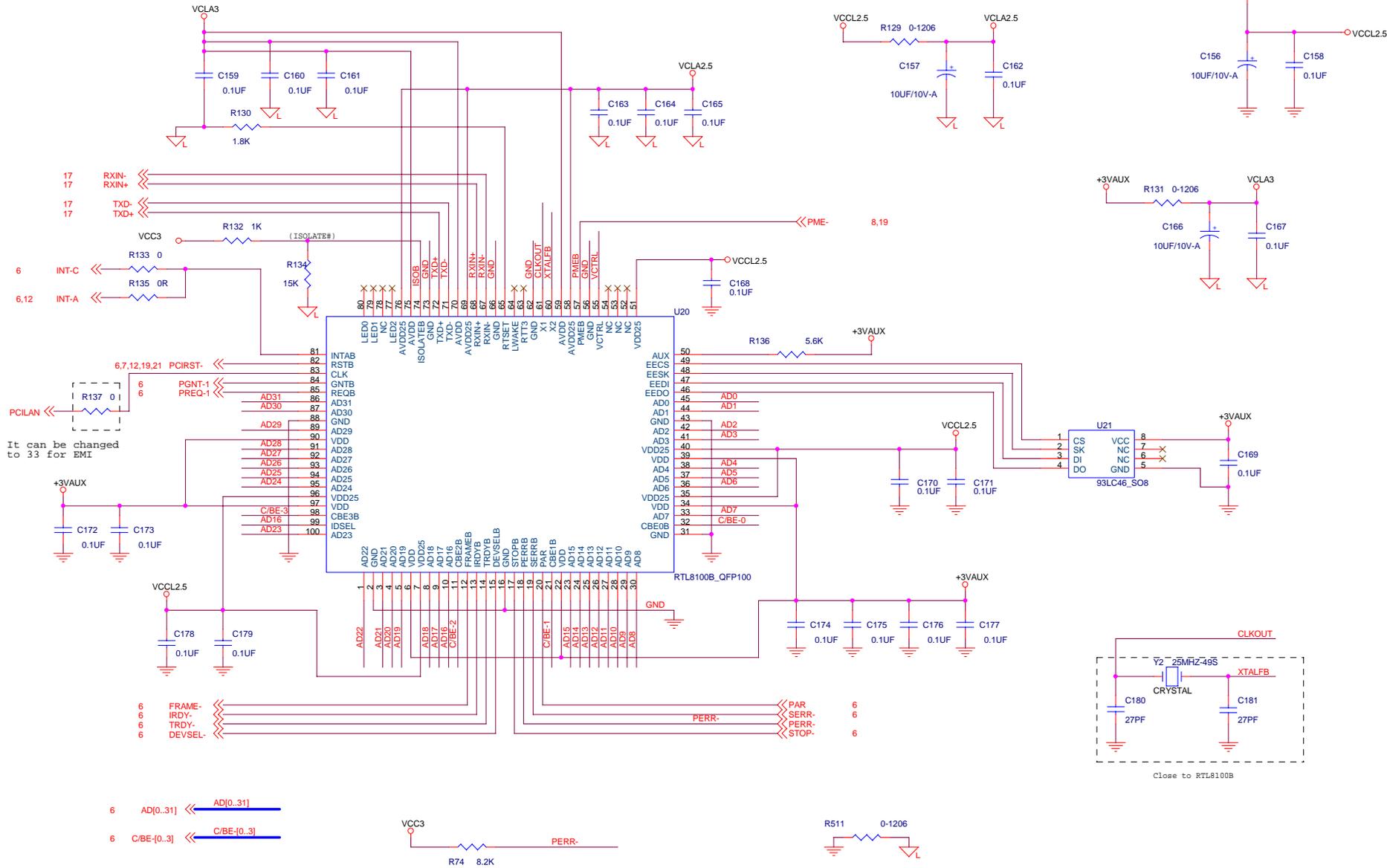


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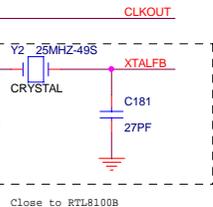


Europe/America use Sidactor(SI1): P3100SX
 Mainland China use Gas Tube(SI1): TEC2600 (SI2,SI3): TEC3100

ALPHA-TOP CORP.		
Title RJ-11 / RJ-45 JACKS & MODEM CARD		
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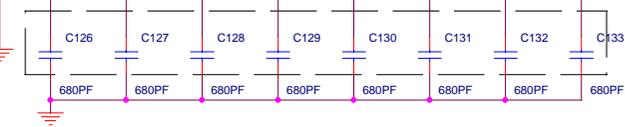
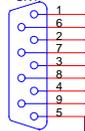


It can be changed to 33 for EMI



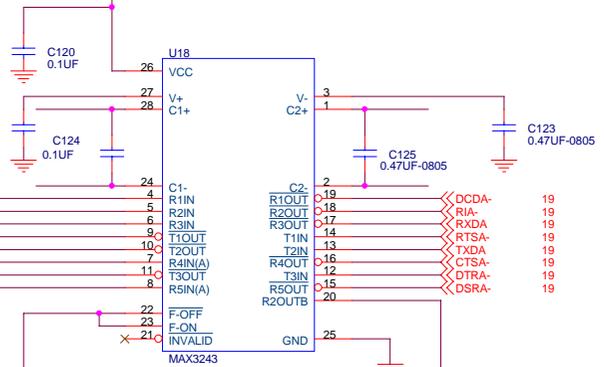
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COMA CONN
7534P-09G2
CN1



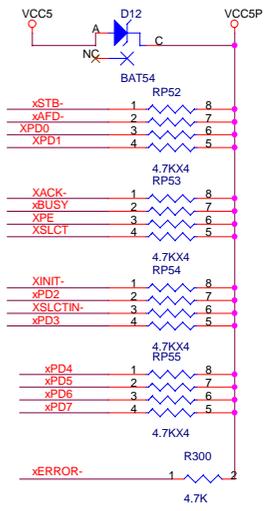
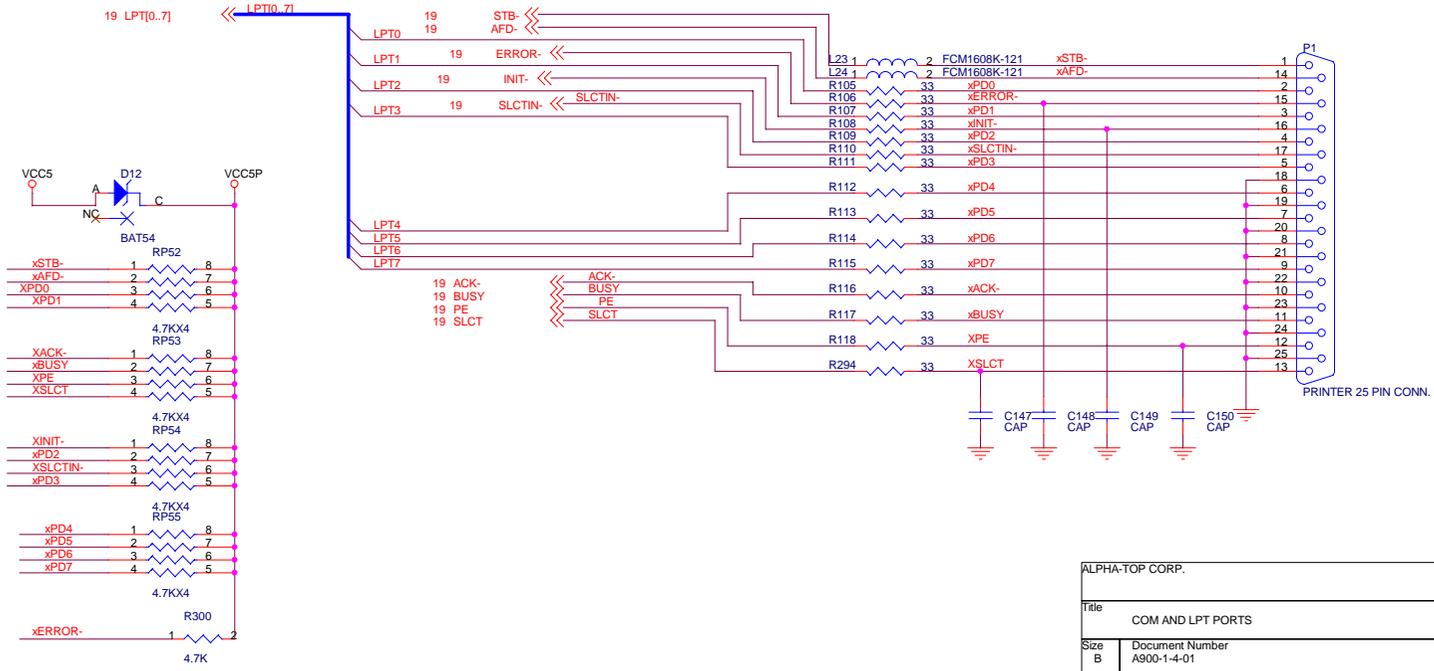
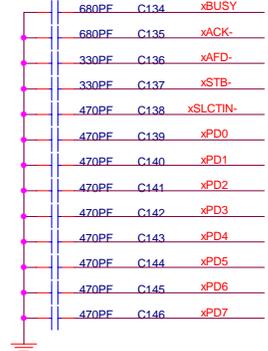
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VCC5

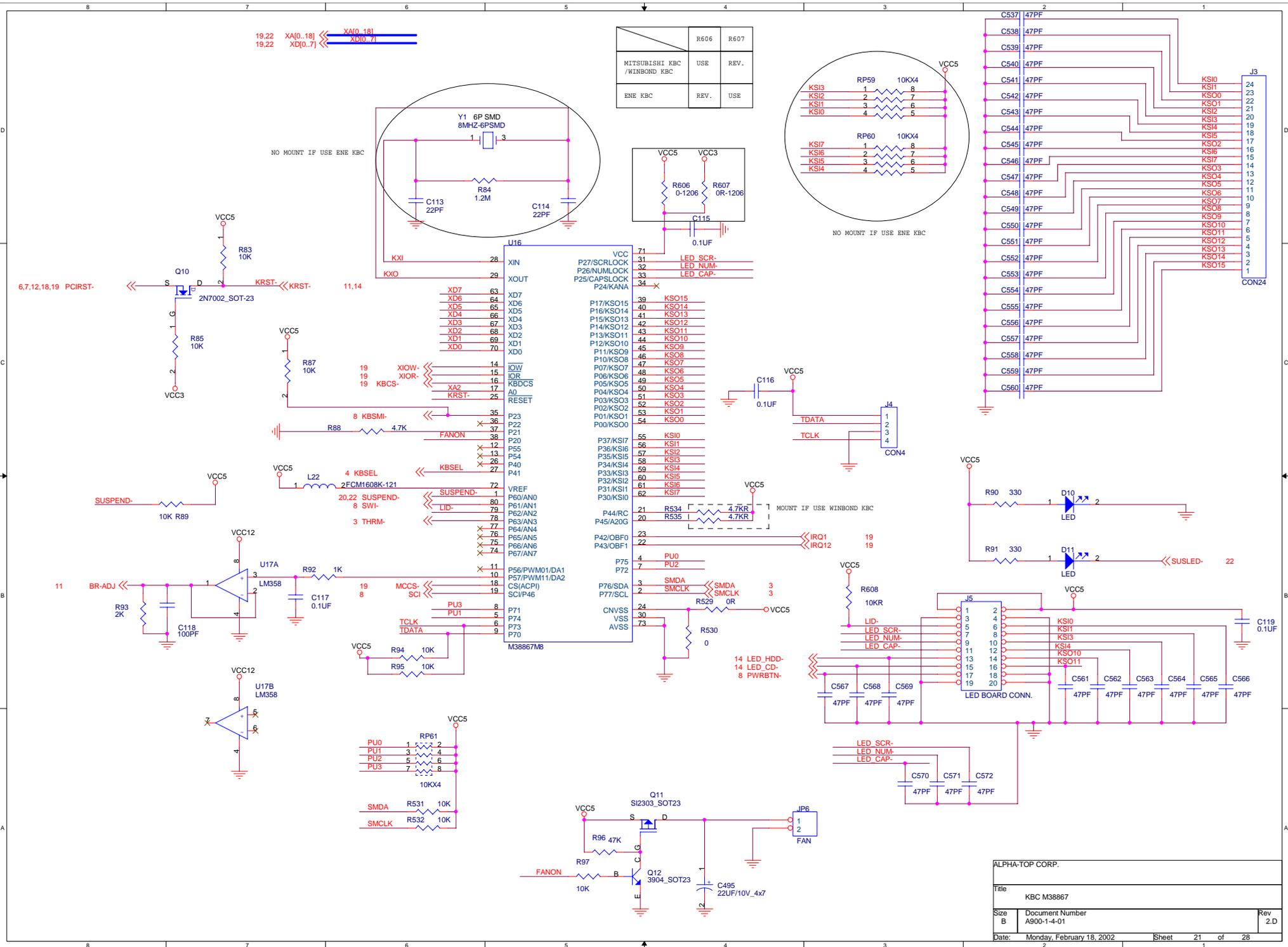


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C125 0.47UF-0805
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<< RING 8

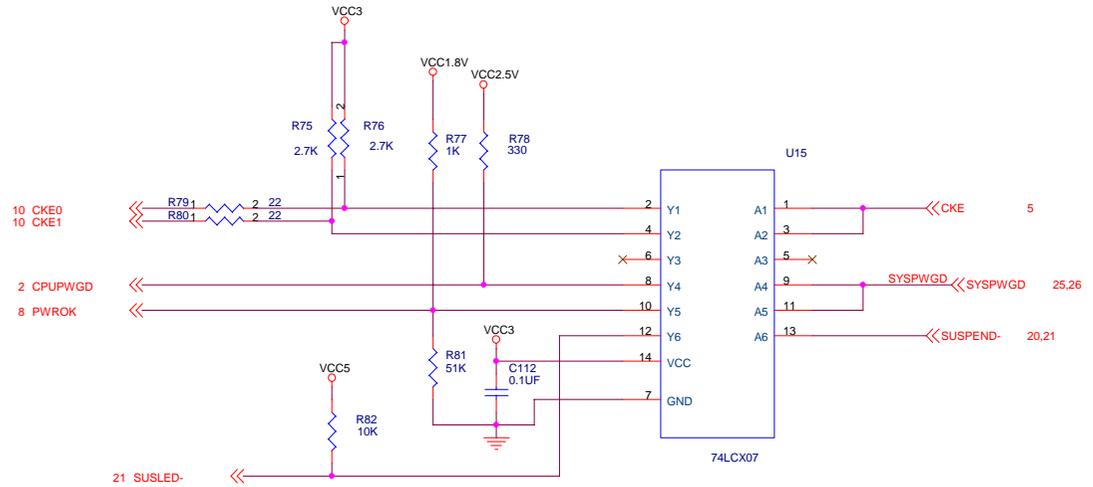
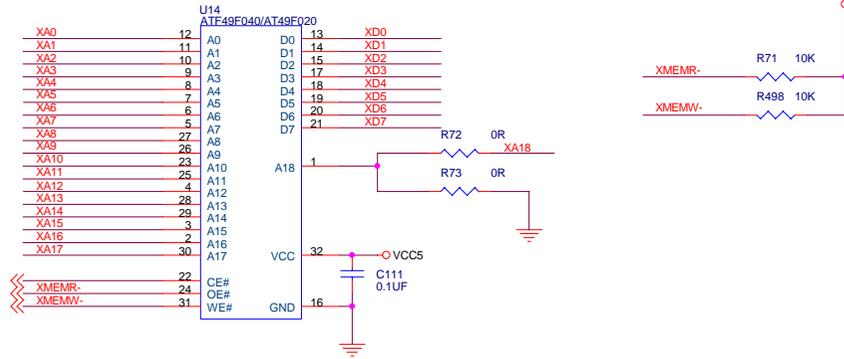


ALPHA-TOP CORP.		
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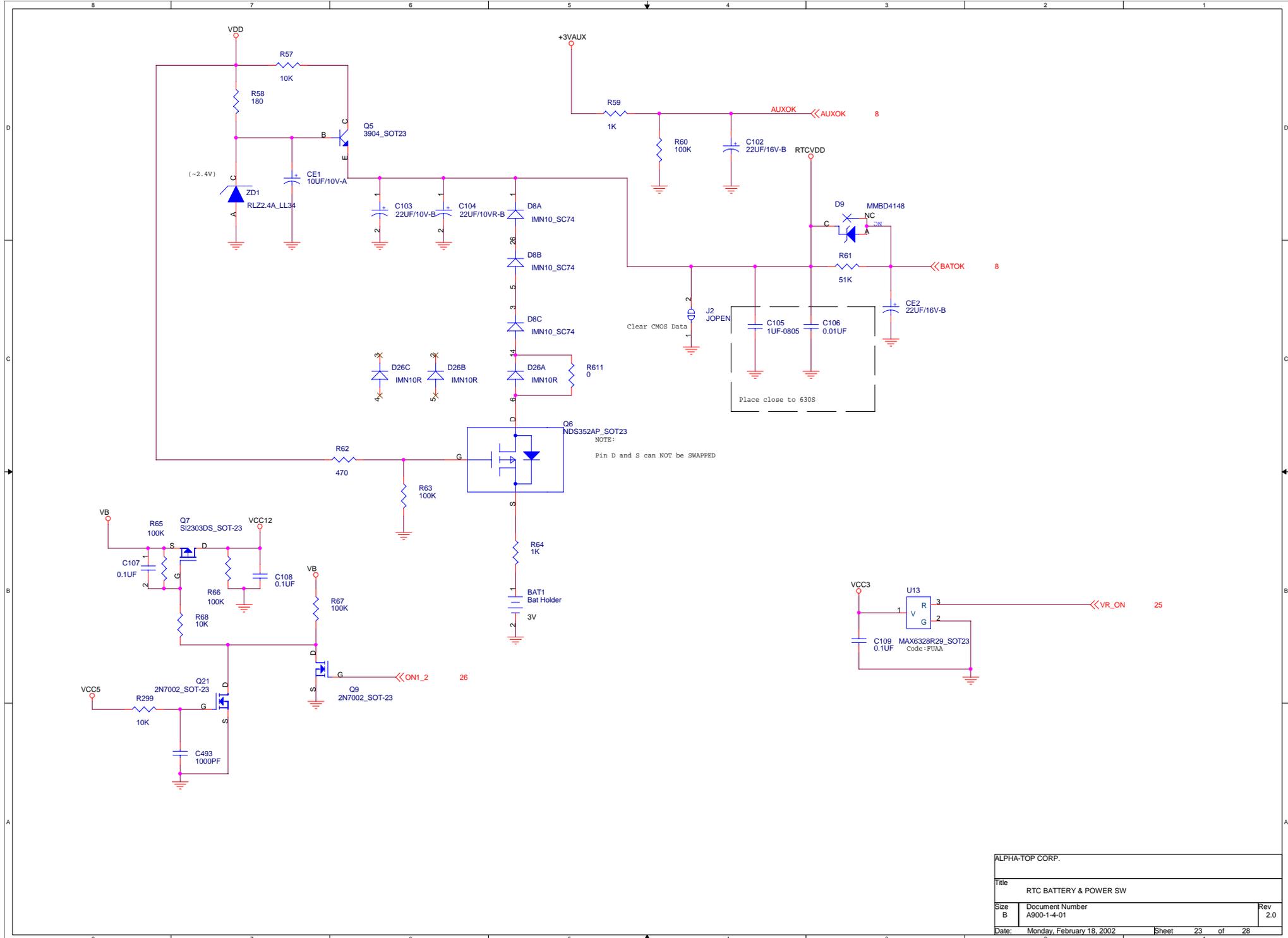


19.21 XA[0..18] << XA[0..18]
 19.21 XD[0..7] << XD[0..7]

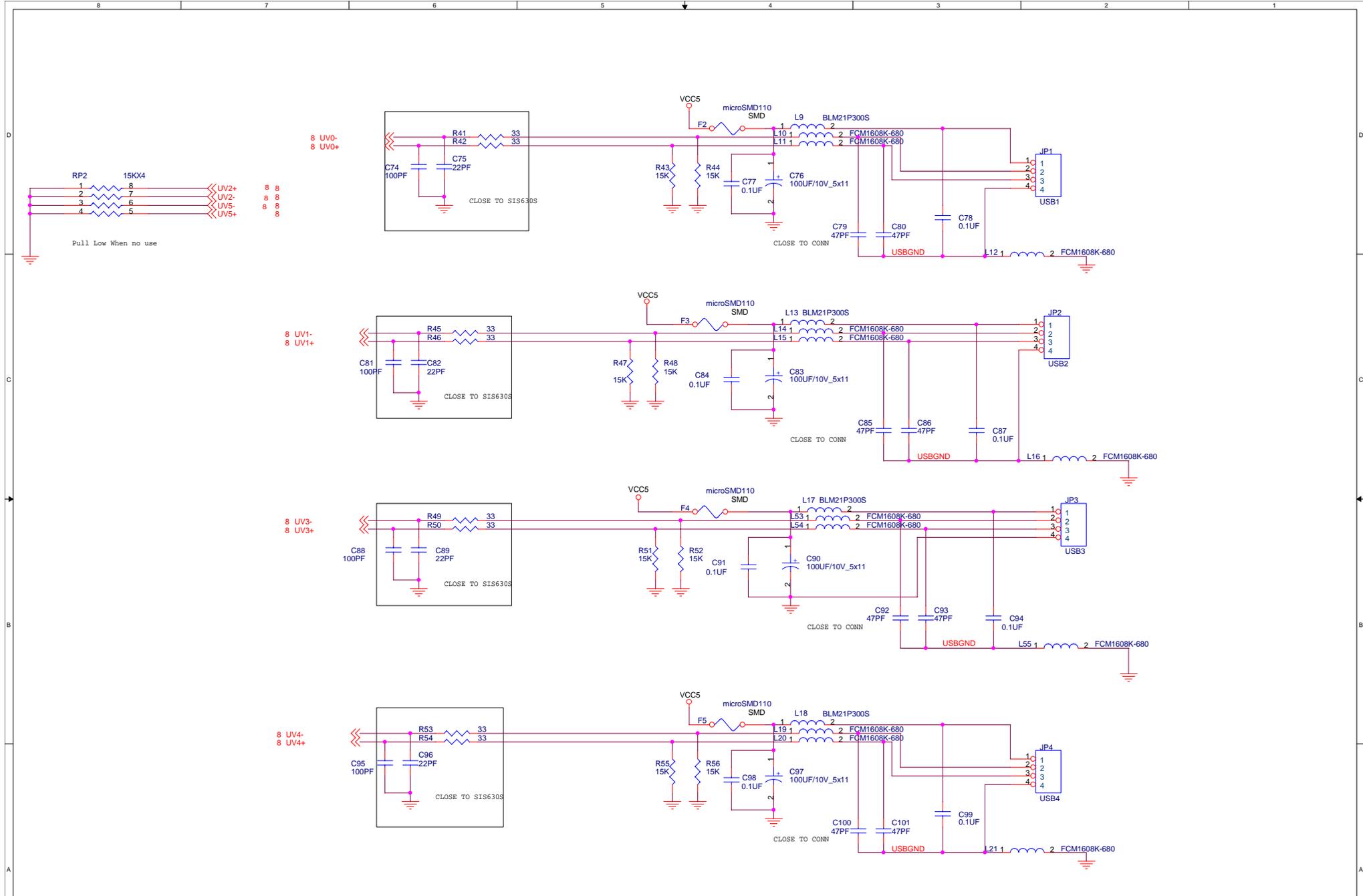
19 ROMCS- << XMEMR-
 19 XMEMR- << XMEMR-
 19 XMEMW- << XMEMW-



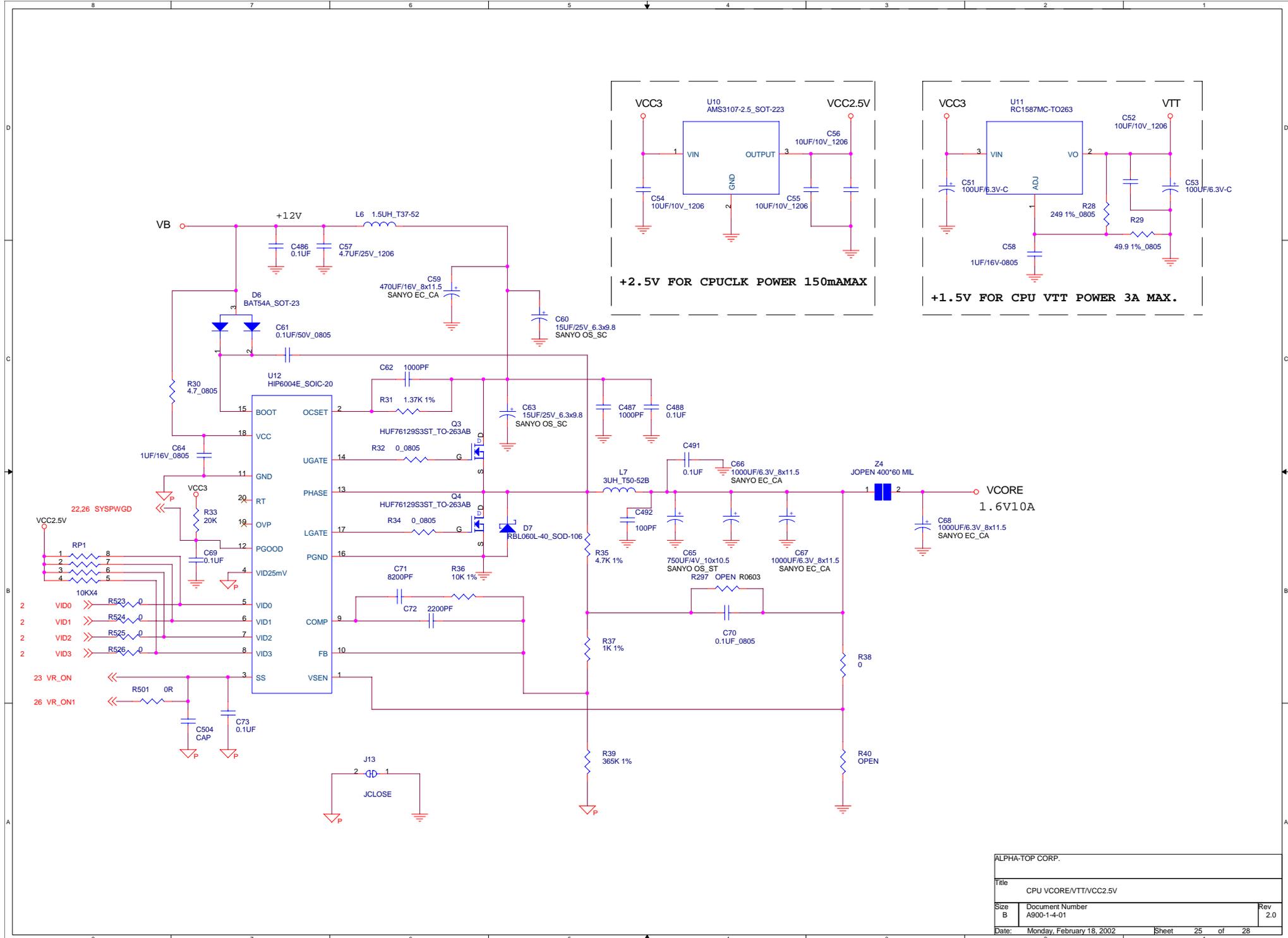
ALPHA-TOP CORP.		
Title ROM & POWER GOOD		
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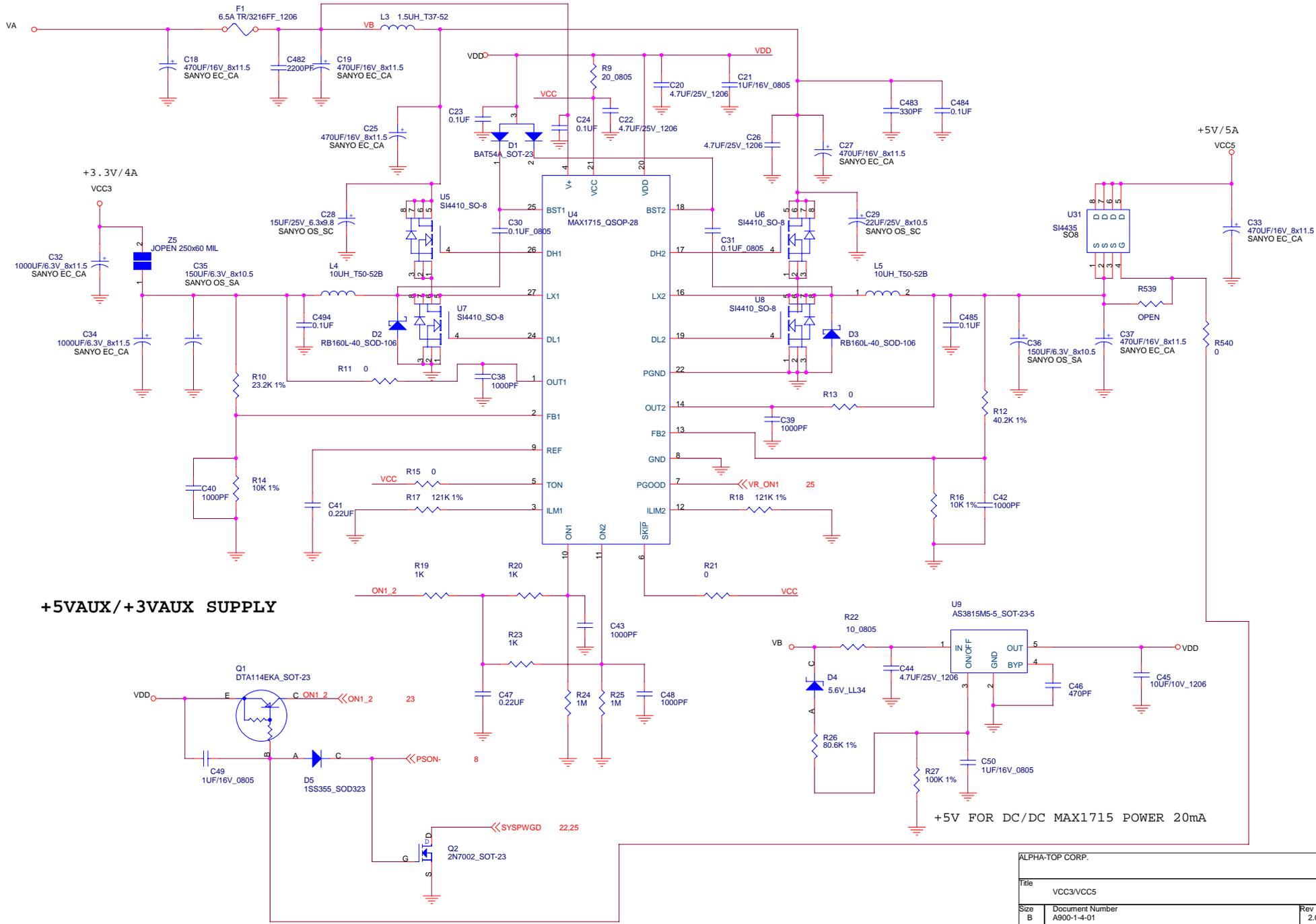
ALPHA-TOP CORP.		
Title RTC BATTERY & POWER SW		
Size B	Document Number A900-1-4-01	Rev 2.0
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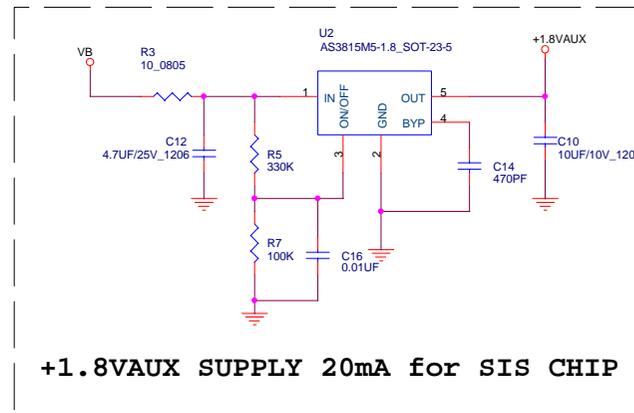
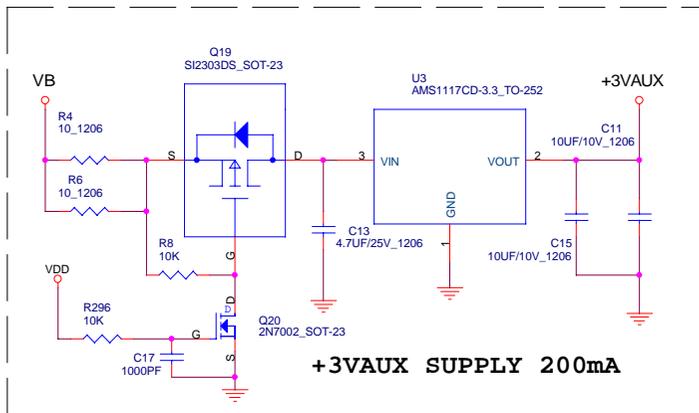
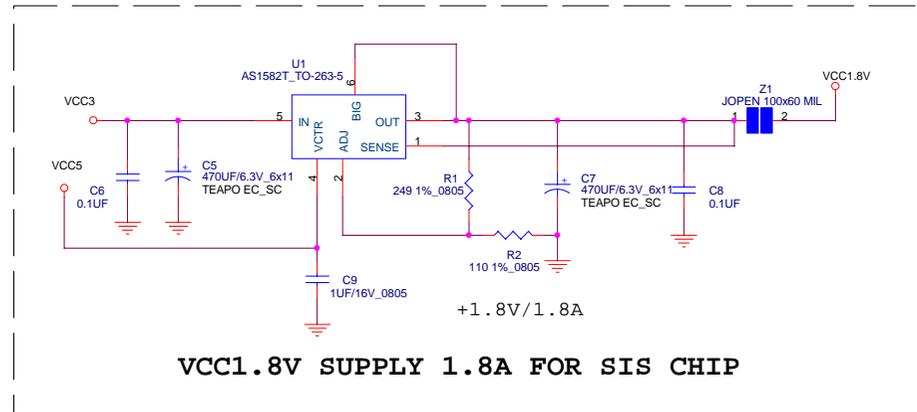
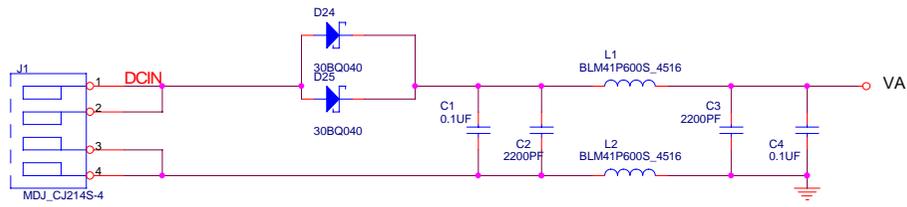
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Title: USB PORTS		
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Title CPU Vcore/VTTC2.5V		
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Title: VCC3/VCC5		
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ALPHA-TOP CORP.		
Title VCC1.8V/AUX POWERS		
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REVISION HISTORY

R1.0	INITIAL RELEASE
R2.0	ADD EMI SOLUTION AND MODEM SAFETY PARTS TO M/B
R2.A	ADD WINBOND KBC AND CHANGE TV-OUT CHIP FOR COST DOWN
R2.B	IMPROVE LAN TO TEST 100BASE-T FAIL WITH FACTORY TEST PROGRAM
R2.C	CHANGE LAN CHIP AND IrDA MODULE FOR COST DOWN AND PART SHORTAGE
R2.D	TO SUPPORT ENE KEYBOARD CONTROLLER

ALPHA-TOP CORP.		
Title		
REVISION HISTORY		
Size	Document Number	Rev
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