

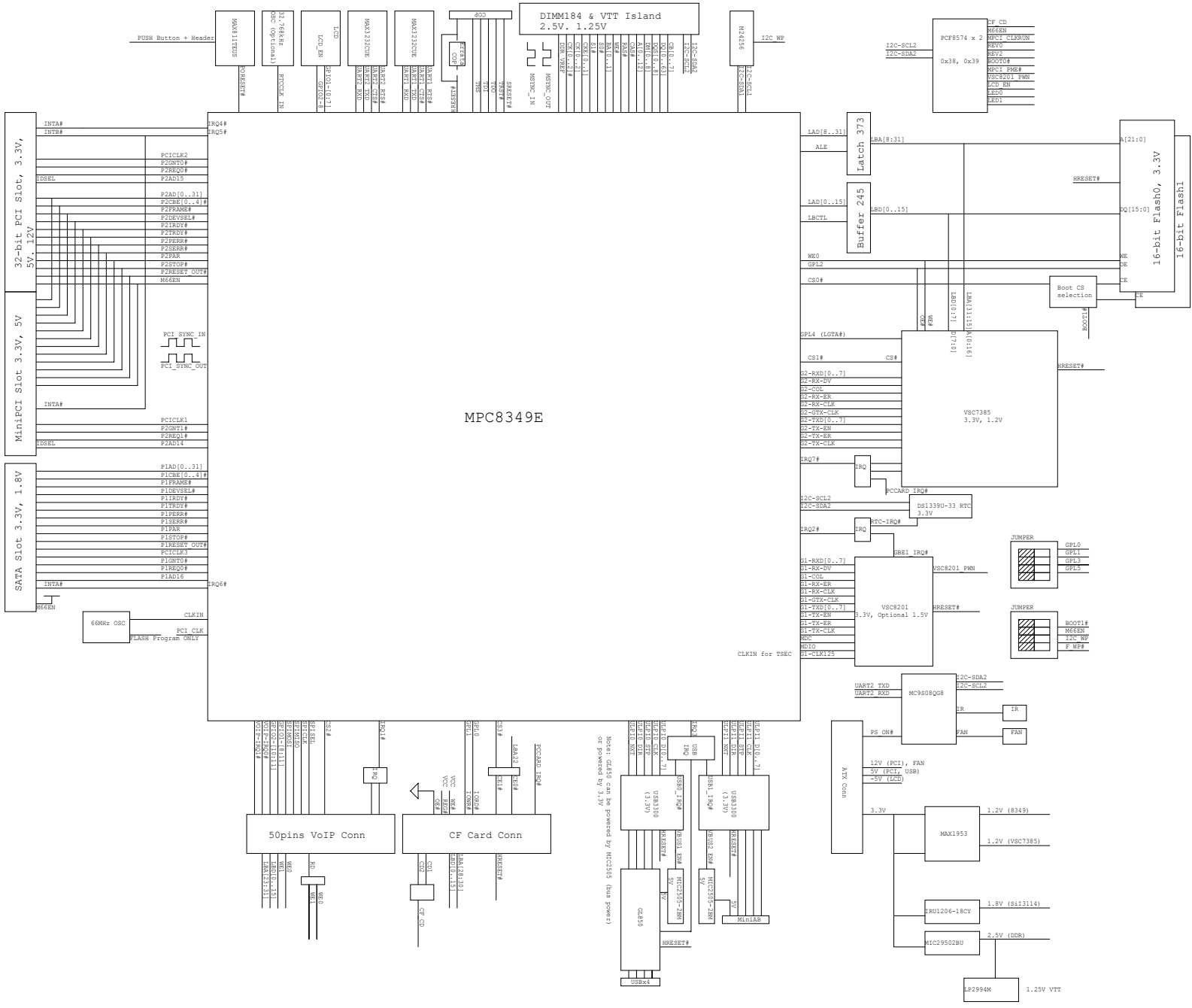
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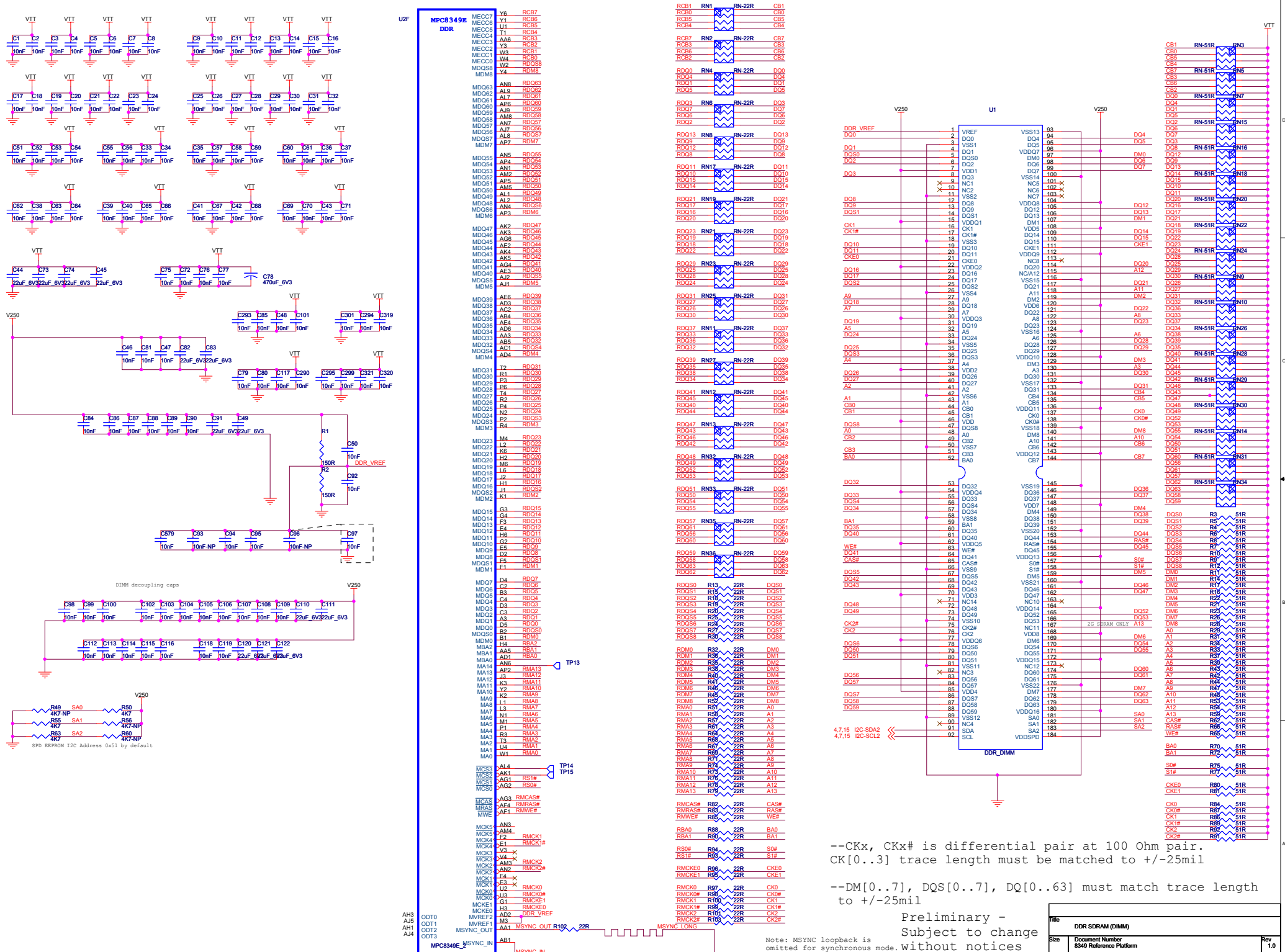
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Revision History

Rev 0.0	12Jul05
Rev 0.1	10Nov05
Rev 1.0	03MAR06

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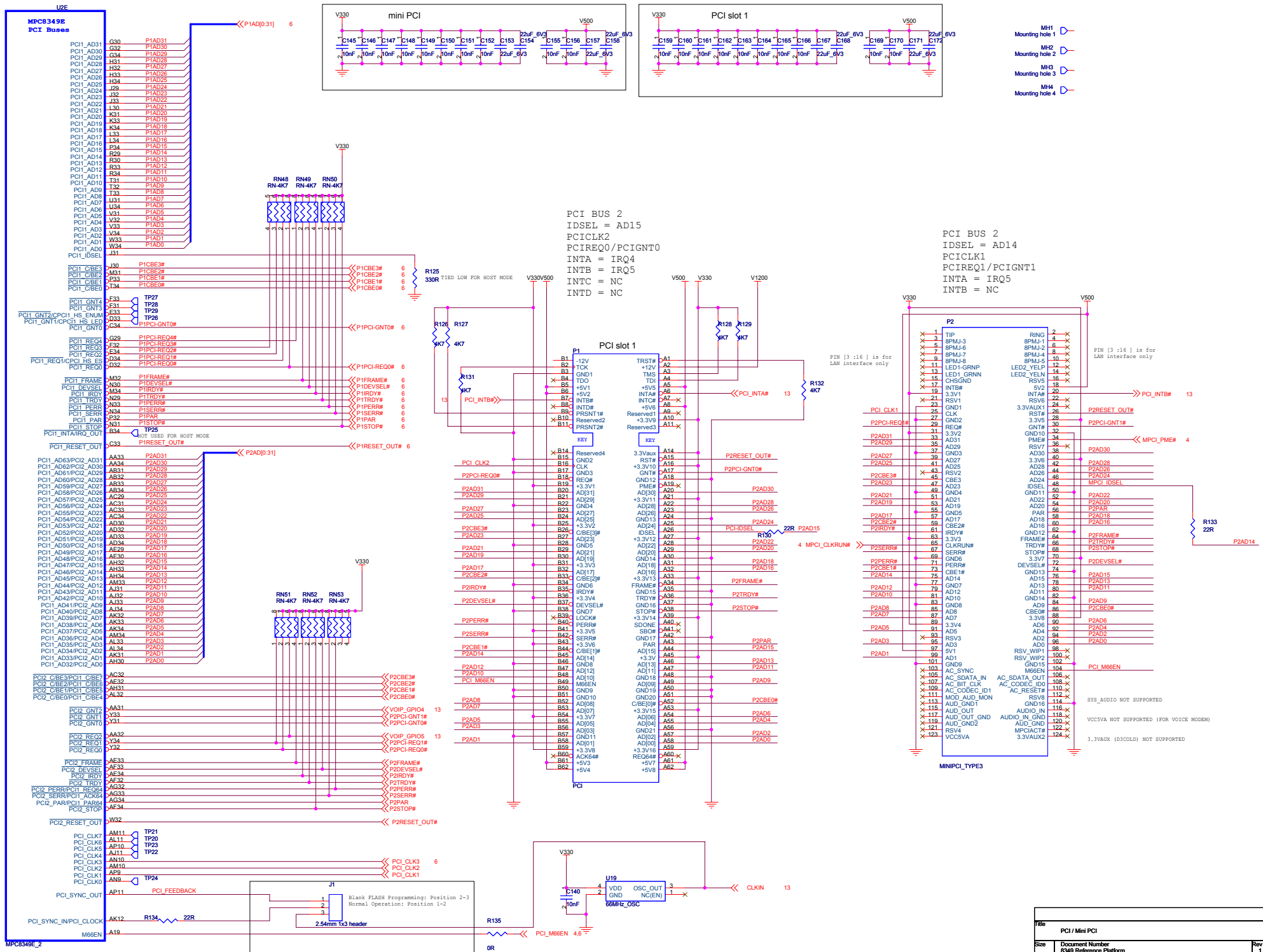
--CKx, CKx# is differential pair at 100 Ohm pair.
 CK[0..3] trace length must be matched to +/-25mil

--DM[0..7], DQS[0..7], DQ[0..63] must match trace length to +/-25mil

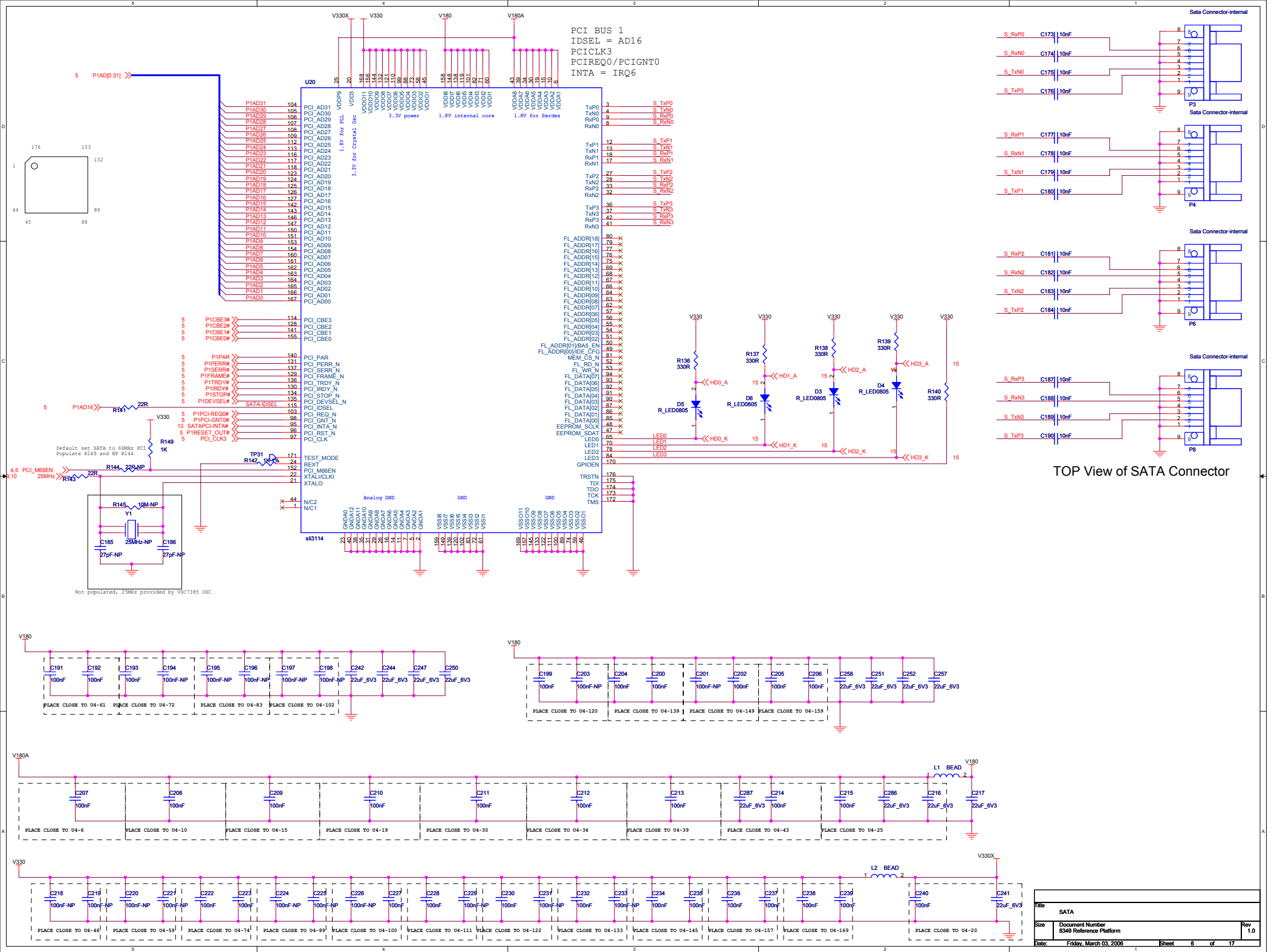
Preliminary -
 Subject to change
 without notices

Note: M5Y1C loopback is omitted for synchronous mode.

Title		DDR SDRAM (DIMM)
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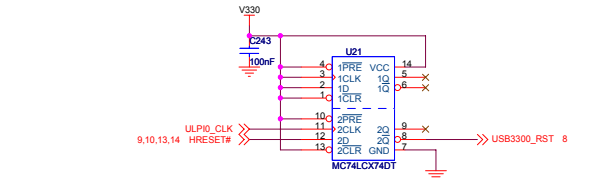
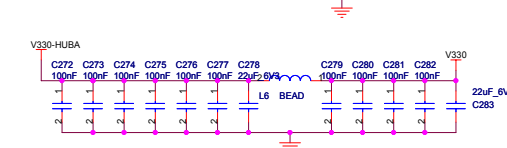
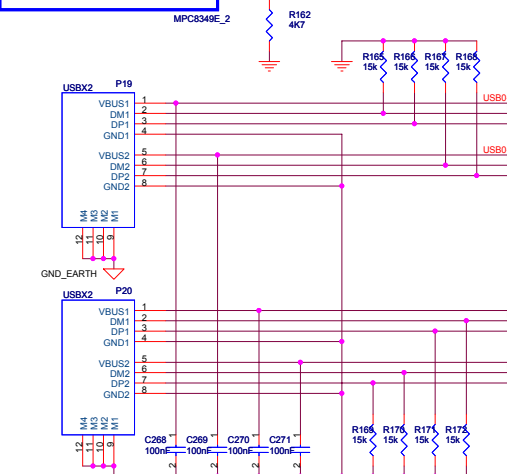
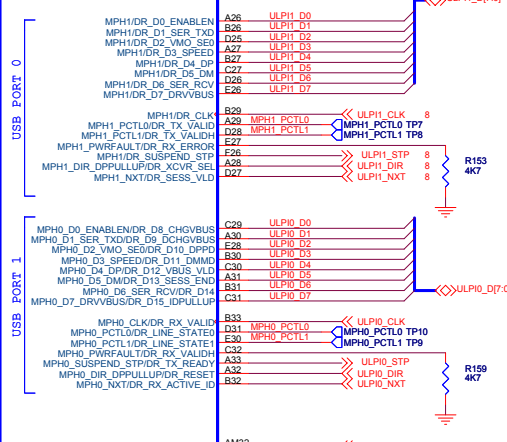
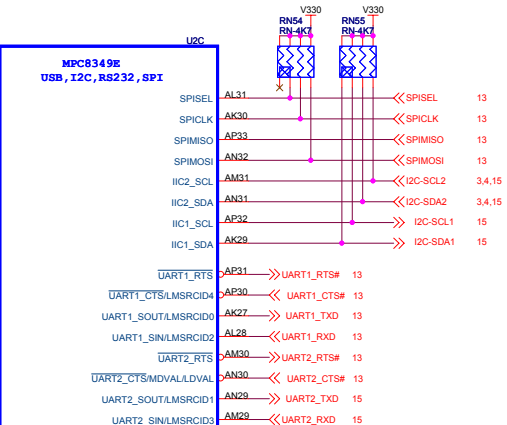


Title		
PCI / Mini PCI		
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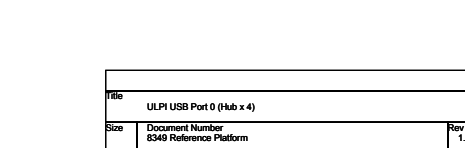
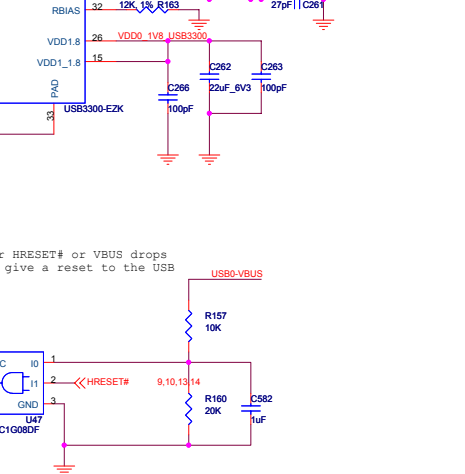
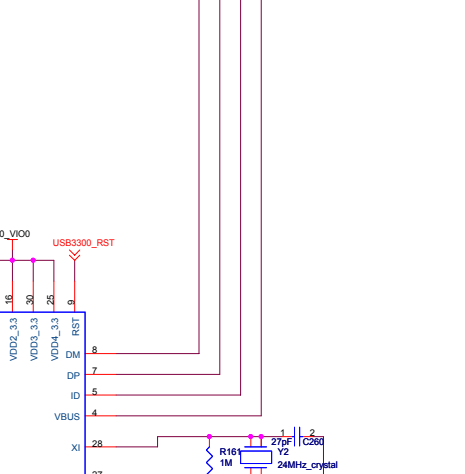
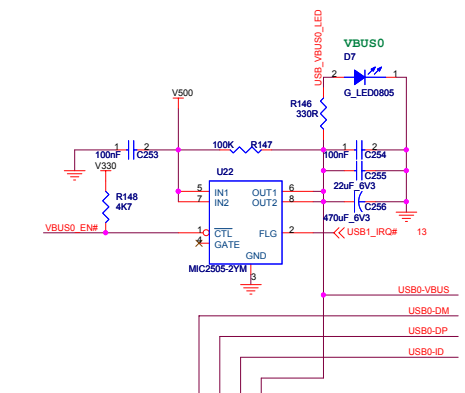
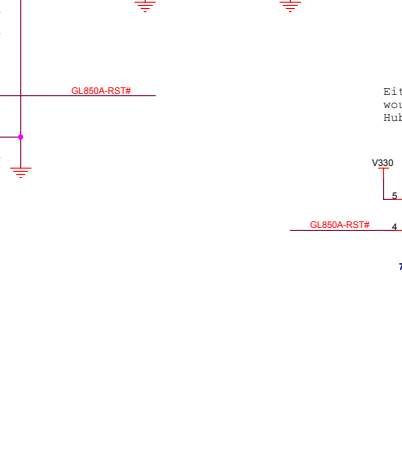
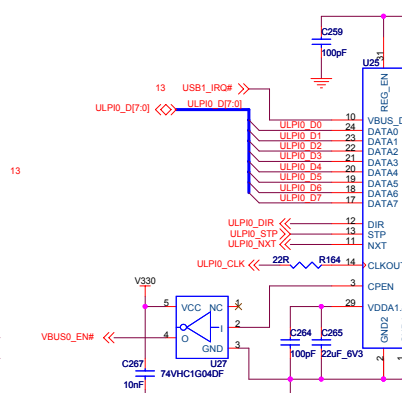
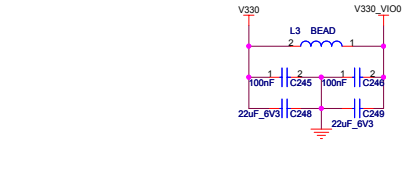
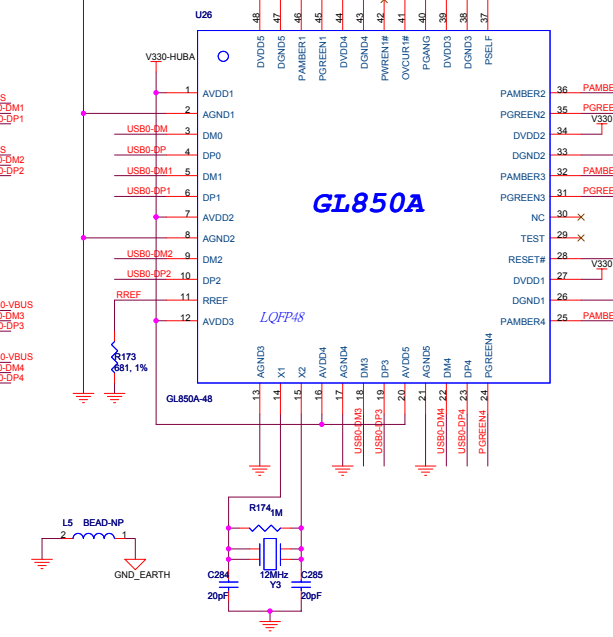
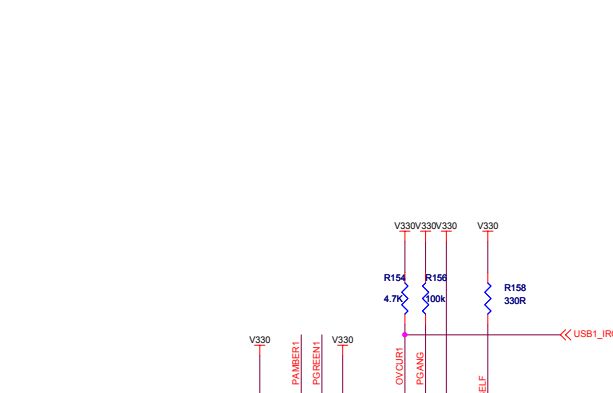


PCI BUS 1
 IDSEL = AD16
 PCICLK3
 PCIREQ0/PCIGNT0
 INTA = IRQ6

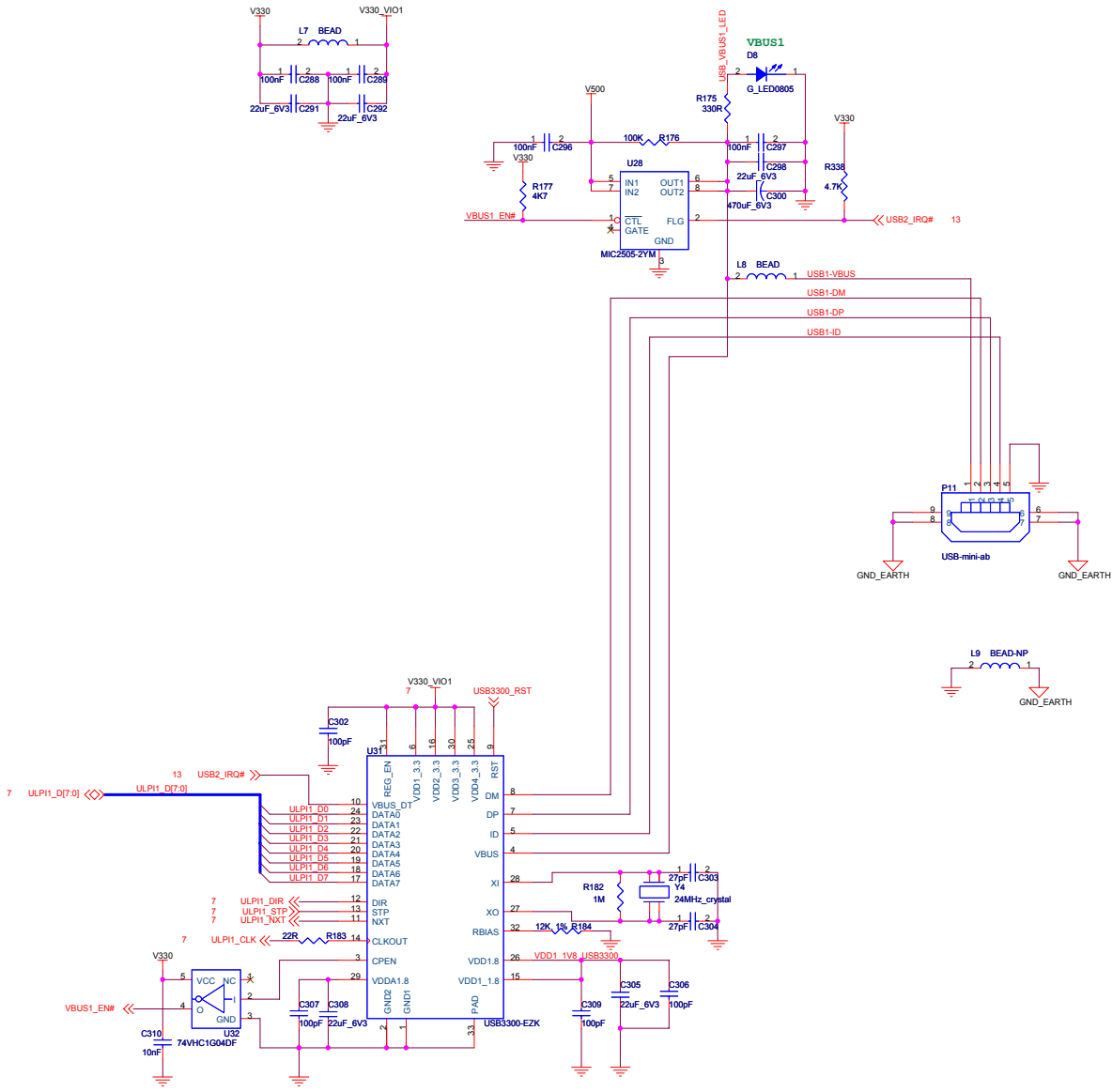
TOP View of SATA Connector



ULPI USB Port 0 (Host)

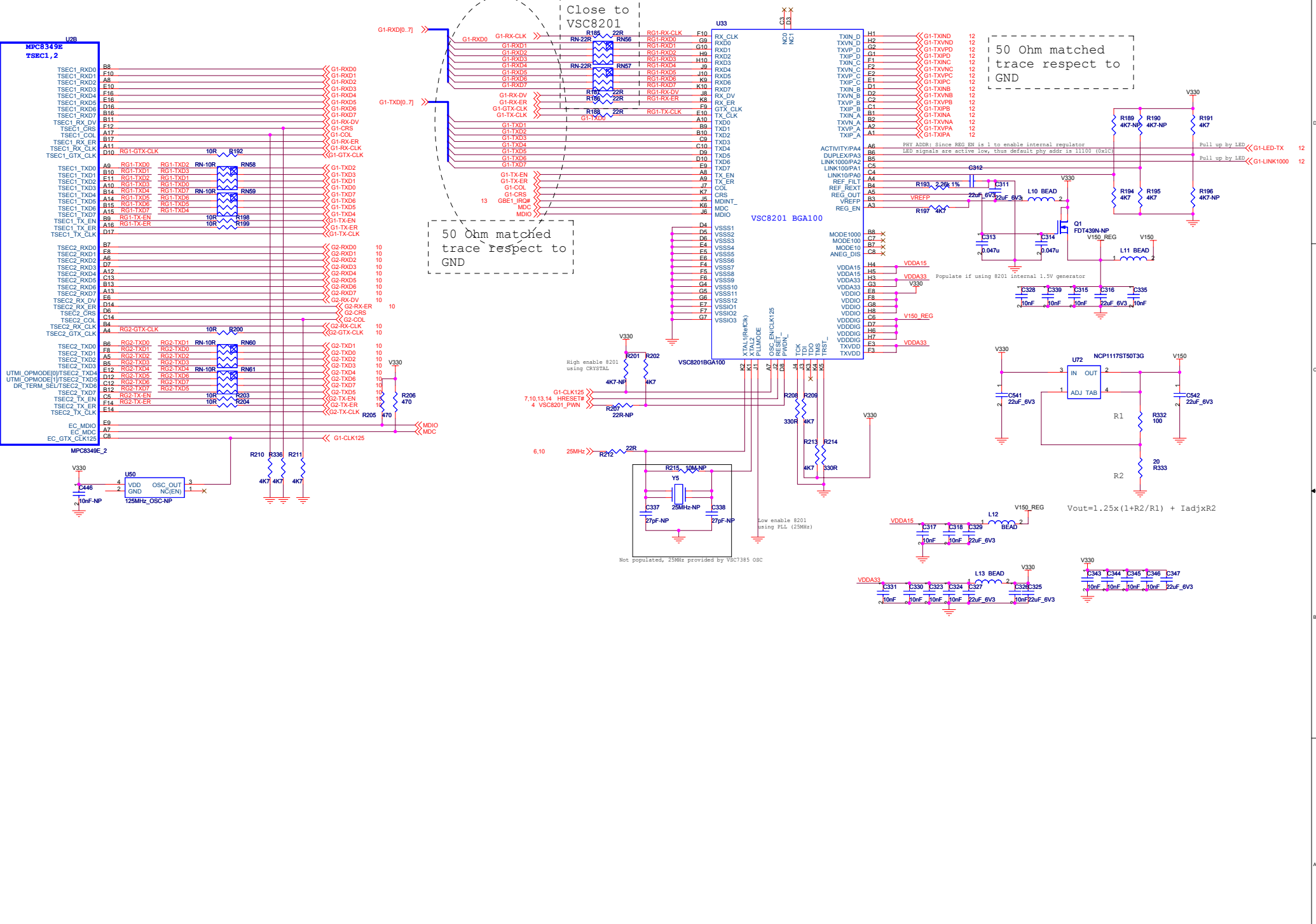


Title		
ULPI USB Port 0 (Hub x 4)		
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ULPI USB Port 1
(Host/Device/OTG)

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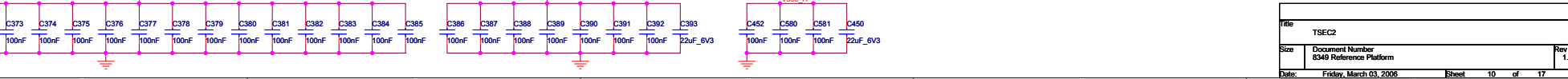
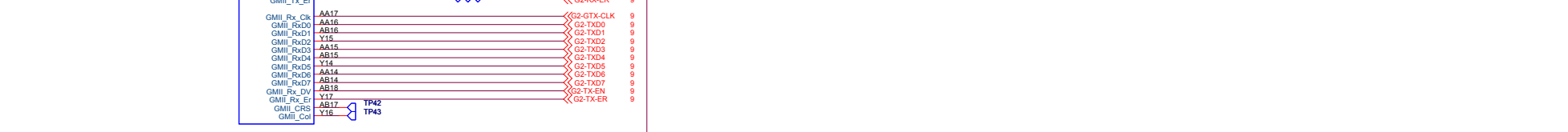
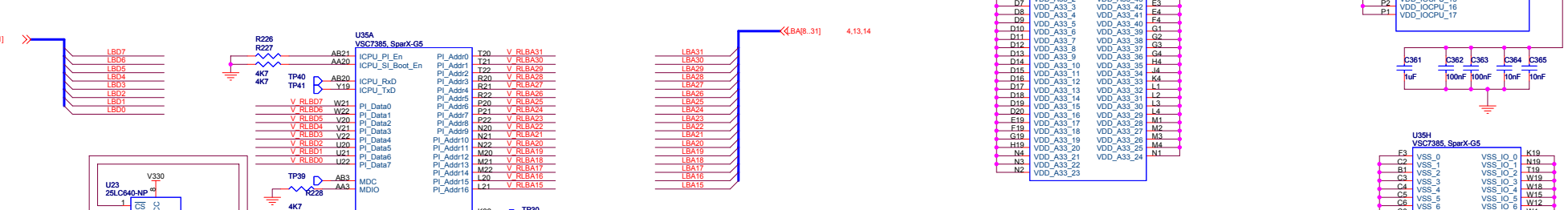
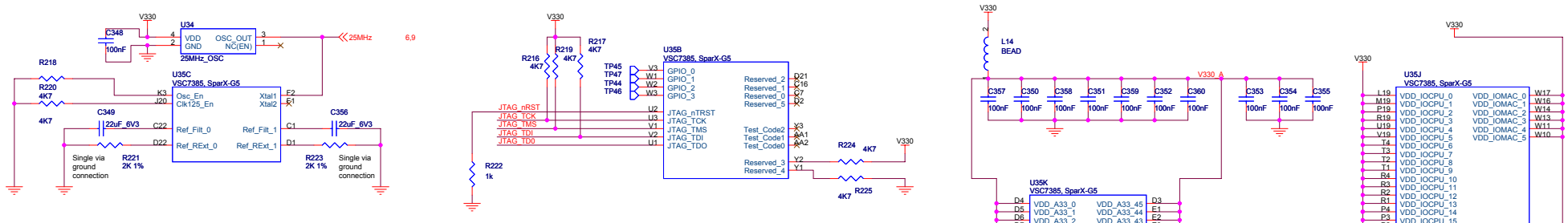


50 Ohm matched trace respect to GND

50 Ohm matched trace respect to GND

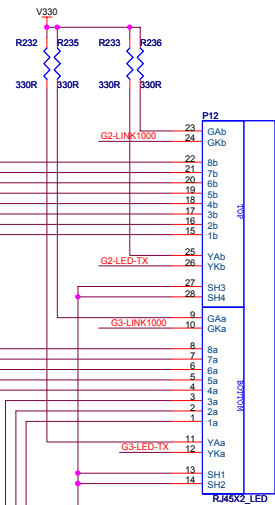
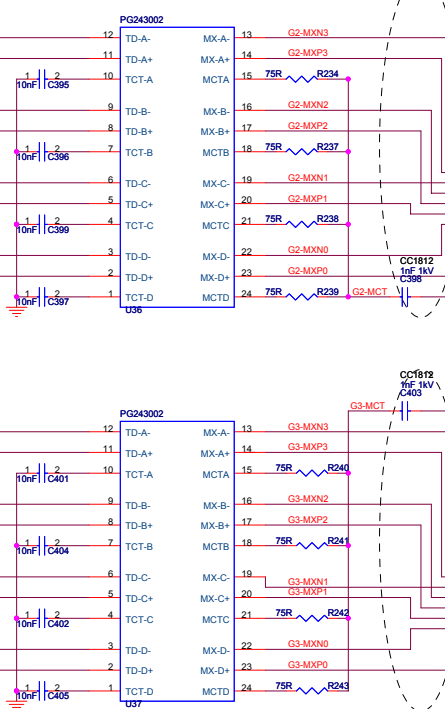
Not populated, 25MHz provided by VSC7385 OSC

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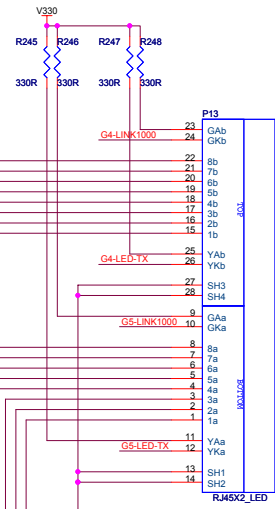
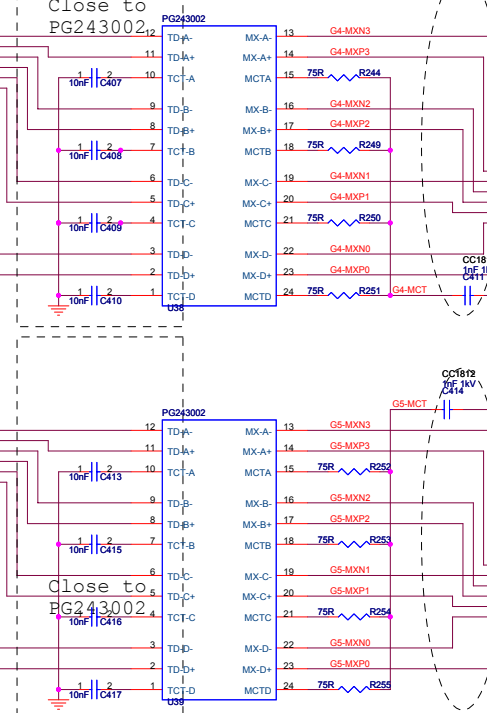
U35E
VSC7385_SparX-G5

P0_D3N	A21	G2-MDI3N
P0_D3P	B21	G2-MDI3P
P0_D2N	A20	G2-MDI2N
P0_D2P	B20	G2-MDI2P
P0_D1N	A19	G2-MDI1N
P0_D1P	B19	G2-MDI1P
P0_D0N	A18	G2-MDI0N
P0_D0P	B18	G2-MDI0P
P1_D3N	A17	G3-MDI3N
P1_D3P	B17	G3-MDI3P
P1_D2N	A16	G3-MDI2N
P1_D2P	B16	G3-MDI2P
P1_D1N	A15	G3-MDI1N
P1_D1P	B15	G3-MDI1P
P1_D0N	A14	G3-MDI0N
P1_D0P	B14	G3-MDI0P

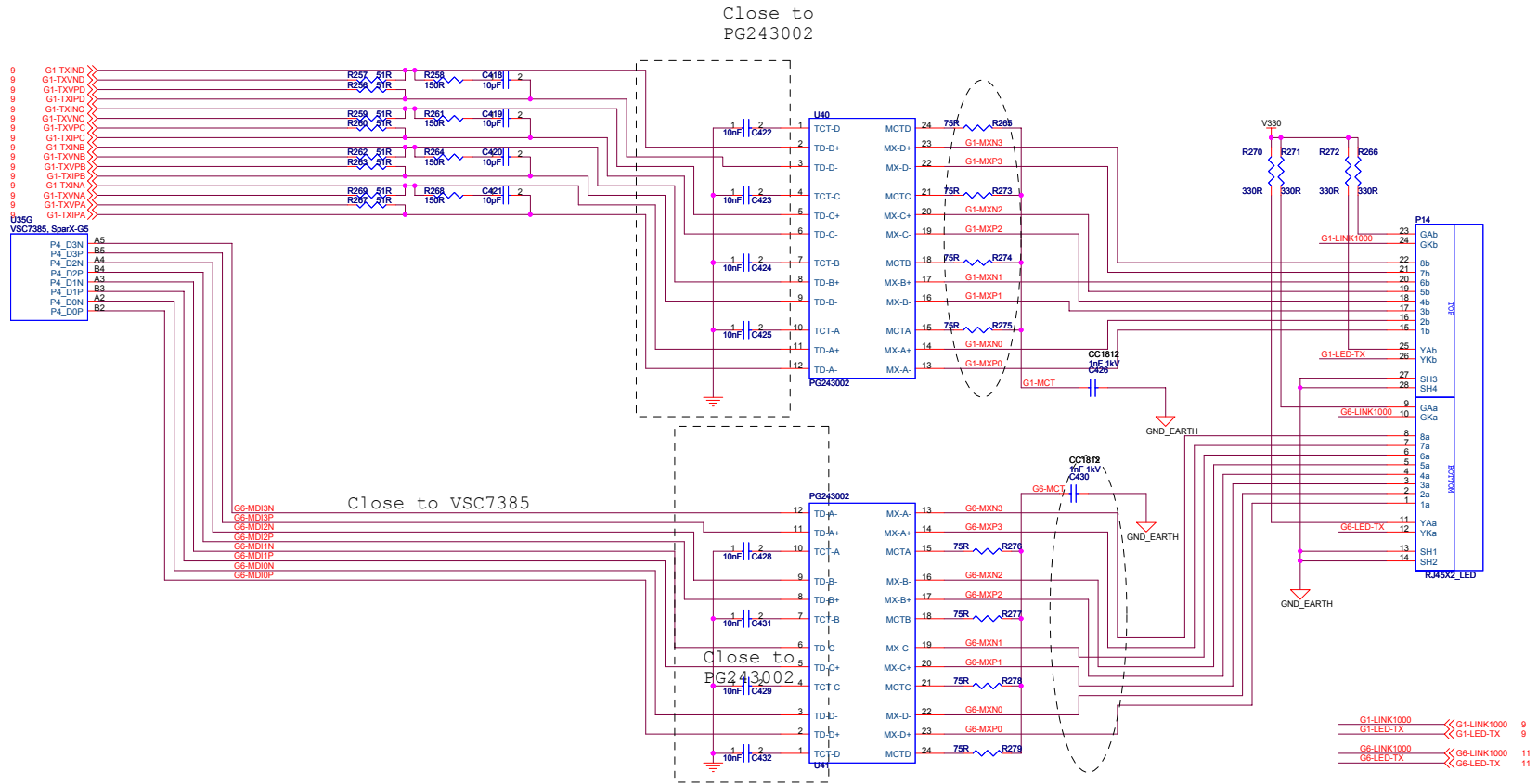


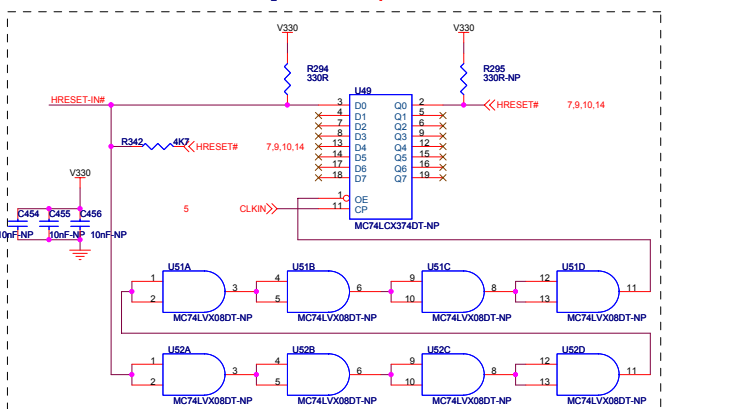
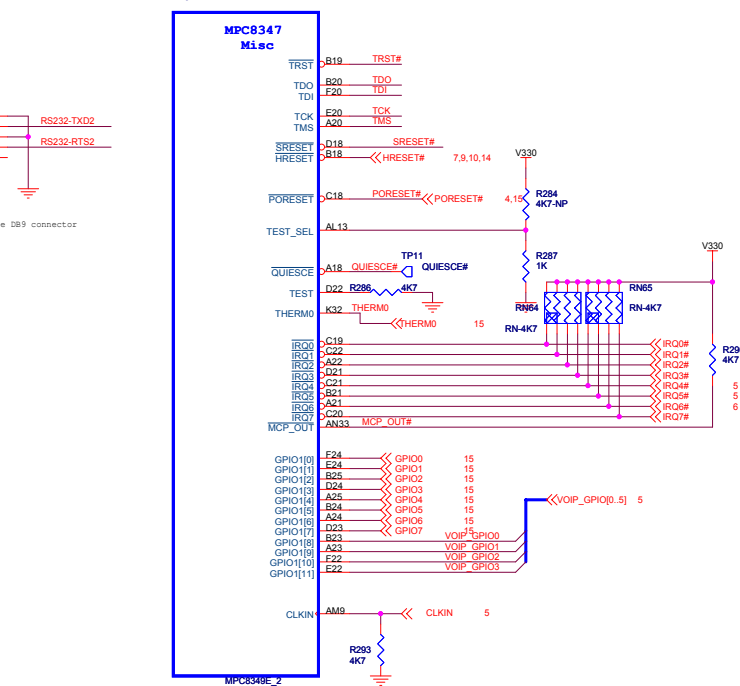
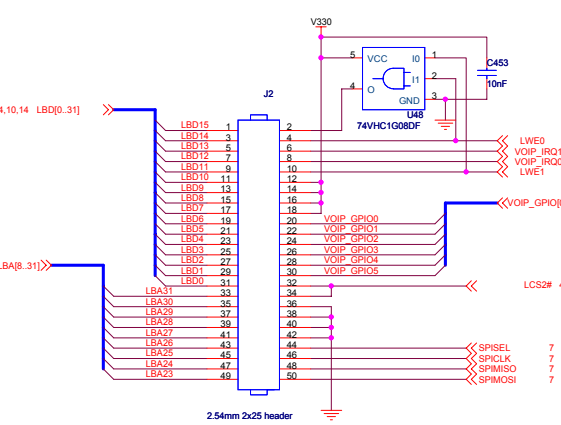
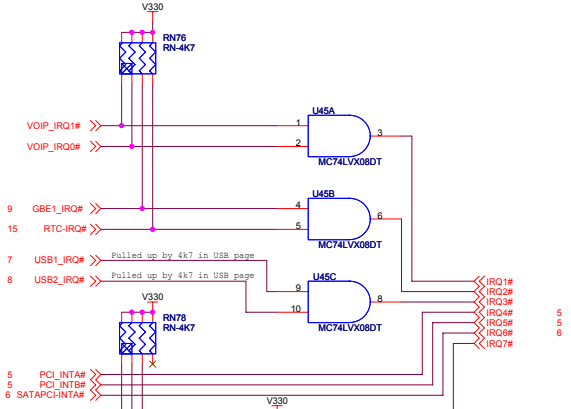
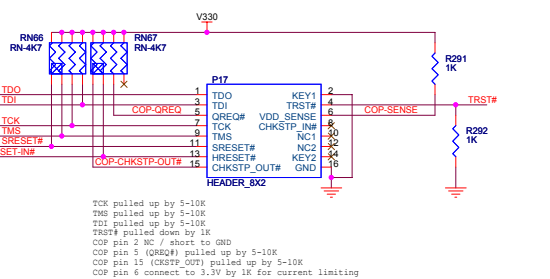
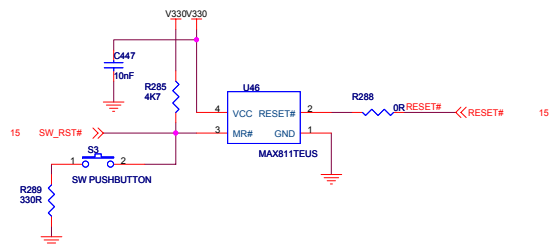
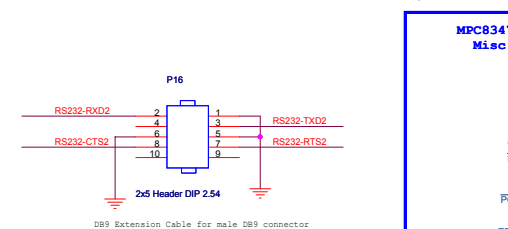
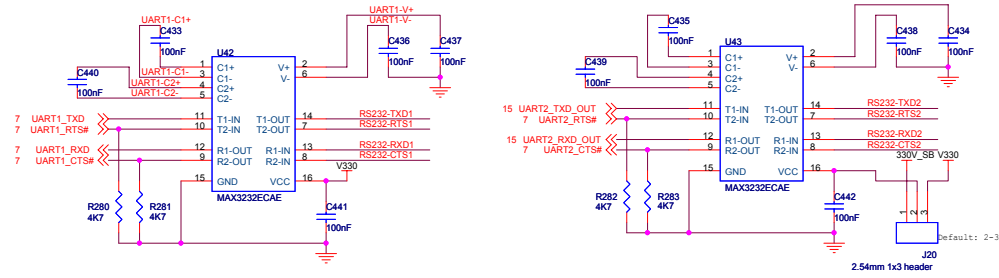
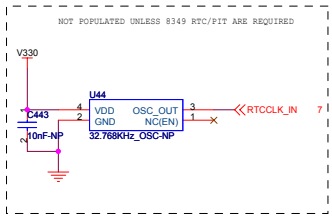
U35F
VSC7385_SparX-G5

P2_D3N	A13	G4-MDI3N
P2_D3P	B13	G4-MDI3P
P2_D2N	A12	G4-MDI2N
P2_D2P	B12	G4-MDI2P
P2_D1N	A11	G4-MDI1N
P2_D1P	B11	G4-MDI1P
P2_D0N	A10	G4-MDI0N
P2_D0P	B10	G4-MDI0P
P3_D3N	A9	G5-MDI3N
P3_D3P	B9	G5-MDI3P
P3_D2N	A8	G5-MDI2N
P3_D2P	B8	G5-MDI2P
P3_D1N	A7	G5-MDI1N
P3_D1P	B7	G5-MDI1P
P3_D0N	A6	G5-MDI0N
P3_D0P	B6	G5-MDI0P



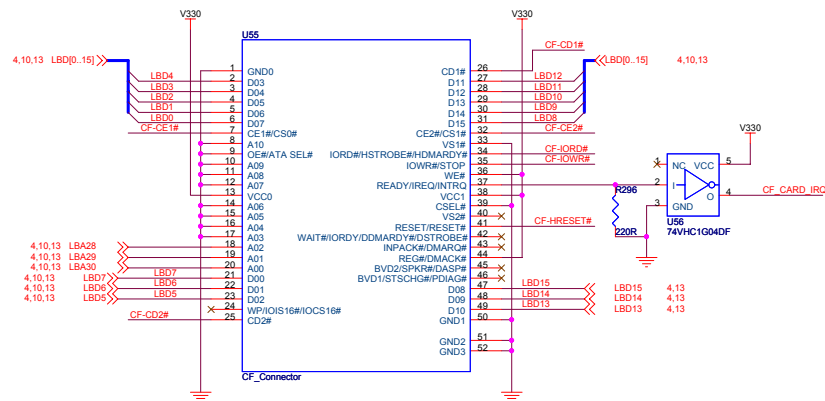
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GBE Transformer		
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885871 Errata in Rev 1.0 silicon
Delay >1: PCI CLKIN (chosen >30ns delay (33MHz))
Remove all parts in this circuit and rename COP_HRESET-IN# to HRESET# after silicon fixed.

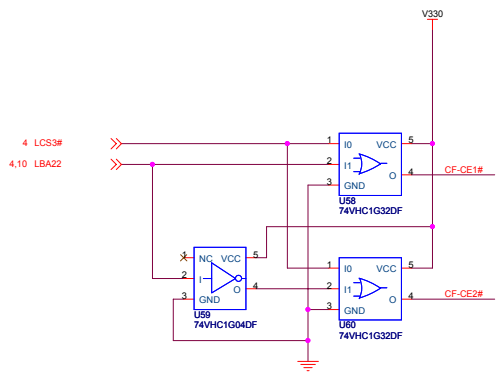
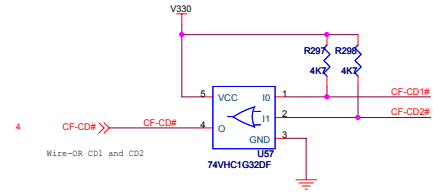
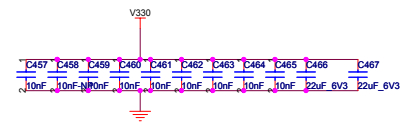
Title		
RTC,CLK,RST,RS232,COP		
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- 7,8,10,13 HRESET# >>> CF-HRESET#
- 13 CF_CARD_IRQ# >>> CF_CARD_IRQ#
- 4 LGPL0 >>> CF-IORD#
- 4 LGPL1 >>> CF-IOWR#

CF in True IDE Mode

83xx	CF
LBSC3#	CE1#
LBD[7:0]	D[0:7]
LBD[15:8]	D[8:15]
LBA[30..28]	A[0..2]
VCC	REG#
GND	WE#
IRQ7#	ATA_SEL#/OE#
LBGPL0	CF_CARD_IRQ#
LBGPL1	IORD#
	IOWR#

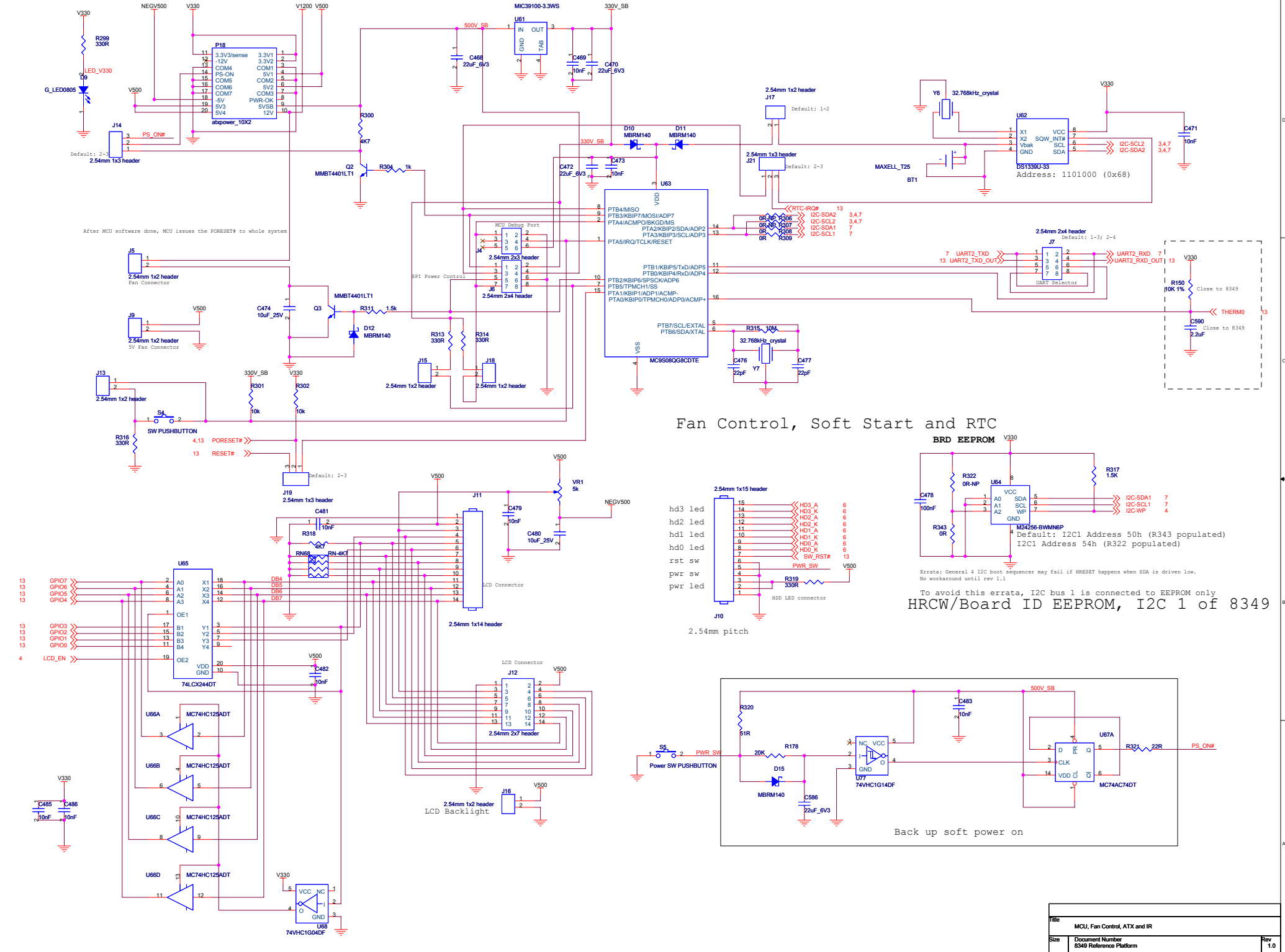


CE2# CE1# Addr. Read (IORD# = L) Write (IOWR# = L)

```

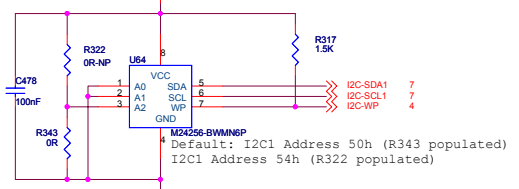
=====
1 0 0xn000 Data Register (16 bit) Data Register (16 bit)
1 0 0xn002 Error Register Feature Register
1 0 0xn004 Sector Count Register Sector Count Register
1 0 0xn006 Sector Number Register Sector Number Register
1 0 0xn008 Cylinder Low Register Cylinder Low Register
1 0 0xn00a Cylinder High Register Cylinder High Register
1 0 0xn00c Drive Head Register Drive Head Register
1 0 0xn00e Status Register Command Register
0 1 0xn020c Alt. Status Register Device Control Register
0 1 0xn020e Drive Address Register Reserved
=====

```



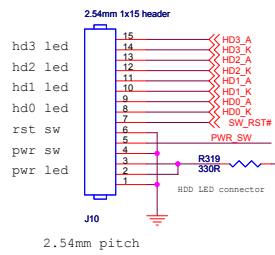
Fan Control, Soft Start and RTC

BRD EEPROM

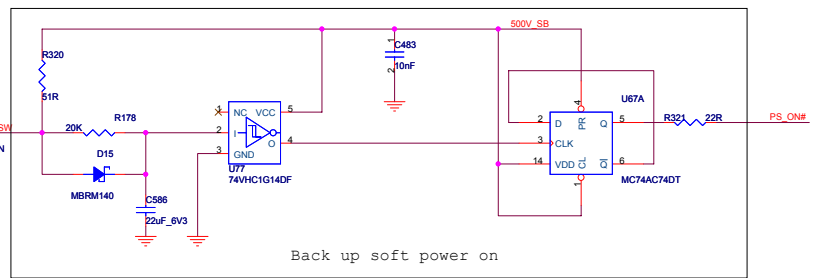


Errata: General 4 I2C boot sequencer may fail if HRESET happens when SDA is driven low. No workaround until rev 1.1

To avoid this errata, I2C bus 1 is connected to EEPROM only
HRCW/Board ID EEPROM, I2C 1 of 8349

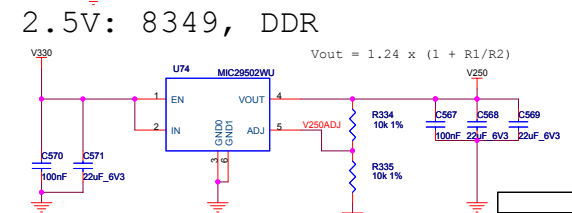
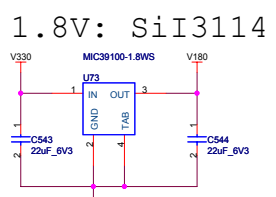
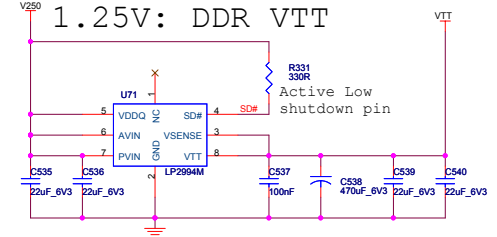
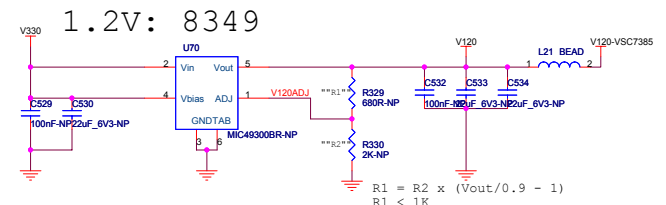
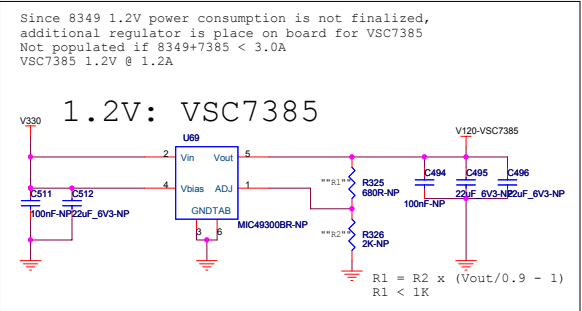
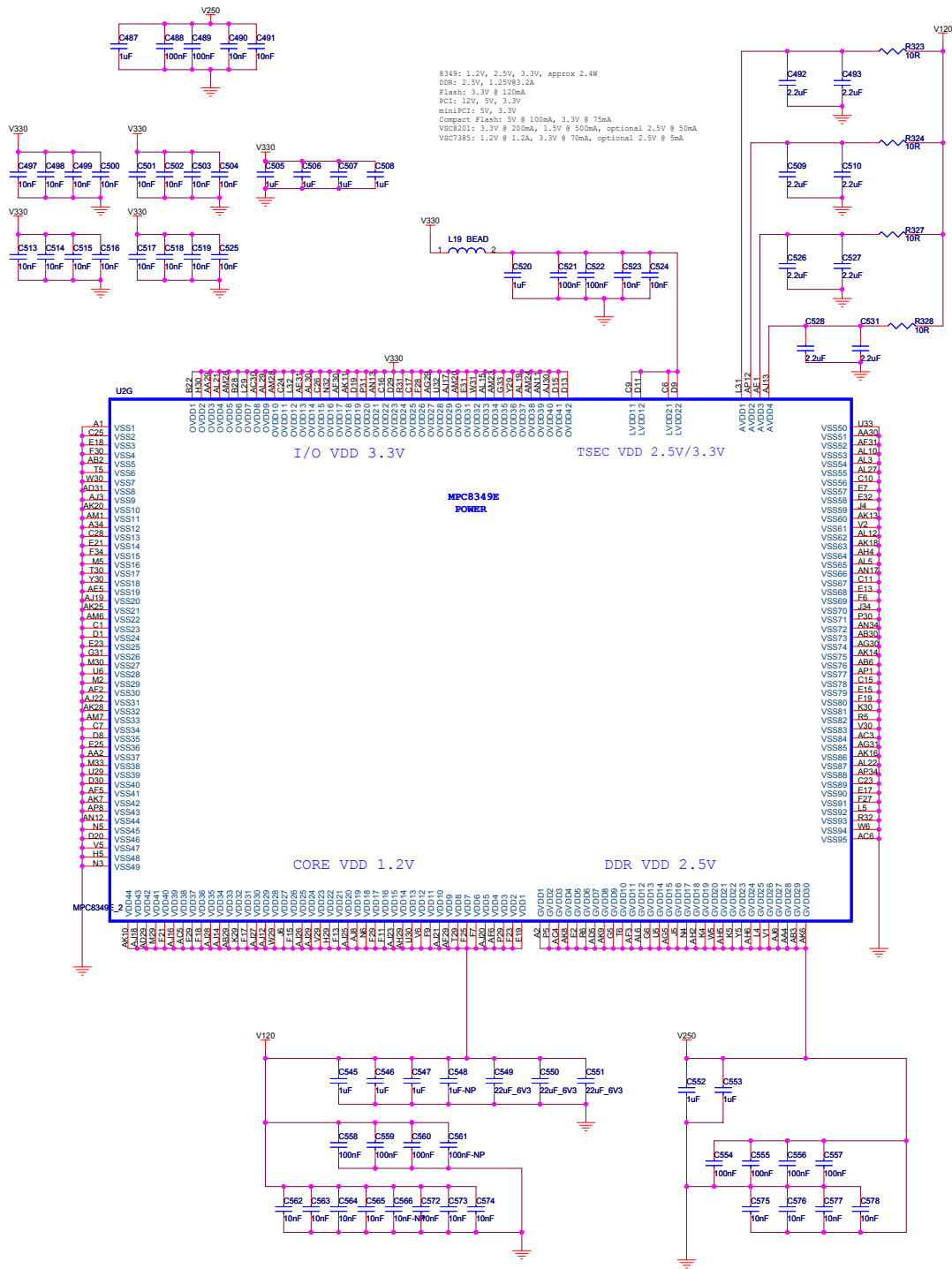


2.54mm pitch

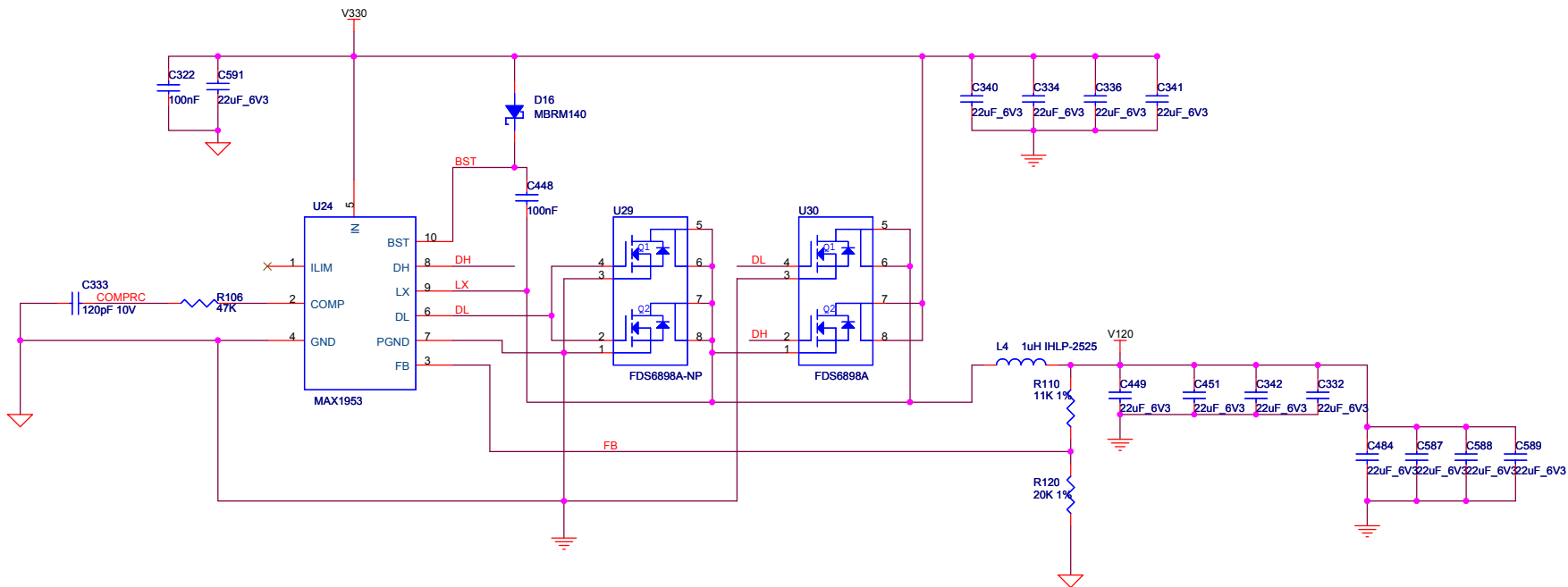


Back up soft power on

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MCU, Fan Control, ATX and IR		
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Power		
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$$V_{out} = (R1/R2 + 1) \times 0.8$$

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Power		
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