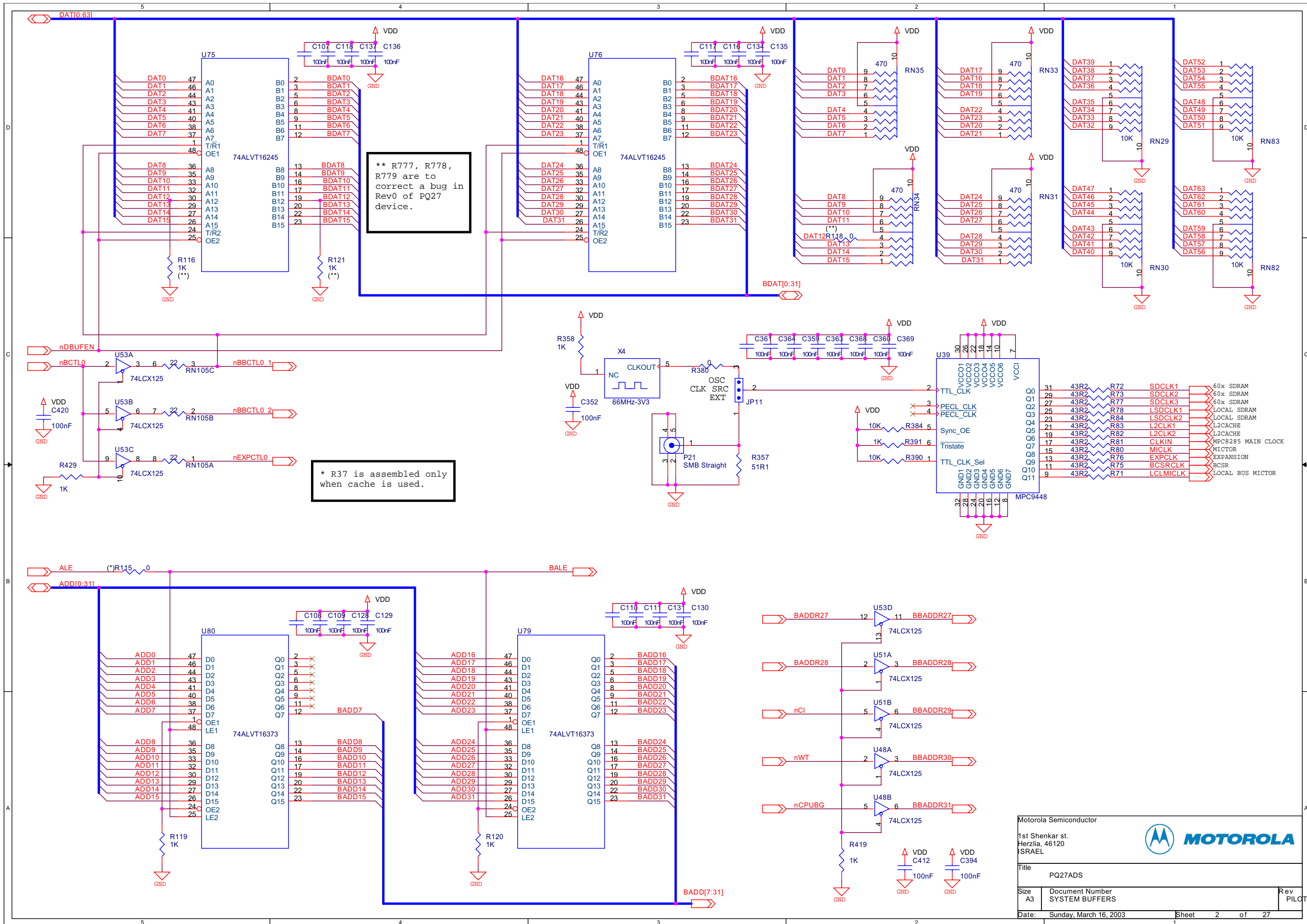


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5	FLASH and EEPROM Memories
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8	MPC8280 CPM
9	Fast Ethernet CPM MUX
10	UTOPIA 8 bits MUX
11	UTOPIA 16 Bit, RS232 & USB CPM Mux
12	ATM PHY
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18	PCI Connectors 1
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20	Expansion Connectors (2 x 128 pin)
21	Logic Analyzer Connectors - Mictors
22	Pull-Up / Pull-Down Resistors
23	MPC8280 & ATM PHY Power
24	Parallel Port Interface
25	COP/JTAG Command Converter
26	Voltage Regulators, Leds
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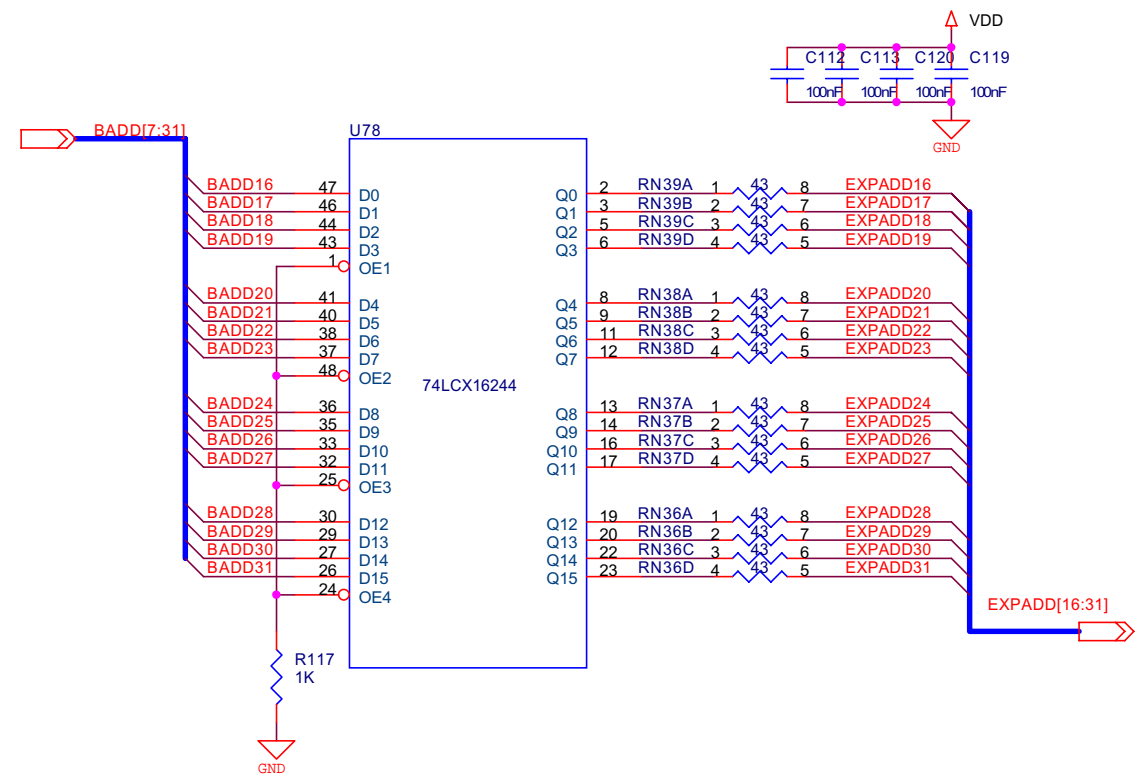
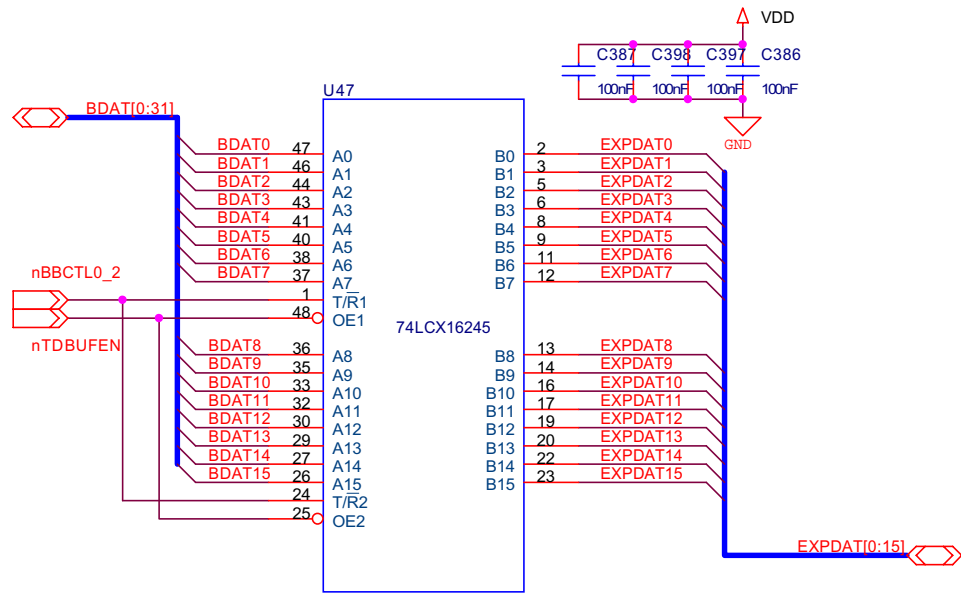
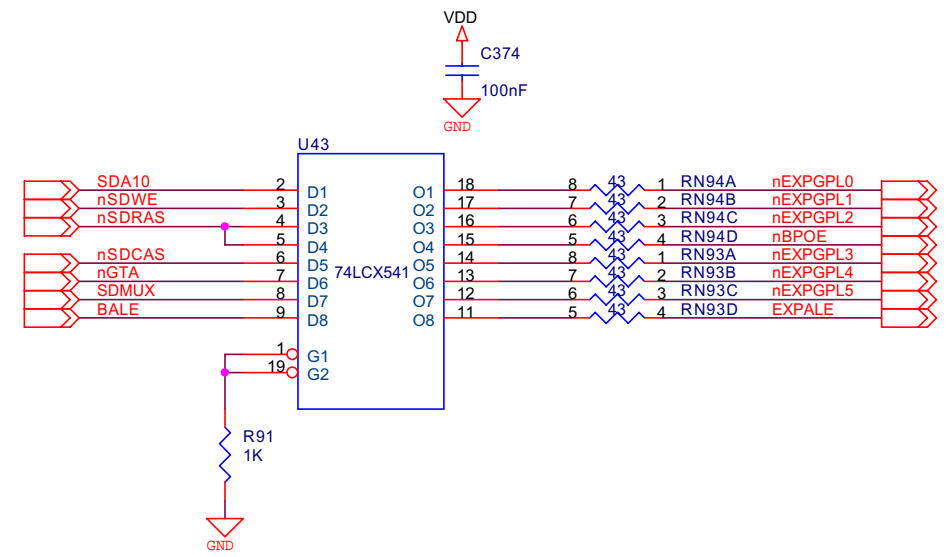
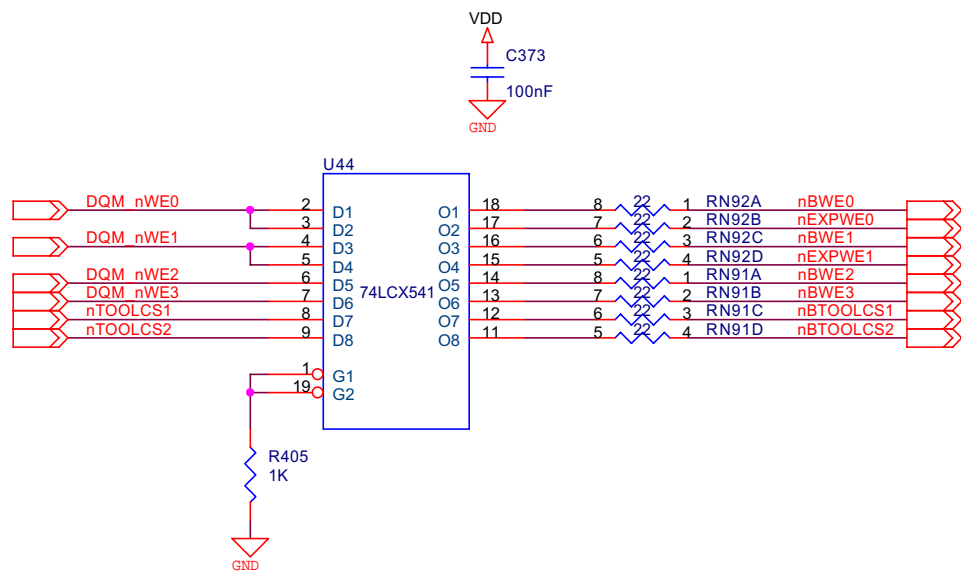
PQ2FADS-ZU

**MPC8280 MotherBoard
Rev. PILOT**

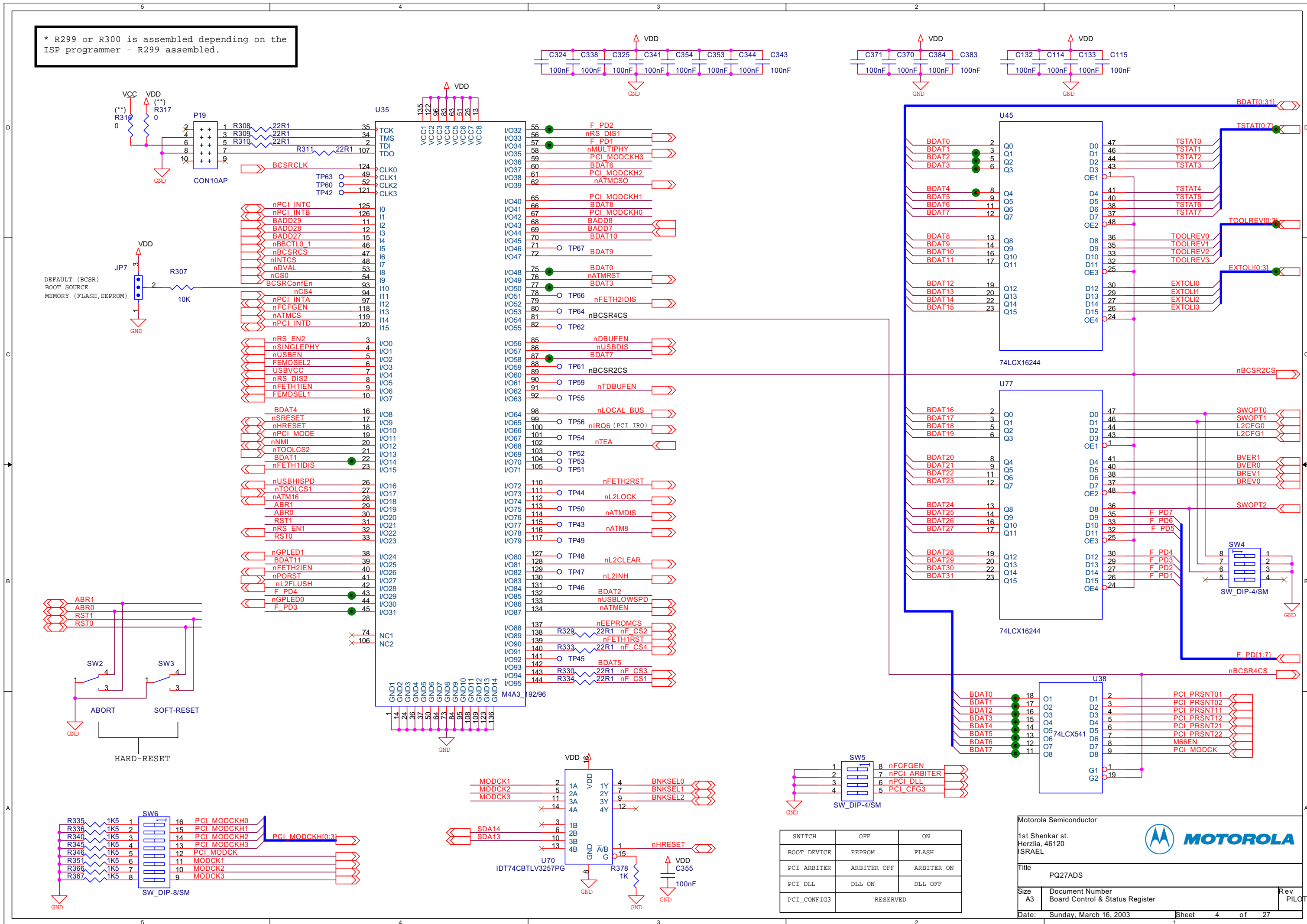


** R777, R778, R779 are to correct a bug in Rev0 of PQ27 device.

* R37 is assembled only when cache is used.



* R299 or R300 is assembled depending on the ISP programmer - R299 assembled.



SWITCH	OFF	ON
BOOT DEVICE	EEPROM	FLASH
PCI ARBITER	ARBITER OFF	ARBITER ON
PCI DLL	DLL ON	DLL OFF
PCI_CONFIG3	RESERVED	

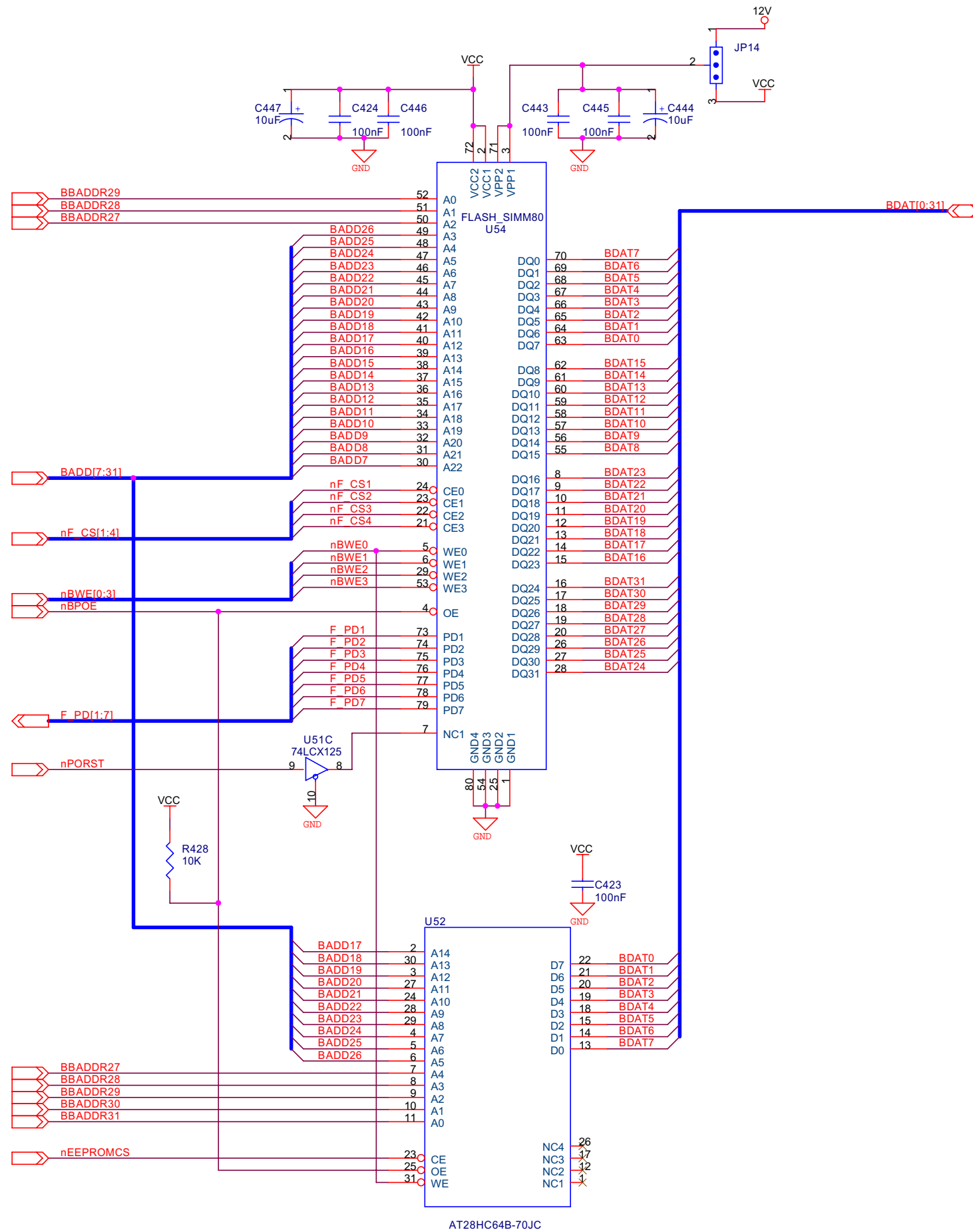
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ISRAEL

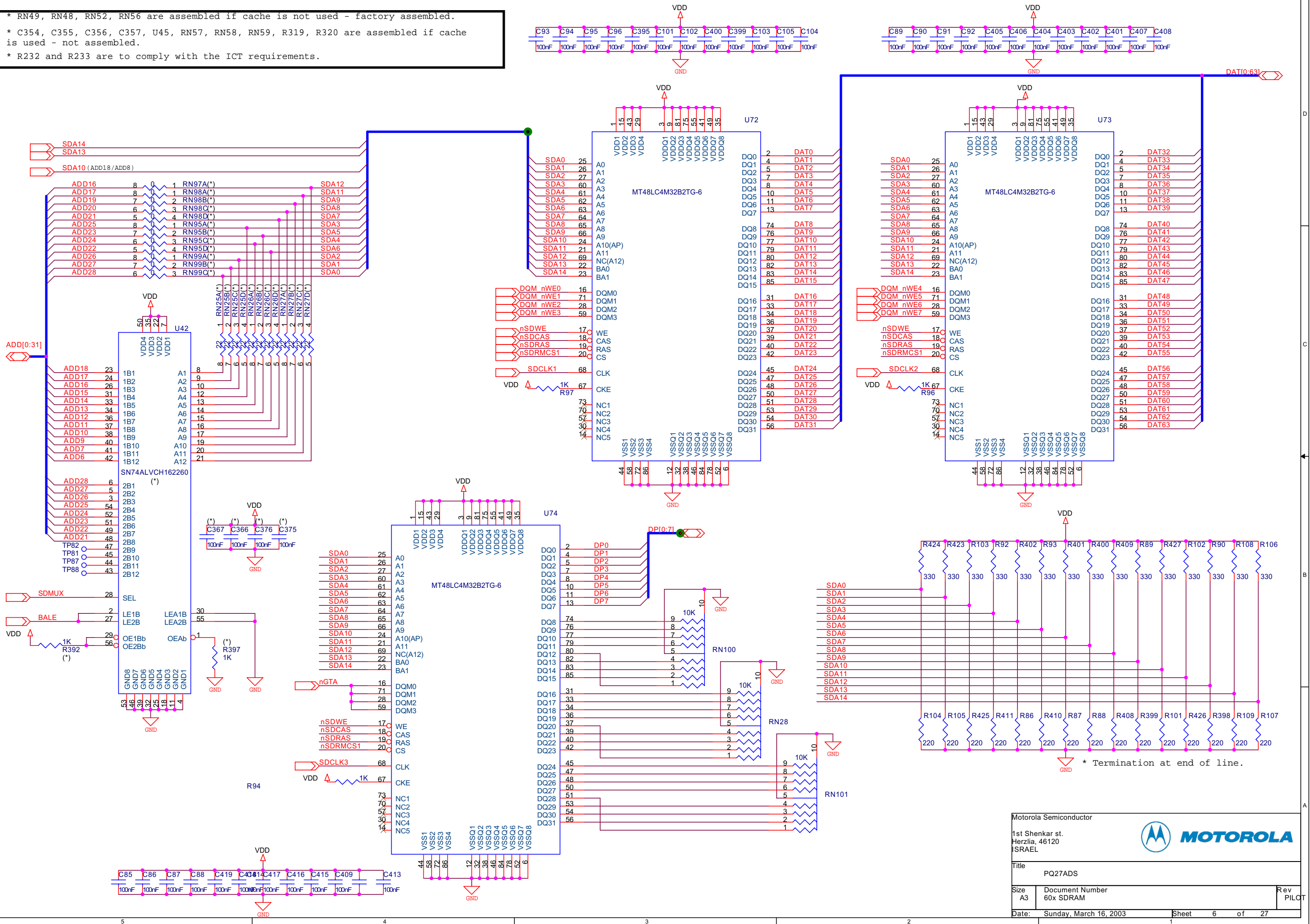
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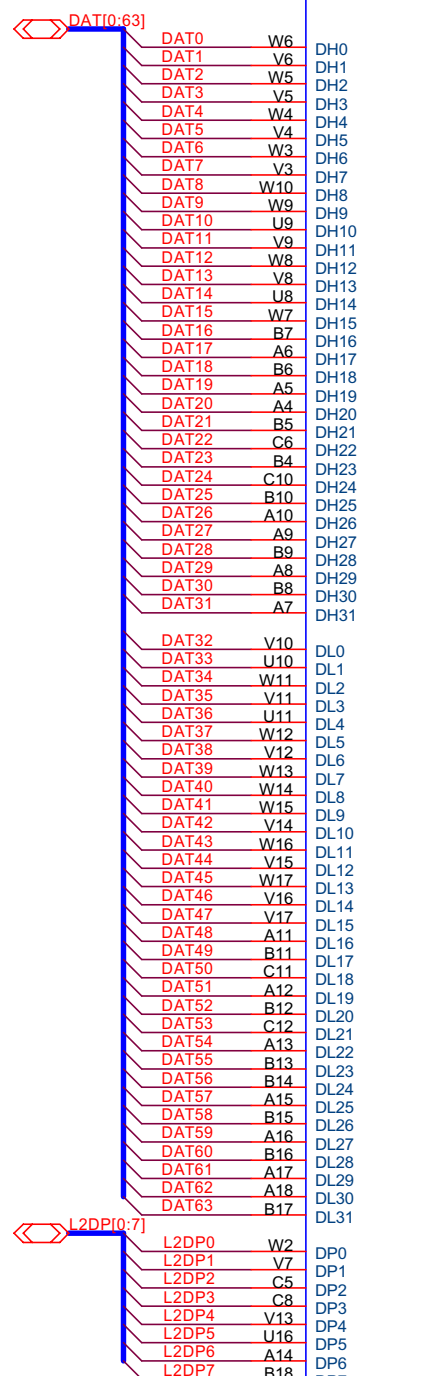
Size: A3 | Document Number: Board Control & Status Register | Rev: PILOT

Date: Sunday, March 16, 2003 | Sheet: 4 of 27

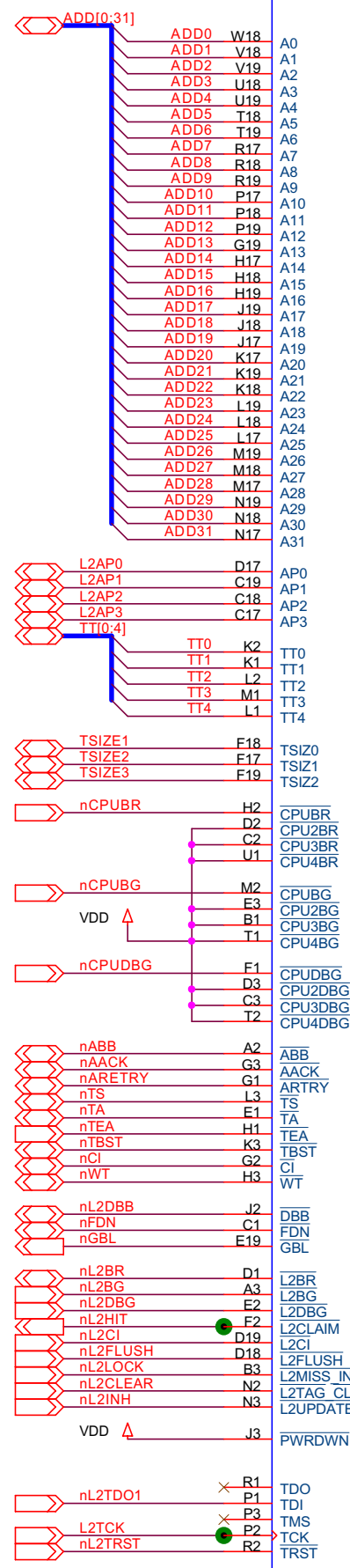
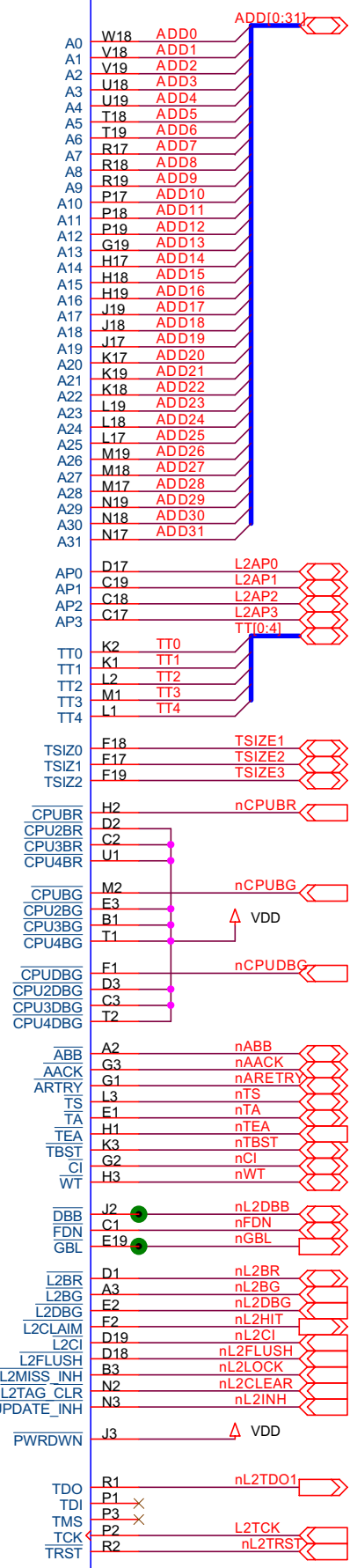


* RN49, RN48, RN52, RN56 are assembled if cache is not used - factory assembled.
 * C354, C355, C356, C357, U45, RN57, RN58, RN59, R319, R320 are assembled if cache is used - not assembled.
 * R232 and R233 are to comply with the ICT requirements.

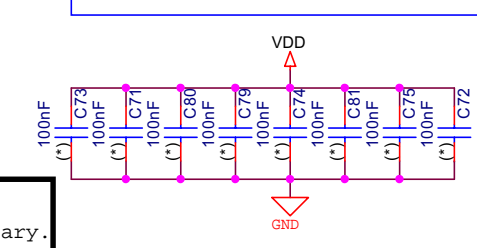
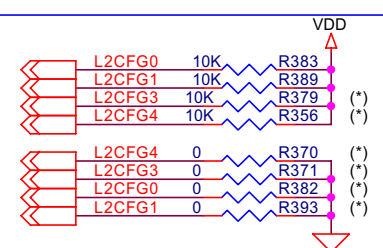
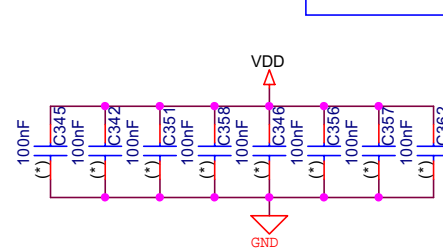
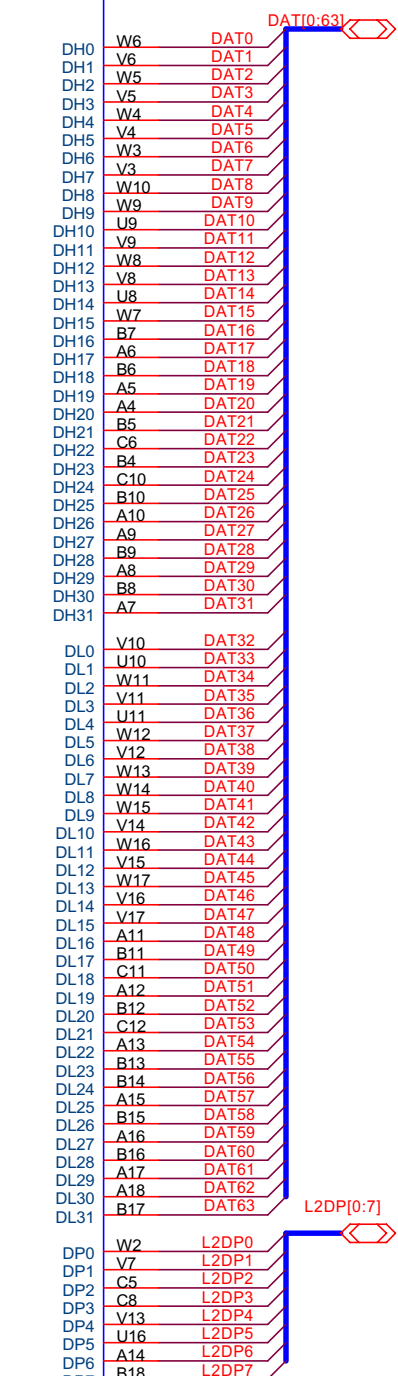




(*) U37
MPC2605

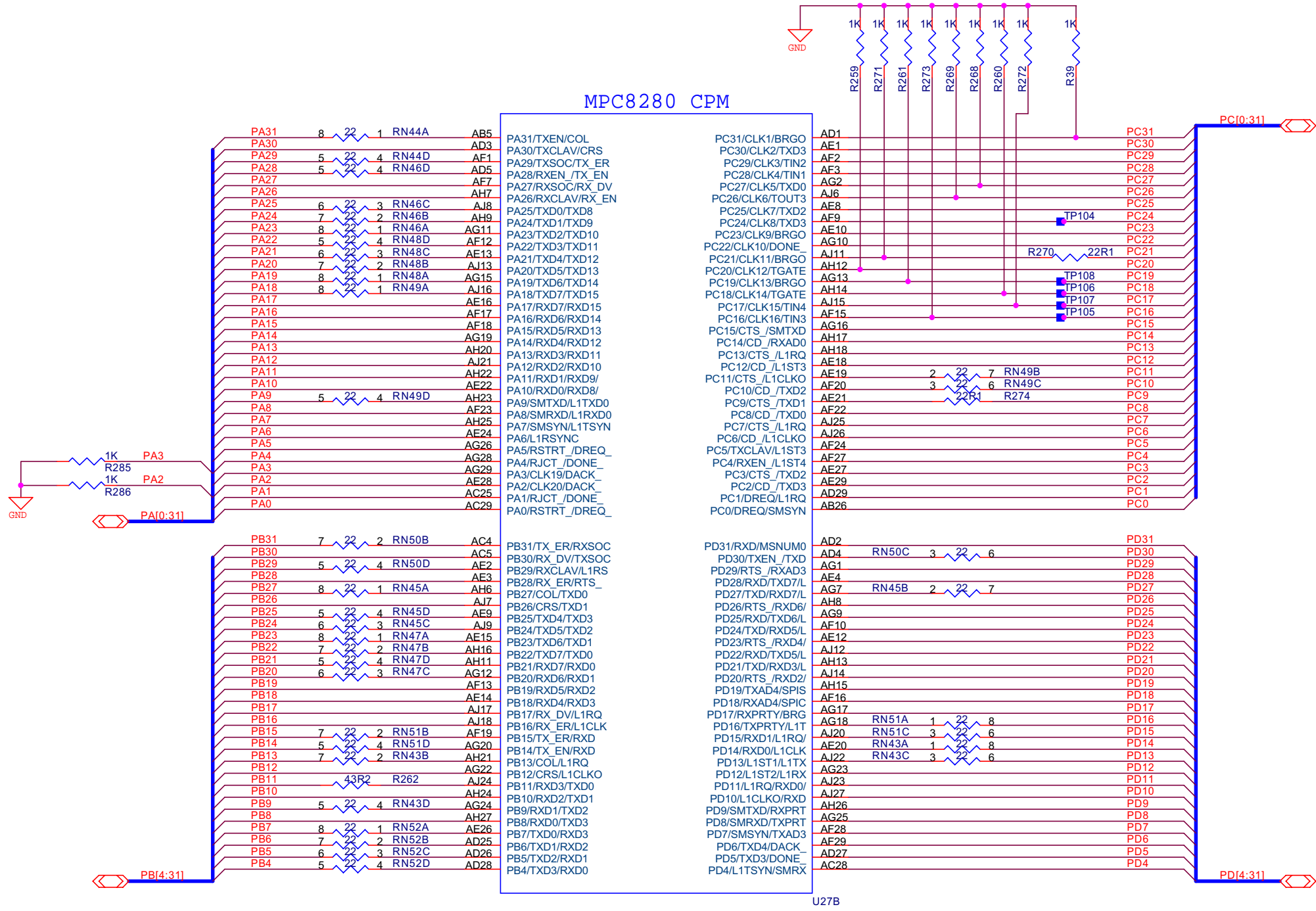


(*) U71
MPC2605



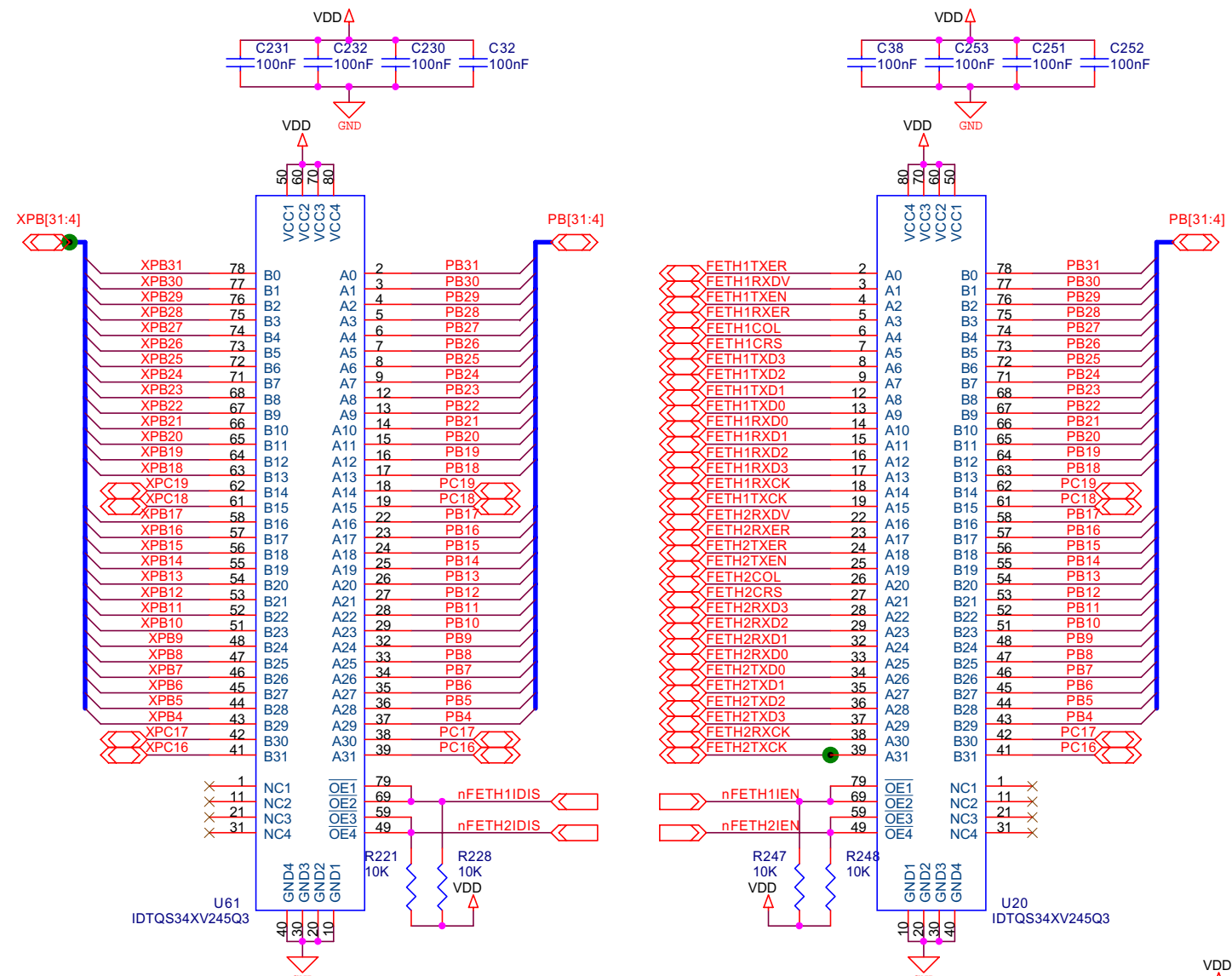
* All components in this page are assembled only if cache is necessary.

MPC8280 CPM



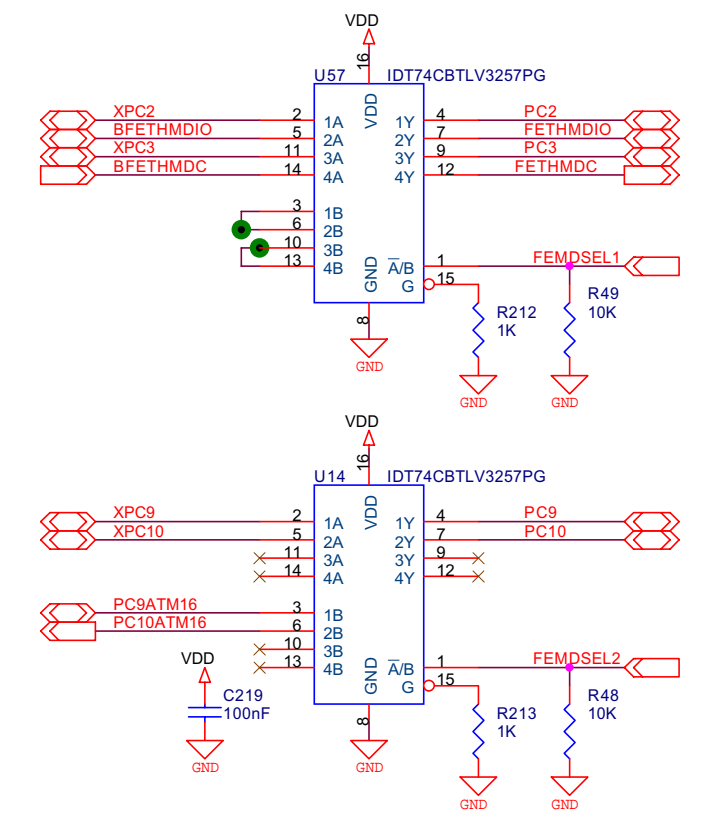
FAST ETHERNET 1 and FAST ETHERNET 2 MUX

FAST ETHERNET MANAGEMENT (MDIO, MDC) MUX

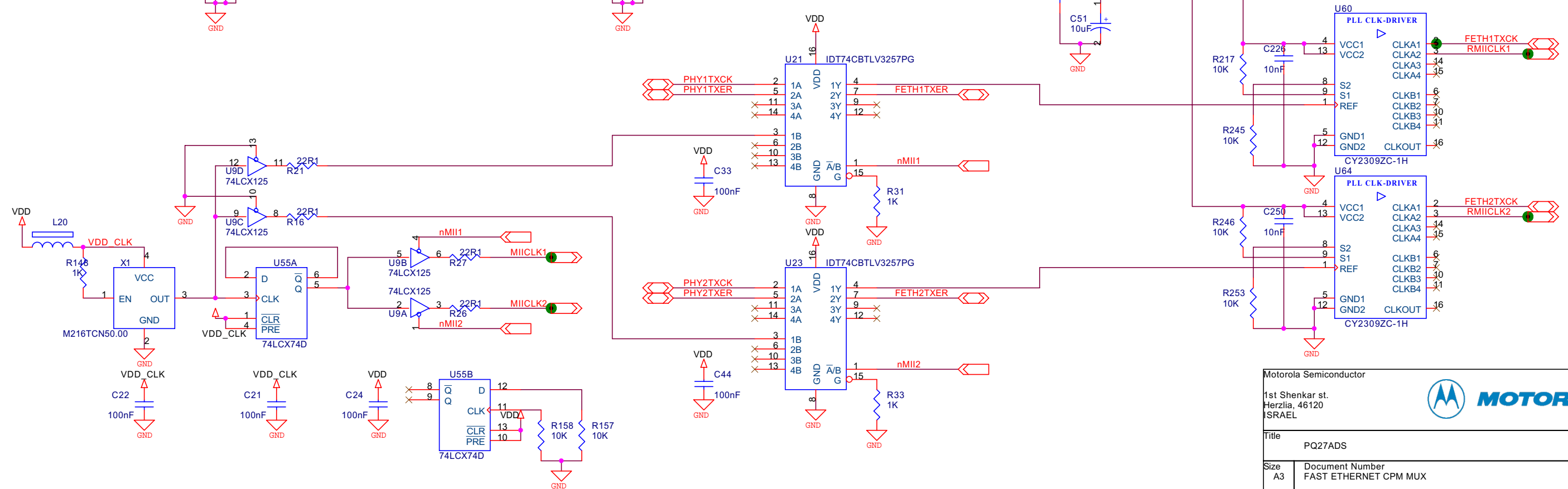


FAST ETHERNET 1 MUX

FAST ETHERNET 2 MUX



* MDIO and MDC are originally on PC9 and PC10. There is a conflict when F.E. is enabled with USB or ATM 16 bits UTOPIA. To resolve the conflict, MDIO and MDC are switched to PC2 and PC3 respectively.



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Title: PQ27ADS

Size: A3

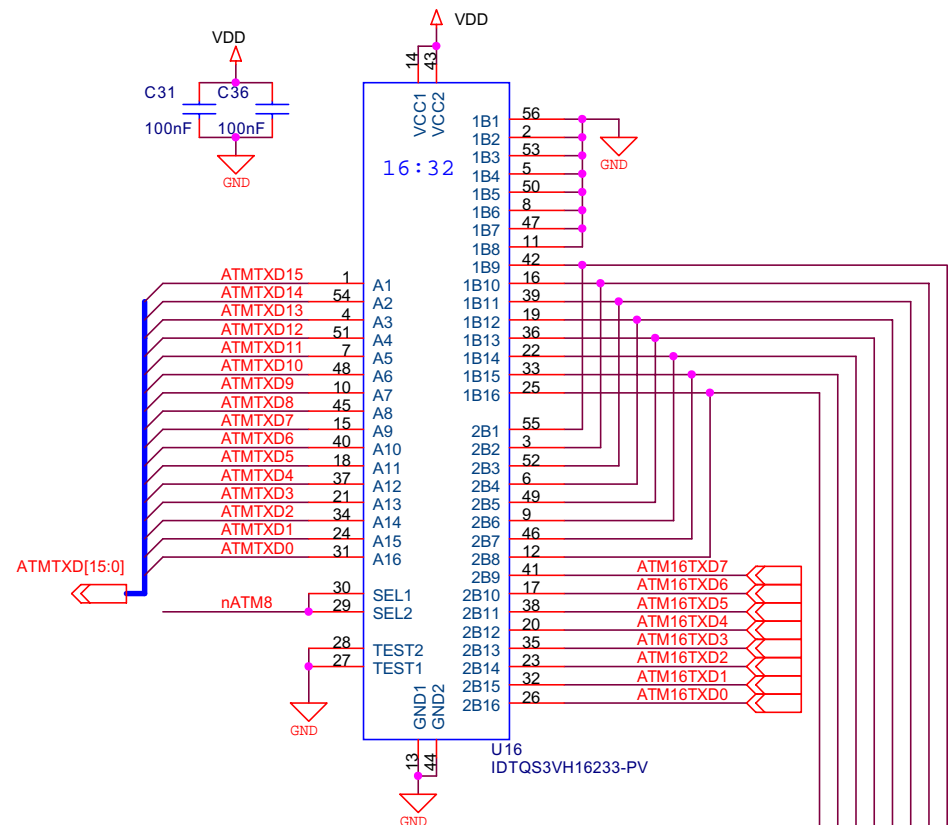
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Date: Sunday, March 16, 2003

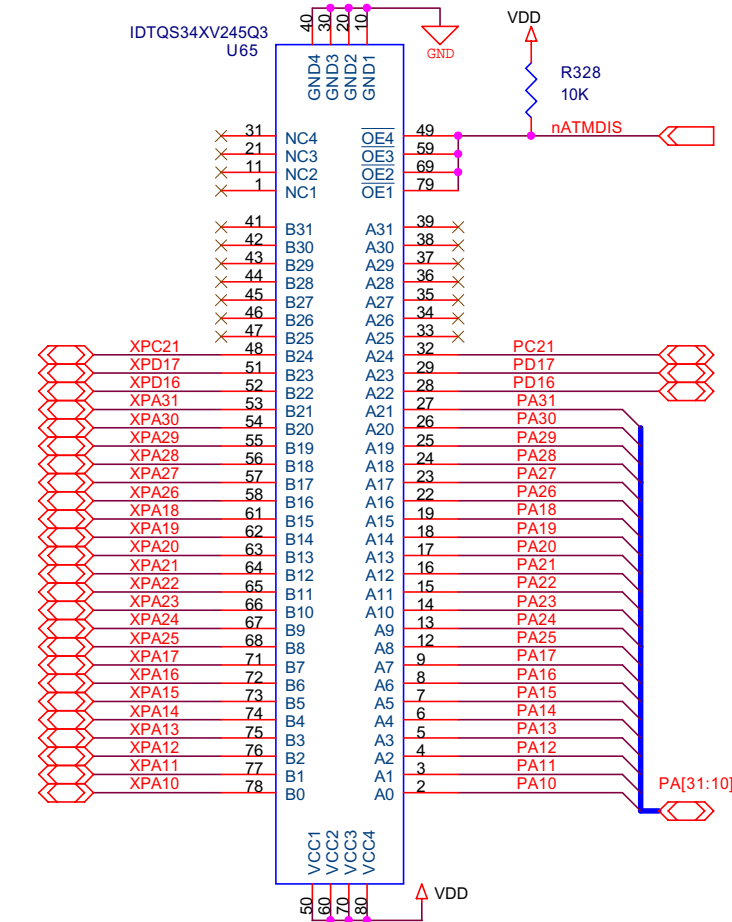
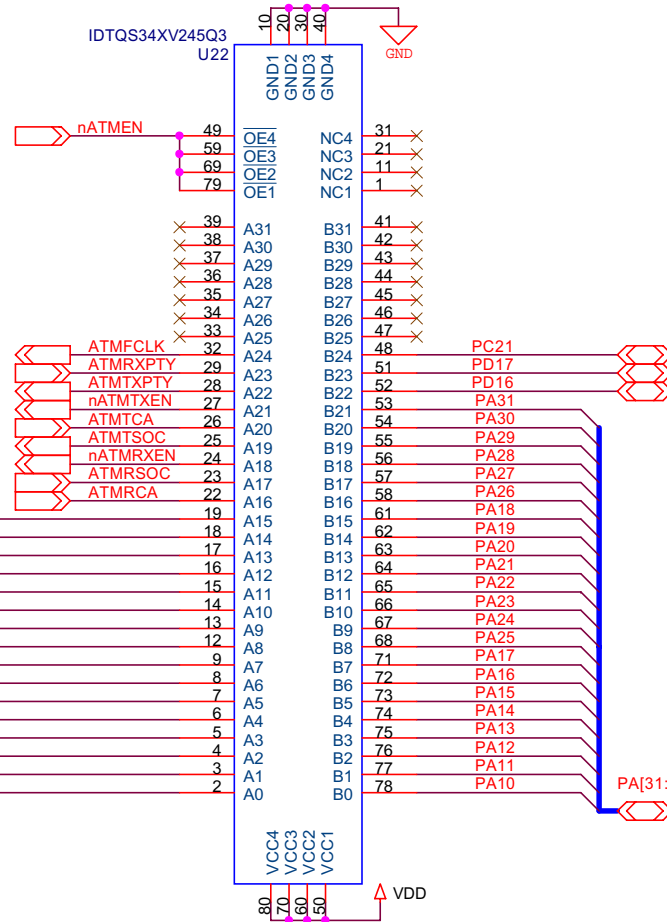
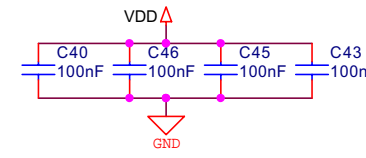
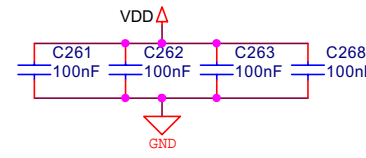
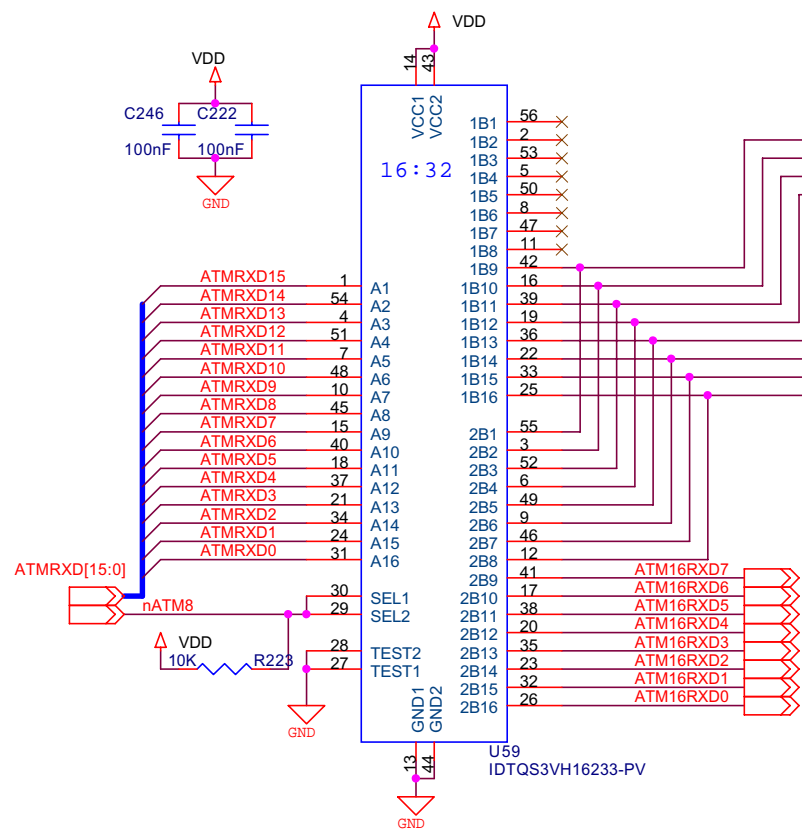
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UTOPIA TX 8/16 BITS MUX

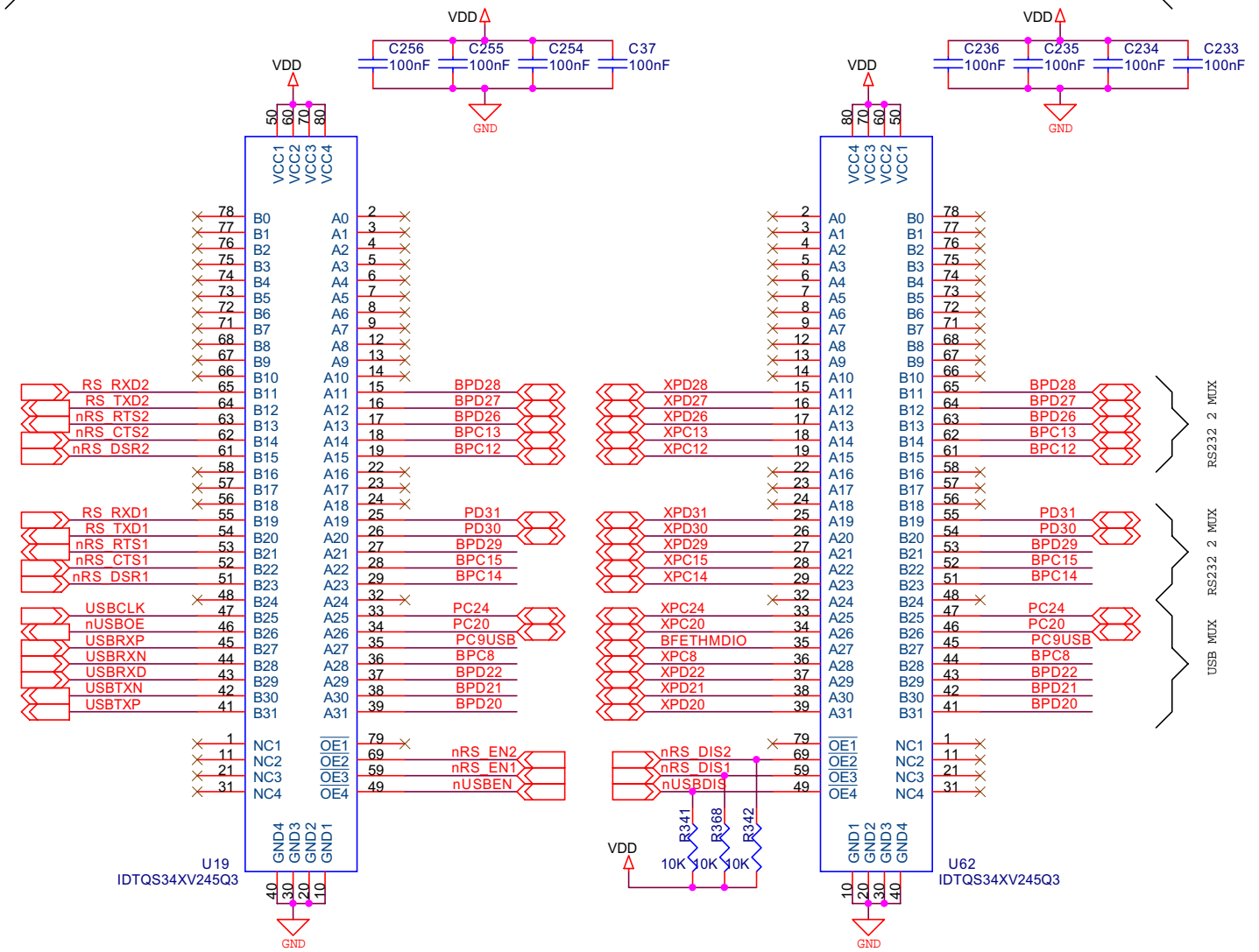
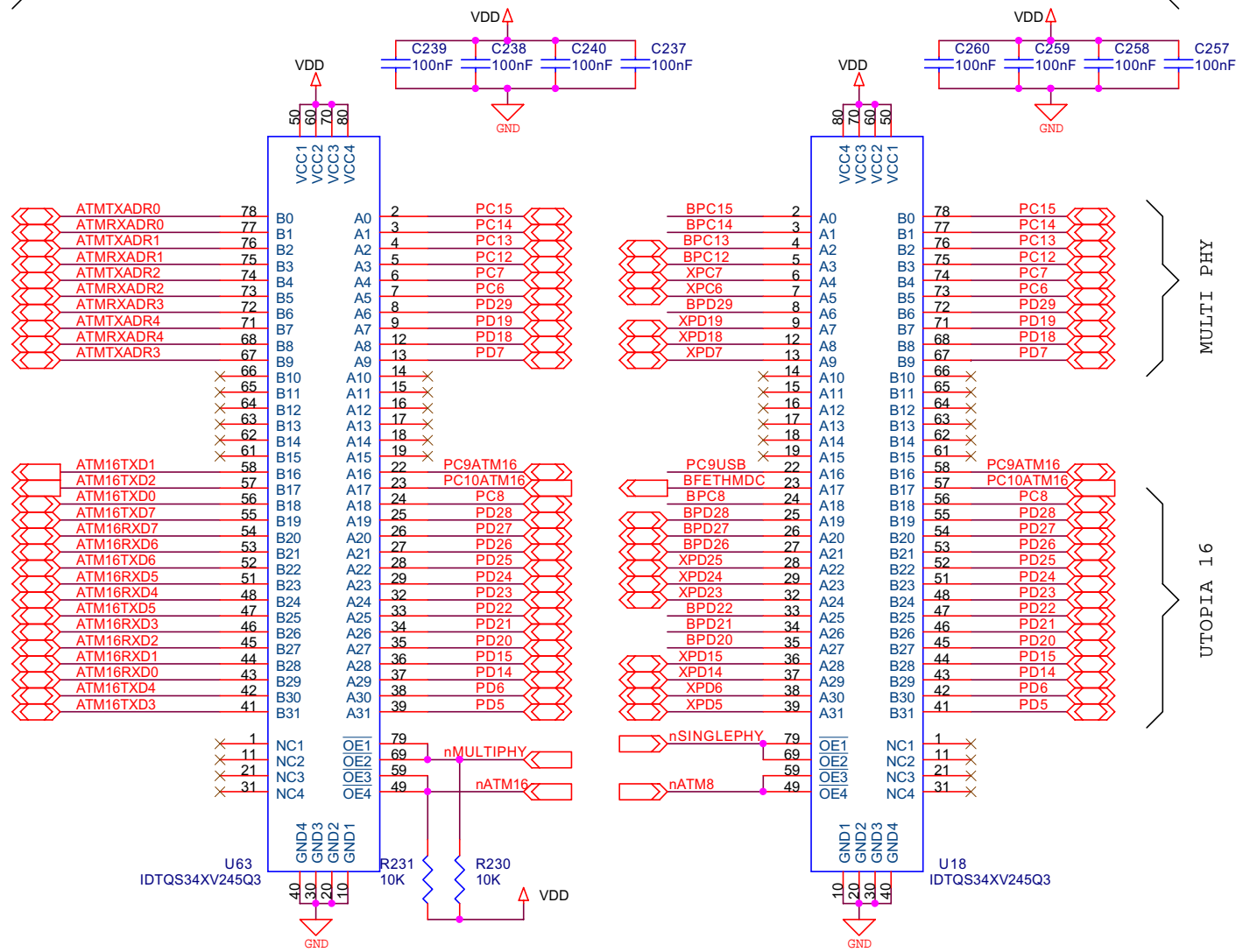


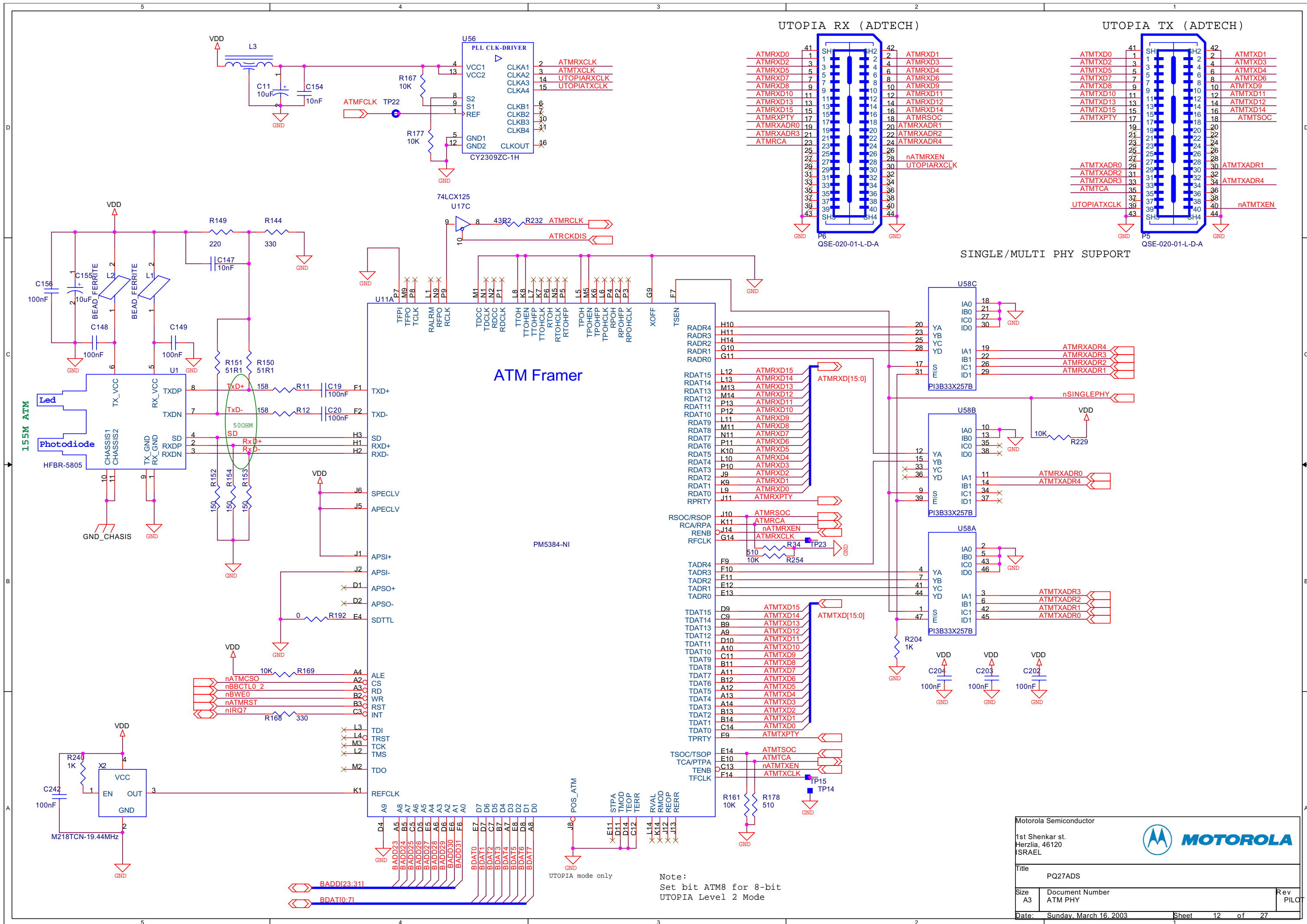
UTOPIA RX 8/16 BITS MUX



ATM MULTI PHY AND UTOPIA 16 BIT SUPPORT

USB, RS232-1 and RS232-2 MUX

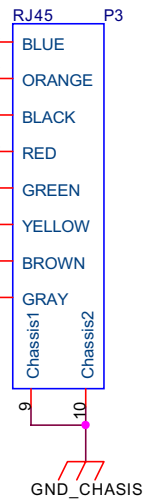
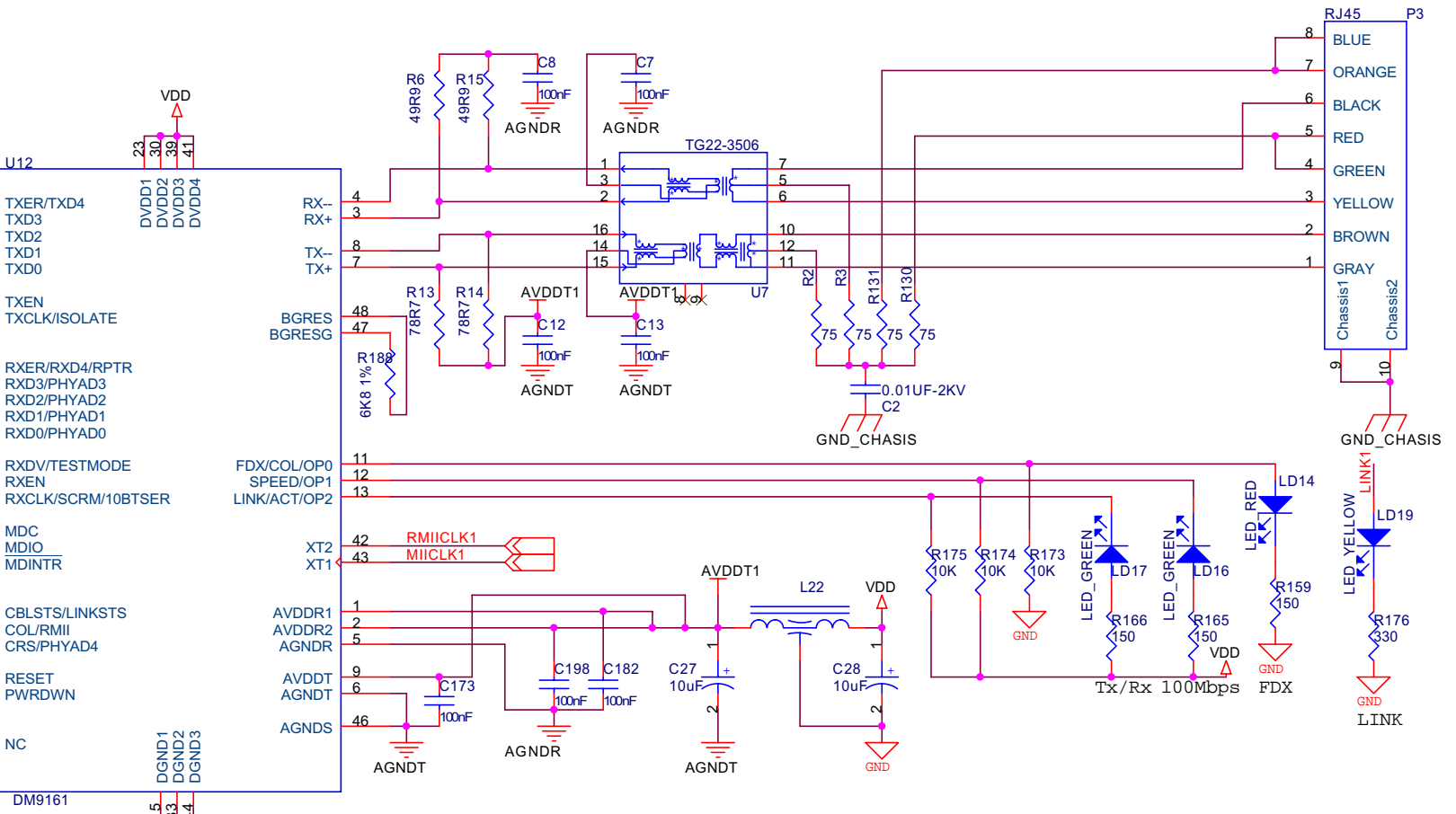
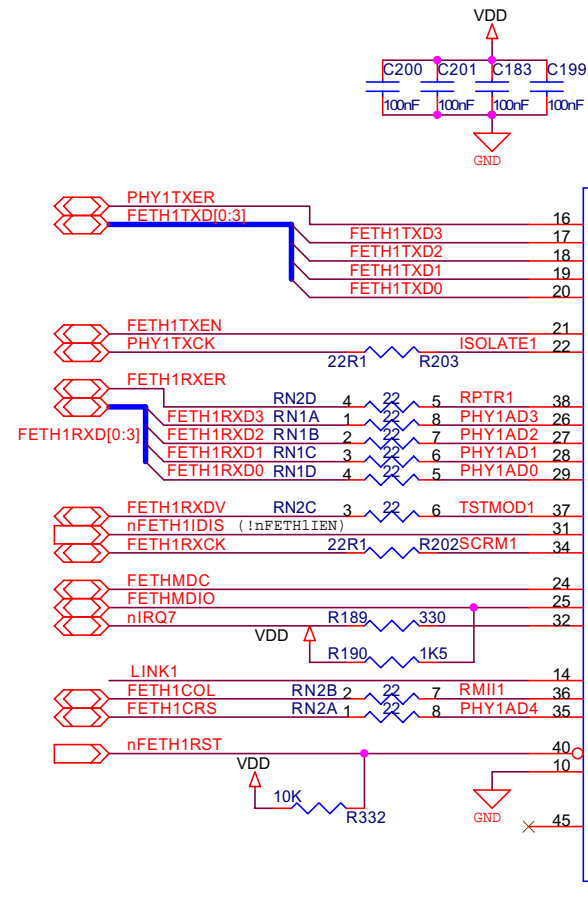
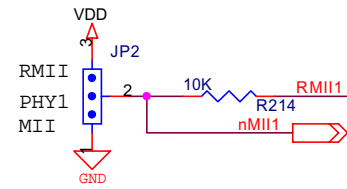
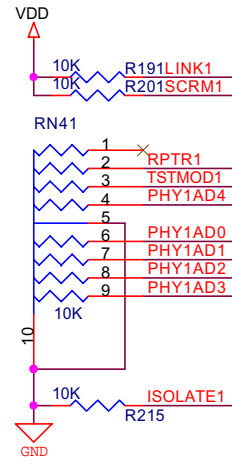




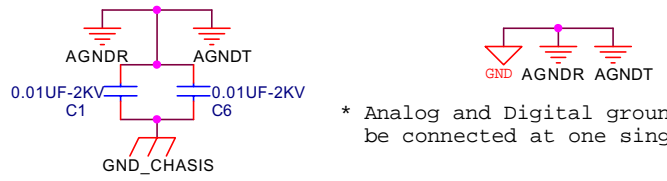
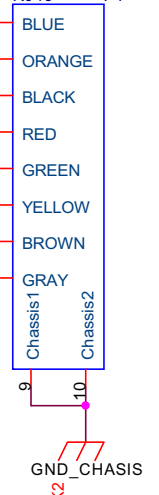
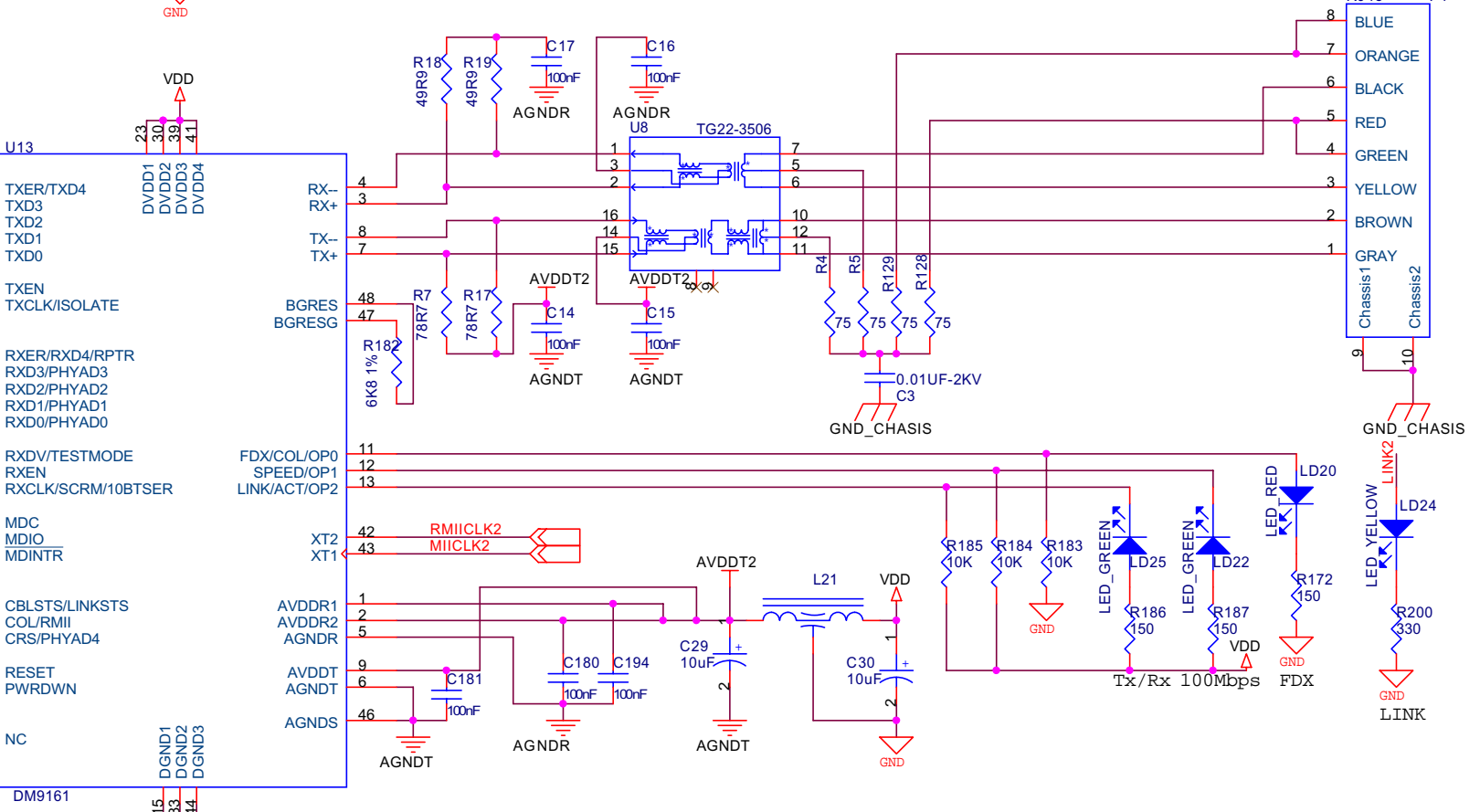
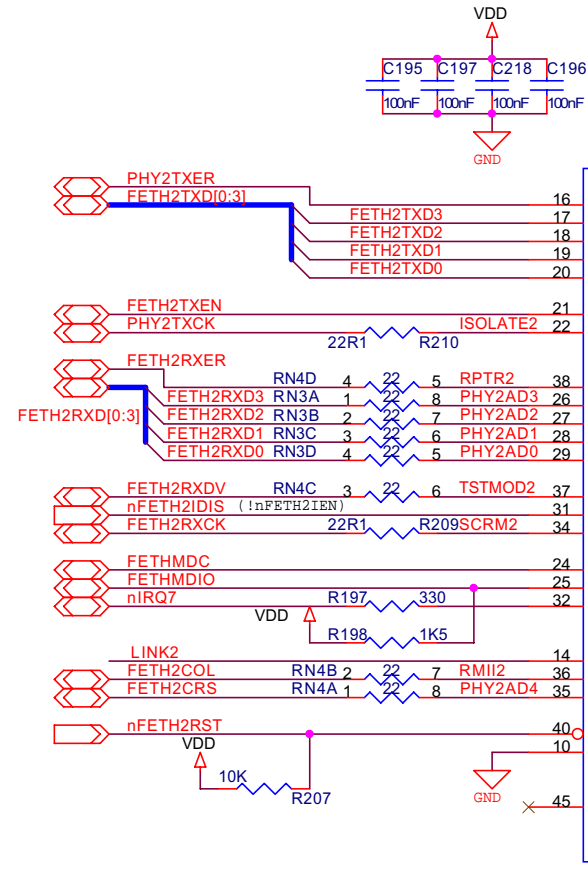
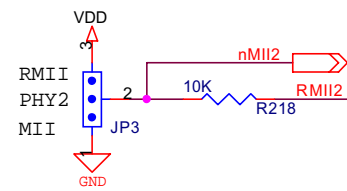
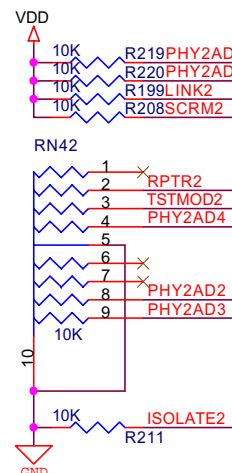
Note:
Set bit ATM8 for 8-bit
UTOPIA Level 2 Mode

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Title	PQ27ADS
Size	Document Number ATM PHY
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* FAST ETHERNET1 - PHY ADDRESS 00000



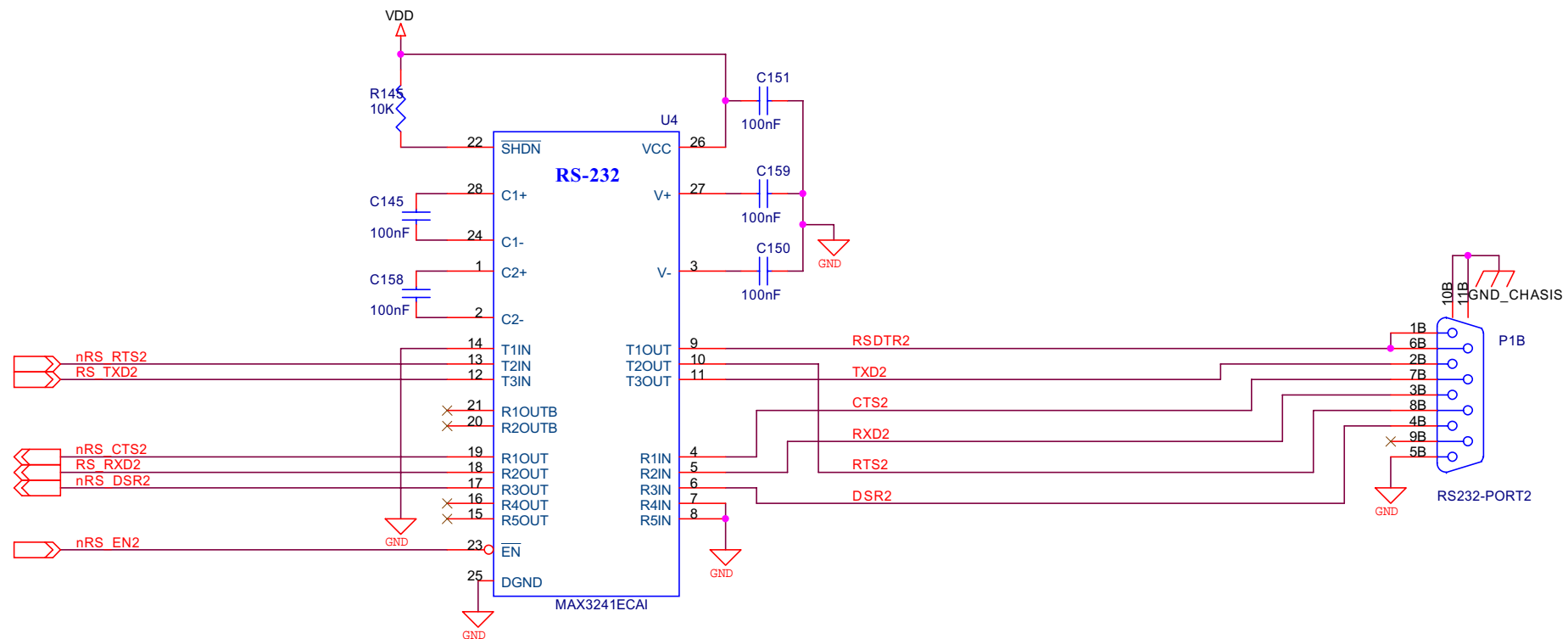
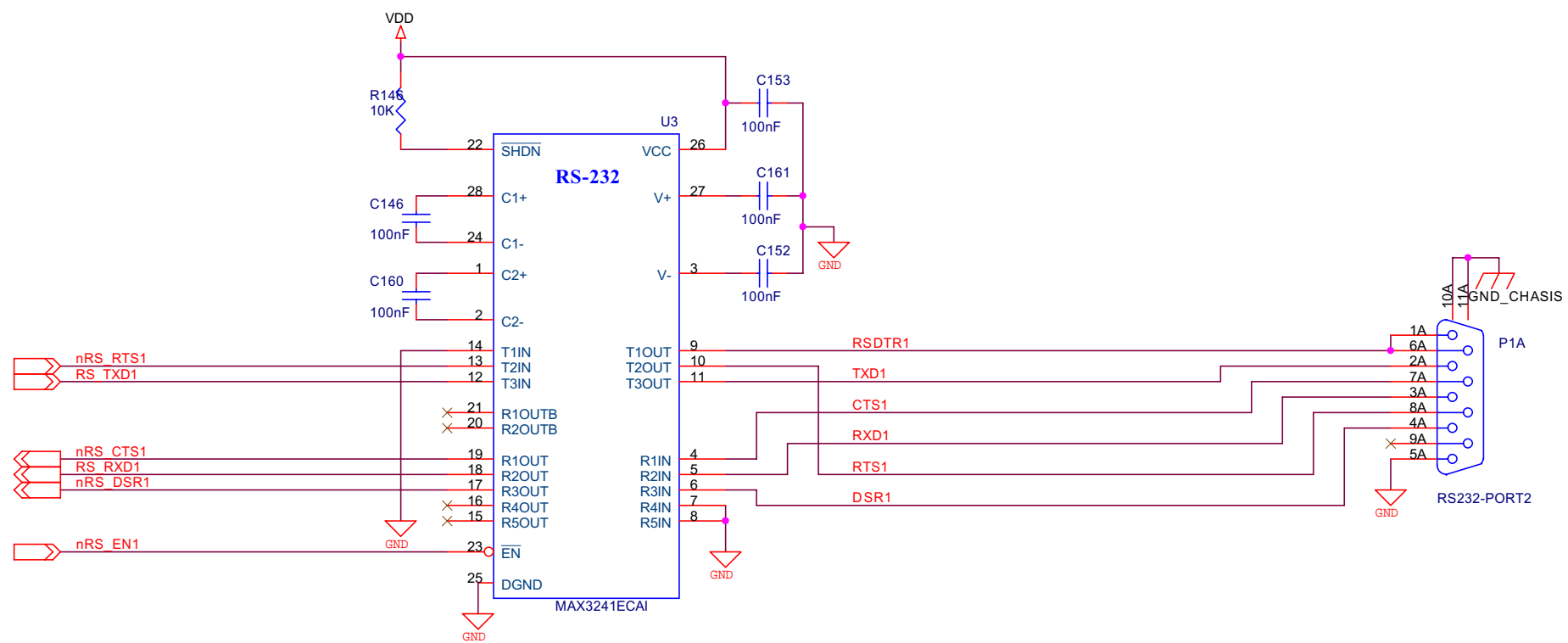
* FAST ETHERNET 2 - PHY ADDRESS 00011

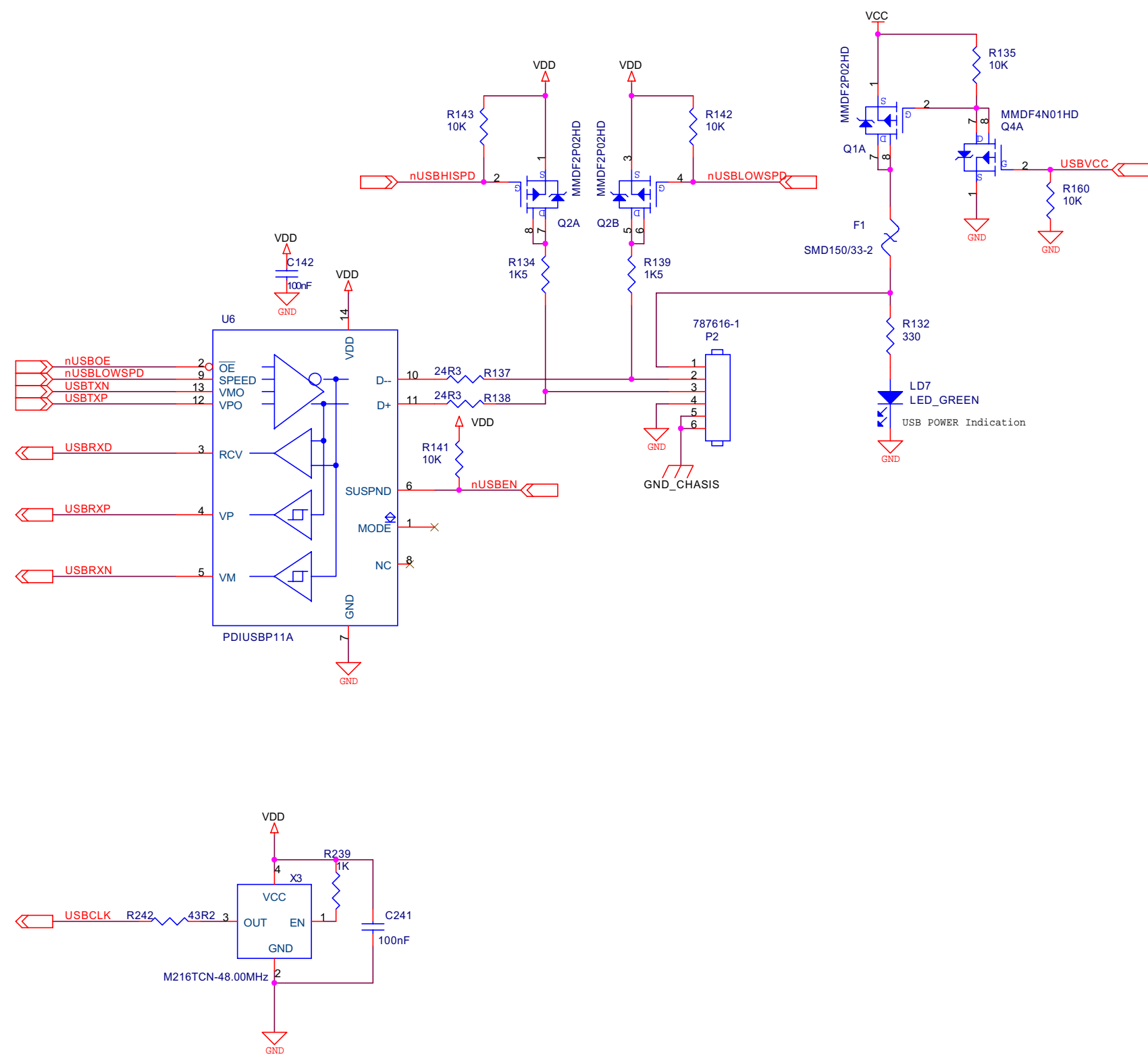


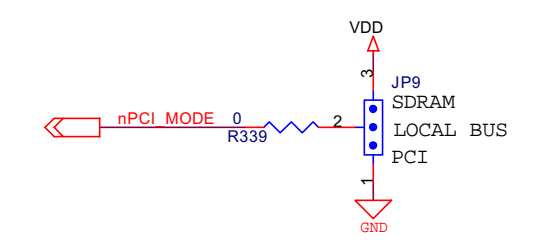
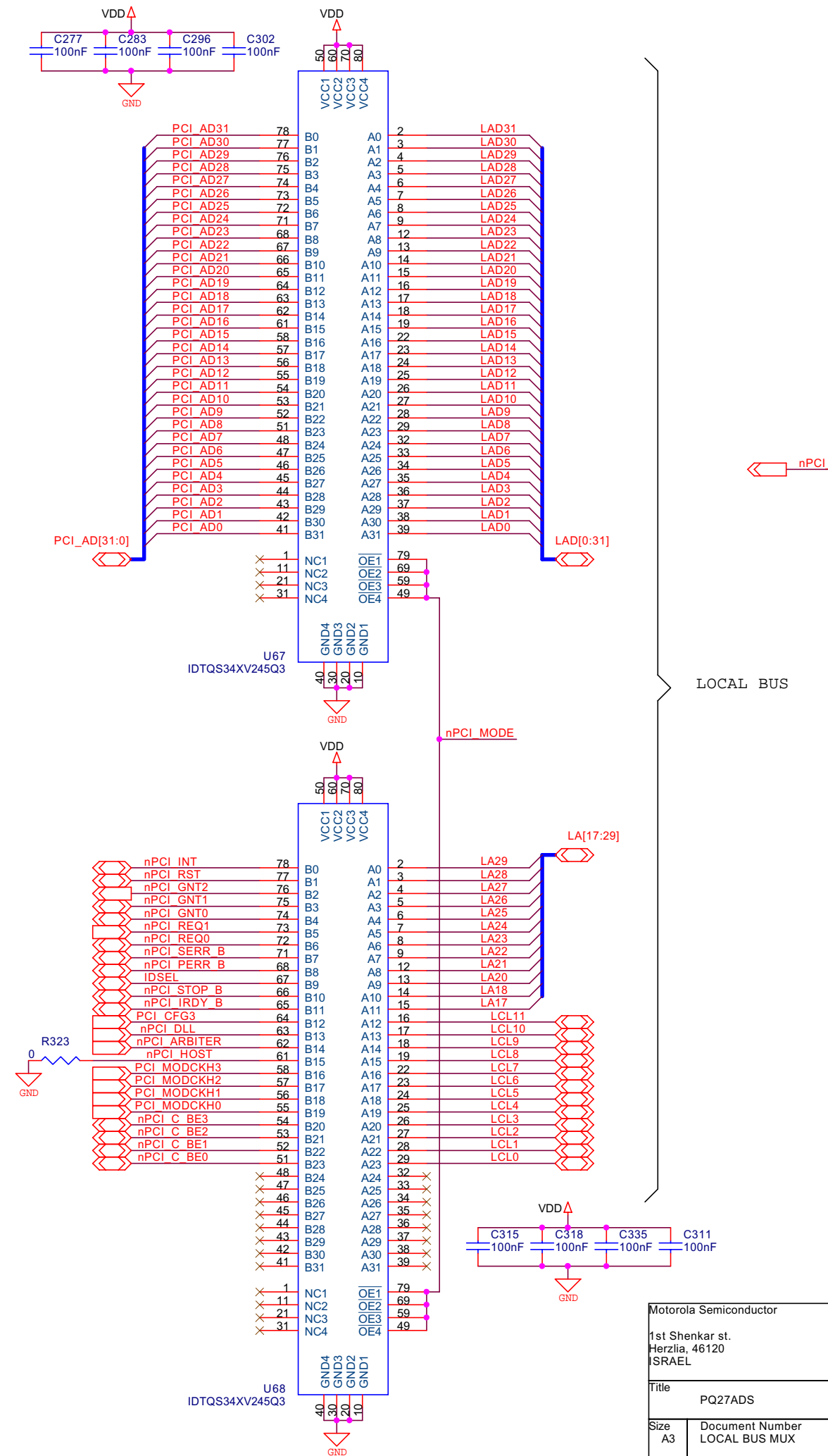
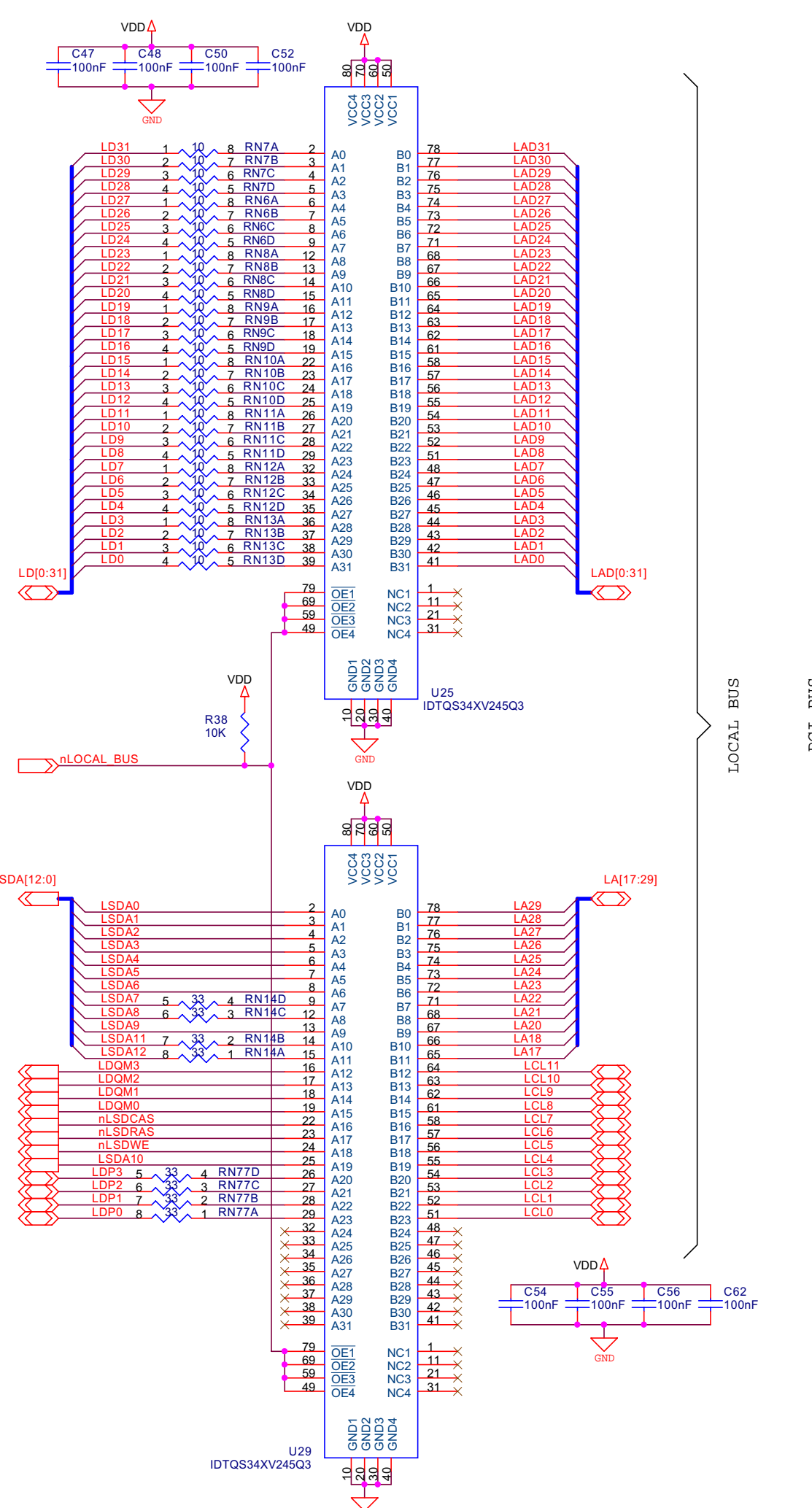
* Analog and Digital ground planes should be connected at one single point.

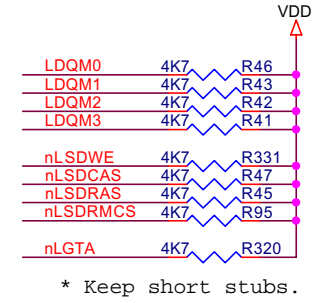
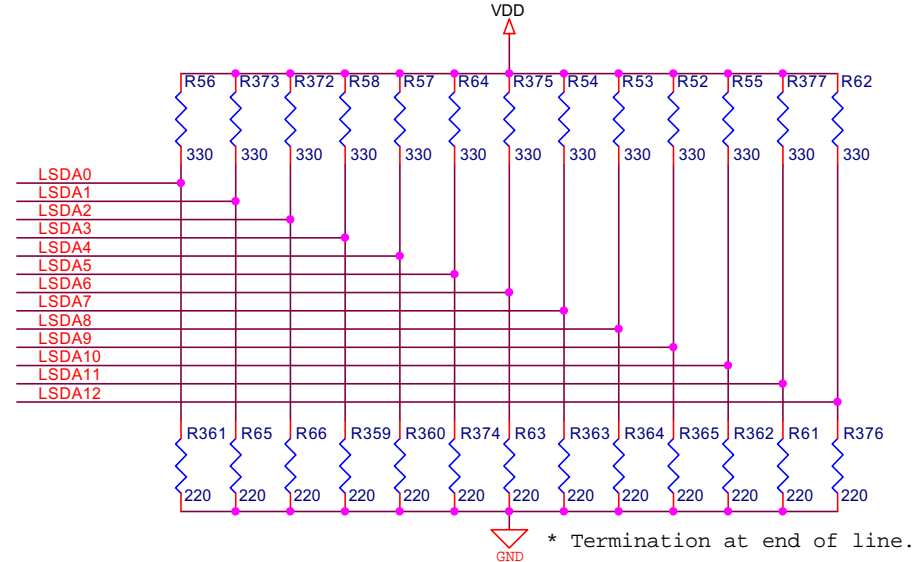
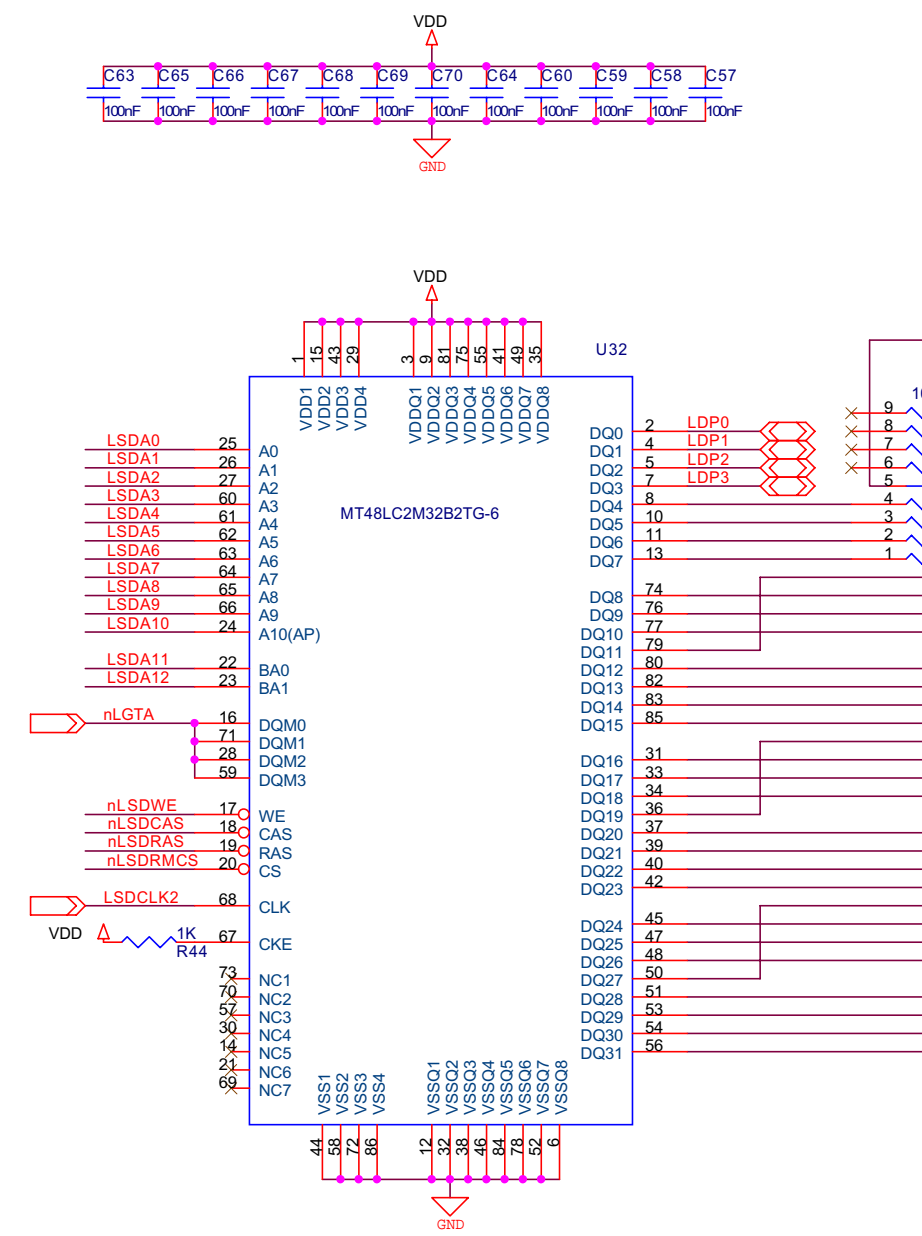
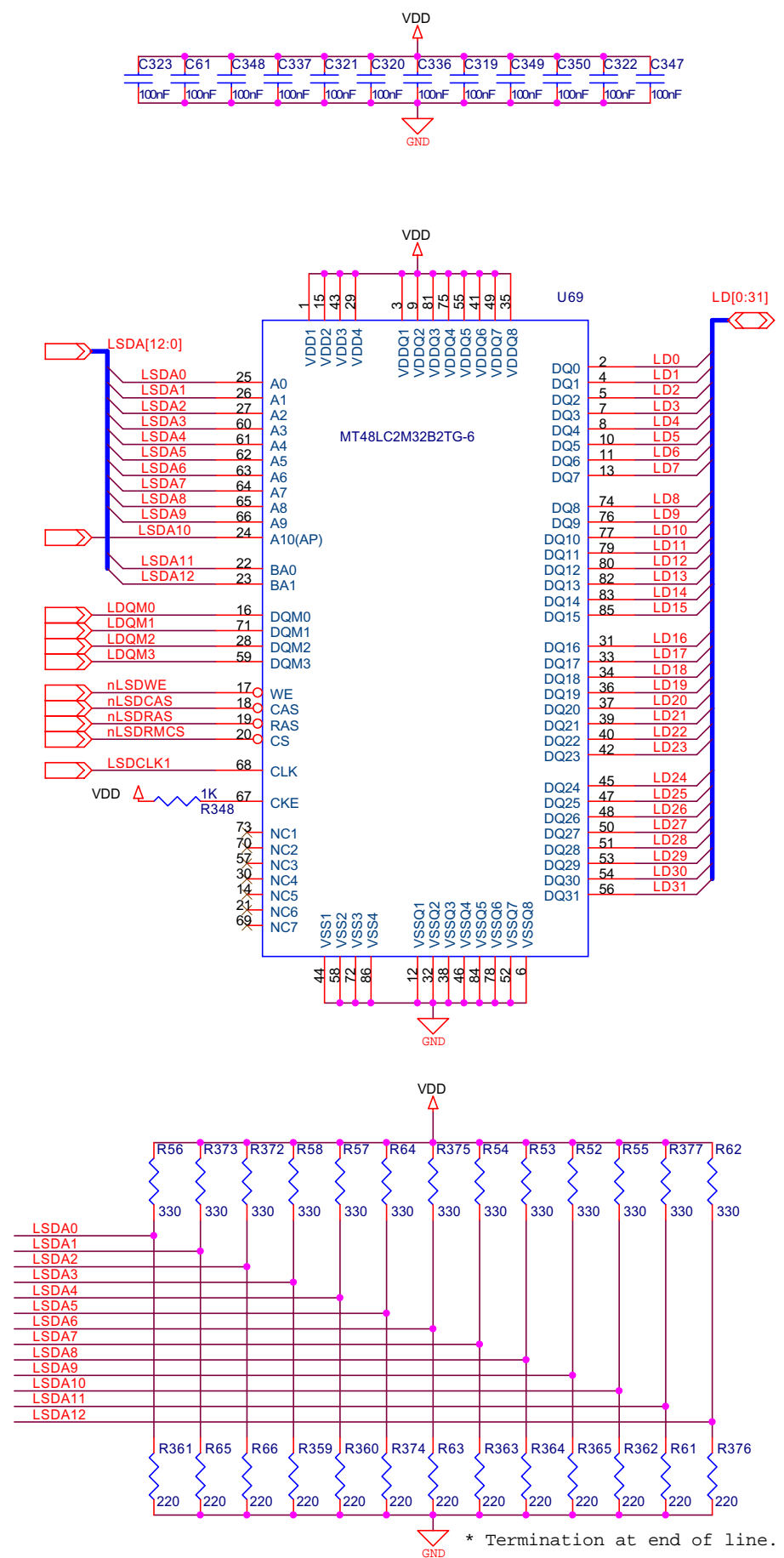
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Title: PQ27ADS
 Size: A3
 Document Number: FAST ETHERNET
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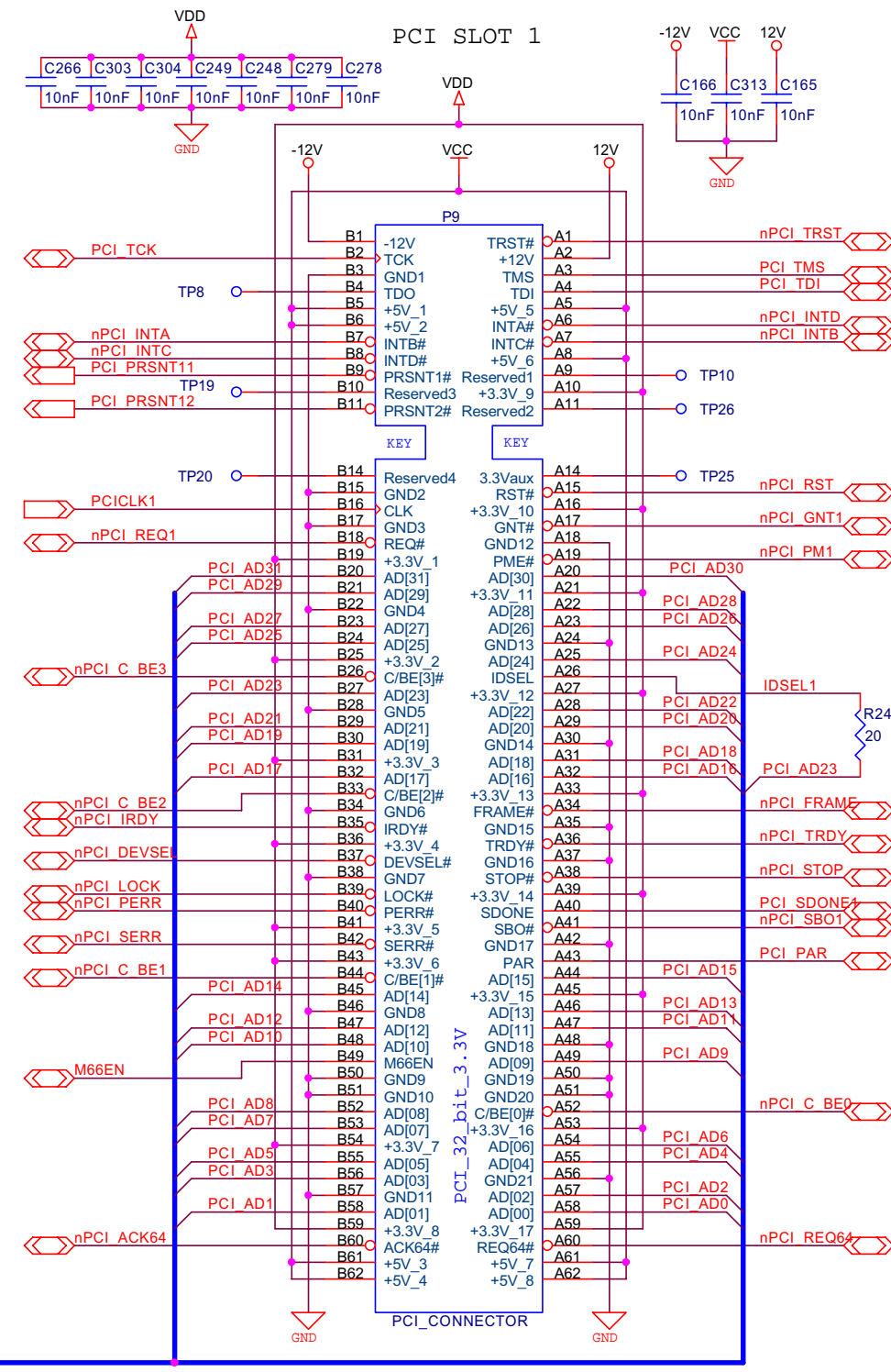
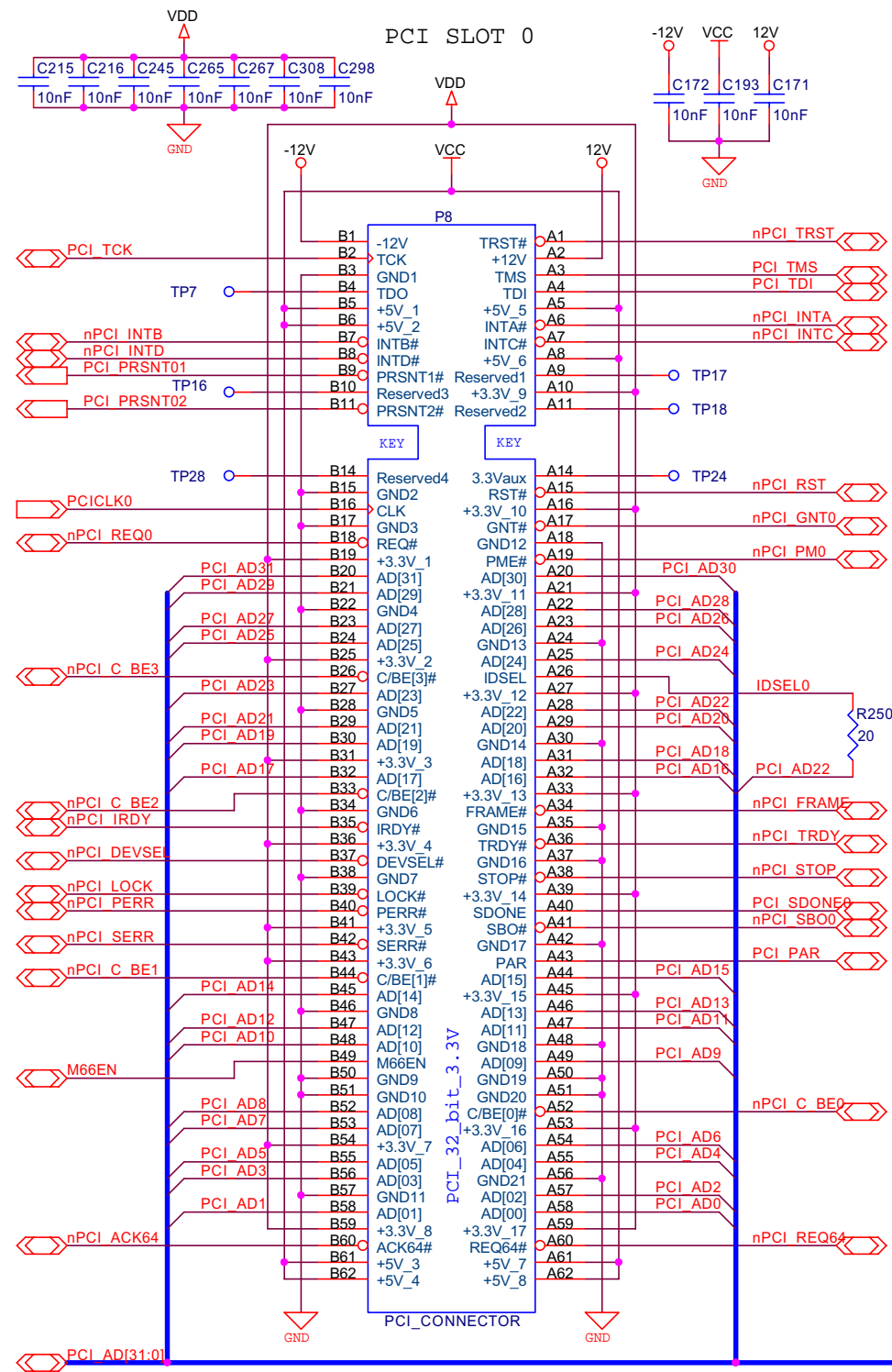
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 ISRAEL

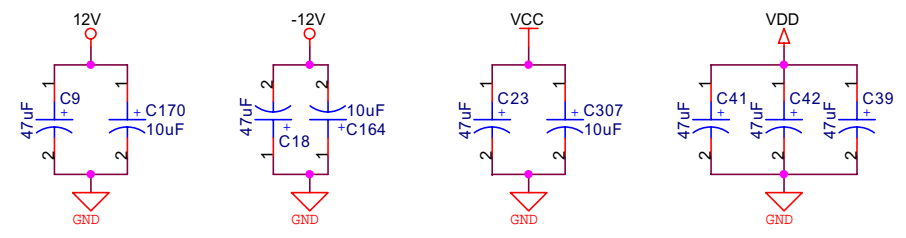
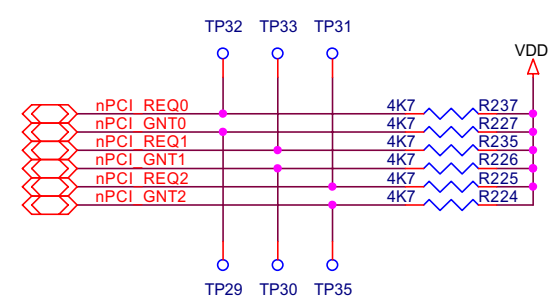
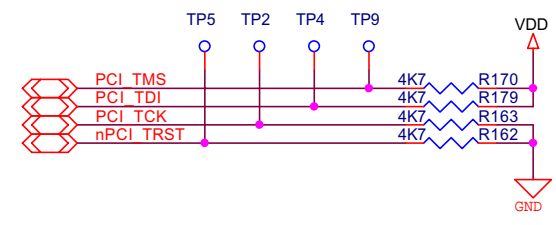
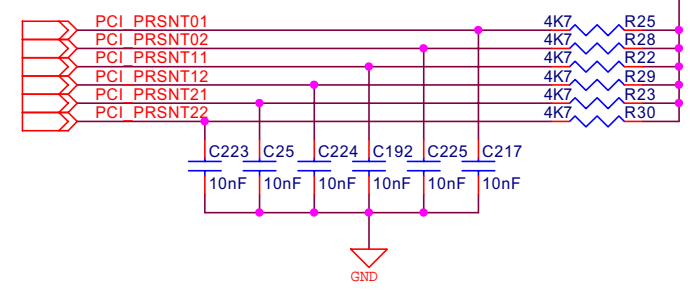
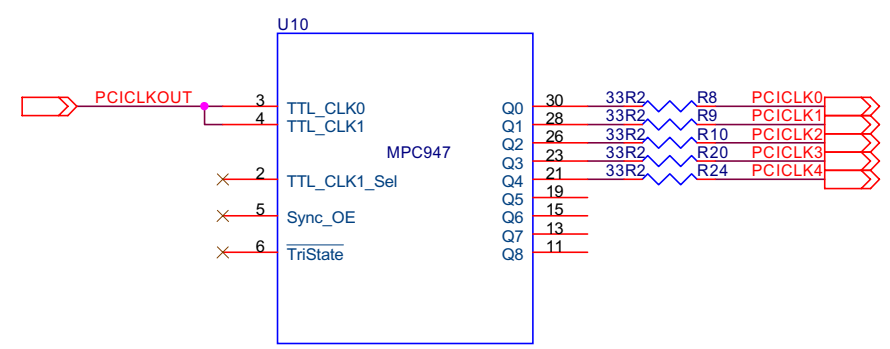
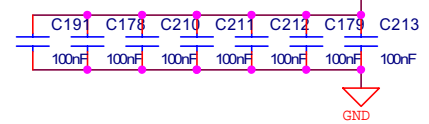
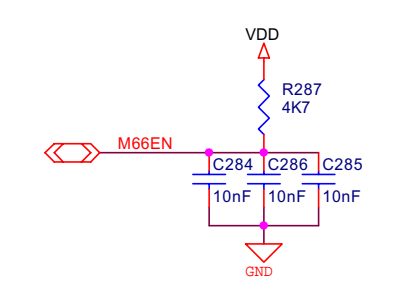
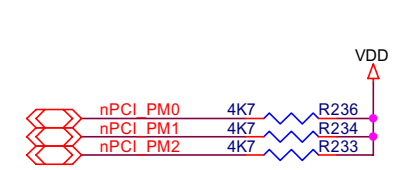
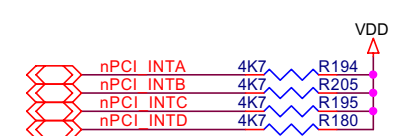
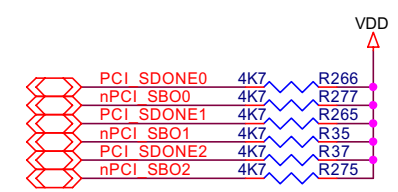
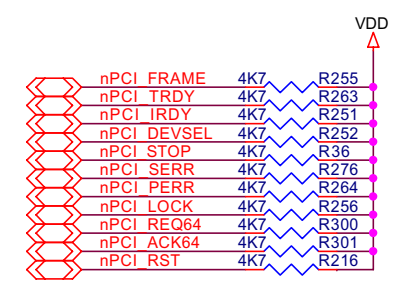
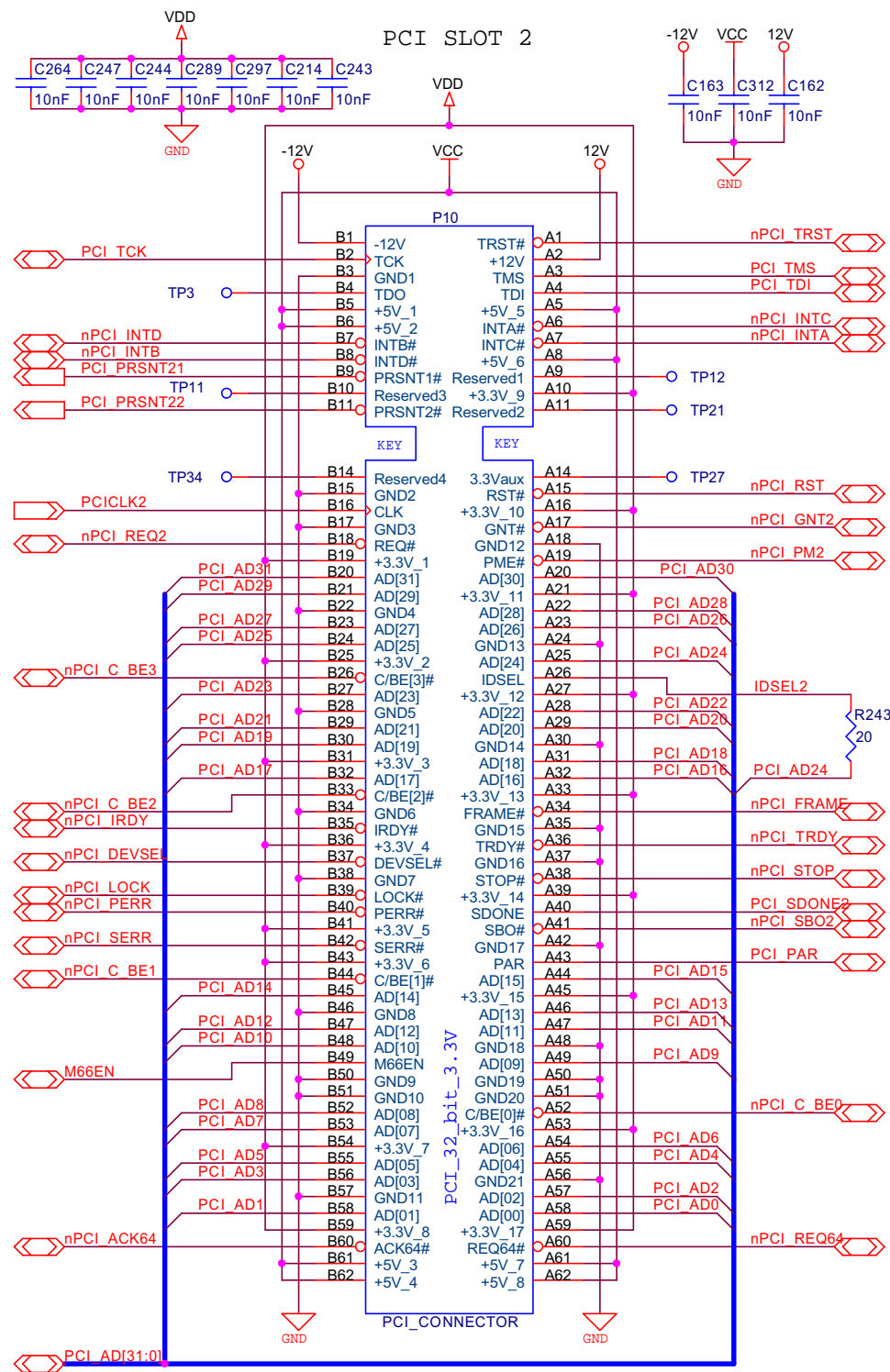
MOTOROLA

Title: LOCAL BUS SDRAM

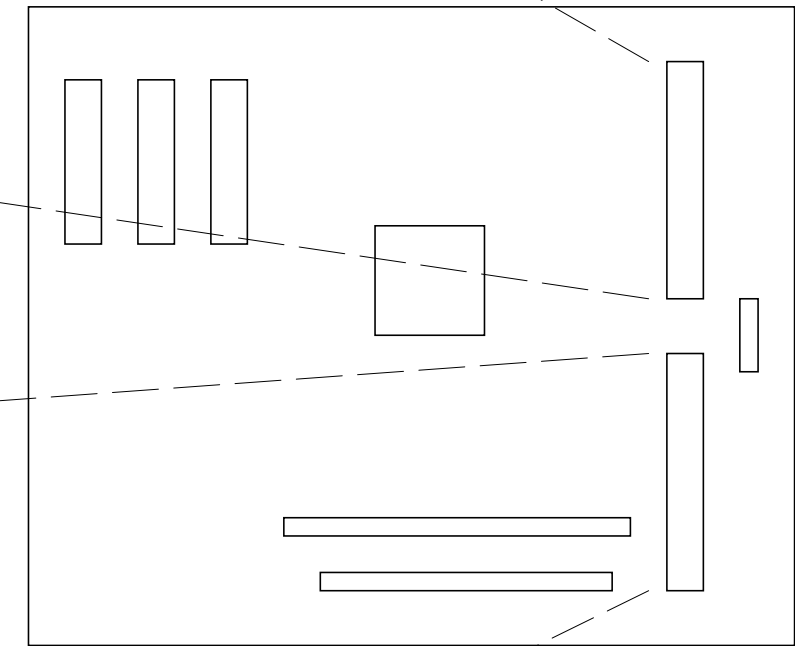
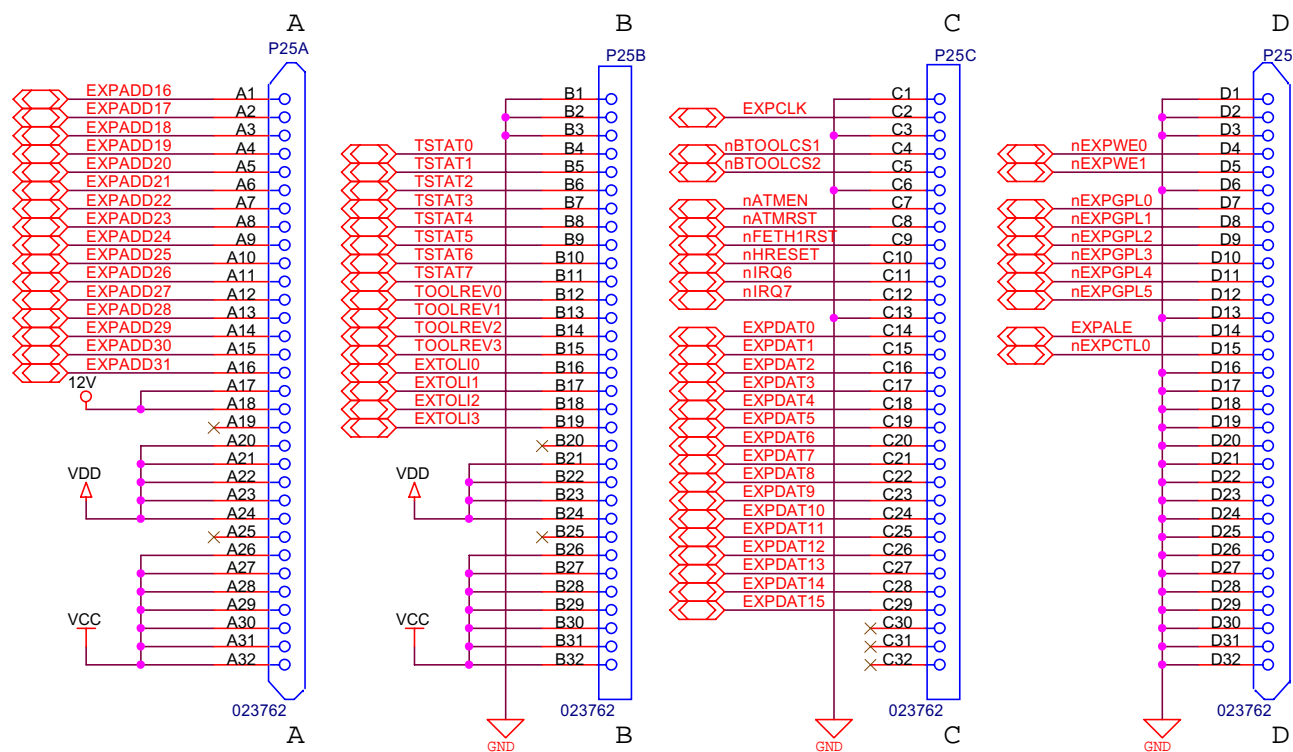
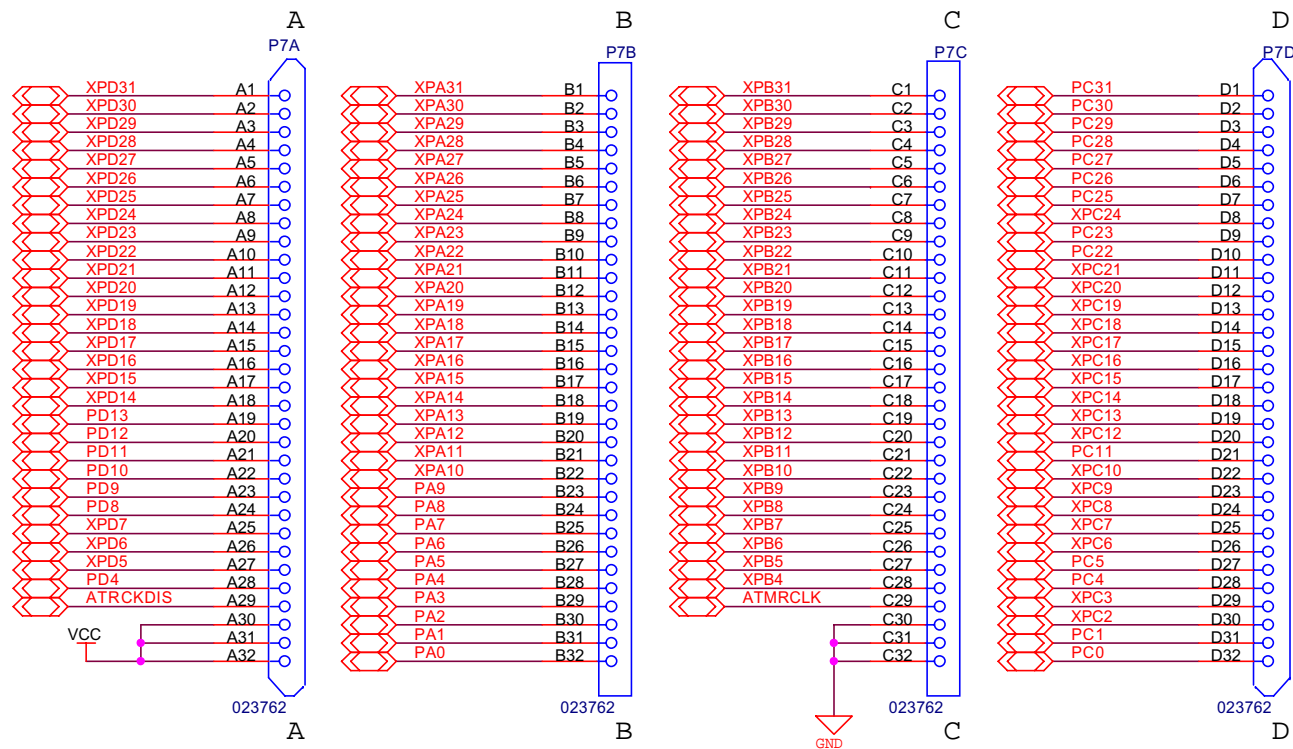
Size A3 | Document Number: PQ27ADS | Rev: PILOT

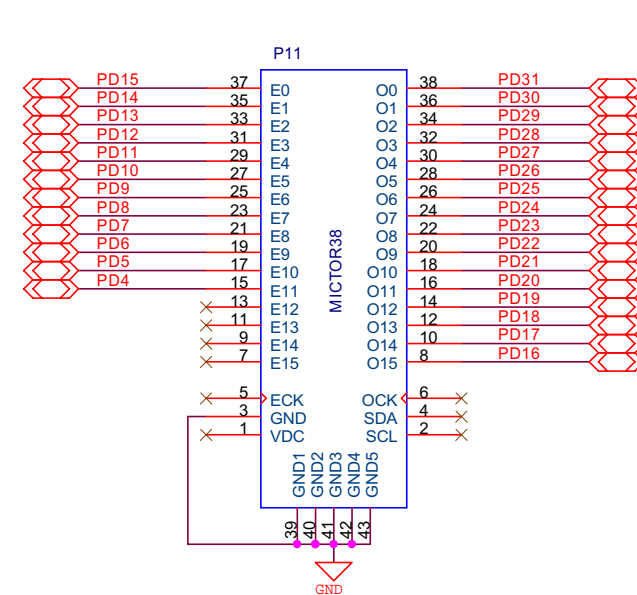
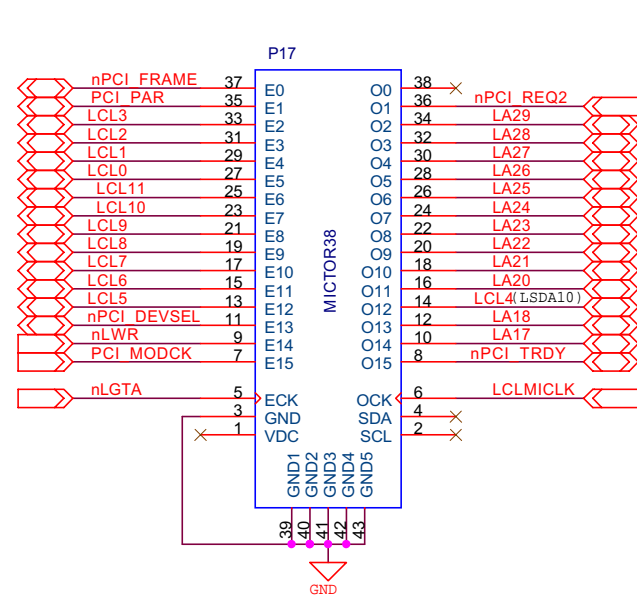
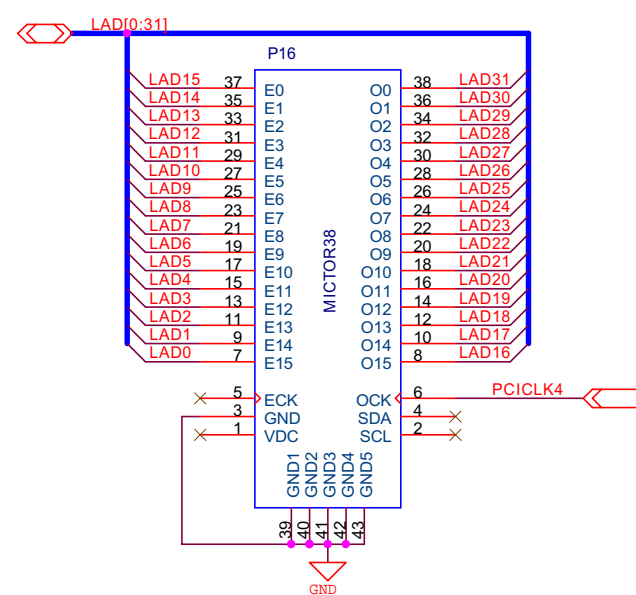
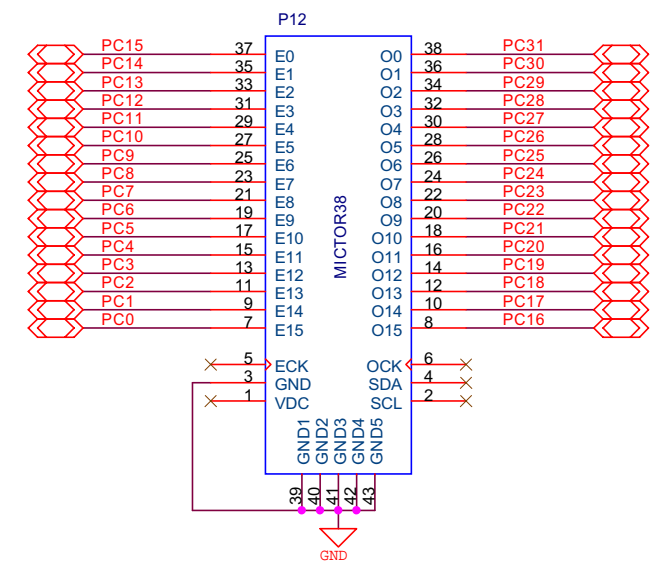
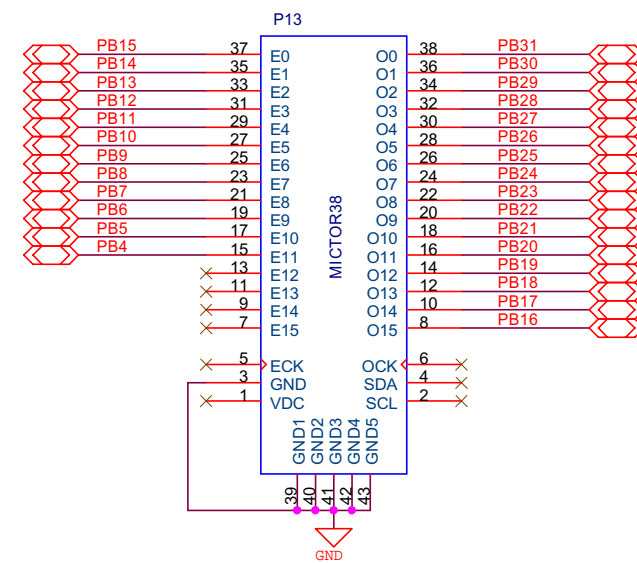
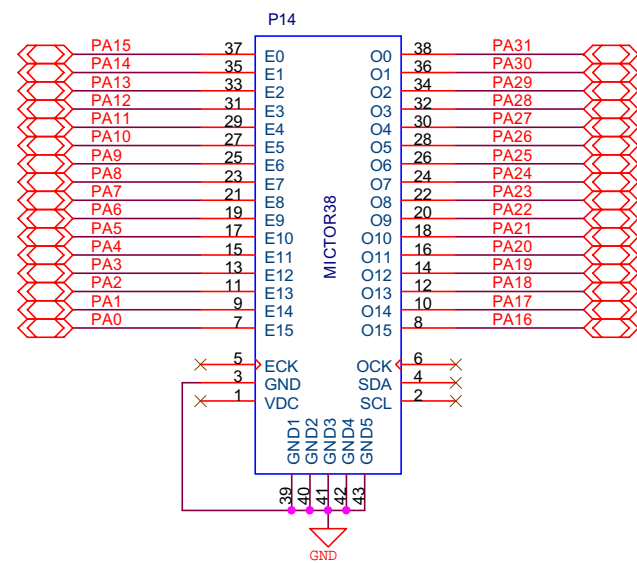
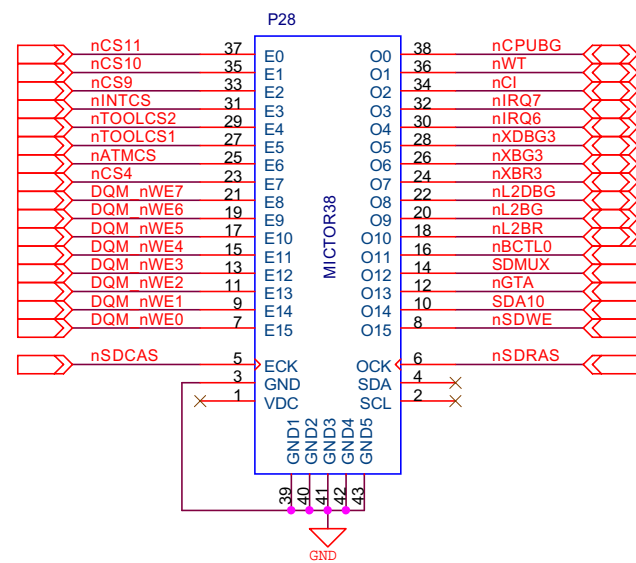
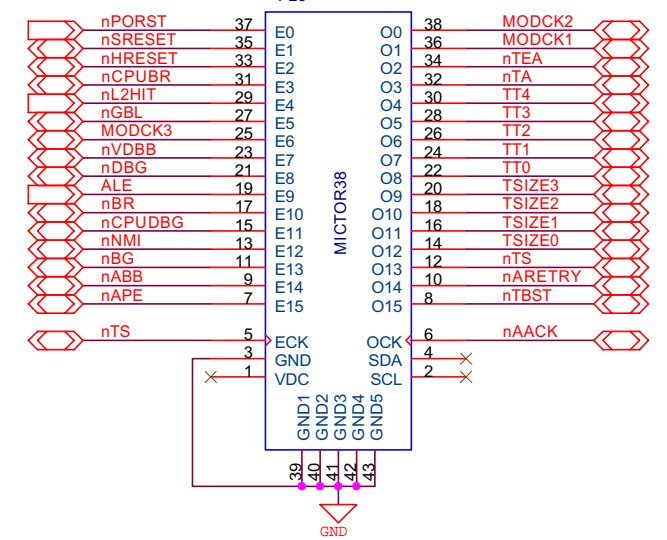
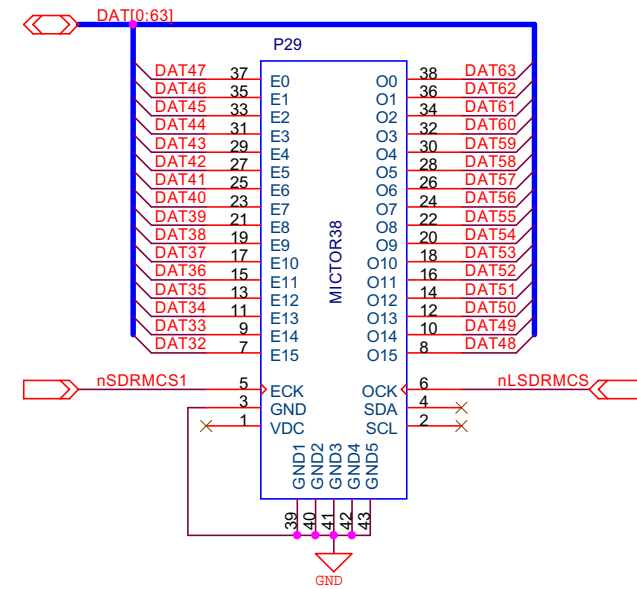
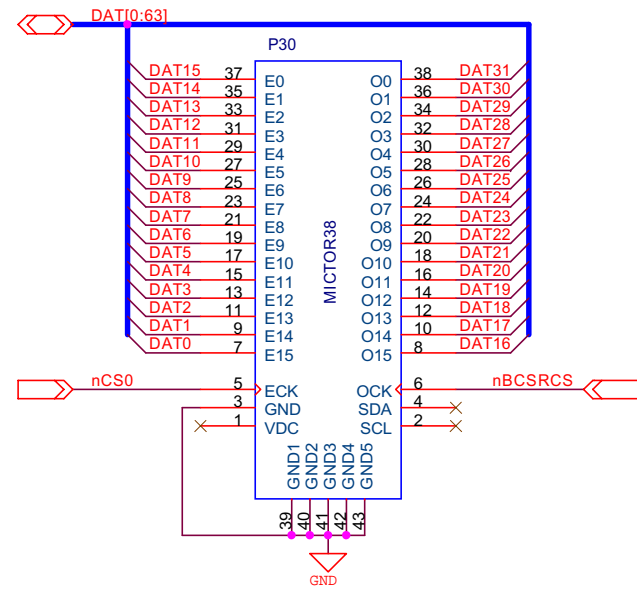
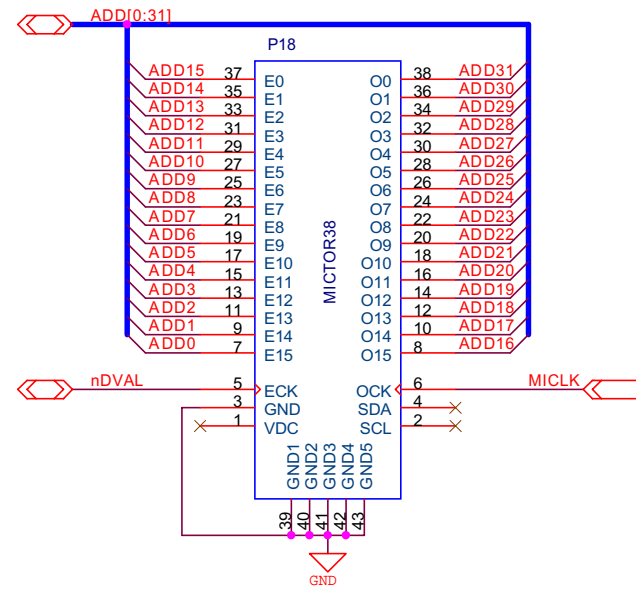
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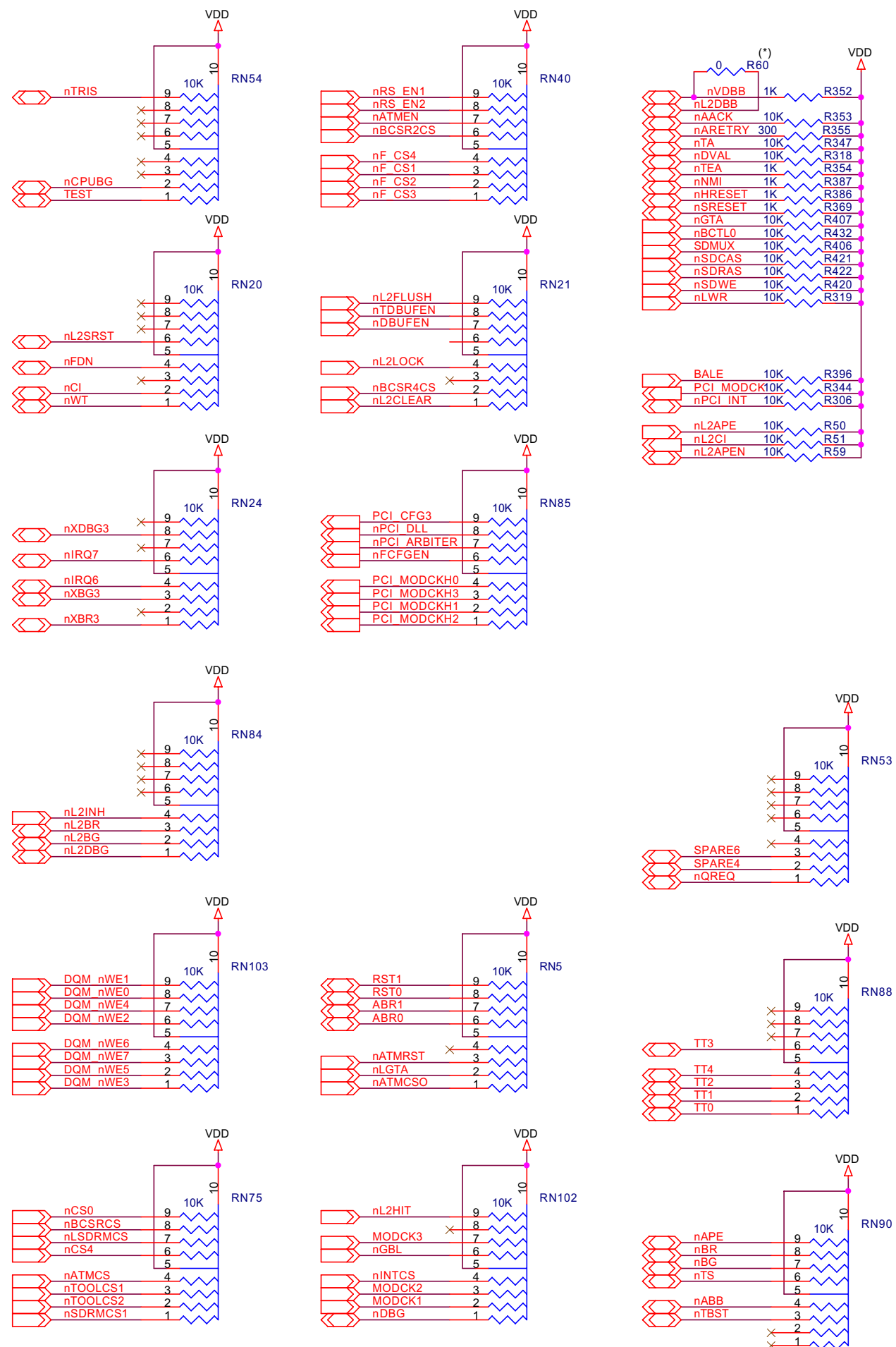


nPCI STOP R325_15 nPCI STOP B
 nPCI IRDY R327_15 nPCI IRDY B
 nPCI PERR R314_15 nPCI PERR B
 nPCI SERR R315_15 nPCI SERR B
 * Place near closest PCI connector to P02 for Signal Integrity due to Local Bus SDRAM.

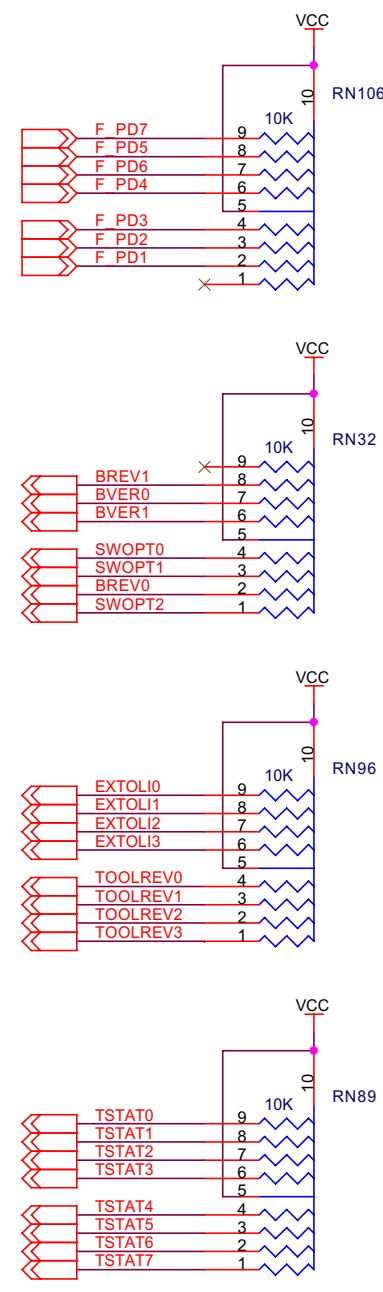




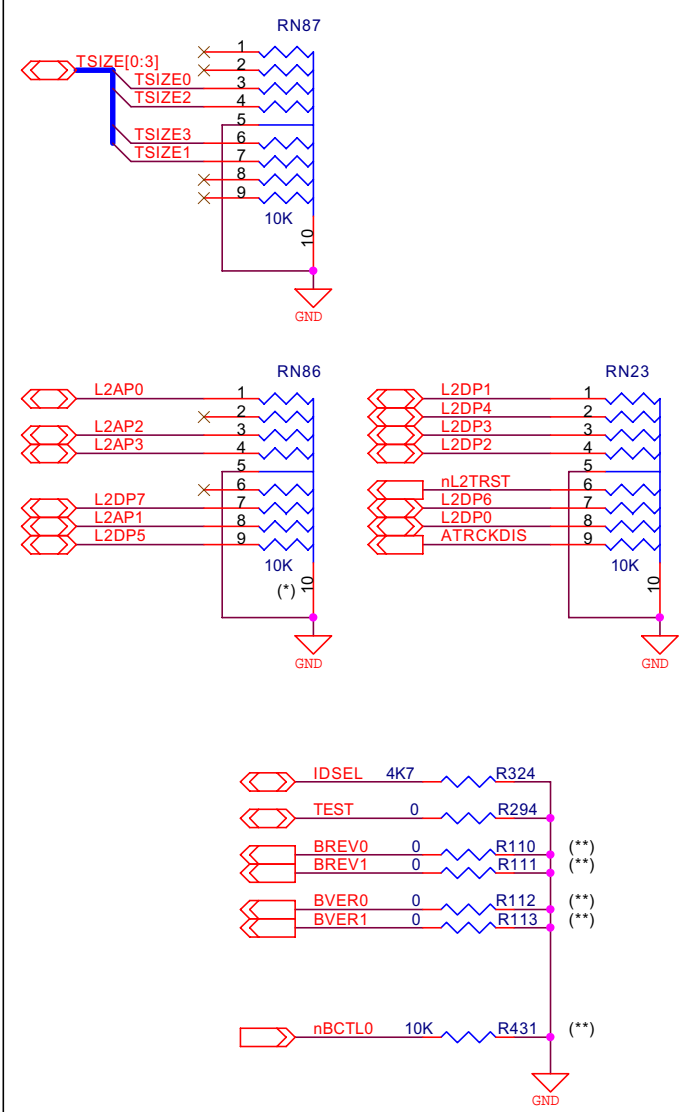
3.3V PULL-UPS



5V PULL-UPS



PULL-DOWNS




** R24 is an option - not assembled in the factory
 ** R71, R76 determine the configuration of the Fast Ethernet Transceiver - not assembled in the factory.
 * R34, R36 determine the amount of L2cache on board.
 * R209, R203, RS14, R204, R214 are assembled if cache is used.
 ** R213 & R32 determine the boards' revision as follows:
 R213 R32 Revision
 yes yes ENG
 no yes PILOT
 yes no A
 no no Reserved
 ** R164 depends on the functionality of nBCTL0 signal - not assembled in the factory.

(*) R210 Was changed to 300 ohm per device errata

Motorola Semiconductor

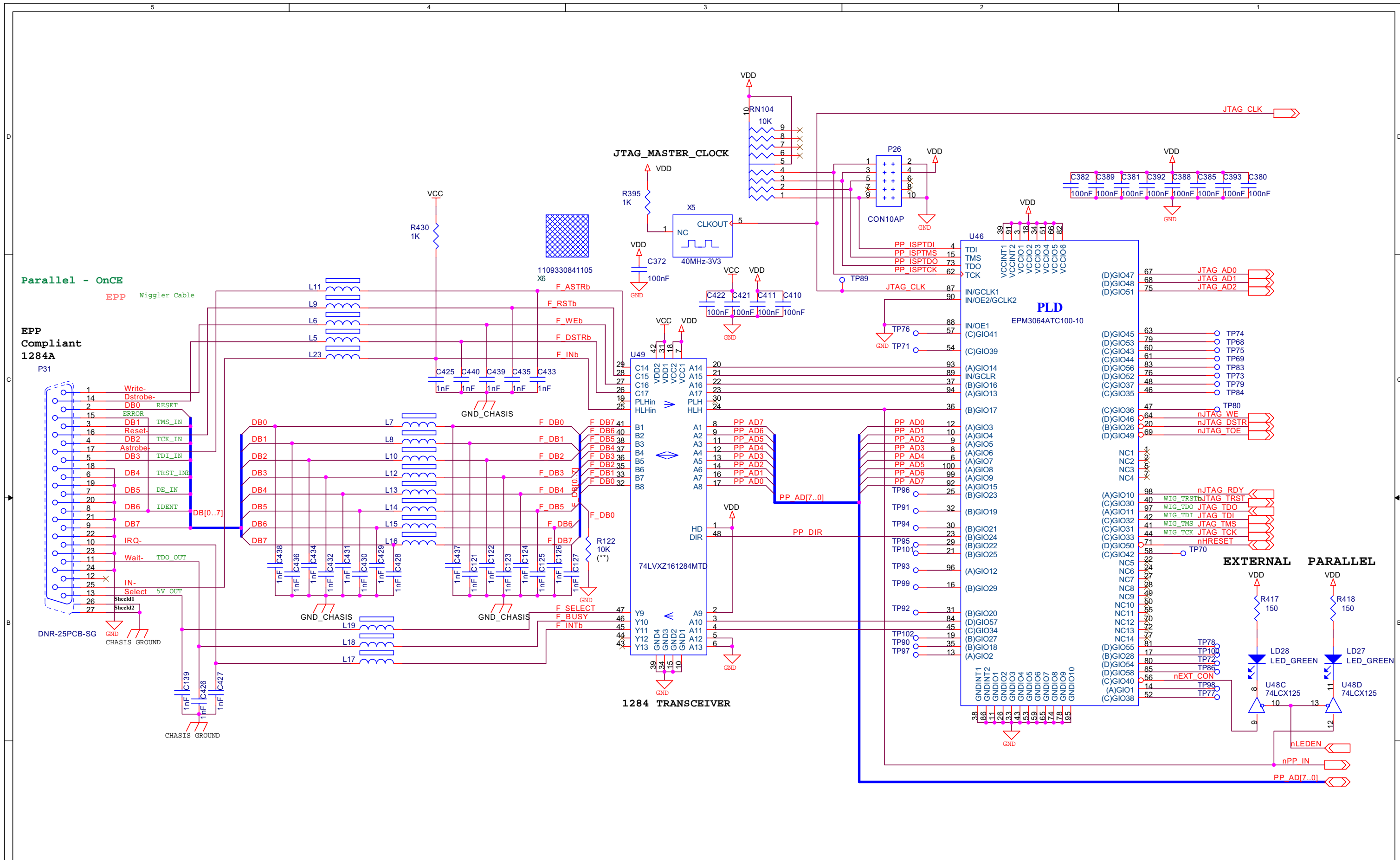
1st Shenkar st.
 Herzlia, 46120
 ISRAEL



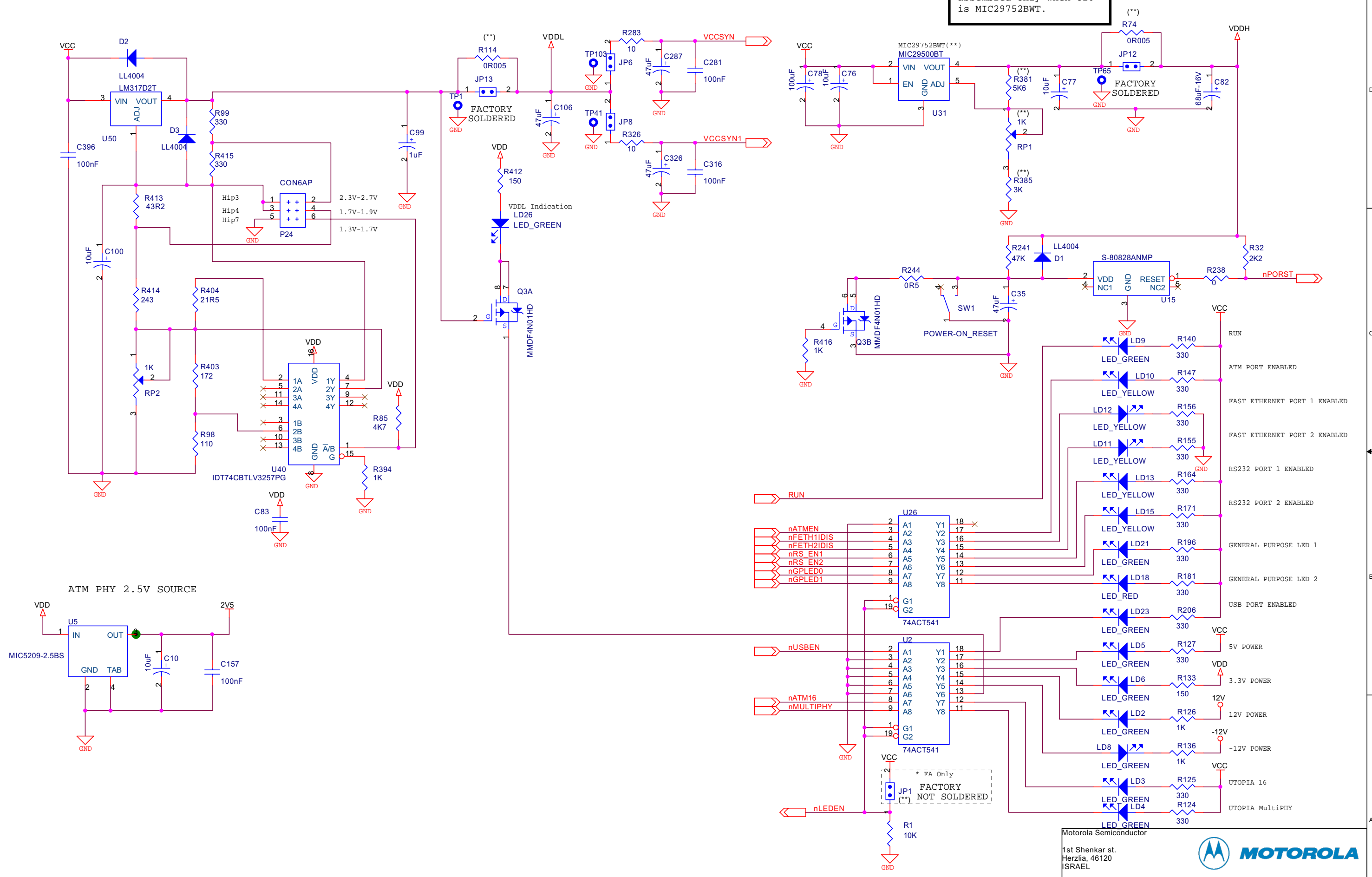
Title: PQ27ADS

Size: A3 Document Number: PULL UPS/DOWNS Rev: PILOT

Date: Sunday, March 16, 2003 Sheet: 22 of 27

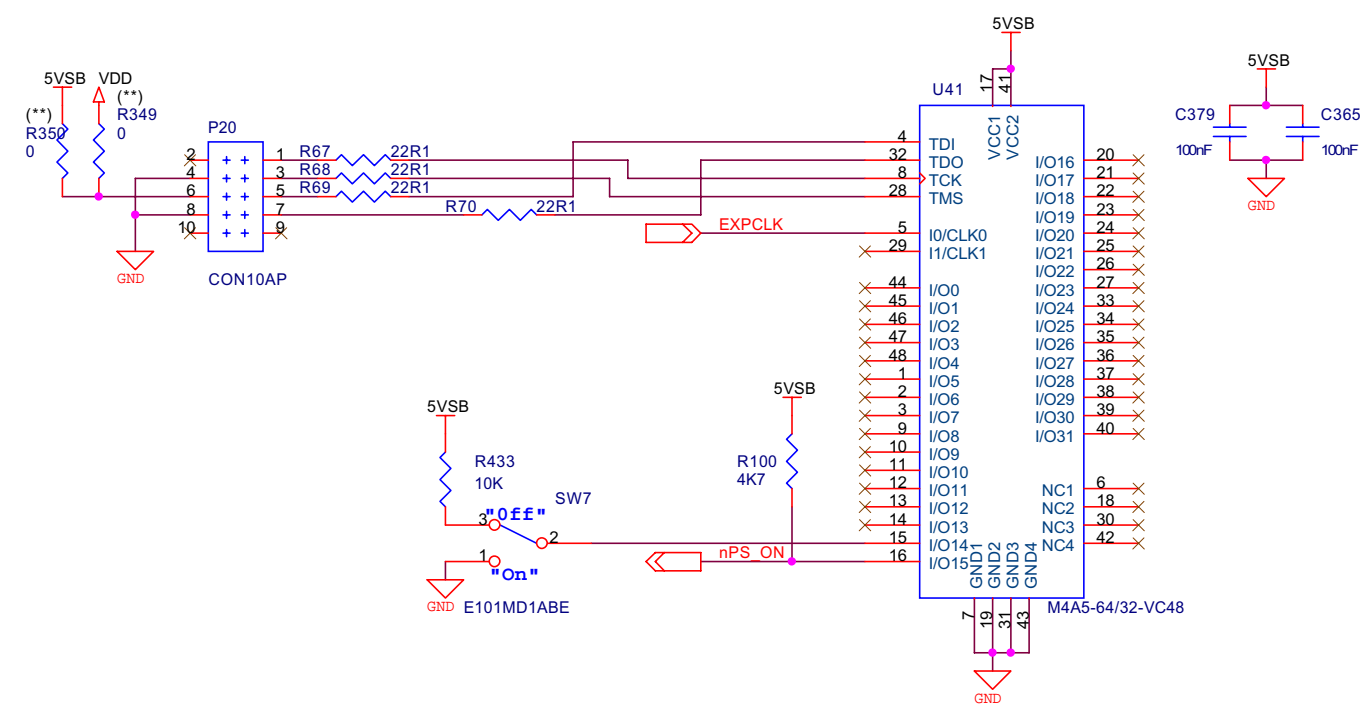


* R31, R207 & R219 are assembled only when U16 is MIC29752BWT.

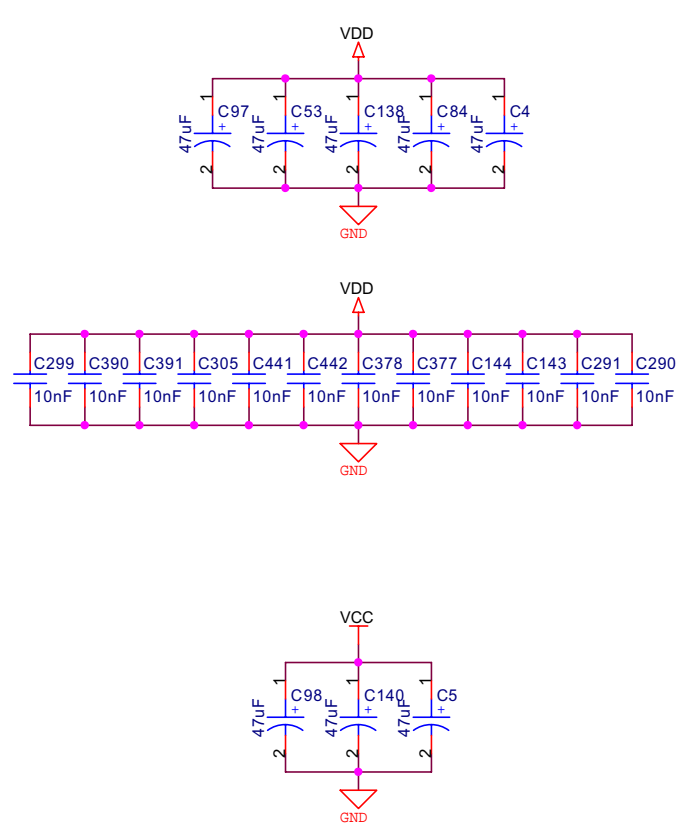


* R332 or R333 is assembled depending on the ISP programmer - R333 assembled.

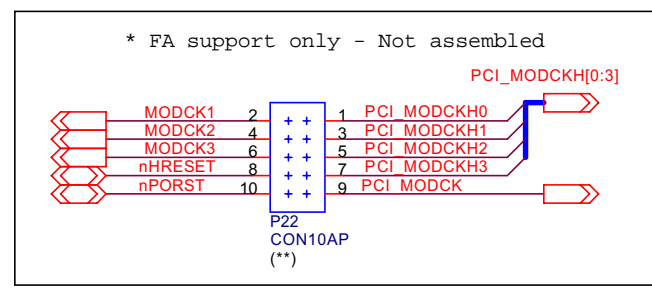
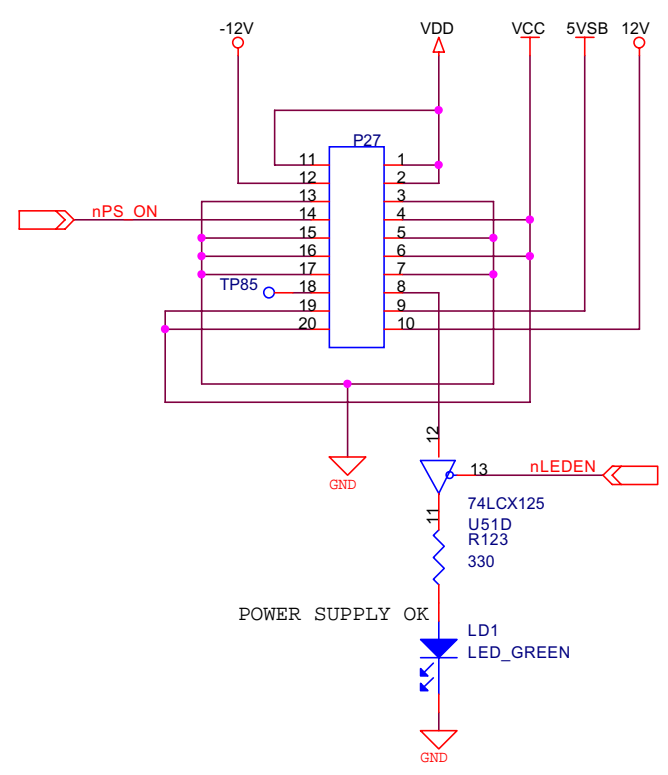
Power Switch Debounce



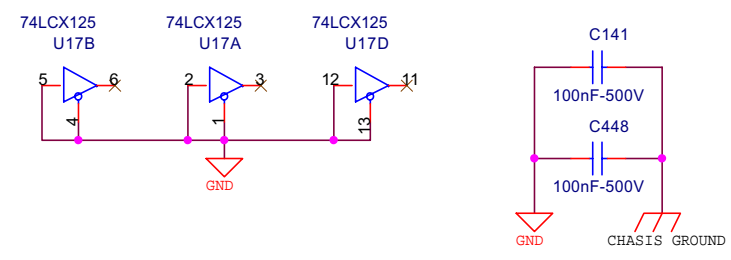
GENERAL BULK & HIGH FREQUENCY CAPACITORS



ATX_Power_Connector



MAIN/CHASIS GROUND CONNECTION



MAIN GROUND-BRIDGES

