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CPU, Reset, oscillators, jtag/swd/trace connectors

Page 3

Ethernet interface

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SPI-FLASH and I2C-E2PROM

Page 5

SDRAM

Page 6

External bus buffers

Page 7

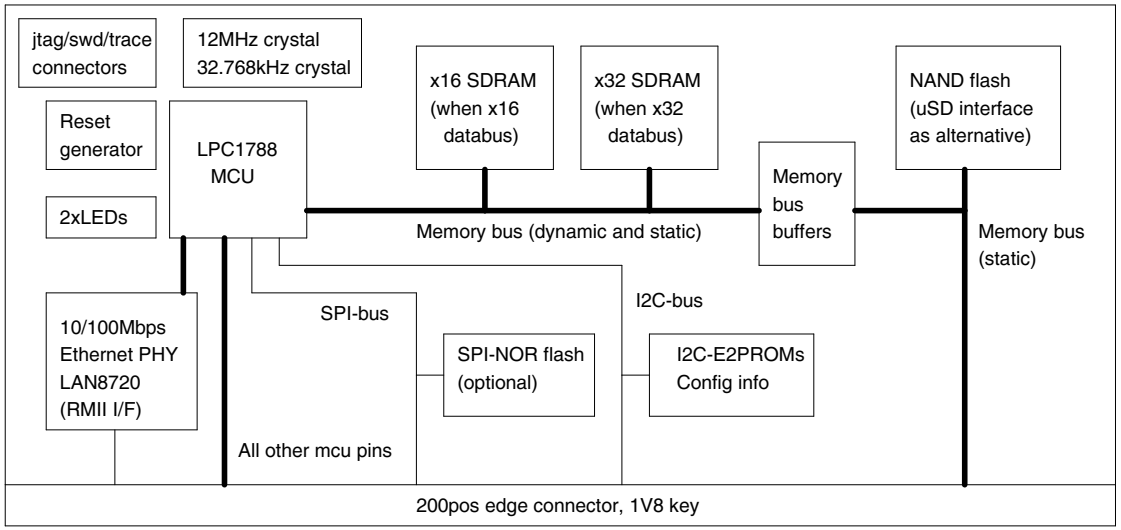
NAND flash

Page 8

LEDs and configuration I2C-E2PROM

Page 9

SODIMM edge connector



UL = UnLoaded = normally not mounted component.

Default jumper settings are indicated in the schematic.
However, always check jumper positions on actual boards since there is no guarantee that all jumpers are in default place.

Rev B
Update which components that are mounted.
Layout updates.

Rev A
First revision

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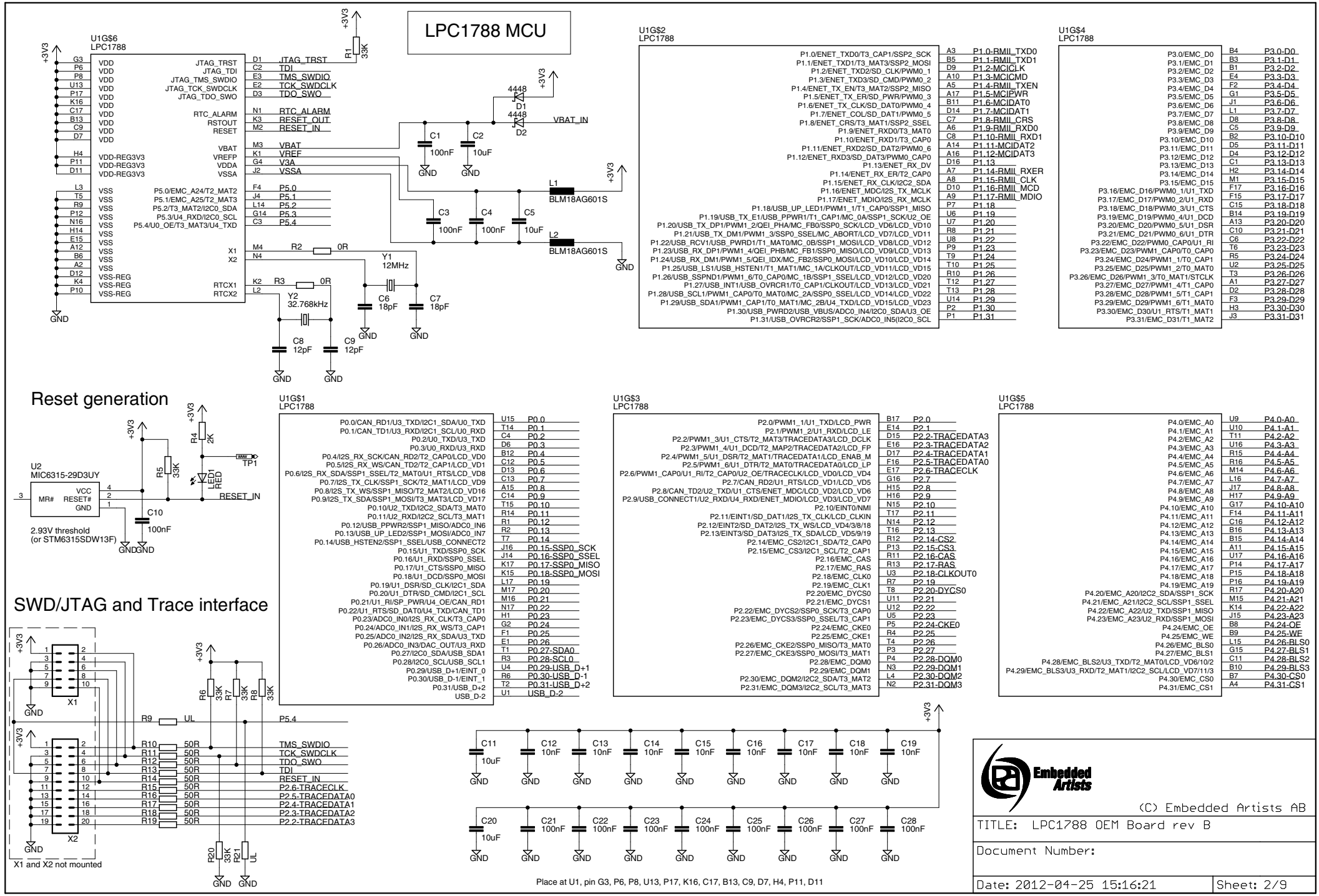
LPC1788 MCU
U1G$6
LPC1788
U1G$2
LPC1788
U1G$4
LPC1788
Reset generation
U1G$1
LPC1788
U1G$3
LPC1788
U1G$5
LPC1788
SWD/JTAG and Trace interface
X1 and X2 not mounted
Place at U1, pin G3, P6, P8, U13, P17, K16, C17, B13, C9, D7, H4, P11, D11
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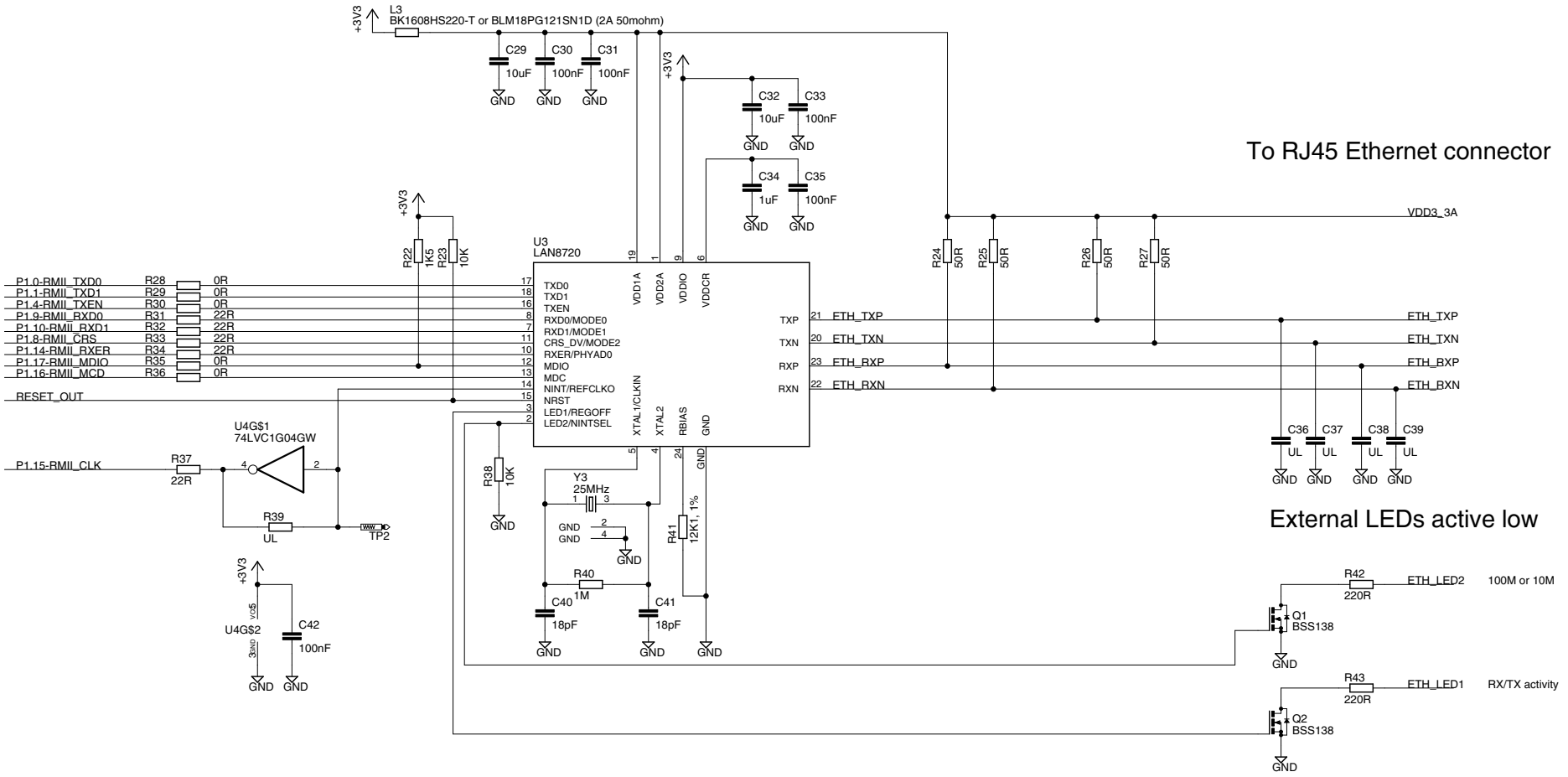
100/10M Ethernet PHY (via RMII interface)



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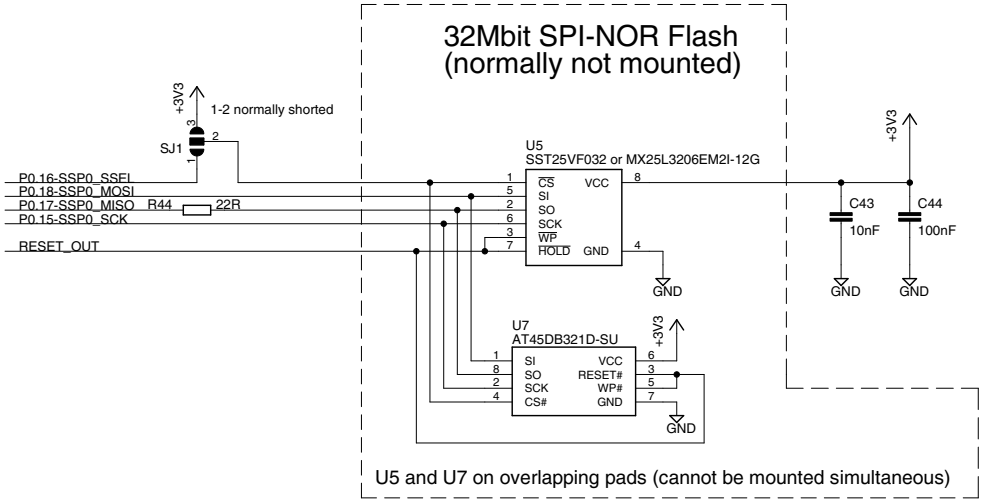
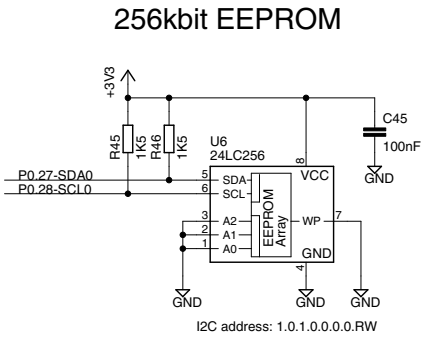
Serial memories (I2C-E2PROM / SPI-FLASH)





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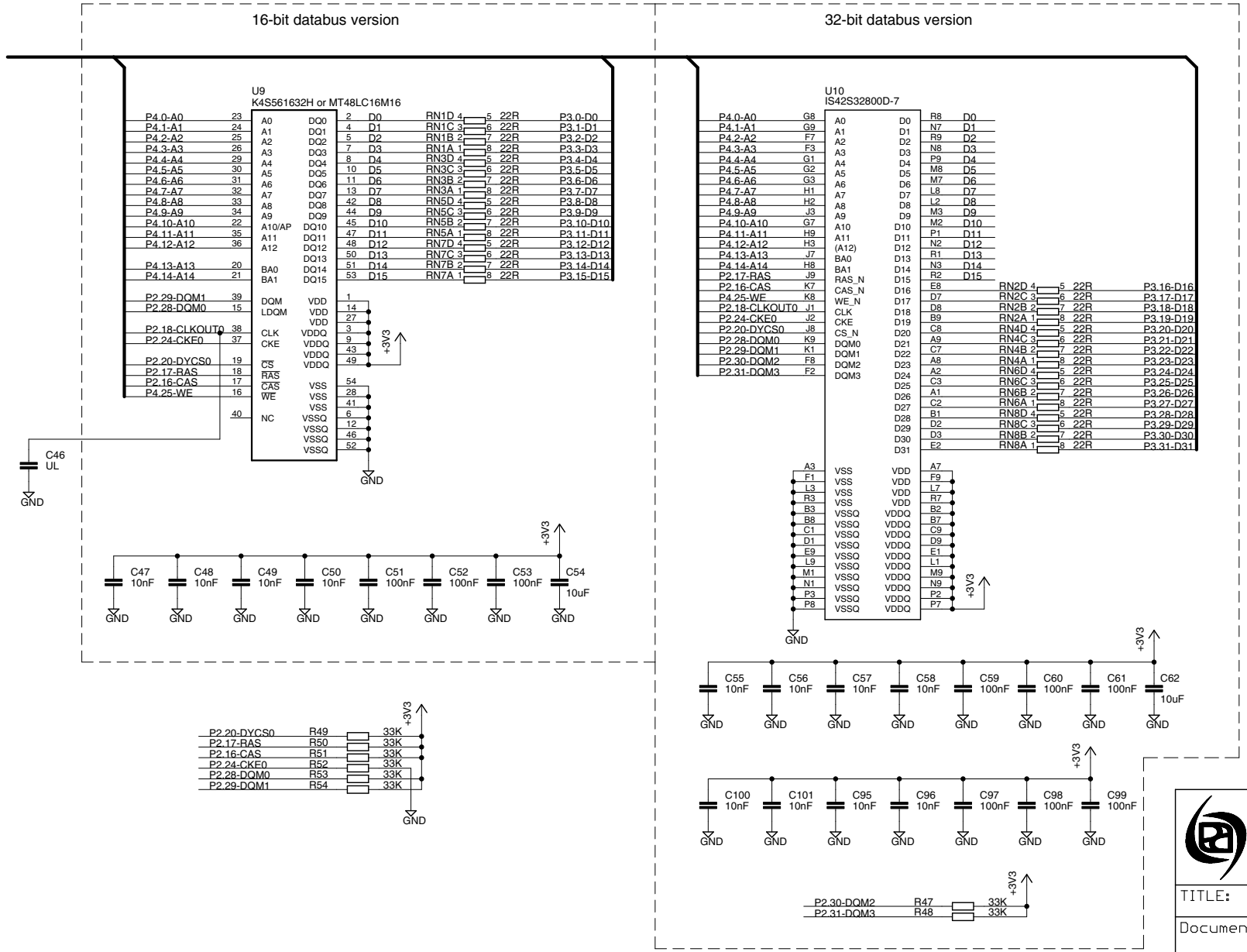
SDRAM

256Mbit (32MByte) SDRAM
(DYCS0 = 0xA000 0000 - 0xAFFF FFFF)



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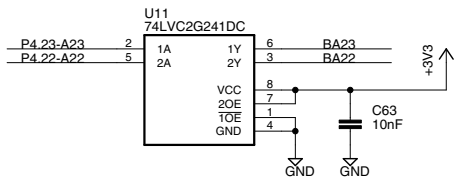
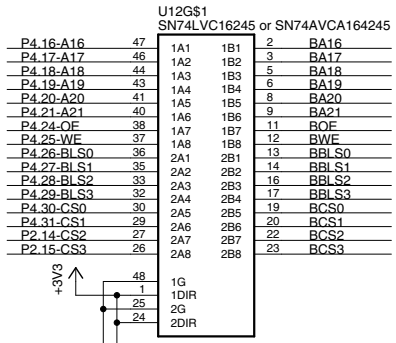
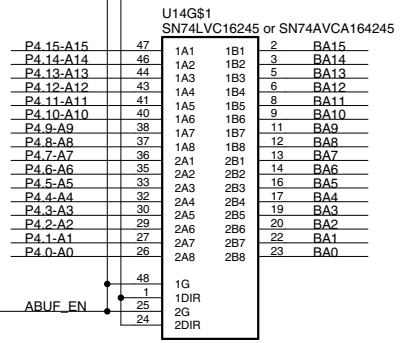
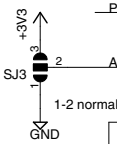
Buffers for external memory bus

Address and Control Buffers

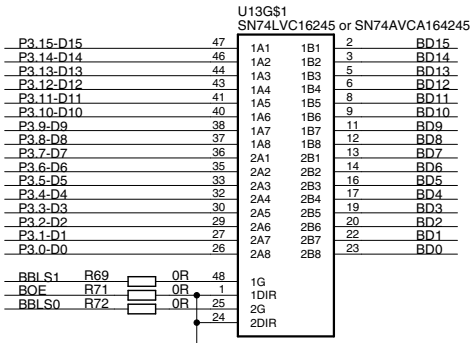


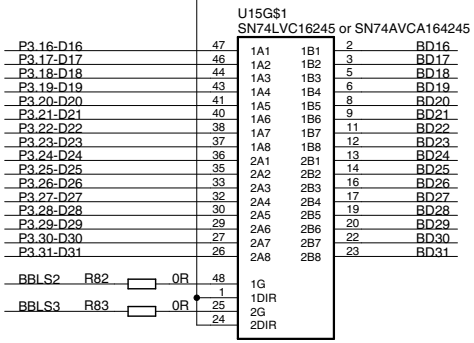




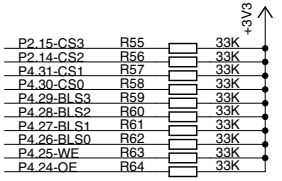


Databus Buffers

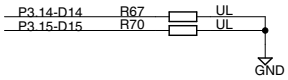




Pullups



Boot control (not used)

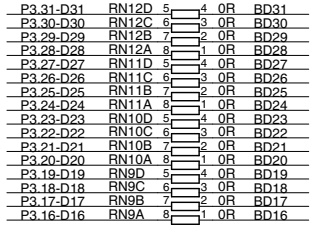


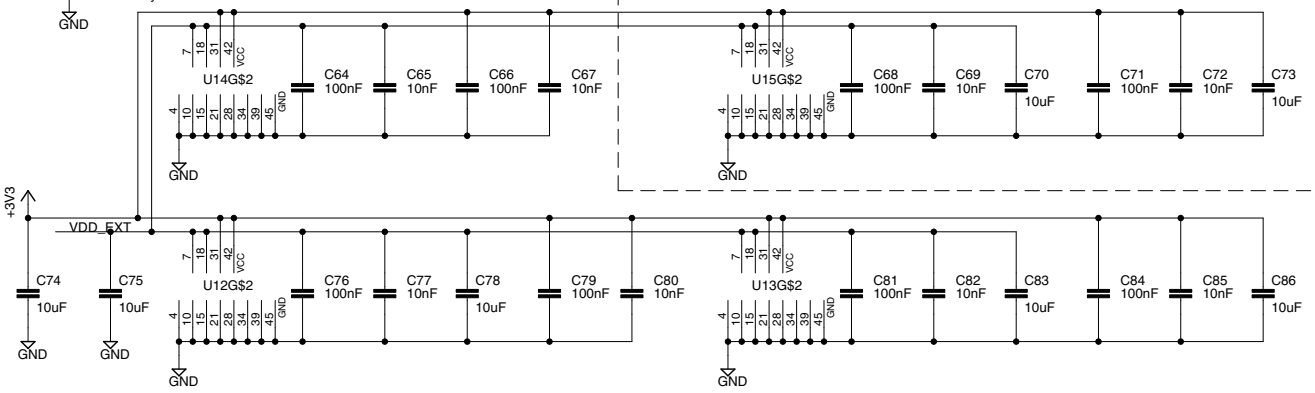
32-bit databus version

(P3.16 - P3.31 are buffered)

16-bit databus version

(P3.16 - P3.31 are not buffered)





Buffered bus for static memories:

CS0 = 0x8000 0000 - 0x83FF FFFF
CS1 = 0x9000 0000 - 0x93FF FFFF
CS2 = 0x9800 0000 - 0x9BFF FFFF
CS3 = 0x9C00 0000 - 0x9FFF FFFF

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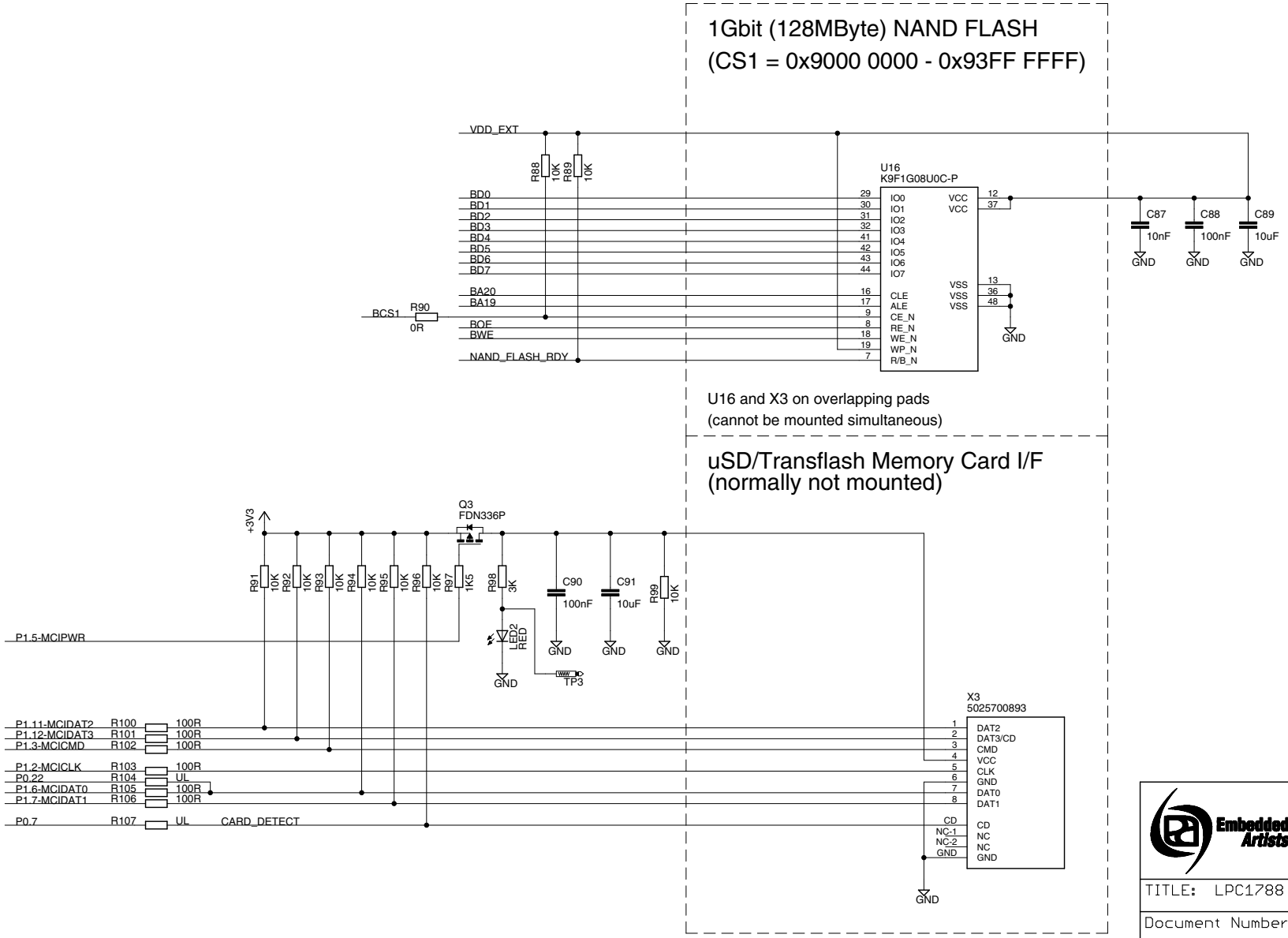
NAND Flash memory (on buffered bus)



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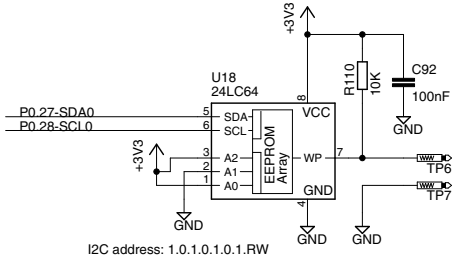
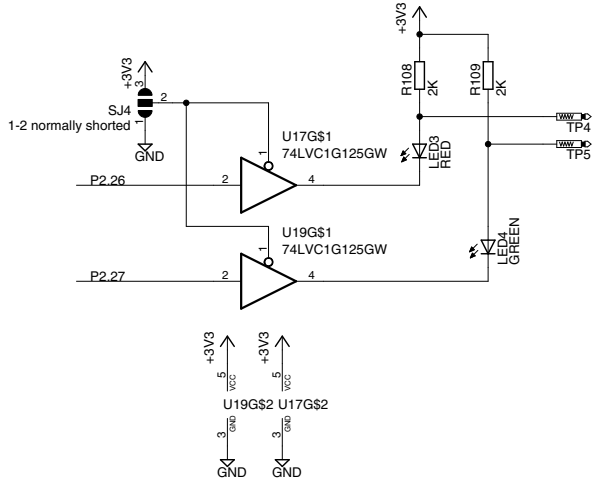
Configuration I2C-E2PROM and LEDs

64kbit Configuration EEPROM (write protected)



I2C address: 1.0.1.0.1.0.1.RW

LEDs



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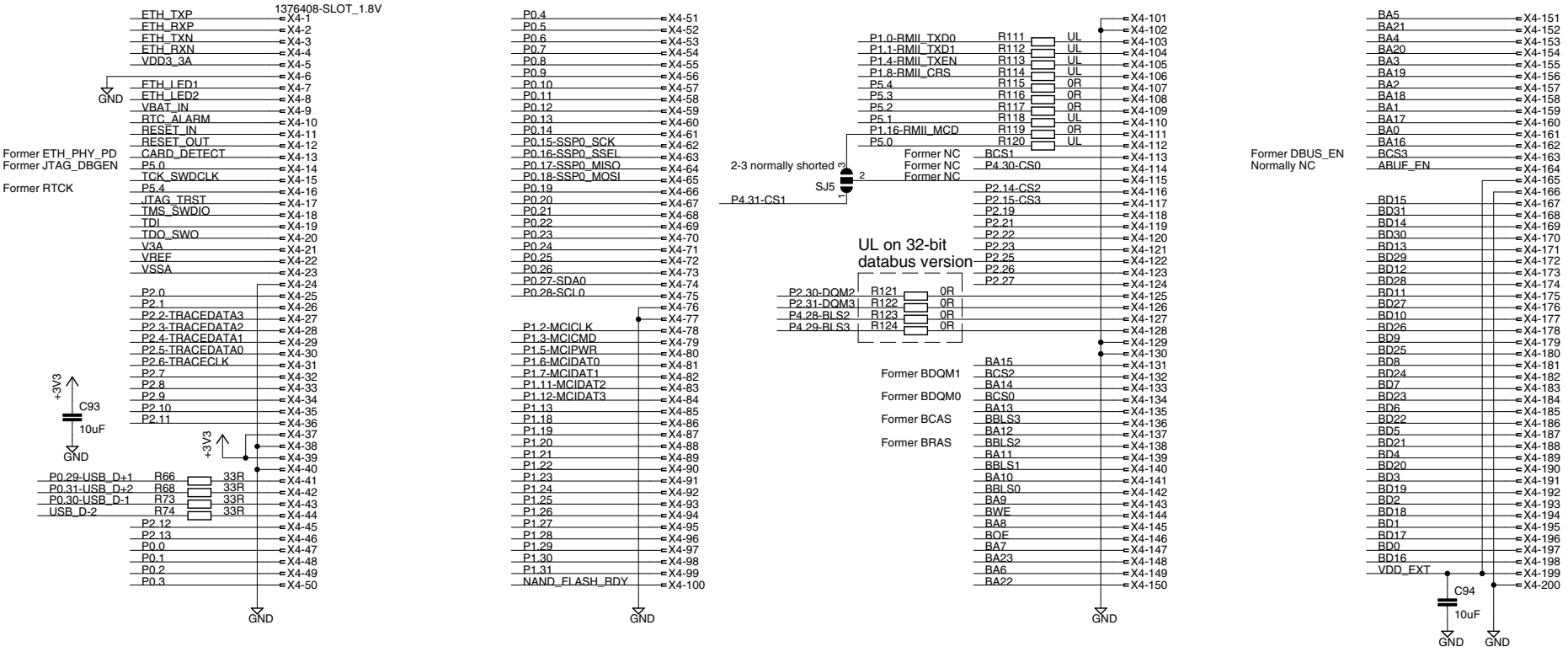
Expansion Connector (SODIMM Edge Connector)



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