PCB Design Parameters -

Four Layer FR4	0.063 (1.60)
Via Diameter	0.020 (0.50)
Via Drill	0.010 (0.25)
Routing Grid	0.008 (0.20)
Trace Width	0.006 (0.15)

U1 BGA Parameters -

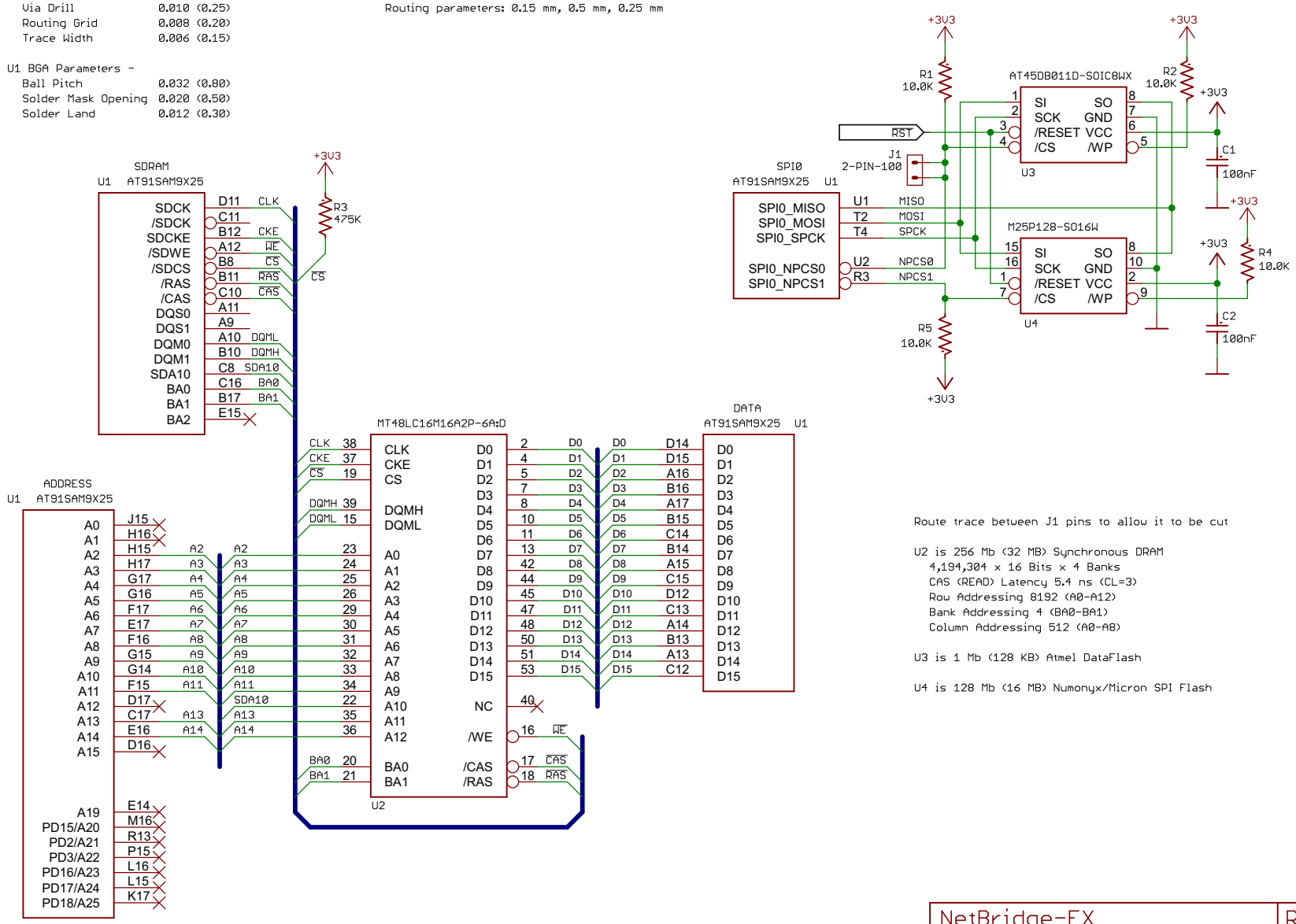
Ball Pitch	0.032 (0.80)
Solder Mask Opening	0.020 (0.50)
Solder Land	0.012 (0.30)

Eagle Commands -

Ratsnest ! *

Set Polygon_Ratsnest On / Off

Routing parameters: 0.15 mm, 0.5 mm, 0.25 mm



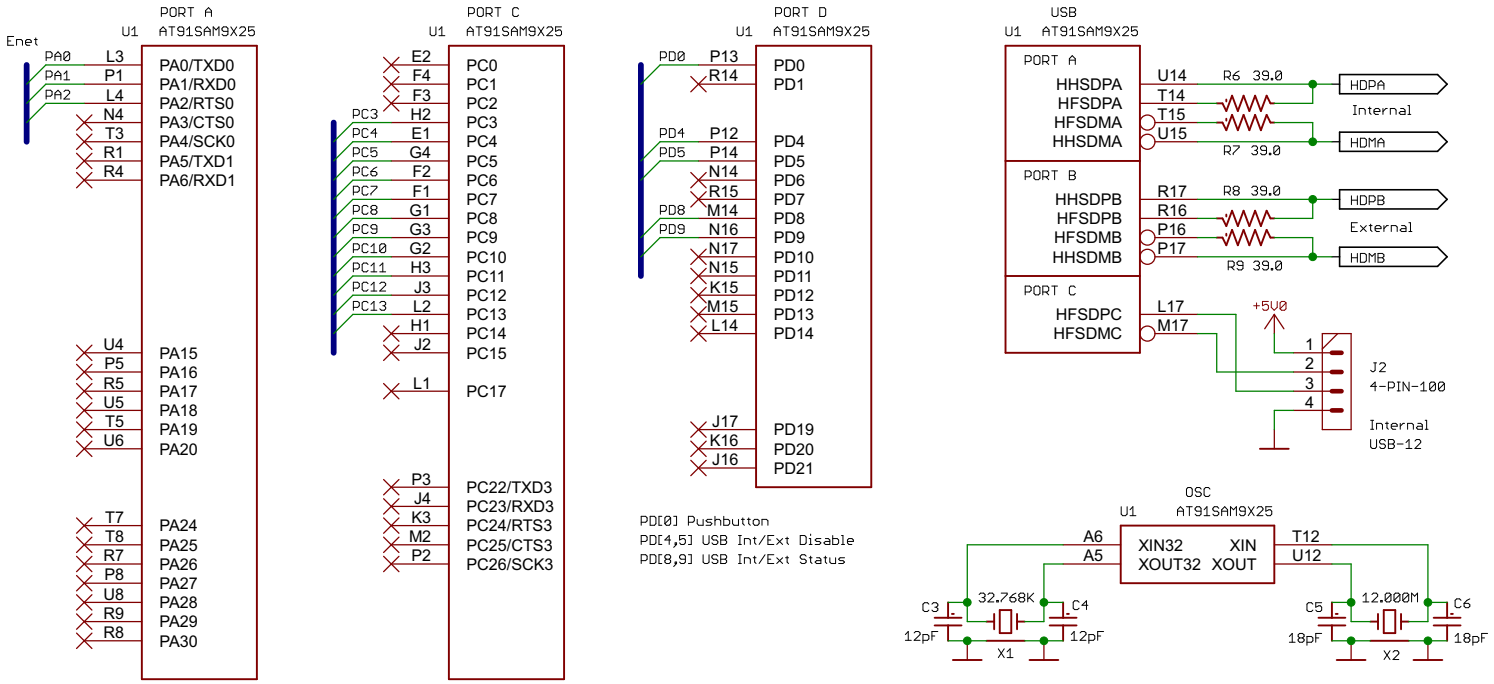
Route trace between J1 pins to allow it to be cut

U2 is 256 Mb (32 MB) Synchronous DRAM
- 4,194,304 x 16 Bits x 4 Banks
- CAS (READ) Latency 5.4 ns (CL=3)
- Row Addressing 8192 (A0-A12)
- Bank Addressing 4 (BA0-BA1)
- Column Addressing 512 (A0-A8)

U3 is 1 Mb (128 KB) Atmel DataFlash

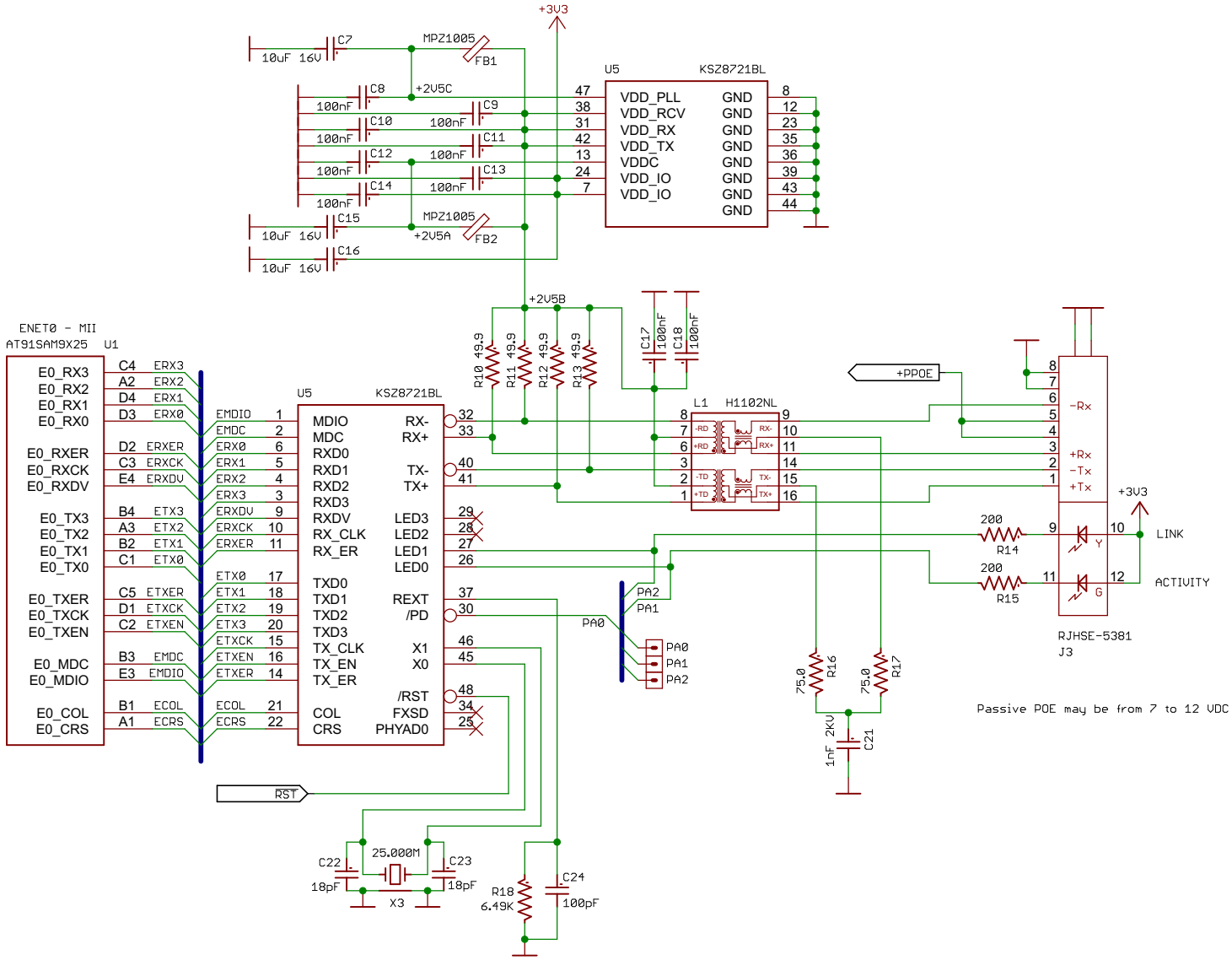
U4 is 128 Mb (16 MB) Numonyx/Micron SPI Flash

NetBridge-FX	REV: 1.01
Memory SDRAM / FLASH	ENG: MEN
1/21/2012 8:15:08 PM	1/7

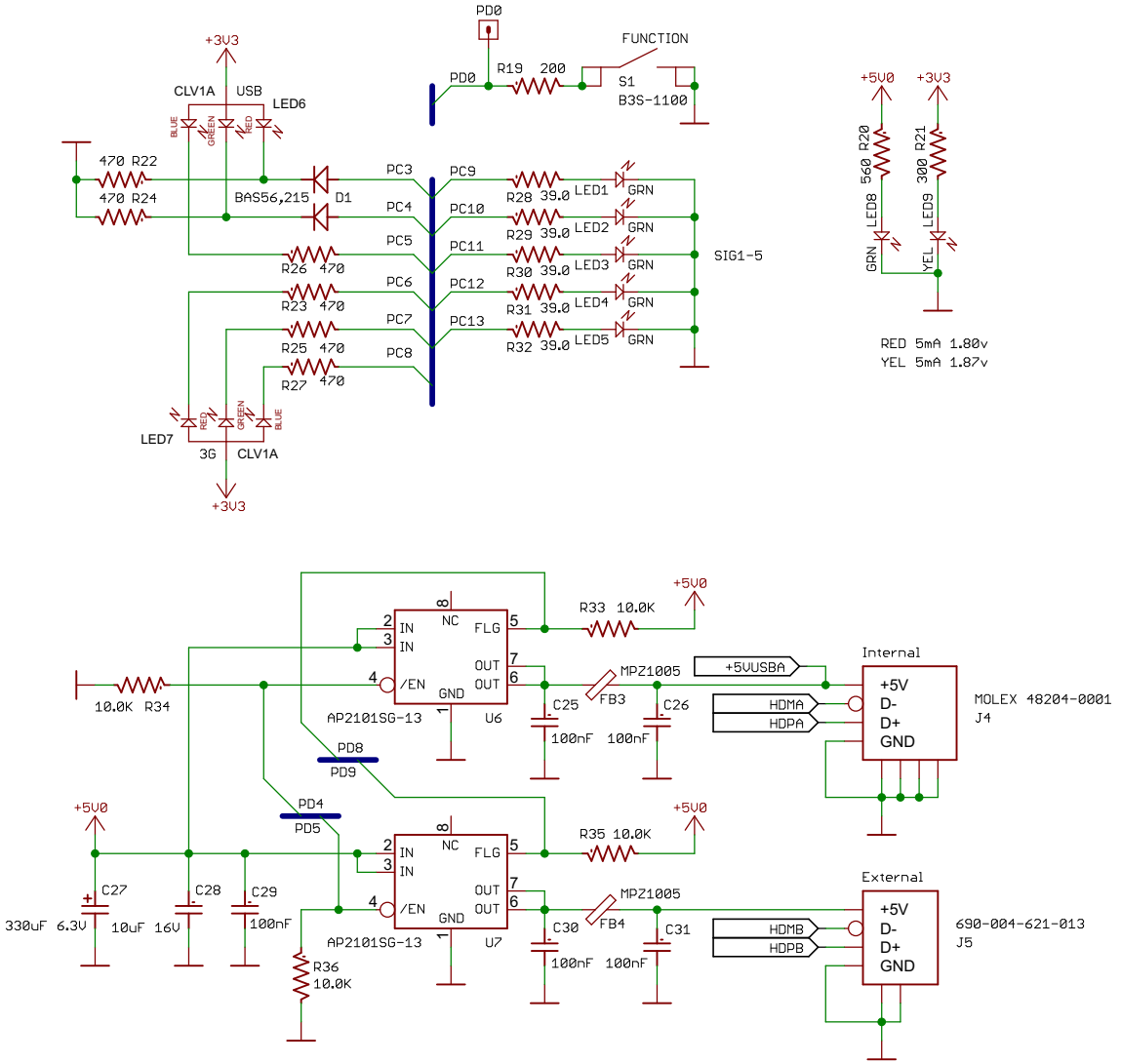


NetBridge-FX	REV: 1.01
GPIOs / USBs / Clocks	ENG: MEN
1/21/2012 8:15:08 PM	2/7

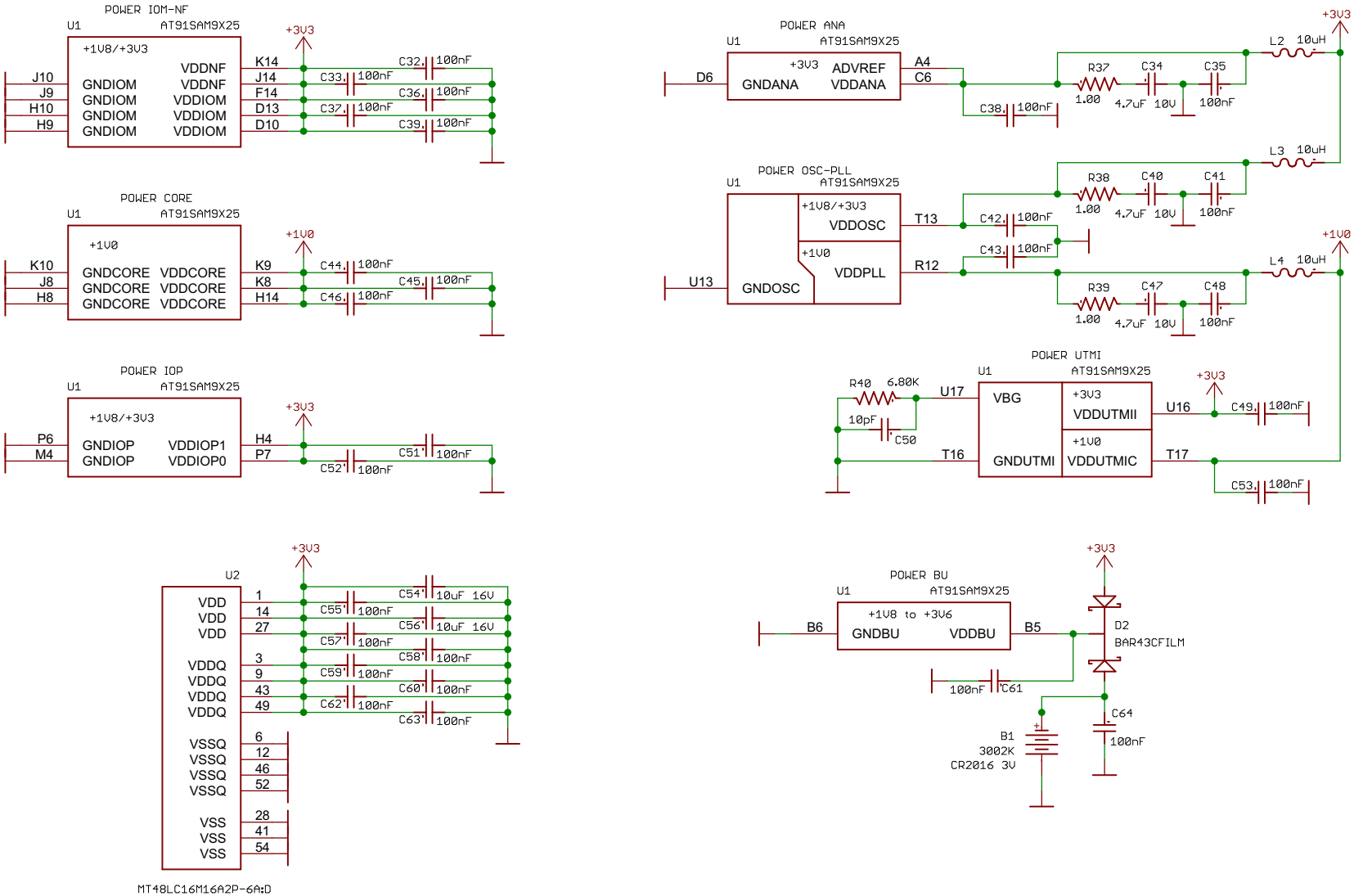
Eagle Notes -
Enet ERX[0123] ETX[0123] ERXER ERXCK ERXDV ETXER ETXCK ETXEN EMDC EMDIO ECOL ECRS
Enet GPIO PA[012]



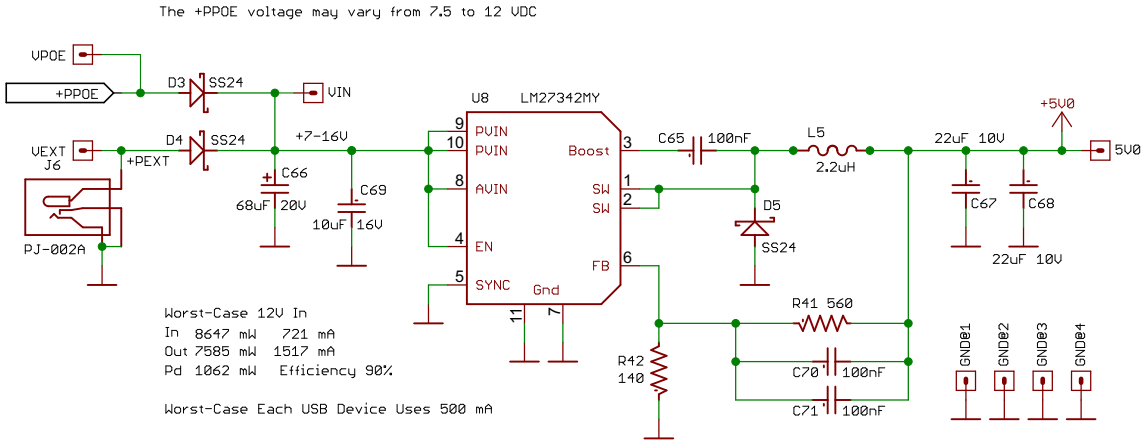
NetBridge-FX	REV: 1.01
Ethernet	ENG: MEN
1/21/2012 8:15:08 PM	3/7

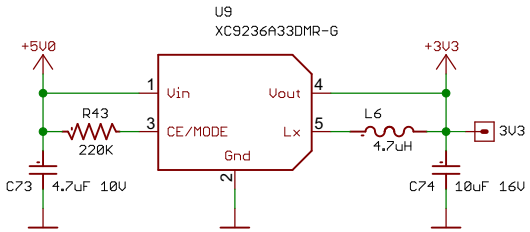


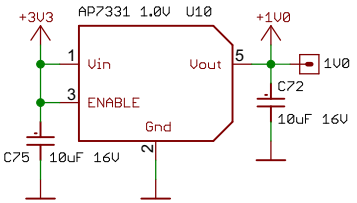
NetBridge-FX	REV: 1.01
LEDs / Button / USBs	ENG: MEN
1/21/2012 8:15:08 PM	4/7



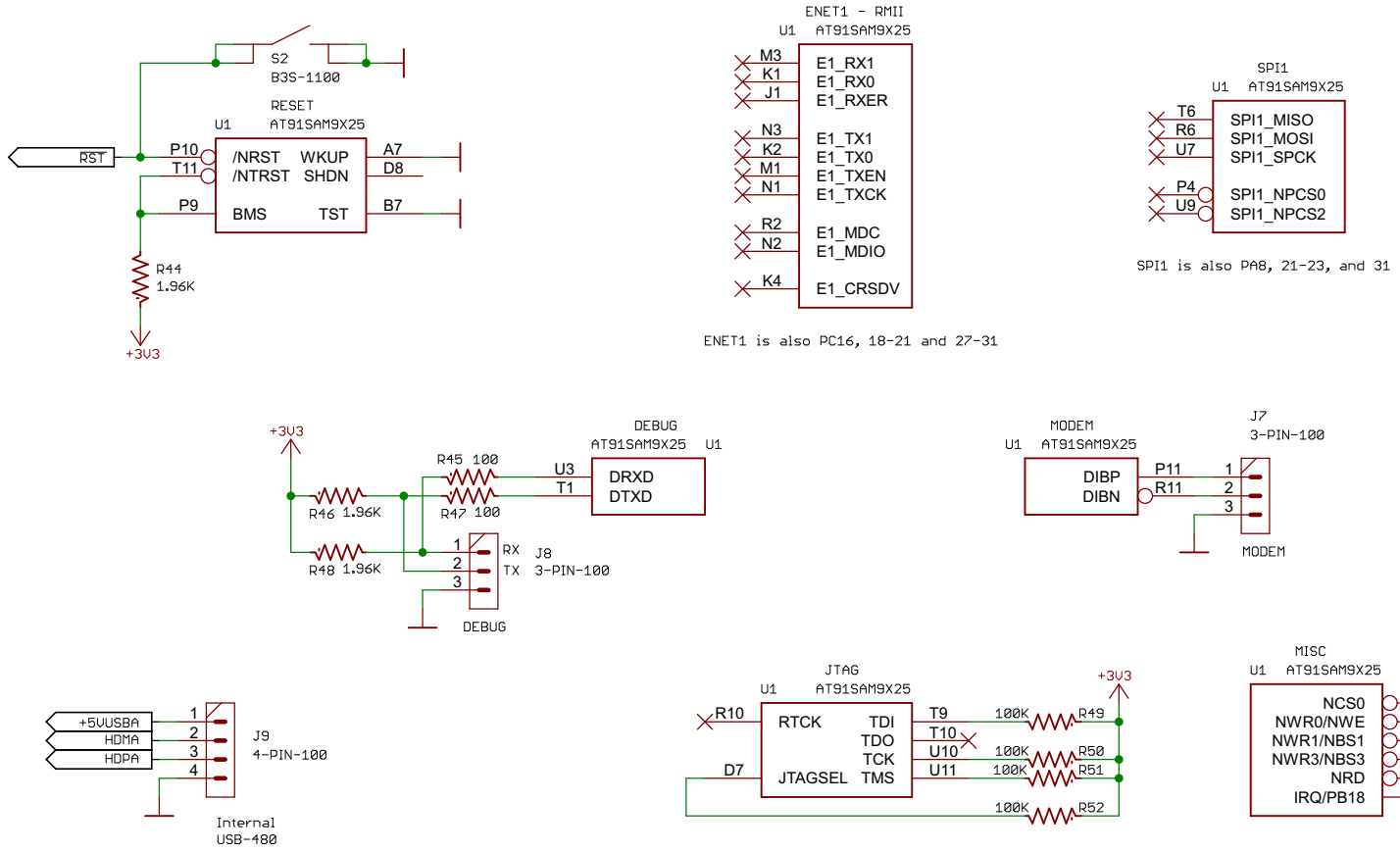
NetBridge-FX	REV: 1.01
Power Distribution	ENG: MEN
1/21/2012 8:15:08 PM	5/7







NetBridge-FX	REV: 1.01
Voltage Regulators	ENG: MEN
1/21/2012 8:15:08 PM	6/7



NetBridge-FX	REV: 1.01
Miscellaneous / Unused	ENG: MEN
1/21/2012 8:15:08 PM	7/7