

# PCB Design Parameters -

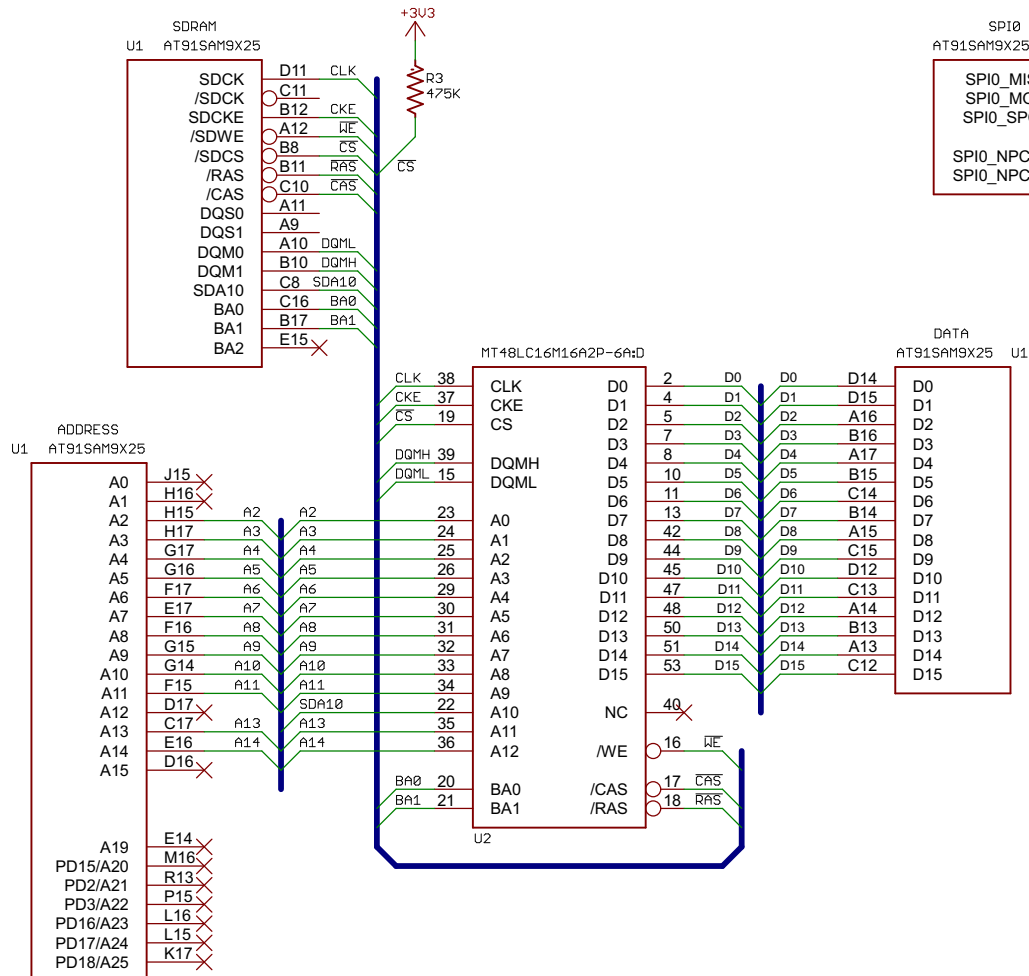
Four Layer FR4 0.063 (1.60)  
Via Diameter 0.020 (0.50)  
Via Drill 0.010 (0.25)  
Routing Grid 0.008 (0.20)  
Trace Width 0.006 (0.15)

# Eagle Commands -

Ratsnest ! \*  
Set Polygon\_Ratsnest On / Off  
Routing parameters: 0.15 mm, 0.5 mm, 0.25 mm

# U1 BGA Parameters -

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



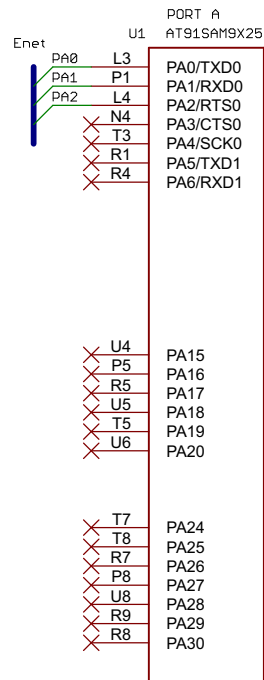
Route trace between J1 pins to allow it to be cut

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)

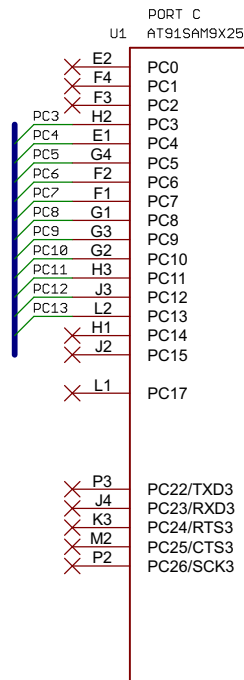
U3 is 1 Mb (128 KB) Atmel DataFlash

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

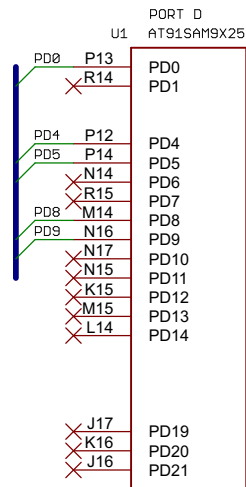
NetBridge-FX	REV: 1.01
Memory SDRAM / FLASH	ENG: MEN
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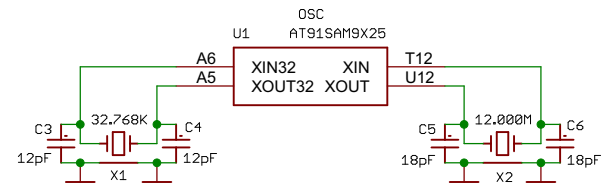
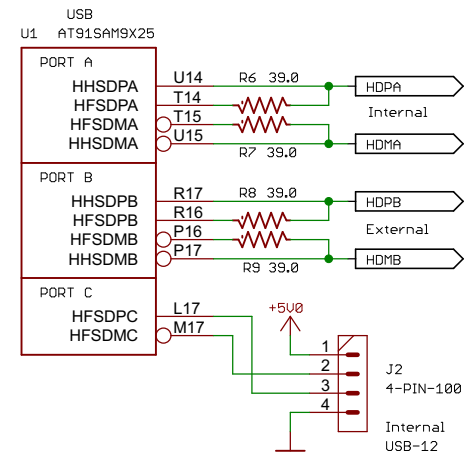
PA[0] Ethernet Enable  
PA[1] Ethernet Activity  
PA[2] Ethernet Link



PC[3,4,5] LED6 RGB USB  
PC[6,7,8] LED7 RGB 3G  
PC[9,10,11,12,13] LED 1,2,3,4,5 GREEN SIGNAL



PD[0] Pushbutton  
PD[4,5] USB Int/Ext Disable  
PD[8,9] USB Int/Ext Status

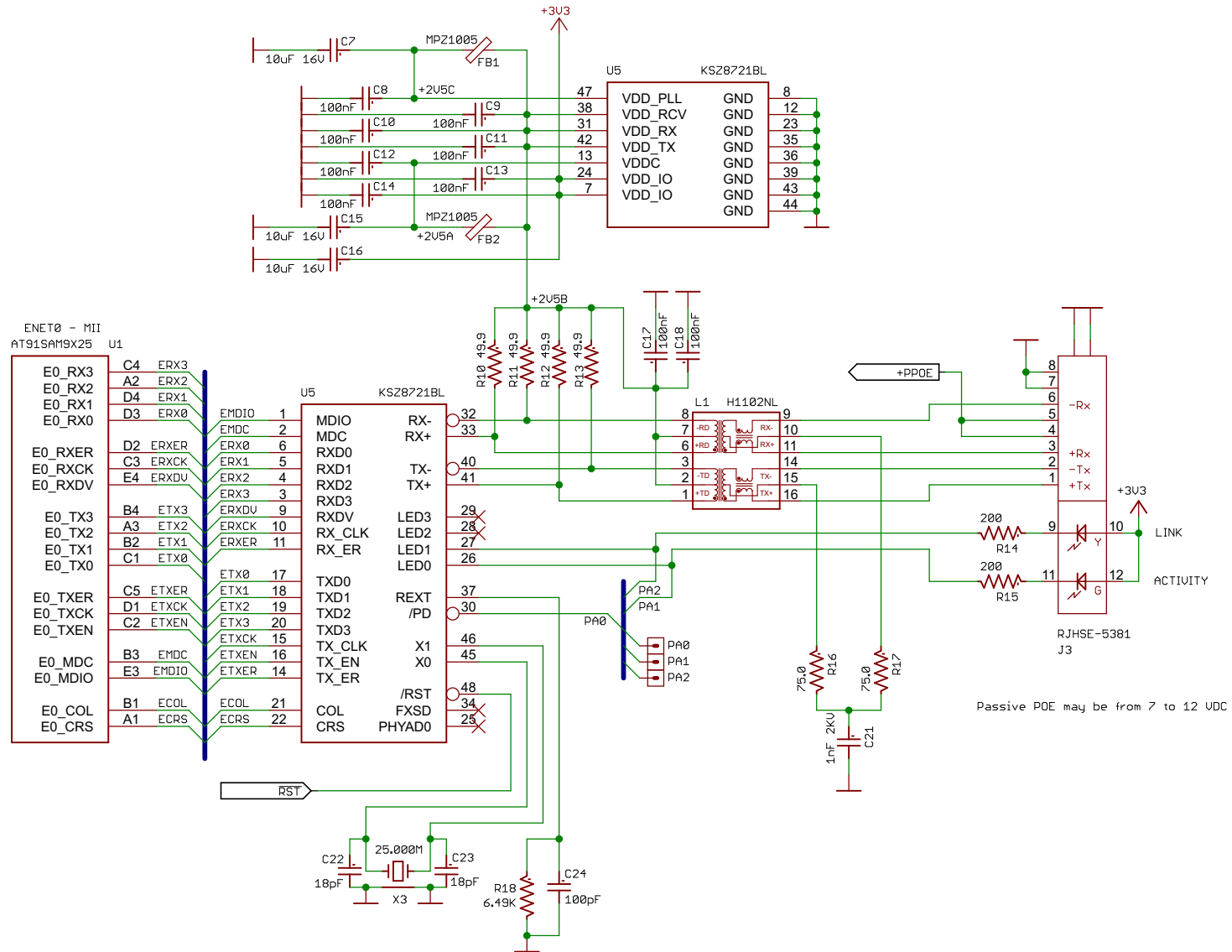


NetBridge-FX	REV: 1.01
GPIOs / USBs / Clocks	ENG: MEN
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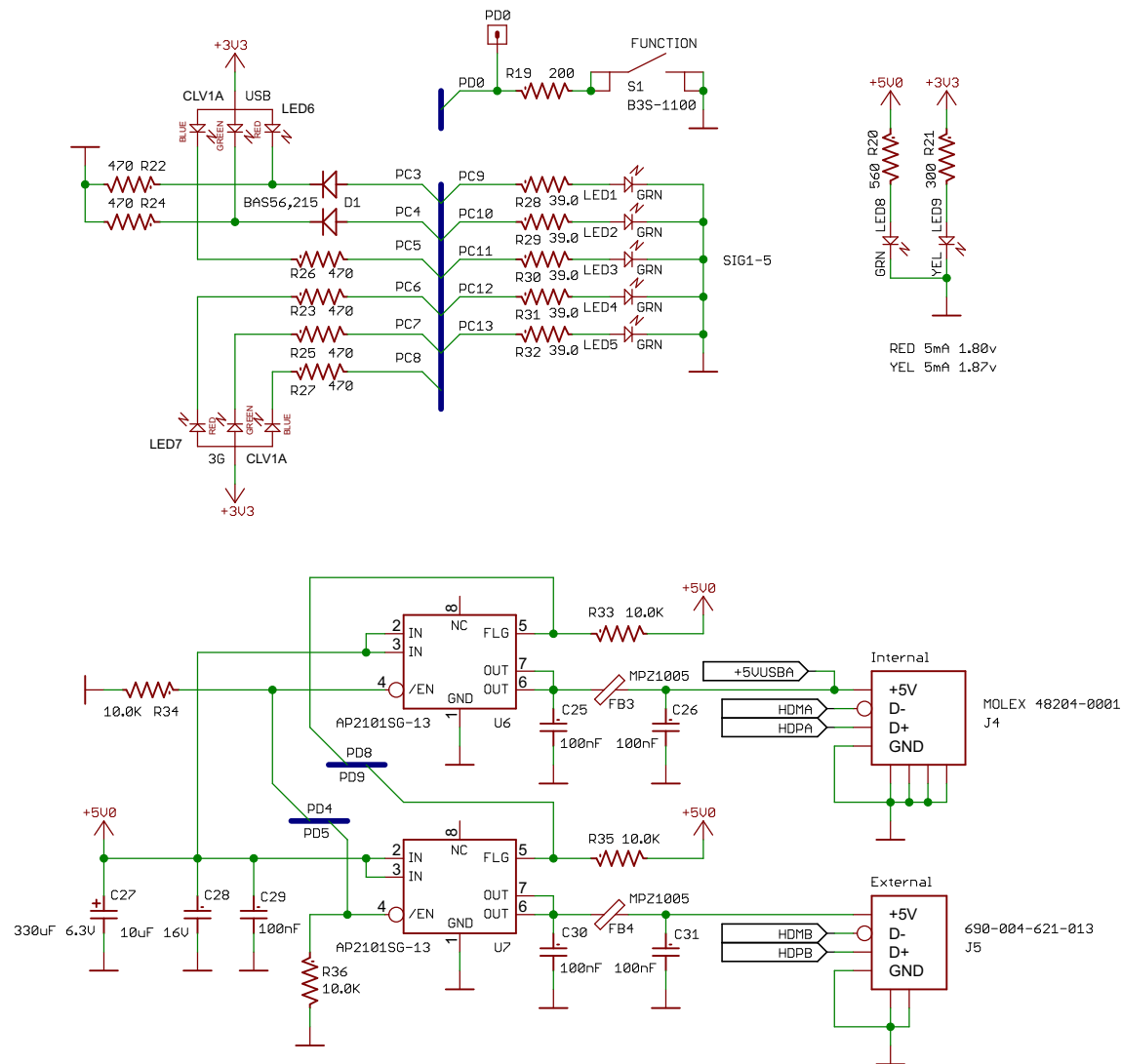
Eagle Notes -

Enet ERX[0123] ETX[0123] ERXER ERXCK ERXD0 ETXER ETXCK ETXEN EMD0 EMD10 ECOL ECRS

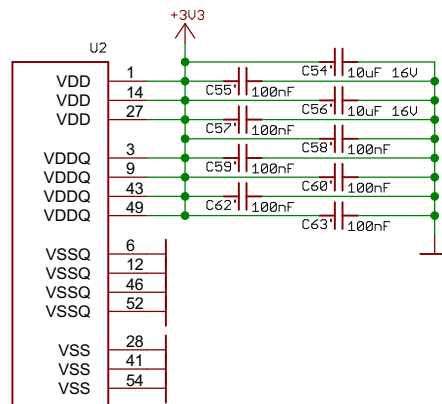
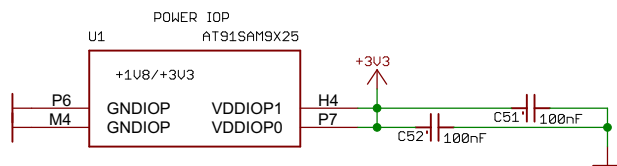
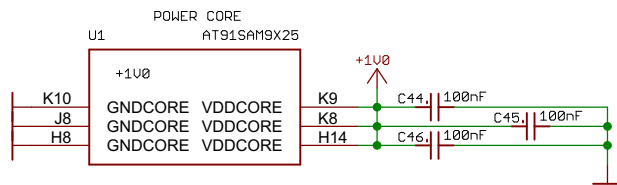
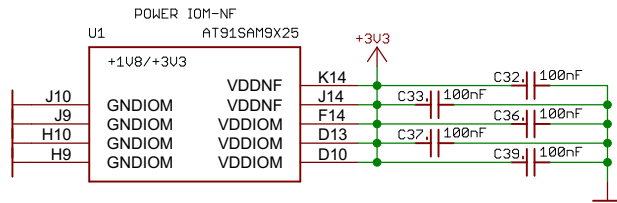
Enet GPIO PA[012]



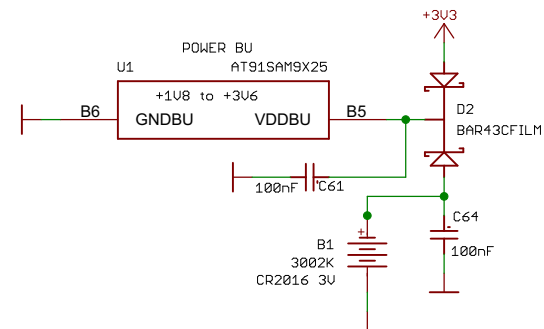
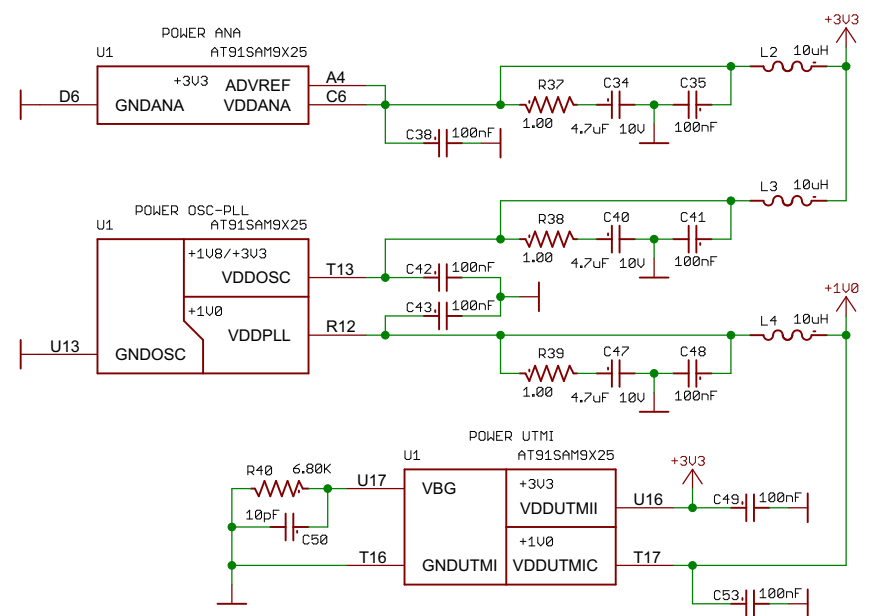
NetBridge-FX	REV: 1.01
Ethernet	ENG: MEN
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NetBridge-FX	REV: 1.01
LEDs / Button / USBs	ENG: MEN
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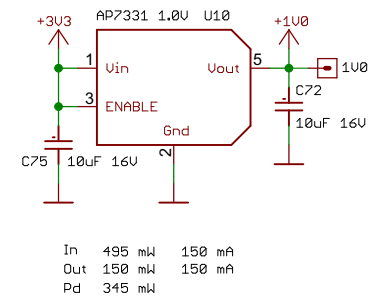
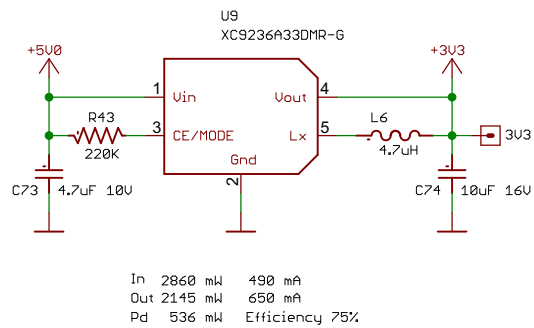
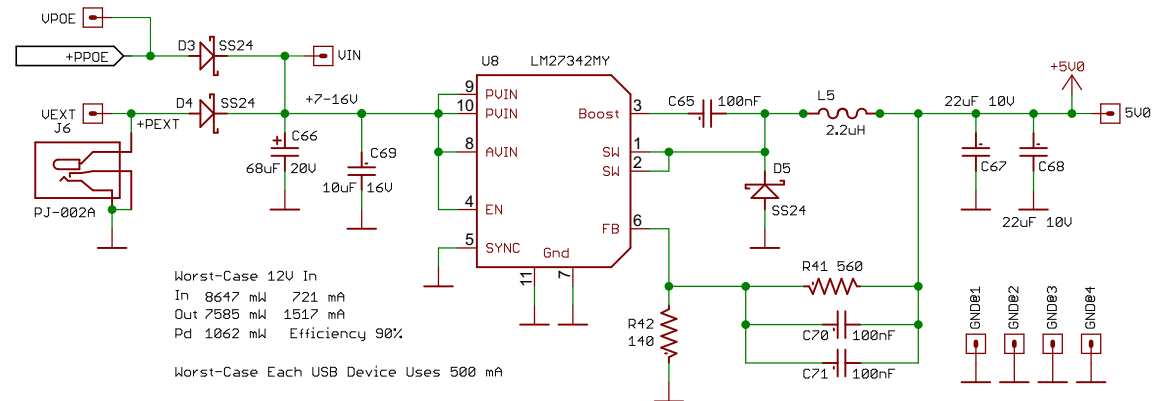


MT48LC16M16A2P-6A:D

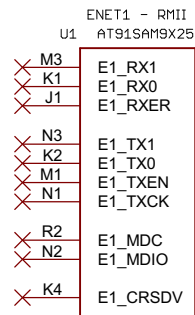
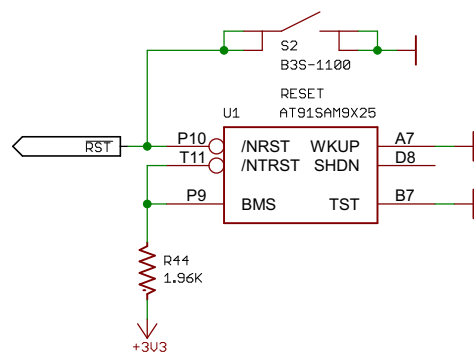


NetBridge-FX	REV: 1.01
Power Distribution	ENG: MEN
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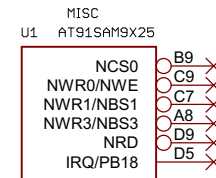
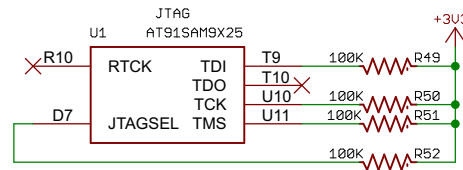
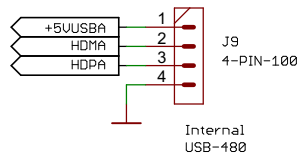
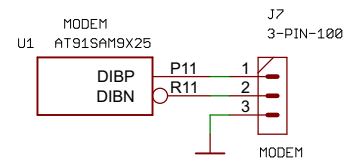
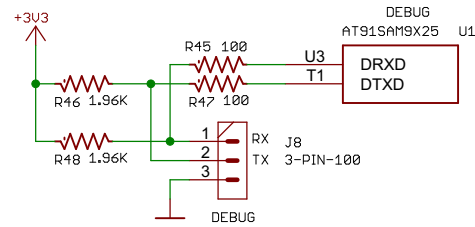
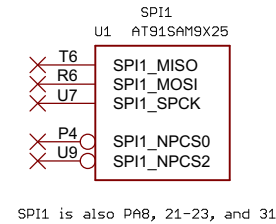
The +PP0E voltage may vary from 7.5 to 12 VDC



NetBridge-FX	REV: 1.01
Voltage Regulators	ENG: MEN
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ENET1 is also PC16, 18-21 and 27-31



NetBridge-FX	REV: 1.01
Miscellaneous / Unused	ENG: MEN
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