

LAN9500 / LAN9500A USB 2.0 -to- 10/100 Ethernet w / MII

Customer Evaluation Board

Assy 6516
PCB Revision C
Schematic Revision 1.2

Design Details

Board:
Assy 6516

Chip:
SMSC LAN9500 / LAN9500A

Board Form Factor:
USB / MII Stand-Alone

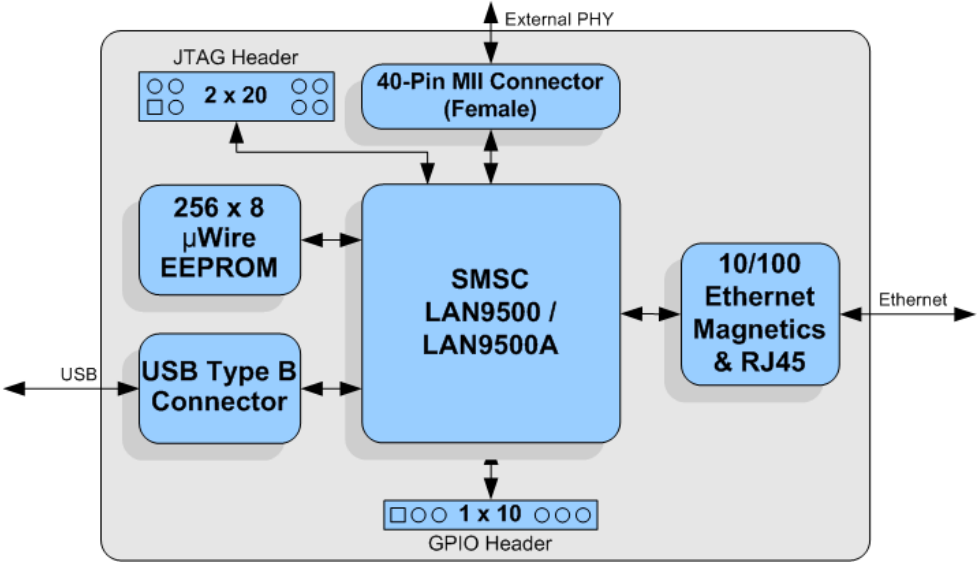
Assembly:
56 Lead QFN w/ Exposed GND Pad

Circuit Diagrams utilizing SMSC Products Are Included As A Means Of Illustrating Typical Semiconductor Applications: Consequently Complete Information Sufficient For Construction Purposes Is Not Necessarily Given. The Information Has Been Carefully Checked And Is Believed To Be Entirely Reliable. However, No Responsibility Is Assumed For Inaccuracies. Furthermore, Such Information Does Not Convey To The Purchaser Of The Semiconductor Devices Described Any License Under The Patent Rights Of SMSC Or Others. SMSC Reserves The Right To Make Changes At Any Time In Order To Improve Design And Supply The Best Product Possible.

Revision History

- Rev 1.0:**
Unreleased, Rev B
- Rev 1.1:**
Relabeled RJ45 LEDs
- Rev 1.2:**
Added support for LAN9500A
R59 changed from 39.2K to 20.5K.
R60 changed from 69.8K to 41.2K
R63 10.0K added as rework to U3, Pin-5.

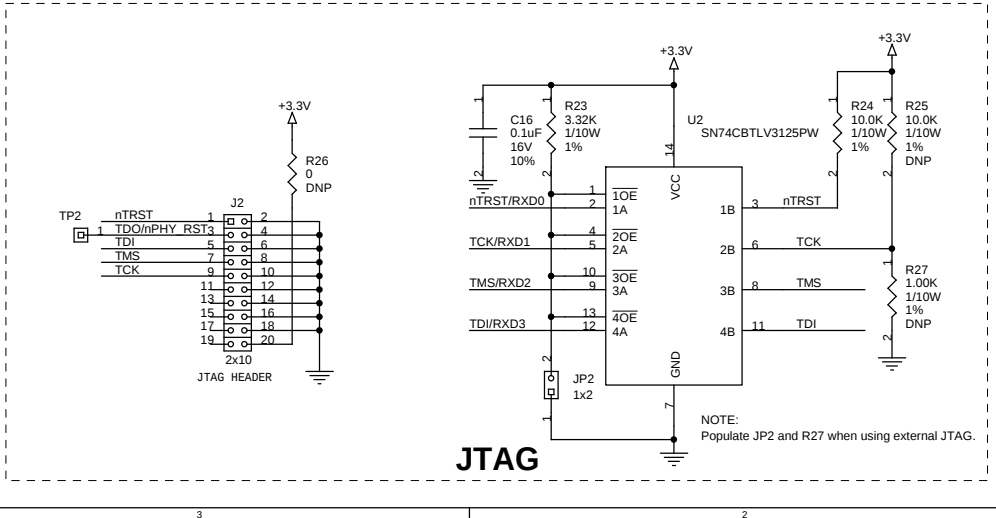
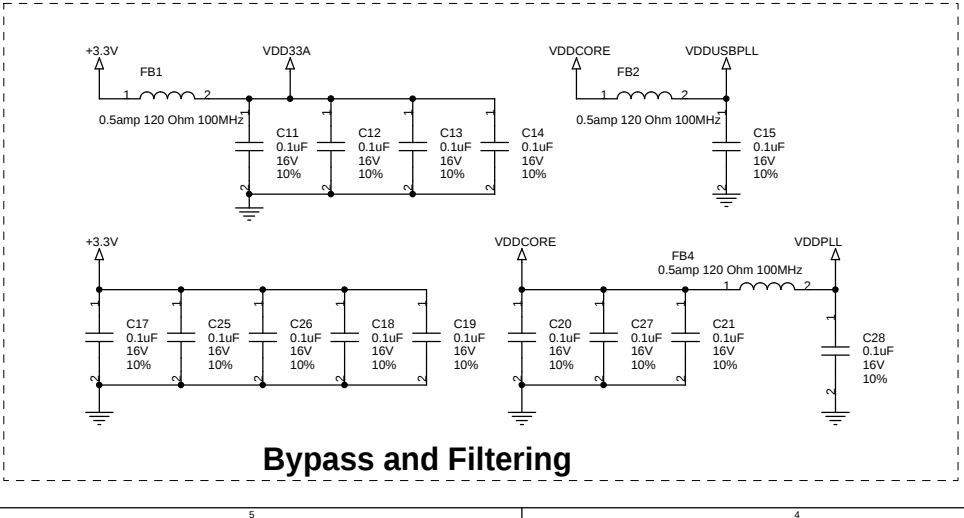
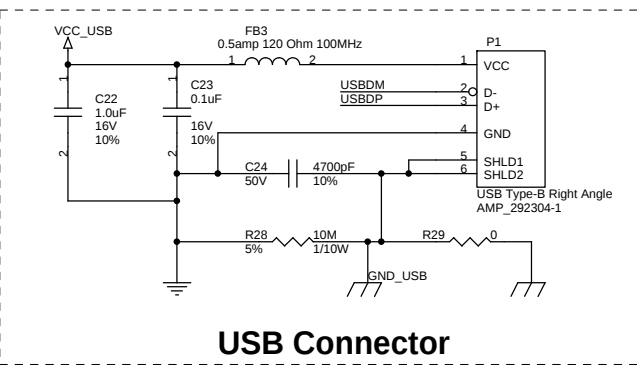
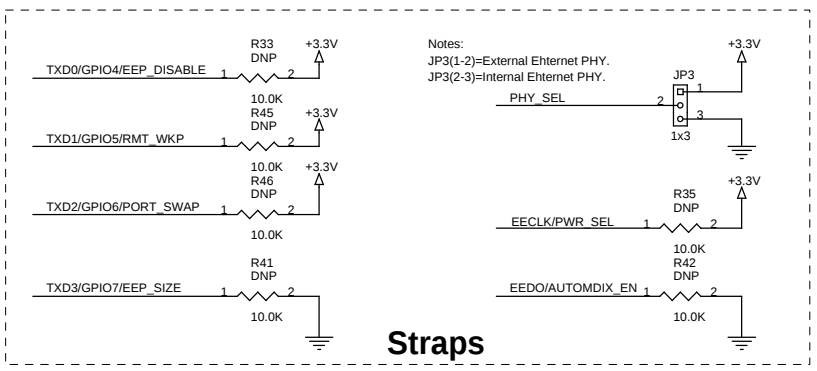
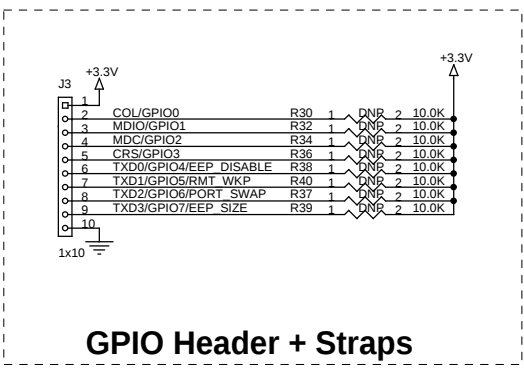
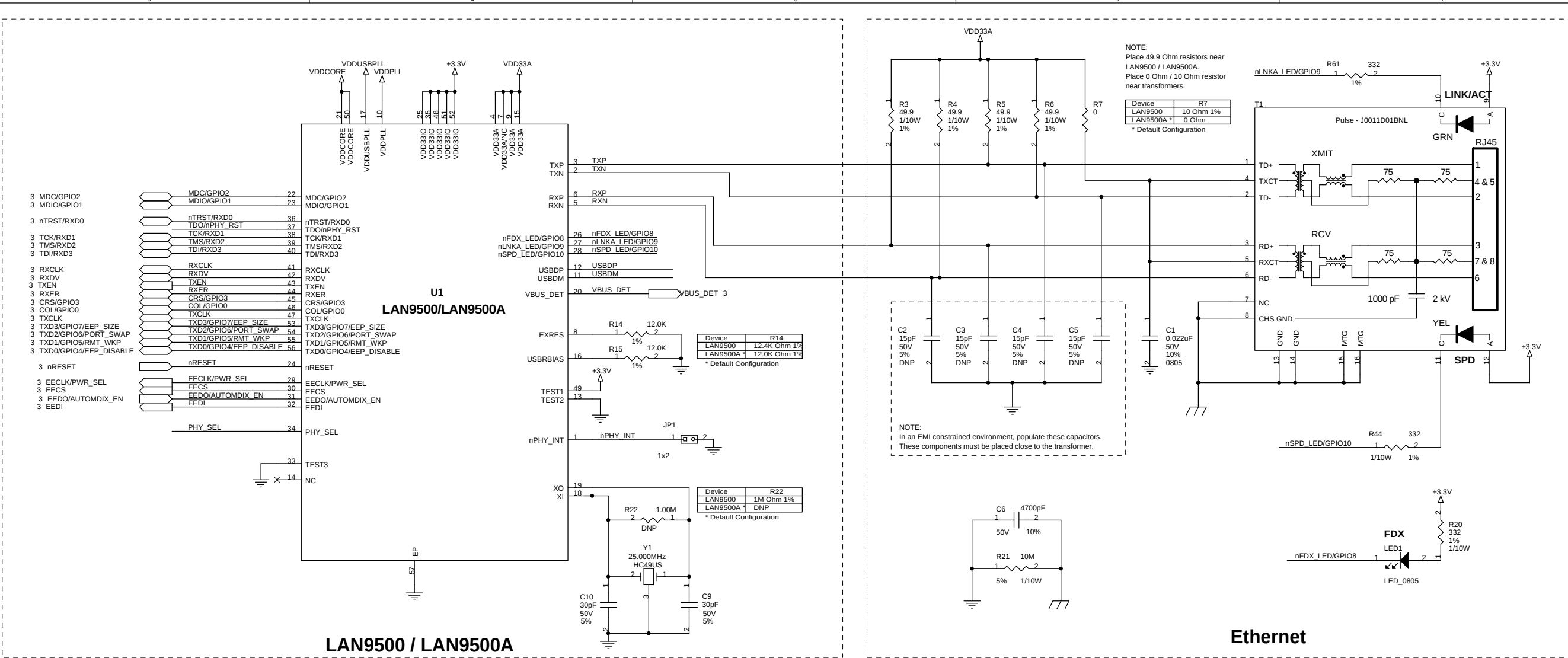
BLOCK DIAGRAM

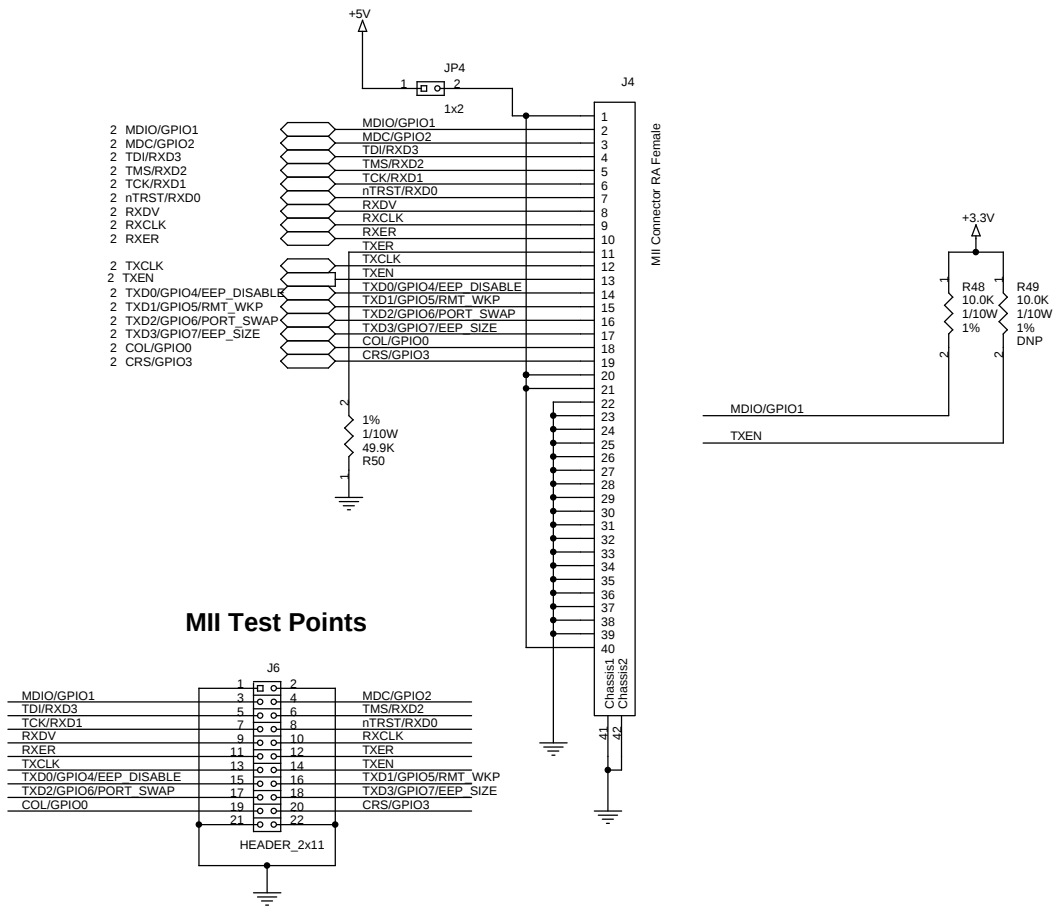


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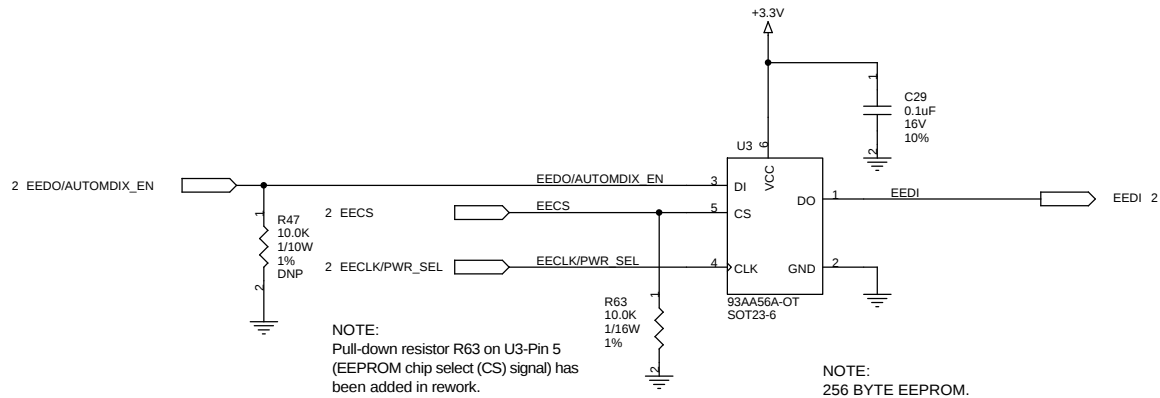
Title LAN9500 / LAN9500A USB 2.0 -to- 10/100 Ethernet w/ MII				
Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
	R. W.	6516	C	1.2
Date: Friday, May 21, 2010			Sheet	1 of 2



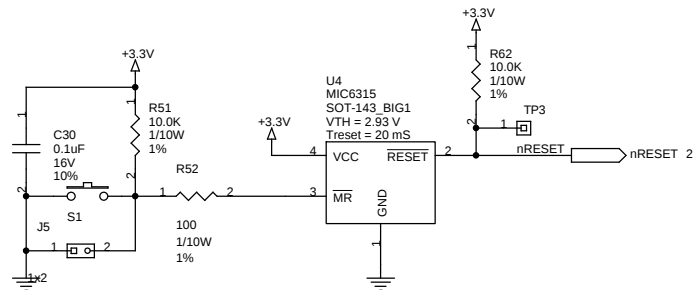


MII Test Points

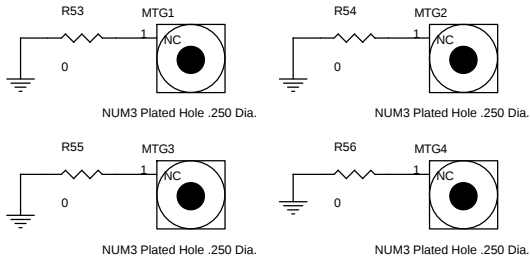
MII



Microwire Serial EEPROM

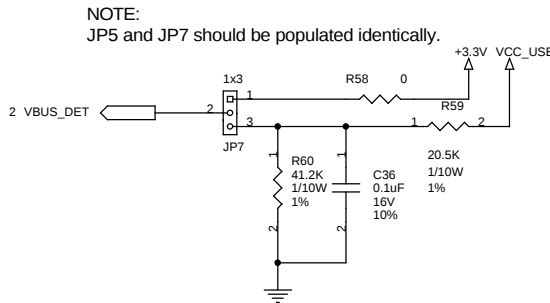


Reset

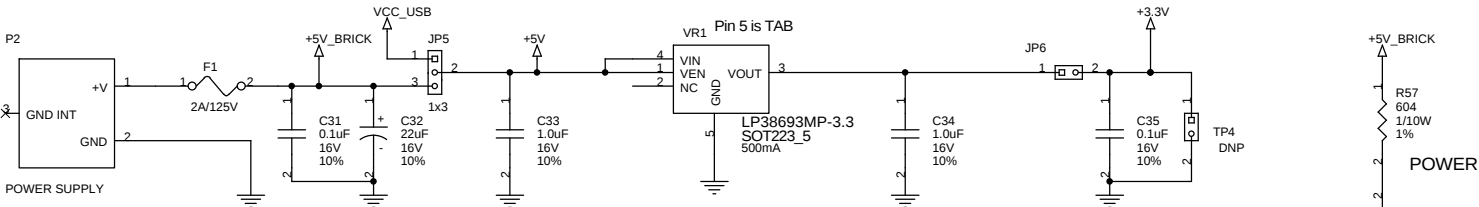


Mounting Holes

Note:
R59 changed from 39.2K to 20.5K.
R60 changed from 69.8K to 41.2K from Rev. 1.0 to Rev 1.1.
Rev 1.0 was never built.



VBUS_DET



Note: LP38693 requires only 55uA typ, 100uA max
quiescent current. Also requires only 1uF on Vin
and Vout pins.
Has extremely low dropout voltage of 250mV @ 500mA.

Power



Title				
Power / MII / uWire EEPROM / Misc.				
Size	Engineer	Assembly No.	PCB Rev	Schematic Rev
C	R. W.	6516	C	1.2
Date: Friday, May 21, 2010		Sheet 3 of 3		