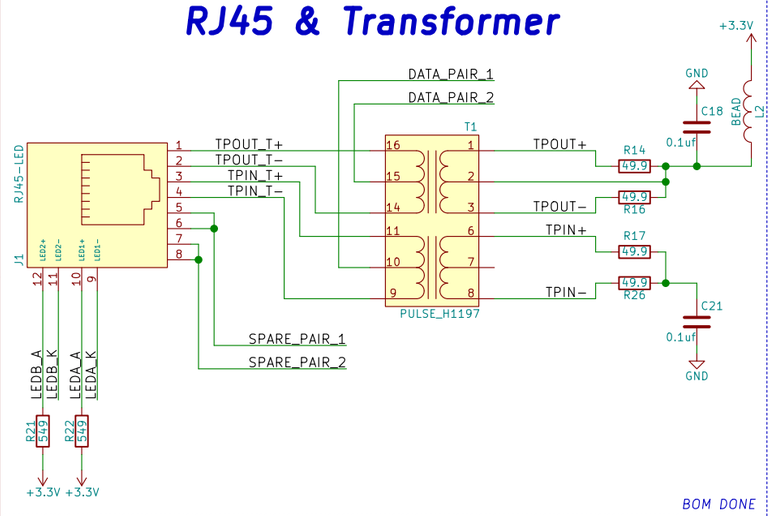
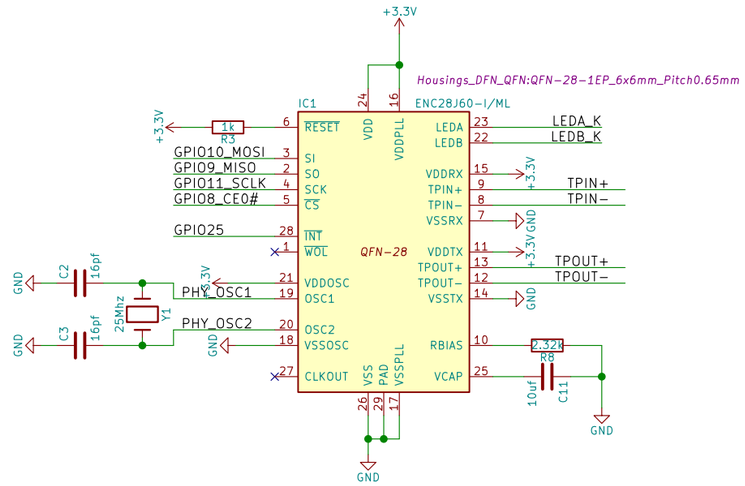
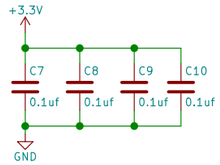
RJ45 & Transformer



BOM DONE

Ethernet PHY

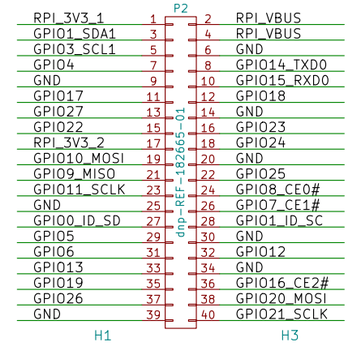


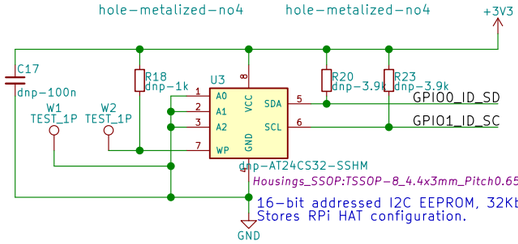


BOM DONE

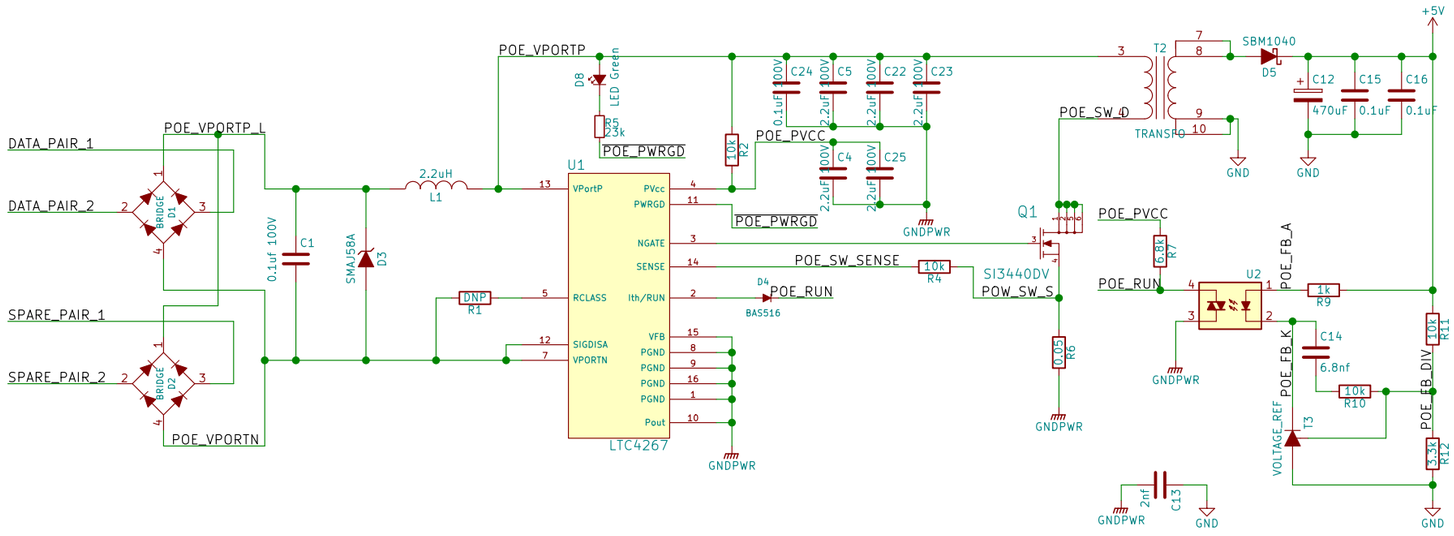
Raspberry Pi Header

TH Female Bottom or SMT Female Top Header
SMT: Toby Electronics REF-182665-01/REF-182665-03
TH: Digikey 1528-1385-ND
Pin #s Match RPi.



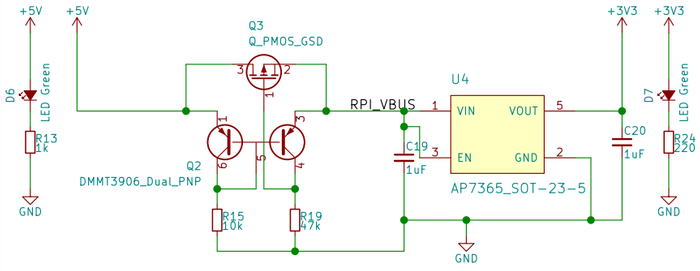


Power Over Ethernet Mangament



BOM DONE

Raspberry Pi Power



Ideal Diode for RPi 5V Source

Q1: Low Rds PFET like DMP3099L.
3A, 99mΩ @ 4.5V Vgs.
Q2: Matched PNP pair. Current mirror comparator pulls Q1 gate low (on) when USB_VBUS_RVP > USB_VBUS.

Extra Linear Reg. for 3.3V

Power ethernet phy whether we have PoE or not. Phy requires more power than allowed from RPi 3.3V.

Author: Julien Marcus
OpenFet
Sheet: /
File: pizero-poe.sch

Title: Raspberry Pi – Power Over Ethernet & PHY

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