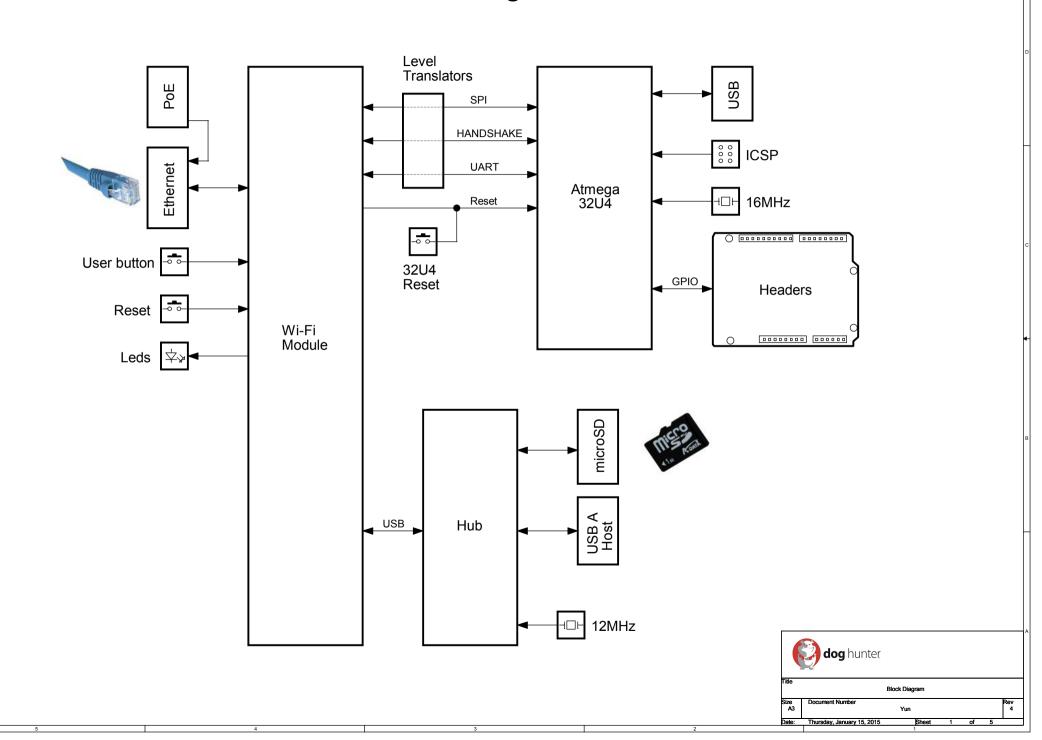
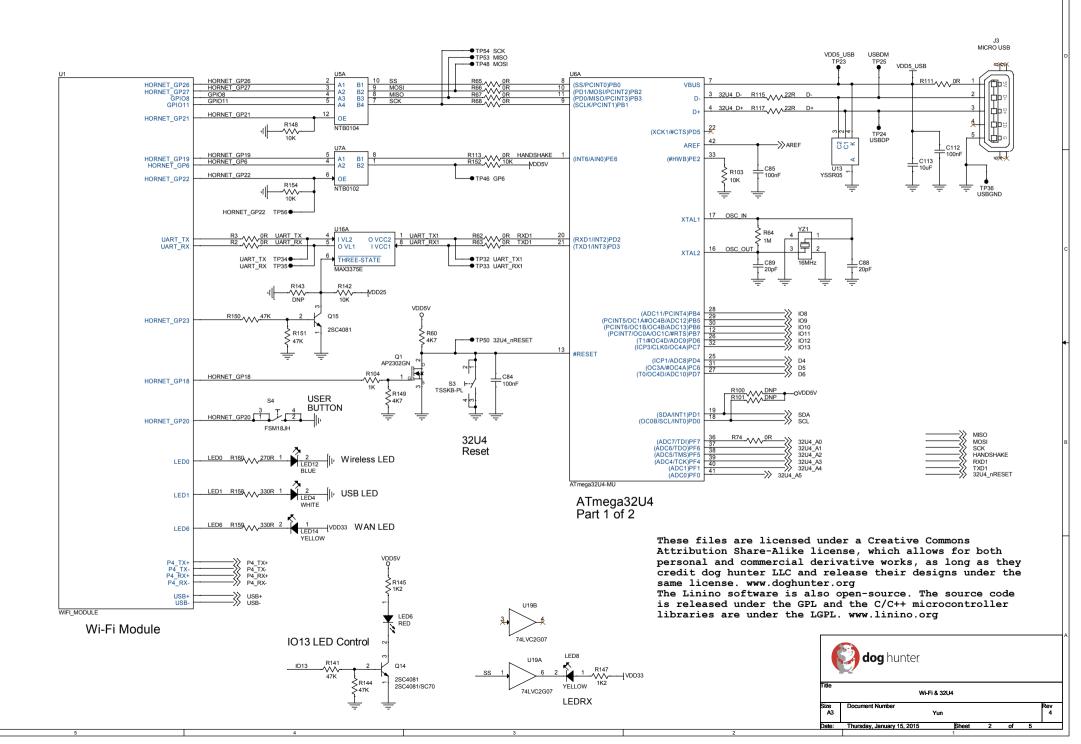
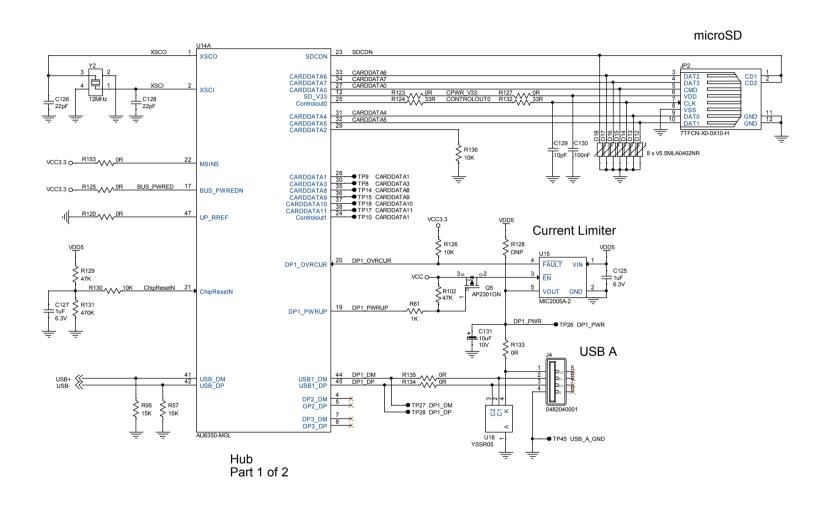
Block Diagram



Wi-Fi & 32U4



Hub, microSD & USB Host



USB signal line trace:

1.Keep traces of USB bus D+ and D- the same length.

2.Achieve 90 ohm differential characteristic impedance.

3.Achieve 45 ohm common characteristic impedance.

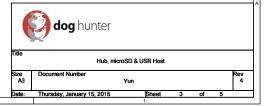
4.Maintain parallelism between D+ and D-.

5.Do not route USB2.0 D+ and D- over the power plane split.

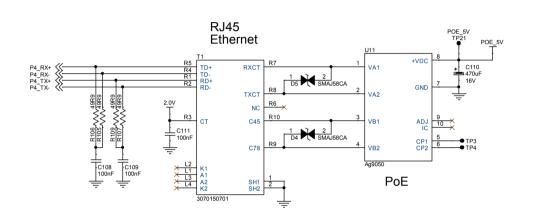
6.Do not route USB2.0 D+ and D- over the other high frequency signals.

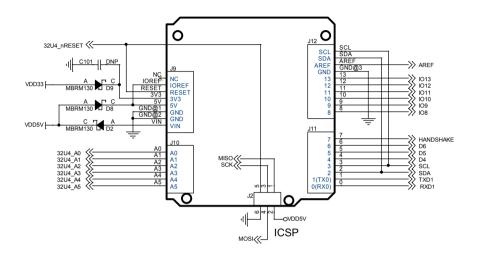
7.It is preferred to route USB2.0 D+ and D- over ground layer.

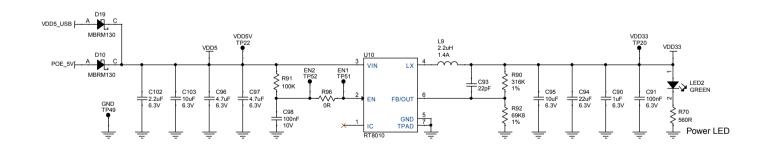
8.It is preferred to route USB2.0 D+ and D- using single layer.

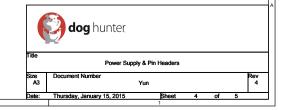


Power Supply & Pin Headers

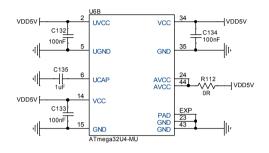




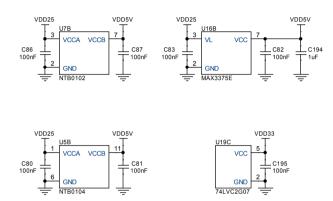


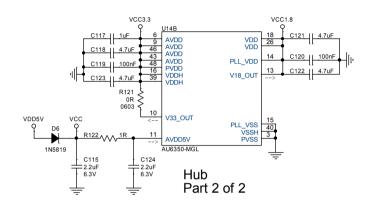


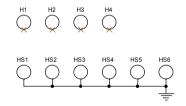
IC Power



ATmega32U4 Part 2 of 2







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