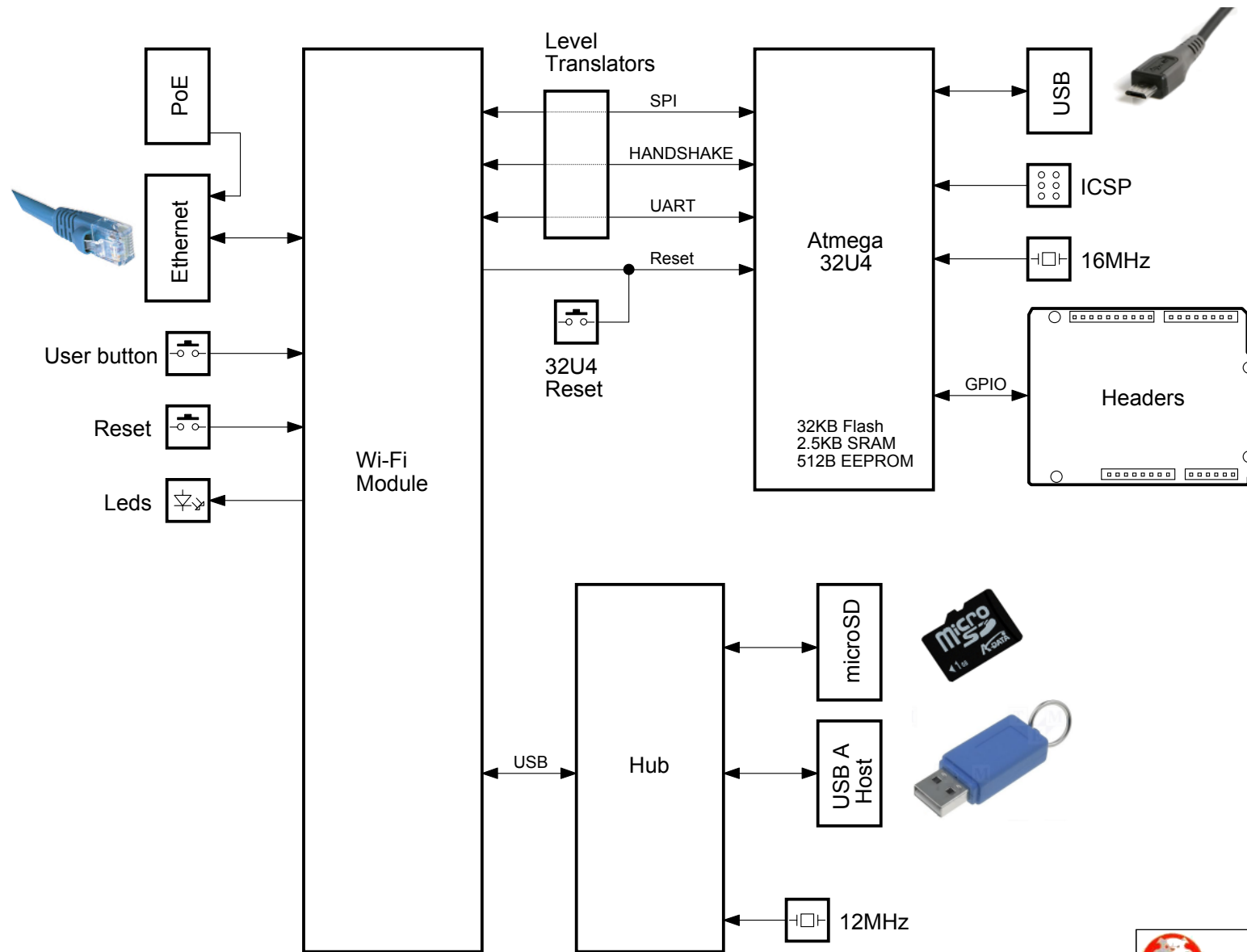



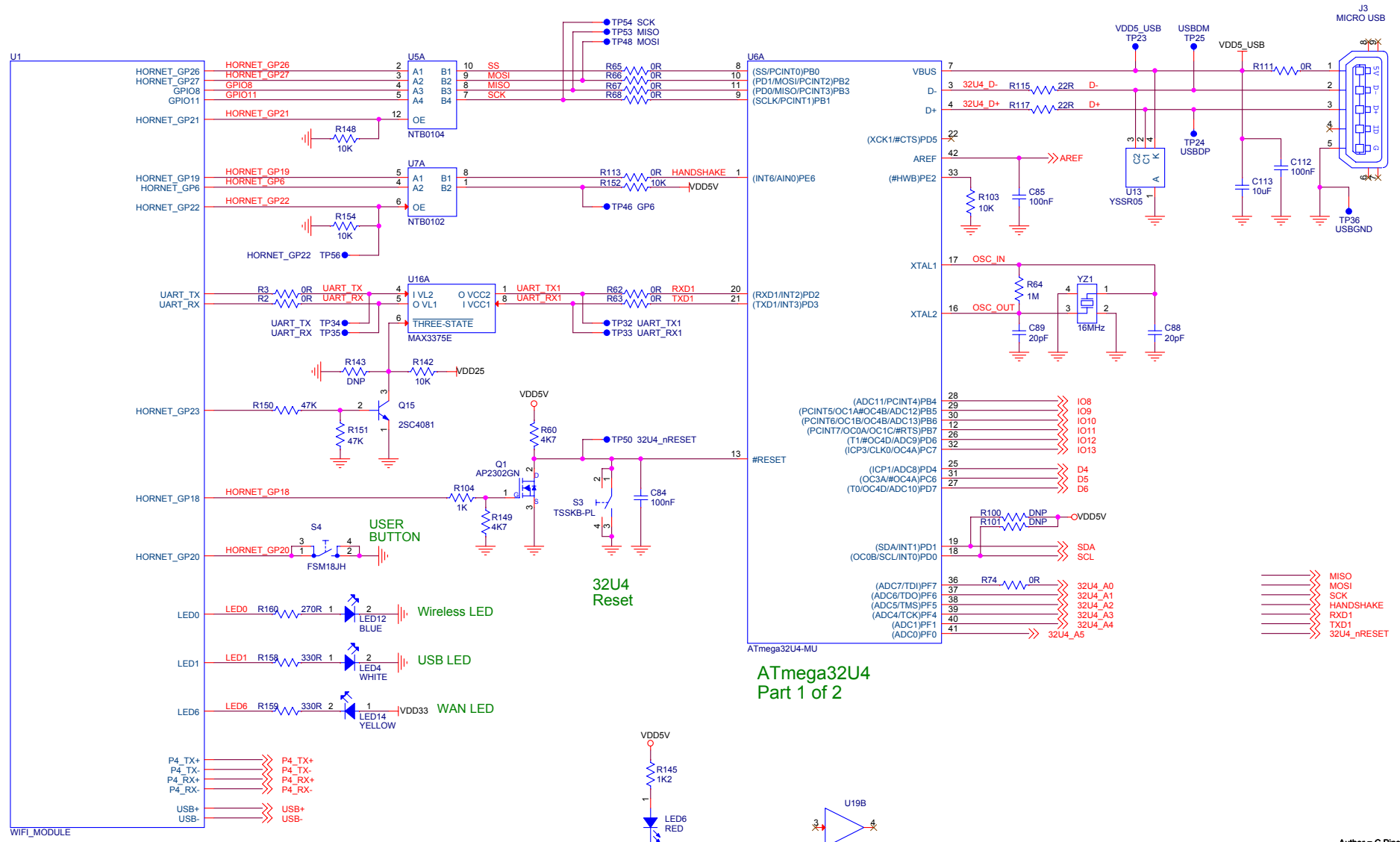
Block Diagram



Author = C.Pino
Variant Name = Base


 dog hunter		dog hunter AG Baarerstrasse 14 6300 Zug Switzerland	
		Title: Block Diagram	
Size: A3	Document Number: Yun	Rev: 4	
Date: Friday, February 28, 2014		Sheet: 1 of 5	

Wi-Fi & 32U4

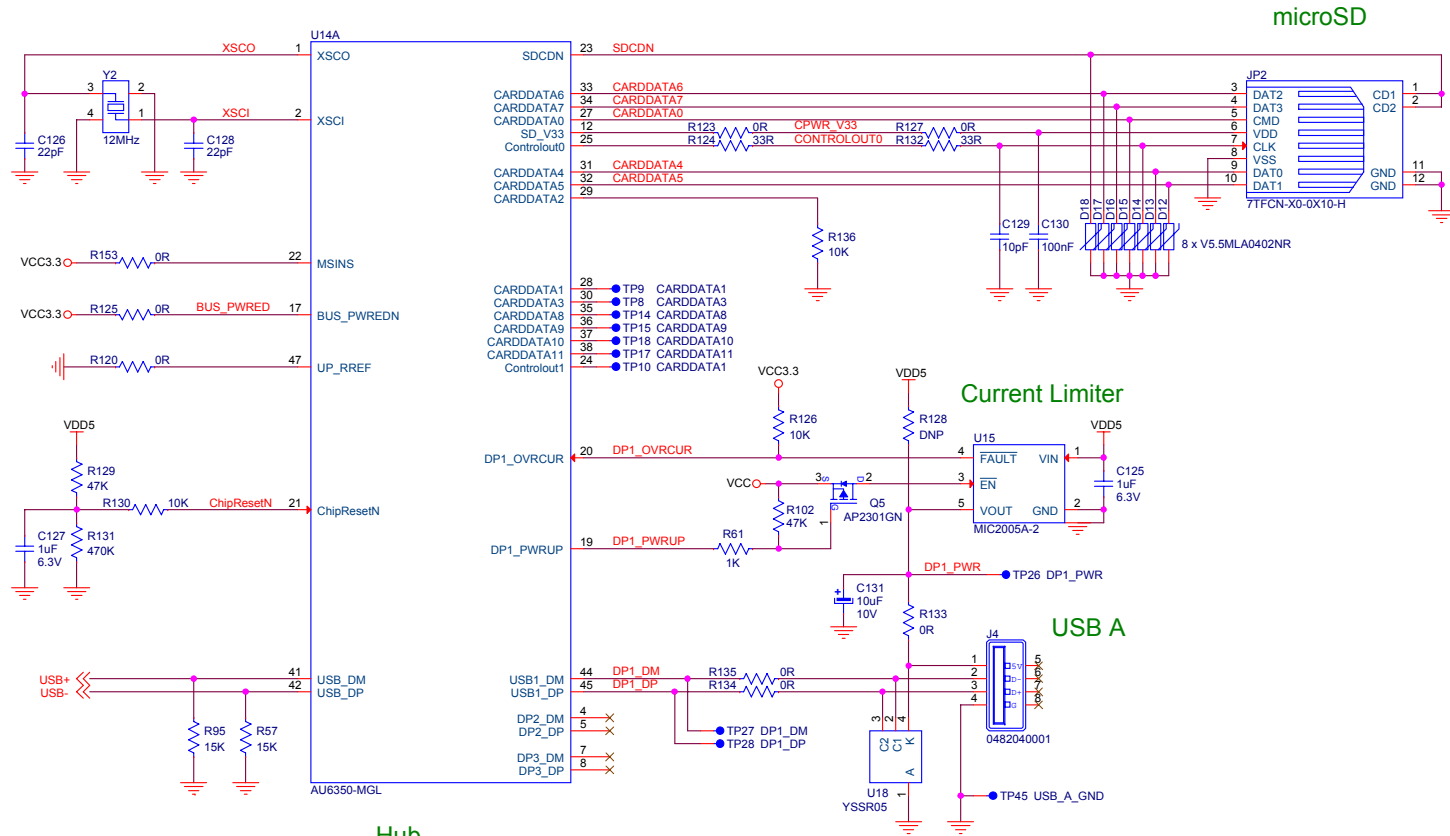


ATmega32U4-MU
ATmega32U4
Part 1 of 2

Author = C.Pino
Variant Name = Base

 dog hunter		dog hunter AG Baarenstrasse 14 6300 Zug Switzerland	
		Title: Wi-Fi & 32U4	
Size: A3	Document Number: Yun	Rev: 4	
Date: Friday, February 28, 2014	Sheet: 2	of 5	


Hub, microSD & USB Host



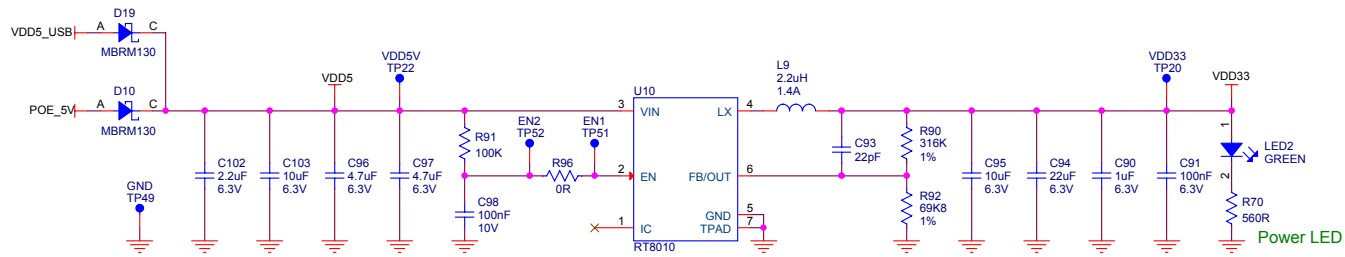
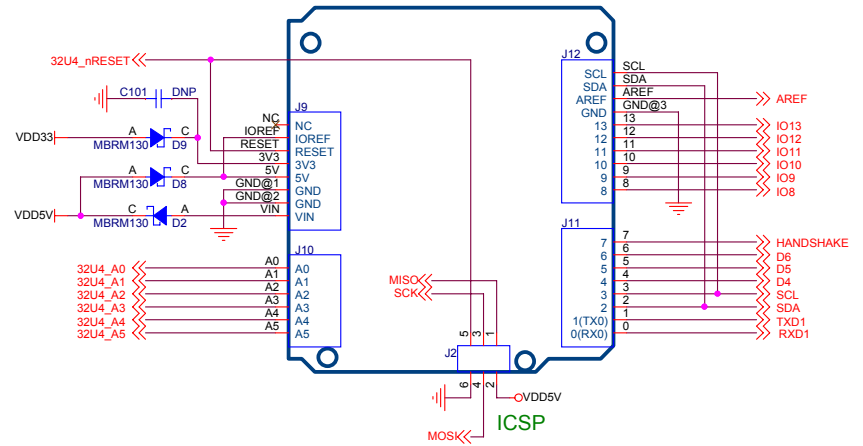
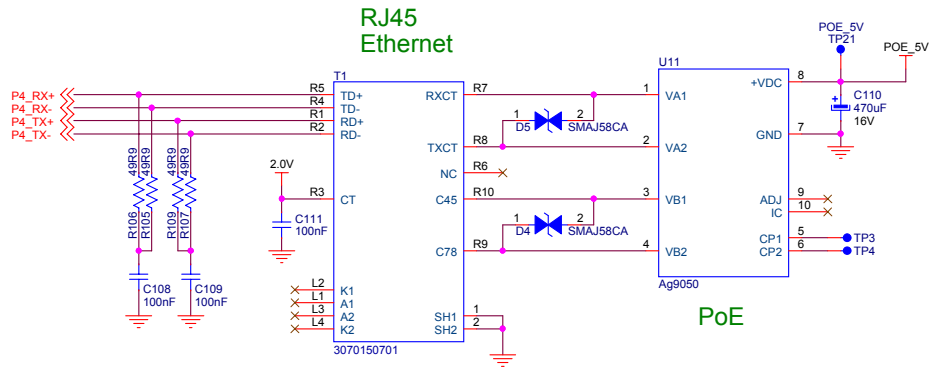
Hub
Part 1 of 2

- 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.

Author = C.Pino
Variant Name = Base

 dog hunter		dog hunter AG Baarerstrasse 14 6300 Zug Switzerland	
		Title: Hub, microSD & USB Host	
Size: A3	Document Number: Yun		Rev: 4
Date: Friday, February 28, 2014		Sheet: 3	of 5

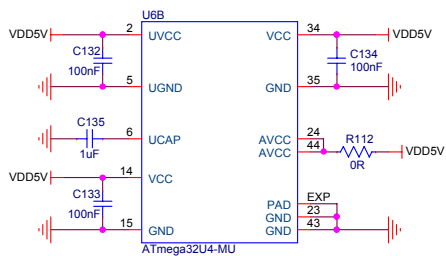
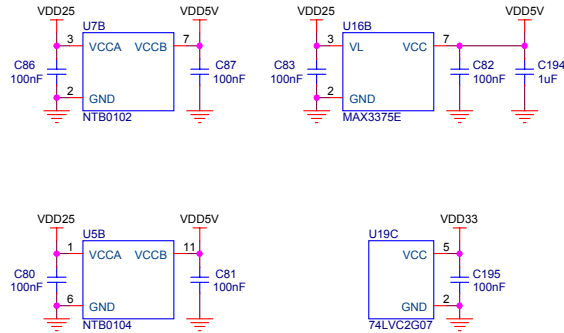
Power Supply & Pin Headers



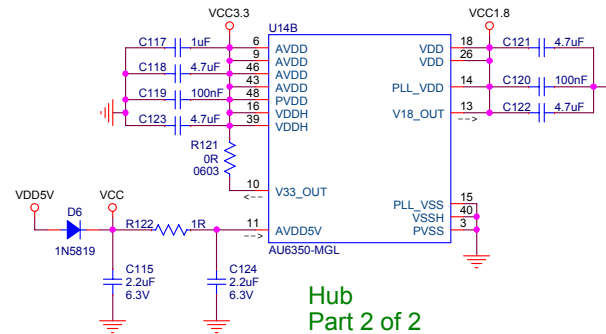
Author = C.Pino
Variant Name = Base

 dog hunter		dog hunter AG Baarerstrasse 14 6300 Zug Switzerland	
		Title: Power Supply & Pin Headers	
Size: A3	Document Number: Yun	Rev: 4	
Date: Friday, February 28, 2014	Sheet: 4		of 5

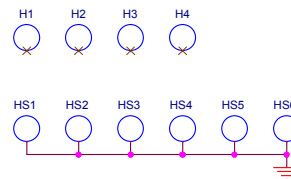
IC Power



ATmega32U4
Part 2 of 2




Hub
Part 2 of 2



Filter capacitors must be placed as close as possible to relative pin, as drawn in the schematic

Author = C.Pino
Variant Name = Base

 dog hunter		dog hunter AG Baarerstrasse 14 6300 Zug Switzerland	
		Title: IC Power	
Size: A3	Document Number: Yun		Rev: 4
Date: Friday, February 28, 2014		Sheet: 5 of 5	