Devices needed for selection:

1. LDO
   1. 5.0V in
   2. 3.3V out
2. SPS
   1. 5.0V in
   2. 3.3V out
3. ULPI phy (see figure 89 STM32F407i datasheet)
   1. http://www.digikey.com/product-detail/en/TUSB1210BRHBR/296-28384-1-ND/2627248
      1. Needs 24 or 26MHz crystal
      2. USB HS connector
4. Ethernet phy (see figure 91 and figure 92 STM43F407i datasheet)
   1. RJ-45 Ethernet connector?
   2. Phy 10/100
   3. 50MHz Oscilator
5. Edge connectors
   1. .1in header
   2. 2mm (waveshare)
6. Programming connector
   1. .05 in 10pin SWD connector
   2. keyed shroud
7. USB FS connector
   1. Micro
8. Power input barrel jack
   1. 5.1 x 2.0 mm ish
9. SDIO memory card interface?
   1. Friction lock (push pull)
10. System status LEDs
    1. Count 8 LED’s (code for marionette state) - mBus
    2. RGB (heartbeat)

Power jack selection:

Chose CUIinc **PJ-047A**

* Meets the 2.0 x 5.5mm pin
* Lots of supply on hand
* Shielded connection
* Cost is under $1.00
* Cheapest power jack with a board guide.
  + Wanted a board guide to reduce amount of force that would be applied to the jack when plugging/unplugging power supply
* <http://www.cui.com/product/resource/pj-047a.pdf>