

# Hayin/Kyle's Friday's Lunch meeting

BioPrint Informal Friday notes on 10/12/2012

- Hayin/Kyle - Mechatronics
  - o [http://www.ebay.com/itm/MakerBot-RepRap-Generation-4-Electronics-Kit-/280915547200?pt=LH\\_DefaultDomain\\_0&hash=item4167df1440](http://www.ebay.com/itm/MakerBot-RepRap-Generation-4-Electronics-Kit-/280915547200?pt=LH_DefaultDomain_0&hash=item4167df1440)
    - Specifications: Generation 4 Electronics
      - \* Supports up to five stepper drivers (XYZ + A/B)
      - \* Connect over USB
      - \* Optional LCD interface support
      - \* Full endstop support
      - \* High current mosfets to drive heated build platform and extruder heater
      - \* Thermocouple support for accurate temperature sensing
      - \* XY Positioning resolution of 0.02mm (20 microns or 0.0008")
      - \* XY Maximum Feedrate of up to 5000mm/minute (roughly 200 IPM)
      - \* Z Positioning resolution of 0.005mm (5 microns / or 0.0002")
      - \* Z Positioning Feedrate of up to 1000mm/minutes (roughly 40 IPM)
    - MakerBot Generation 4 Electronics Kit Includes:
      - MakerBot MotherBoard v2.4 -1 piece
      - Stepper Motor Driver v3.3 -3 pieces
      - Extruder Controller v3.6 -1 piece
      - Arduino Mega 2560 -1 piece
      - Mechanical Endstop v1.2 -3 piecesCables:
      - One (1) Type K Thermocouple
      - One (1) 1' Cat5e Patch Cable
      - Six (6) 6 Pin IDC Cable Heads
      - One 36" 10 Pin Ribbon Cable
      - Three (3) 4 Pin Endstop Cables
      - One (1) USB Cable
  - o Downloaded ReplicatorG