# FB2020 COREXY BOM

#### 2020 EXTRUSION LENGTHS

- 4 x 345 mm (Frame, vertical)
- 6 x 380 mm (Frame, X Axis + diagonal)
- 2 x 340 mm (Frame, Y Axis top)
- 2 x 300 mm (Frame, Y Axis bottom)
- 2 x 235 mm (Bed, Z Axis)
- 2 x 147mm (Bed ties)

## **BEARINGS**

- 4x LM8UU
- 4x LM8LUU

Or

- 8x LM8UU
- 8x 625ZZ Idlers
- 1x 608ZZ Extruder

### **ELECTRONICS**

- 4x Nema17 Stepper Motor (40 Ncm min)
- 1x RAMPS 1.4 & 1x Arduino Mega or 1x MKS Base
- 4x A4988 or 4x DRV8825 Stepper Drivers (if using RAMPS)
- 1x Set RAMPS Connection wires
- 1x MK2B PCB Heater
- 1x 100k 4.7k Pullup Thermistor heatbed
- 1x E3D v6
- 1-2 Meters 14 AWG wire (PSU to RAMPS)
- 1-2 Meters 16 AWG wire (Bed to RAMPS)
- 1x 12v LED PSU
- 1 x Mains cable and Plug
- 1x Makerbot-style Mechanical Endstops & 2 Omron or similar Micro Limit switch.

#### **OPTIONAL**

- 1x Reprap Smart Controller or 1x SDRAMPS
- 2-3 Meters LED Strip (https://www.fasttech.com/products/1211/10000732/2174203)

#### HARDWARE

- 1m x 4mm OD PTFE Tubing
- 1x 6mm Pnumatic Coupler
- 1x 250mm long 8mm Leadscrew and Nut
- 6x 300mm Smooth Rod
- 1x 100mm Smooth Rod or 1x100mm M8 Rod & 2x M8 Nuts Spool holder
- ~150 x M4x8mm Bolts 6mm will work but can be a little annoying with T-Nuts
- 100x T- Nut Misumi
- 6x M4 Printed T-Nut STL in files not my design, can't find the Thing to attribute as didn't collect it. - PSU clamp (to be uploaded after testing), extruder, Spool holder
- 10-15 x M4 Nut
- 2x M5x25 Bolts Y Idlers
- 4x M5x14 Bolts Frame Idlers
- 1x M5x10 Bolt Extruder
- 18x M3x10 or M3x8 Bolts Attaching Steppers/Leadscrew
- 5-10x M3 Nuts
- Mix of 10-15 M3x16 & M3x22 Bolts
- 4x Bed Springs (Extruder and Bed)
- 3x Thumb Nut
- 1x Glass or Aluminium plate
- 3m GT2 Timing belt
- 2x GT2 20 tooth Timing pulley
- 2 x 40mm 12v Fan (Layer fan & Active Board cooling)
- 1x E3D HobbGoblin Drive gear
- 2x M2 Nut
- 4x 15mm x M2 bolts Limit switch on Extruder Carriage and Z Endstop

### **OPTIONAL**

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1x 5mm to 8mm Flex or Rigid coupler