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)
- 1 x 147 mm (Bed, middle) - if using printed tie or 2 x 147mm if not.

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
- 4x A4988 or 4x DRV8825 Stepper Drivers
- 1x Set RAMPS Connection wires
- 1x MK2B PCB Heater
- 1x 100k 4.7k Pullup Thermistor - heatbed
- 1x E3D v6
- 1 Meter 14 AWG wire (PSU to RAMPS)
- 1 Meter 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 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
- 10x M5x10 Bolts - Frame Idlers, Extruder
- 18x M3x10 or M3x8 Bolts - Attaching Steppers/Leadscrew
- 5-10x M3 Nuts
- Mix of 10-15 M3x16 & M3x22 Bolts
- 4x Bed Springs
- 4x Thumb Nut
- 1x Glass or Aluminium plate
- 3m GT2 Timing belt
- 2x GT2 20 tooth Timing pulley
- 1x 40mm 12v Fan
- 1x E3D HobbGoblin Drive gear
- 2x M2 Nut

- 4x 15mm x M2 bolts - Limit switch on Extruder Carriage and Z Endstop

Optional
-
  1x 5mm to 8mm Flex or Rigid coupler