MCU Connectors Cable ID Len (m) Segments **Toolhead Power** 1 1.5 Component HE0 FH0 FH1 **ABL** Pin Number 3 4 VIN Pin Name VIN <u>VIN</u> VIN **GND GND GND** Pin Name **GND** Pin Number 6 8 9 **Toolhead Signal** 2 1.5 TH0 ABL ME Component Pin Number 4 Pin Name E1_A E1_B AS GND AS GND Pin Name **E2_A E2_B** Pin Number 5 6 7 8 **Toolhead SPI** 1.5 Component COM SPI 2 Pin Number Pin Name 3.3V SCLK MOSI Pin Name **GND** CS MISO Pin Number 4 5 6 **Gantry Motion** 3 1 Component \mathbf{SX} MX Pin Number 1 2 3 AS E1_A E1_B Pin Name Pin Name AS_GND E2_A E2_B Pin Number 4 5 6 **Rear Motion** 4 1 SY SZ MY Component 2 Pin Number 1 3 4 Pin Name AS AS E1_A E1_B AS_GND Pin Name AS_GND E2_A E2_B Pin Number 5 6 8 Pin Number **Bottom Motion** 5 0.5 ΜZ 3 4 E1 A E1 B E2_A E2_B 8 **Bed Thermistor** 6 ТВ 1 AS

2 AS_GND 5

SRV

Unused

10

Connector Pin Mapping

Toolhead	Pin Name	In ID	In Pin	Out Pin
HE0	VIN	1	1	1
	GND	1	6	2
FH0	VIN	1	2	1
	GND	1	7	2
FH1	VIN	1	3	1
	GND	1	8	2
TH0	AS	2	1	1
	AS_GND	2	5	2
ABL (POW)	VIN	1	4	1
	GND	1	9	2
	SRV	1	5	3
ABL (SIG)	AS	2	2	4
	AS_GND	2	6	5
ME	E1_A	2	3	1
	E1_B	2	7	2
	E2_A	2	4	3
	E2_B	2	8	4

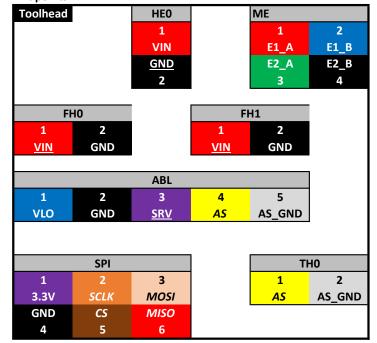
SPI	3.3V	SPI	1	1
	SCLK	SPI	2	2
	MOSI	SPI	3	3
	GND	SPI	4	4
	CS	SPI	5	5
	MISO	SPI	6	6

Motion	Pin Name	In ID	In Pin	Out Pin
SX	AS	3	1	1
	AS_GND	3	4	2
MX	E1_A	3	2	1
	E1_B	3	3	2
	E2_A	3	5	3
	E2_B	3	6	4

SY	AS	4	1	1
	AS_GND	4	5	2
SZ	AS	4	3	1
	AS_GND	4	6	2
MY	E1_A	4	3	1
	E1_B	4	4	2
	E2_A	4	7	3
	E2_B	4	8	4

MZ	E1_A	5	1	1
	E1_B	5	2	2
	E2_A	5	3	3
	E2_B	5	4	4

Endpoints



SX		
1	2	
AS	AS_GND	

SY		
1	2	
AS	AS_GND	

SZ		
1	2	
AS	AS_GND	

MX		
1	2	
E1_A	E1_B	
E2_A	E2_B	
3	4	

MY		
2		
E1_B		
E2_B		
4		

MZ		
1	2	
E1_A	E1_B	
E2_A	E2_B	
3	4	