

Toolhead Connectors

MCU Connectors

Cable ID Len (m)

Segments

Toolhead 1

1

1.7

Component

Pin Number

Pin Name

Pin Name

Pin Number

HE0	(Spare)	FH0	FH1	ME	
1	2	3	4	5	6
VIN	VIN	VIN	VIN	E1_A	E1_B
GND	GND	GND	GND	E2_A	E2_B
7	8	9	10	11	12

Toolhead 2

2

1.7

Component

Pin Number

Pin Name

Pin Name

Pin Number

TH0	ABL		
1	2	3	4
AS	VIN	SRV	AS
AS_GND	GND	AS_GND	Unused
5	6	7	8

I2C

I2C

1.7

Component

Pin Number

Pin Name

I2C			
1	2	3	4
3.3V	GND	SDA	SCL

Rear Panel Connectors

Other Connectors

Cable ID Len(m)

Segments

Gantry Motion

3

1.35m

1.5m	1.5m	
SX	MX	
1	2	3
AS	E1_A	E1_B
AS_GND	E2_A	E2_B
4	5	6

Component

Pin Number

Pin Name

Pin Name

Pin Number

Rear Motion

4

0.5m

0.6m	1.5m	1.2m			0.9m		1.2m
TB	SY	SZ	MY		MZ		LC0
1	2	3	4	5	6	7	8
AS	AS	AS	E1_A	E1_B	E1_A	E1_B	VIN
AS_GND	AS_GND	AS_GND	E2_A	E2_B	E2_A	E2_B	GND
9	10	11	12	13	14	15	16

Component

Pin Number

Pin Name

Pin Name

Pin Number

Other

5

0.5m

0.9m	1.2m	
TC	FC0	FC1
1	2	3
AS	VIN	VIN
AS_GND	GND	GND
4	5	6

Component

Pin Number

Pin Name

Pin Name

Pin Number

Pin Mapping				
Segment	Pin Name	In ID	In Pin	Out Pin
HE0	VIN	1	1	1
	GND	1	7	2
(Spare)	VIN	1	2	-
	GND	1	8	-
FH0	VIN	1	3	1
	GND	1	9	2
FH1	VIN	1	4	1
	GND	1	10	2
ME	E1_A	1	5	1
	E1_B	1	6	2
	E2_A	1	11	3
	E2_B	1	12	4
TH0	AS	2	1	1
	AS_GND	2	5	2
ABL	VIN	2	2	1
	GND	2	6	2
	SRV	2	3	3
	AS	2	4	4
	AS_GND	2	7	5
I2C	3.3V	I2C	1	1
	SCLK	I2C	2	2
	MOSI	I2C	3	3
	GND	I2C	4	4

Endpoints				
Toolhead	HE0		ME	
	1		1	2
	VIN		E1_A	E1_B
	GND		E2_A	E2_B
	2		3	
			4	
FH0			FH1	
1	2		1	2
VIN	GND		VIN	GND
ABL				
1	2	3	4	5
VLO	GND	SRV	AS	AS_GND
TH0				
1	2			
AS	AS_GND			
I2C				
1	2	3	4	
3.3V	GND	SDA	SCL	

Pin Mapping				
Segment	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
TB	AS	4	1	1
	AS_GND	4	9	2
SY	AS	4	2	1
	AS_GND	4	10	2
SZ	AS	4	3	1
	AS_GND	4	11	2
MY	E1_A	4	4	1
	E1_B	4	5	2
	E2_A	4	12	3
	E2_B	4	13	4
	E1_A	4	6	1
	E1_B	4	7	2
	E2_A	4	14	3
	E2_B	4	15	4
LC0	VIN	4	8	1
	GND	4	16	2
TC	AS	5	1	1
	AS_GND	5	5	2
FC0	VIN	5	2	1
	GND	5	6	2
FC1	VIN	5	3	1
	GND	5	6	2

Endpoints			
SX		MX	
1 AS	2 AS_GND	1 E1_A	2 E1_B
		3 E2_A	4 E2_B
Gantry Motion			
SY		MY	
1 AS	2 AS_GND	1 E1_A	2 E1_B
		3 E2_A	4 E2_B
SZ		MZ	
1 AS	2 AS_GND	1 E1_A	2 E1_B
		3 E2_A	4 E2_B
Rear Motion			
TB		TC	
1 AS	2 AS_GND	1 AS	2 AS_GND
FC0		FC1	
1 VIN	2 GND	1 VIN	2 GND
Other Connectors		LC0	
		1 VIN	2 GND