Volterra Carriage PCB

Part	Value	Device	Package
C1	0.1uF	ceramic capacitor	0603
C2	1uf	ceramic capacitor	0603
C3	0.1uF	ceramic capacitor	0603
C4	0.1uF	ceramic capacitor	0603
C5	0.1uF	ceramic capacitor	0603
C6	10uF	tantalum capacitor	1210
C7	10uF	tantalum capacitor	1210
C8	0.1uF	ceramic capacitor	0603
C9	0.1uF	ceramic capacitor	0603
C10	1uf	ceramic capacitor	0603
K1	Chassis PCB	connector	34PIN/1MMPITCH/FFC/FPC
K2	Extruder 0 PCB	connector	12PIN/1MMPITCH/FFC/FPC
K3	Extruder 1 PCB	connector	12PIN/1MMPITCH/FFC/FPC
L1	3.3uH	inductor	0805
Q1	MMBT4403	PNP BJT	SOT23
R1	100	resistor	0603
R2	100	resistor	0603
R3	720R	resistor	0603
R4	240R	resistor	0603
R5	8.2K	resistor	0603
R6	20k	resistor	0603
R7	10K	resistor	0603
R8	220R	resistor	0603
R9	720R	resistor	0603
R10	100R	resistor	0603
U$1	NANO	Arduino	NANO
U1	LM317	LDO Regulator	SOT223
U2	LM317	LDO Regulator	SOT223
U5	HX711	IC	SO16
X1	EXTDR-0	connector	JST-XH-04
X2	EXTDR -1	connector	JST-XH-04
X3	LOADCELL	connector	JST-XH-04
X4	CF	connector	JST-XH-04
X5	X limit switch	connector	JST-XH-04
X6	SERVO	connector	JST-XH-04
X7	CF	connector	JST-XH-04
X8	ABL LED	connector	JST-XH-04

Volterra Extruder 0/1 PCB

Part	Value	Device	Package
C1	100nF	ceramic capacitor	0603
C2	1uF	ceramic capacitor	0603
C3	100nF	ceramic capacitor	0603
C4	100nF	ceramic capacitor	0603
C5	100nF	ceramic capacitor	0603
C6	100nF	ceramic capacitor	0603
C7	10nF	ceramic capacitor	0603
C8	10uF	ceramic capacitor	0603
C9	10uF	ceramic capacitor	0603
J1	Hotend	connector	4PIN/5MMPITCH/TERMINALBLOCK
K2	Carriage PCB	connector	12PIN/1MMPITCH/FFC/FPC
R1	2.2K	resistor	0603
R2	2.2K	resistor	0603
R3	10K	resistor	0603
R4	10K	resistor	0603
R5	5.49K	resistor	0603
R6	100	resistor	0603
R7	100	resistor	0603
U1	INA826	Instrumentation Amplifier	SOIC-8
X2	AOF	connector	JST-XH-02

Volterra RPi PCB

Part	Value	Device	Package
+24V	Supply input	connector	JST-XH-02
C1	C2012X5R1V226M125AC	ceramic capacitor, 22uF	0805
C2	TPSA475K010R1400	tantalum capacitor, 4.7uF	1206
C3	C2012X5R1V226M125AC	ceramic capacitor, 22uF	0805
D1	DDZ10CSF-7	Zener Diode, 10V 500mW	SOD-323F-2
D2	DDZ10CSF-7	Zener Diode, 10V 500mW	SOD-323F-1
D3	DDZ10CSF-7	Zener Diode, 10V 500mW	SOD-323F-0
D4	DDZ10CSF-7	Zener Diode, 10V 500mW	SOD-323F-1
D5	DDZ10CSF-7	Zener Diode, 10V 500mW	SOD-323F-2
D6	SS36-E3/57T	Schottky Diode, 3A max, 60V	DO-214AB SMC
D7	SMBJ5.0A-E3/52	TVS Diode, 600W	DO-214AA SMB
DOOR	Door lock	connector	JST-XH-04
F1	MF-MSMF250/16X-2	PTC resettable fuse	1812
FS	Filament sensor PCB	connector	JST-XH-03
GPIO	Raspberry Pi GPIO	connector	PINHEAD-2X20
L1	SRP1265A-470M	Shielded SMD inductor	SRP1265A
LM2596	LM2596S	Power converter	TO263-5
R1	220	resistor	0603
R2	100K	resistor	0603
R3	220	resistor	0603
R4	100K	resistor	0603
R5	220	resistor	0603
R6	100K	resistor	0603
R7	220	resistor	0603
R8	100K	resistor	0603
R9	220	resistor	0603
R10	100K	resistor	0603
R11	100K	resistor	0603
R12	100K	resistor	0603
R13	100K	resistor	0603
SG1	F/CM12P	Piezo buzzer	F/CM12P
T1	NDT2955	P MOSFET, Id 2.5A	SOT223
T2	MMBT3904	NPN BJT	SOT23
T3	NDT2955	P MOSFET, Id 2.5A	SOT223
T4	MMBT3904	NPN BJT	SOT23
T5	NDT2955	P MOSFET, Id 2.5A	SOT223
T6	MMBT3904	NPN BJT	SOT23
T7	NDT2955	P MOSFET, Id 2.5A	SOT223
T8	MMBT3904	NPN BJT	SOT23
T9	NDT2955	P MOSFET, Id 2.5A	SOT223
T10	MMBT3904	NPN BJT	SOT23
T11	MMBT3904	NPN BJT	SOT23
TWR	Tower light	connector	JST-XH-05
VDISP	7" LCD	connector	JST-XH-02

Filament Sensor PCB

Part	Value	Device	Package
C1	0.1uF	ceramic capacitor	0603
C2	1uf	ceramic capacitor	0603
C3	0.1uF	ceramic capacitor	0603
C4	10uF	tantalum capacitor	1210
C5	0.1uF	ceramic capacitor	0603
C6	0.1uF	ceramic capacitor	0603
C7	0.1uF	ceramic capacitor	0603
C8	0.1uF	ceramic capacitor	0603
D1	CGRM4007-G	Rectifier diode	SOD-123 MINI-SMA
D2	CGRM4007-G	Rectifier diode	SOD-123 MINI-SMA
D3	Red	LED 3MM	LED_3MM
FS	RPi Board (O)	connector	JST-XH-03
JP1	Buzzer enable	connector	PINHEAD-1X3
R1	720R	resistor	0603
R2	100R	resistor	0603
R3	10k	resistor	0603
R4	10k	resistor	0603
R5	10k	resistor	0603
R6	10k	resistor	0603
R7	10k	resistor	0603
R8	100R	resistor	0603
SG1	F/CM12P	Piezo buzzer	F/CM12P
SJ1	Dual or single nozzle select	Solder jumper	SJW
U$1	NANO	Arduino	NANO
U2	LM317	LDO Regulator	SOT223
X1	Carriage Board (I)	connector	JST-XH-06
X2	ENC0	connector	JST-XH-06
X3	ENC1	connector	JST-XH-06

Fracktal Works Buck Converter

Part	Value	Device	Package
C1	C2012X5R1V226M125AC	ceramic capacitor, 22uF	0805
C2	TPSA475K010R1400	tantalum capacitor, 4.7uF	1206
D2	SS36-E3/57T	Schottky Diode	DO-214AB SMC
JP1	5V Output	connector	USB A-TYPE FEMALE
L1	SRP1265A-470M	Shielded SMD inductor	SRP1265A
LM2596	LM2596S	Power converter	TO263-5
X1	5V Output	connector	JST-XH-02

Julia RPi PCB

Part	Value	Device	Package
C1	C2012X5R1V226M125AC	ceramic capacitor, 22uF	0805
C2	TPSA475K010R1400	tantalum capacitor, 4.7uF	1206
C3	C2012X5R1V226M125AC	ceramic capacitor, 22uF	0805
D1	SS36-E3/57T	Schottky Diode, 3A max, 60V	DO-214AB SMC
D2	SMBJ5.0A-E3/52	TVS Diode, 600W	DO-214AA SMB
F1	MF-MSMF250/16X-2	PTC resettable fuse	1812
IC1	LM2596S	Power converter	TO263-5
JP1	Raspberry Pi GPIO	connector	PINHEAD-2X20
K1	Display board FFC	connector	FFC/FPC/34PIN/1MMPITCH
L1	SRP1265A-470M	Shielded SMD inductor	SRP1265A
X1	Filament Sensor 0	connector	JST-XH-03
X2	Filament Sensor 1	connector	JST-XH-04
X3	+24V Supply	connector	JST-XH-05