

BOM

Item #	Qty	Part	Value	Package	Description	MFG part#
SURFACE MOUNT (SMD) PARTS LIST						
1	8	R1, R2, R3, R4, R5, R6, R11, R12	0.27Ω	R1210	Resistor	<i>MCR25JZHFLR270</i>
2	6	R7, R8, R9, R29, R30, R31	100Ω	0603-RES	Resistor	<i>RC0603JR-07100RL</i>
3	14	R15, R17, R18, R19, R20, R21, R22, R23, R24, R26, R27, R28, R34, R35	1kΩ	0603-RES	Resistor	<i>RC0603JR-071KL</i>
4	11	R10, R13, R14, R16, R25, R32, R33, R36, R37, R38	4.7kΩ	0603-RES	Resistor	<i>RC0603JR-074K7L</i>
5	4	VR1, VR2, VR3, VR4	10kΩ Trimmer	TRIMMER-23A	10K Trim Pot	<i>23AR10KLFTR</i>
6	4	C5, C7, C9, C19	0.01uF	0603-CAP	Ceramic Capacitor	<i>C0603C103K5RACTU</i>
7	15	C4, C6, C8, C11, C14, C17, C18, C20, C21, C24, C26, C27, C28, C29, C30	0.1uF	0603-CAP	Ceramic Capacitor	<i>CL10F104ZO8NNNC</i>
8	4	C10, C12, C13, C23	0.47uF	0603-CAP	Ceramic Capacitor	<i>CL10B474KQ8NNNC</i>
9	8	C1, C2, C3, C15, C16, C25, C32, C33	4.7uF	C1210	Ceramic Capacitor	<i>CL32B475KBUYNNE</i>
10	4	D1, D2, D3, D4	BAT54C	SOT23	Diode (Comm Cathode)	<i>BAT54C</i>
11	4	LED2, PWR-5V, TX, TX1	GREEN	LED-0603	Green LED's	<i>LG Q971-KN-1</i>
12	5	CEN, SEN, SDR, RX, RX (XB)	YELLOW	LED-0603	Yellow LED's	<i>LY Q976-P1S2-36</i>
13	1	Y1	16MHz	RESONATOR-SMD	16MHz Resonator	<i>CSTCE16M0V53-R0</i>
14	4	IC1, IC2, IC3, IC5	DRV88251	HTSSOP28PWP	Stepper Driver	<i>DRV8825PWPR</i>
15	1	IC4	ATMEGA328	TQFP32-08	Atmega 32P	<i>ATMEGA328P-AUR</i>
16	1	U2	SPDT	10MSOP	IC SWITCH DUAL SPDT	<i>TS5A23157DGSR</i>

BOM

17	1	U\$6	5V @500mA	SOT223	IC REG LDO 5V 0.5A	UA78M05CDCY
18	1	U\$7	3V3 @500mA	SOT223	IC REG LDO 3.3V 0.5A	UA78M33CDCY
19	1	IC6	FT232RLSSOP	SSOP28DB	USB to UART	FT232RL-REEL
20	1	Q1	MOSFET-N	SOT23-3	NFET	2N7002TP
21	3	F1, F2, F3	200mA/400mA	PTC-1206	200mA PTC Fuse (30V)	0ZCJ0020FF2E
22	1	JP3	M05X2SMD	2X5-SMD SHROUD	IDC Header (Opt)	AWHW10-G-SMD-R
23	1	RESET	mom-SPST-NO	TACTILE SWITCH SMD	Mom PB Switch	RS-187R05A2-DS MT RT
24	2	Xbee/Wifi/Bluetooth connector 2mm x 10s			2mm x10p Headers	NPPN101BFLD
THROUGH-HOLE COMPONENTS						
25	1	J1		ATX 24p VERT	ATX Connector	442060007
26	1	AOUT		TERMINAL-3.5mm-4	4p 3.5mm Term Strip	OSTTE040104
27	3	XOUT,YOUT,ZOUT		TERMINAL-3.5mm-6	6p 3.5mm Term Strip	OSTTE060104
28	1	JP11		TERMINAL-3.5mm-9	9p 3.5mm Term Strip	OSTTE090104
29	1	JP12		TERMINAL-5mm-2	2p 5mm Term Strip	1935161
30	4	JP5, JP8, JP9, JP10		4p Header-2.54mm	4p Stepper Header	M20-9990445
31	1	USB		USB-B-PTH	USB B Jack	USB-B1HSB6
32	5	XSTEP,YSTEP,ZSTEP,ASTEP,ISP		2x3p Header-2.54mm	2x3p Jumper (male)	M20-9980346
33	12	MISC PARTS	N/A	N/A	Jumpers for STEP	969102-0000-DA

BOM

BOM

BOM

BOM

25
50