#	Reference	Value	Qty	Description	Product	Vendor
1	C1, C2	1uF	2	CAP CER 1UF 10V 10% X7R 0805	CC0805KKX7R6BB105	Yageo
2	C12, C17, C18	10uF	3	CAP CER 10UF 6.3V X5R 0805	CC0805KKX5R5BB106	Yageo
3	C13, C14	8pF	2	CAP CER 8PF 50V NPO 0805	CC0805DRNPO9BN8R0	Yageo
4	CLED1 - CLED20, C3-C7, C9	0.1 uF	24	CAP CER 0.1UF 16V X7R 0805	CL21B104KOANNNC	Yageo
5	D1:1 - D5:16	DIODE	73	1N4148 SOD123 DIODE	1N4148W-FDICT-ND	Diodes Inc
6	F1	PTC FUSE	1	PTC RESTTBLE 1.0A 6V CHIP 1206	OZCJ0100FF2E	Bel Fuse Inc
7	L2	4.7uH	1	FIXED IND 4.7UH 1.9A 84 MOHM SMD	SRN4018-4R7M	Bourns Inc
8	LED1:1	LED	76	2x3x4mm 1.8mm 3mm flangeless LED		
9	LEDG2 - LEDG9, LEDG11 - LEDG20	WS2812B	18	LED RGB WS2812B W/DVR 4SMD 10PK	WS2812B	WorldSemi
10	LEDI4	LED	1	0805 SMD LED		
11	P1	USB_CONN	1	USB Micro B Female	10103594-0001LF	Amphenol
12	P2	USB3		USB 3.0 A Female	1003-002-01100	CNC Tech
13	P3	USB3_MICRO		USB 3.0 Micro B Female	GSB343K33HR	Amphenol
14	R23. R24	330	2	RES SMD 330 OHM 1% 1/8W 0805	RC0805FR-07330RL	Yageo
15	R25	RLED	1	Resistor to set LED current select 0.1/I	RL0805FR-7W0R5L	Yageo
16	R3, R4	22	2	RES SMD 22 OHM 5% 1/8W 0805	RC0805FR-0722RL	Yageo
17	R9	10k	1	RES SMD 10K OHM 1% 1/8W 0805	RC0805FR-0710KL	Yageo
18	R5, R6	2.2k	2	RES SMD 2.2K OHM 1% 1/8W 0805	RC0805FR-072K2L	Yageo
19	R14	100k	2	RES SMD 100K OHM 1% 1/8W 0805	RC0805FR-07100KL	Yageo
20	RCL1, RI1-RI4	470	5	0805 Resistor for LED	RC0805FR-07470KL	Yageo
21	S1	TAC_SWITCH	1	SWITCH TACTILE SPST-NO 0.02A 15V	PTS525SM15SMTR2 LFS	C&K Components
22	S1:1 - S5:16	SW	73	MX Alps or compatible switch		•
23	U1	Atmega32u4	1	IC MCU 8BIT 32KB FLASH 44TQFP	ATMEGA32U4-AU	Atmel
24	U2	MCP23018	1	IC I/O EXPANDER I2C 16B 24SSOP	MCP23018-E/SS	Microchip
25	U3	IP4234CZ6	1	TVS DIODE 5.5VWM 6TSOP	IP4234CZ6	NXP
26	U4	74HC138	1	IC DECODER/DEMUX 3-8 LINE 16SOIC	74HC138D	NXP
27	U5	PAM2804	1	LED Driver IC 1 Output DC DC Buck 1A	PAM2804AAB010	Diodes Inc
28	X1	CRYSTAL	1	Crystal 16.0000MHz 15ppm 8pF 50 Ohm	NX3225SA-16.000MHZ-STD-CSR-1	NDK
#	Buzzer (Optional)					
1	BZ1	BUZZER	1	BUZZER MAGNETIC 3.6V 8.5MM SMD	SMT-0931-S-R	PUI Audio Inc
2	C8	0.1uF	1	CAP CER 0.1UF 16V X7R 0805	CL21B104KOANNNC	Yageo
3	R33	100	1	RES SMD 100 OHM 1% 1/8W 0805	RC0805FR-07100RL	Yageo
						-
#	Trackpoint (Optional)					
1	C20	2.2uF	1	CAP CER 2.2UF 10V X7R 0805	CC0805KKX7R6BB225	Yageo
2	R13	100k	1	RES SMD 100K OHM 1% 1/8W 0805	RC0805FR-07100KL	Yageo
3	R28, R31	4.7k	2	RES SMD 4.7K OHM 1% 1/8W 0805	RC0805FR-074K7L	Yageo
						-

CAP CER 1UF 10V 10% X7R 0805

ENCODER ROTARY

RES SMD 10K OHM 1% 1/8W 0805

CC0805KKX7R6BB105

PEC12R-4017F-N0024

RC0805FR-0710KL

Yageo

Yageo

Bourns Inc

**Rotary Encoder (Optional)** 

1uF

10k

ENCODER

2

2

1

C10, C11

R71, R72

S2