BOM REV



DATE	COMPANY	COMMENT 1	COMMENT 2

COMMENT 3	COMMENT 4	TOTAL PARTS
		140 (Unique 64)

Ref	Qty	Value	Footprint	Datasheet	Arrow Part Number	Description	Field4	Field5
						Field6	Field7	Field8
Height	Manufacturer_Name	Manufacturer_Part_Number						
[C] - Capacitors								
C1 C45	2	4.7uf	Capacitors_SMD:C_0805					
C2 C3 C5 C6 C8 C9 C11 C13 C14 C15 C16 C17 C18 C19 C20 C24 C25 C26 C27 C28 C29 C30 C31 C35 C36 C37 C38 C39 C40 C41 C42 C43	32	0.1uf	Capacitors_SMD:C_0805					
C4 C7 C10 C12	4	100uf	593D475X9035C2TE3:CAPPM6032X280N					
C21	1	1000uf	Capacitors_THT:CP_Radial_D8.0mm_P3.50mm					
C22 C33 C34	3	10uf	Capacitors_SMD:C_0805					
C23 C32	2	1uf	Capacitors_SMD:C_0805					
C46	1	22uf	Capacitors_SMD:C_0805					
[D] - Diodes								
D1	1	D_Schottky	Diodes_SMD:D_SMB					
[IC] - Integrated Circuit								
IC1	1	PI4ULS5V201TAEX	PI4ULS5V201TAEX:SOT95P280X115-6N	http://www.diodes.com/assets/Datasheets/PI4ULS5V201.pdf	PI4ULS5V201TAEX	1-Bit Bi-directional Level Shifter with Automatic Sensing		1.15
Pericom	PI4ULS5V201TAEX							
IC2	1	TPS63001DRCR	Housings_SON:VSON-10-1EP_3x3mm_Pitch0.5mm_ThermalPad	http://www.ti.com/lit/gpn/tps63001		96% Buck-Boost Converter with 1.7A Current Switches 3.3V fixed Output voltage in 3x3 QFN	Texas Instruments	TPS63001DRCR
IC3	1	MIC2876-5.5YMT-T5	Housings_DFN_QFN:DFN-8-1EP_2x2mm_Pitch0.5mm	http://www.microchip.com/mymicrochip/filehandler.aspx?ddocname=en580787	MIC2876-5.5YMT-T5	Linear Voltage Regulators 120Vin 150mA Ultra-Low Iq High-PSRR Linear Requlator	Microchip	0.6 MIC2876-5.5YMT-T5
[J] -								
J1	1	USB_MINI_B	Connectors:USB_Mini-B					
J2	1	NUMLK	Pin_Headers:Pin_Header_Straight_1x02_Pitch2.54mm					
J3	1	LIPO	Pin_Headers:Pin_Header_Straight_1x02_Pitch2.54mm					

J4	1	LED	Pin_Headers:Pin_Header_Straight_1x02_Pitch2.54mm					
J5	1	STM32_PROG	Pin_Headers:Pin_Header_Straight_2x04_Pitch2.54mm					
J6	1	TFT	Socket_Strips:Socket_Strip_Straight_1x14_Pitch2.54mm					
J7	1	ICSP	Pin_Headers:Pin_Header_Straight_2x03_Pitch2.54mm					
J8	1	BOOT	Pin_Headers:Pin_Header_Straight_1x03_Pitch2.54mm					
J9	1	SD	Socket_Strips:Socket_Strip_Straight_1x04_Pitch2.54mm					
J10	1	PWR						

[L] - Inductors

L1	1	2.2uh	LQH3NPN2R2MJ0L:INDC3030X120N					
L2	1	1uh	calculator:1uh					

[LED] -

LED1 LED2 LED3 LED4 LED5 LED6 LED7 LED8 LED9 LED10 LED11 LED12 LED13 LED14 LED15 LED16 LED17 LED18 LED19 LED20 LED21 LED22 LED23 LED24	24	APA102	apa102:SON75P200X200X100-6N	https://componentsearchengine.com/Datasheets/1/COM-14608.pdf	APA102	SparkFun Accessories SMD LED - RGB APA102-2020		1
		SparkFun	APA102					

[Q] - Transistors

Q1 Q2	2	DMP1045U	TO_SOT_Packages_SMD:SOT-23	Diodes Inc.			Warning	0.14 USD
				SOT-23 Diodes Inc.	MOSFET P CH W ESD 12V SOT23; Transistor Polarity: P Channel; Continuous Drain Current Id: 5.2A; Drain Source Volt...	DMP1045U		

[R] - Resistors

R1 R21	2	1m	Resistors_SMD:R_0805					
R2	1	33k	Resistors_SMD:R_0805					
R3 R4 R7 R9 R12 R14 R17 R20	8	10k	Resistors_SMD:R_0805					
R5	1	1.5k	Resistors_SMD:R_0805					
R6 R8	2	22	Resistors_SMD:R_0805					
R10 R11	2	470	Resistors_SMD:R_0805					
R13 R16 R22	3	100k	Resistors_SMD:R_0805					
R15	1	4.7k	Resistors_SMD:R_0805					
R18	1	220	Resistors_SMD:R_0805					
R19	1	100	Resistors_SMD:R_0805					

[S] -

S1	1	RESET	TL3342F160QG:SW_TL3342F160QG	TL3342 Series SPST 1.6 N Round Button Gull Wing Surface Mount Tactile Switch	0.41 USD	E-Switch	Good None	TL3342F160QG
S2 S3	2	DPDT	MFS201N-16-Z:MFS201N-16-Z	TE			Switch Slide ON None ON DPDT Top Slide 0.3A 125VAC PC Pins Bracket Mount/Through Hole Tray	None 1825289-1 Good 1.05 USD

[SW] -

SW1	1	F1	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW2	1	1	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW3	1	F2	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW4	1	2	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW5	1	F3	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW6	1	3	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW7	1	F4	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW8	1	enter	Button_Switch_Keyboard:SW_Cherry_MX1A_2.00u_Vertical_PCB				
SW9	1	NUMLK	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW10	1	0	Button_Switch_Keyboard:SW_Cherry_MX1A_2.00u_PCB				
SW11	1	/	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW12	1	point	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW13	1	*	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW14	1	BACK	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW15	1	7	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW16	1	8	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW17	1	9	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW18	1	-	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW19	1	4	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW20	1	5	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW21	1	6	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				
SW22	1	+	Button_Switch_Keyboard:SW_Cherry_MX1A_1.00u_PCB				

[U] - Semiconductors

U1 U2	2	TCA9555PWR	Housings_SSOP:TSSOP-24_4.4x7.8mm_Pitch0.65mm				
U3	1	STM32F103C8T6	Housings_QFP:LQFP-48_7x7mm_Pitch0.5mm	STMicroelectronics		LQFP-48 STMicroelectronics	Good Mainstream Performance line ARM Cortex-M3 MCU with 64 Kbytes Flash 72 MHz CPU motor control USB and CAN
3.78 USD	STM32F103C8T6						
U4	1	ATTINY85-20SU	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm				
U5	1	MCP73831	TO_SOT_Packages_SMD:SOT-23-5				

[Y] -

Y1	1	8mhz	CSTCE8M00G55-R0:CSTCE12M0G55-R0				

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