

Circuit Monkey**Epoch – 16-ch Vibe Controller****Rev. A (04/2023)**

Part	Value	Package	Description
C1	0.1uF	0603-CAP	Capacitor
C2	0.1uF	0603-CAP	Capacitor
C3	22uF/16V	1210-CAP	Capacitor
C4	22uF/16V	1210-CAP	Capacitor
C5	22uF/16V	1210-CAP	Capacitor
C6	22uF/16V	1210-CAP	Capacitor
C7	22uF/16V	1210-CAP	Capacitor
C8	22uF/16V	1210-CAP	Capacitor
C9	22uF/16V	1210-CAP	Capacitor
C10	22uF/16V	1210-CAP	Capacitor
R1	330	0603-RES	Resistor
R2	100K	0603-RES	Resistor
R3	1K	0603-RES	Resistor
R4	10K	0603-RES	Resistor
R5	100K	0603-RES	Resistor
R6	10K	0603-RES	Resistor
F_LED	Belfuse 0ZCJxxx	BELFUSE-1206	Fuse, 100mA
F_PWM	Belfuse 0ZCJxxx	BELFUSE-1206	Fuse, 750mA
Q1	P-FET, 20V, 2A	SOT-23	P-FET (PFET)
PWM	16-CH PWM Driver	QFN-32	16-CHANNEL LED DRIVER
J1		MOLEX-105314-XX08	8-pin, Nanofit, 2-ROW, RA, SMD
J2		MOLEX-105314-XX08	8-pin, Nanofit, 2-ROW, RA, SMD
J3		MOLEX-105314-XX08	8-pin, Nanofit, 2-ROW, RA, SMD
J4		MOLEX-105314-XX08	8-pin, Nanofit, 2-ROW, RA, SMD
LCD-SCKTHeader			Header, 14P, VERT, FEM
SDCARD	MOLEX_1040310811	MOLEX_1040310811_USD	MICRO-SD
SW	SPDT	CK_TS01C	Switch,Slide, SPDT, PCB
HUZ	Huzzah, ESP32	ADAFRUIT_HUZZAH32	AdaFruit Huzzah32
LCD	LCD,320x240,3.2in	LCD-320X240-DIANN-3.2	LCD, 320x240, Touch, 3.2-inch

Parts Cost :

Cables
Conn
Wire

Molex Housing, 8P
Wire with crimped pin

<u>COST01</u>	<u>COST10</u>	<u>COST100</u>	<u>HAVE</u>	<u>MFR</u>	<u>MPN</u>
\$0.12	\$0.09	\$0.05			
\$0.12	\$0.09	\$0.05			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.25	\$0.20	\$0.10			
\$0.10	\$0.05	\$0.02			
\$0.10	\$0.05	\$0.02			
\$0.10	\$0.05	\$0.02			
\$0.10	\$0.05	\$0.02			
\$0.10	\$0.05	\$0.02			
\$0.10	\$0.05	\$0.02			
\$0.22	\$0.14	\$0.10 Mouser	Belfuse		0ZCJ0010FF2E
\$0.25	\$0.23	\$0.19 Mouser	Belfuse		0ZCJ0075FF2C
\$0.45	\$0.35	\$0.25 Mouser	Generic		FDN340P
\$3.50	\$3.10	\$2.60 Mouser	Texas Instruments		TLC59401RHB
\$2.00	\$1.70	\$1.50 Mouser	Molex		
\$2.00	\$1.70	\$1.50 Mouser	Molex		
\$2.00	\$1.70	\$1.50 Mouser	Molex		
\$2.00	\$1.70	\$1.50 Mouser	Molex		
\$0.30	\$0.20	\$0.10	Tayda		
\$2.25	\$1.90	\$1.60	Molex		1040310811
\$5.00	\$4.00	\$2.00	C&K		TS01C*
\$20.00	\$18.00	\$16.00 Mouser	AdaFruit		3405
\$16.00	\$14.00	\$8.00	DIANN		
\$58.81	\$50.80	\$37.86			

\$0.30	\$0.30	\$0.25	Molex	105308-1208
\$0.19	\$0.19	\$0.16	Molex	105300-1200

epoch-bom-rev-a

LINK

1210/47uF/10V have

ZXMP3A13FTA

<https://www.mouser.com/ProductDetail/Texas-Instruments/TLC59401RHBR>