

High Impedance Buffer Rev1 Bill of Materials

2019-08-31

Part #	Quantity	Designators	Manufacturer	Description
PJ-102AH	1	J1	CUI Inc.	Jack for 2.1mm ID, 5.5mm OD barrel plug
WAU20-200	1	—	Triad Magnetics	120VAC 60Hz input, 20VAC 200mA output wall adapter. 2.1mm ID, 5.5mm OD barrel plug
0679L0250-05	1	F1	Bel Fuse	250mA 125V fast fuse, 2410 case
SMBJ36CA-13-F	1	D3	Diodes Inc.	36V V_{WM} bidirectional TVS diode, SMB case
NRVTSA4100ET3G	2	D4, D5	ON Semiconductor	100V low leakage, low V_F Schottky diode, SMA case
EEV-TG1H471M	2	C5, C6	Panasonic	470 μ F, 50V, 125°C, low ESR electrolytic capacitor
CKG57NX7R2A106M500JH	4	C3, C4, C9, C10	TDK	10 μ F, 100V, X7R, dual stacked J-Lead capacitor
SMBJ18A	2	D1, D2	Taiwan Semiconductor	18V V_{WM} unidirectional TVS diode, SMB case
TPS7A4901DGNR	1	U1	Texas Instruments	36V linear regulator, 8-MSOP-EP
TPS7A3001DGNR	1	U2	Texas Instruments	36V negative linear regulator, 8-MSOP-EP
GRM1885C1H103JA01D	4	C1, C2, C7, C8	Murata Electronics	10nF 50V NP0 capacitor, 0603 case
DPAD1	4	D6–D9	Linear Systems	Dual 45V picoamp diode, TO-78-5L case
CC0805KRX7R9BB104	4	C13–C16	Yageo	100nF 50V X7R capacitor, 0805 case
CL31B105KBHNNNE	4	C11, C12, C17, C18	Samsung Electro-Mechanics	1 μ F 50V X7R capacitor, 1206 case
OPA192IDR	2	U3, U4	Texas Instruments	\pm 18V low offset, low bias current, high input impedance rail-to-rail op amp
CMDD6001	4	D10–D13	Central Semiconductor	75V Low leakage diode, SOD323 case

Part #	Quantity	Designators	Manufacturer	Description
MMBZ27VAL,215	2	D14, D15	Nexperia	Dual (common anode) low leakage 22V V_{WM} TVS diode, SOT23-3 case
1776540	1	J2	Phoenix Contact	6 position, 5.08mm pitch right angle socket for terminal block plug
1778027	1	—	Phoenix Contact	6 position 5.08mm pitch terminal block plug, screw clamp
ERA-3ARB622V	2	R1, R2	Panasonic	6.2k Ω $\pm 0.1\%$ $\pm 10\text{ppm}/^\circ\text{C}$ 0.1W resistor, 0603 case
RQ73C1J88K7BTD	2	R3, R4	TE Connectivity	88.7k Ω $\pm 0.1\%$ $\pm 10\text{ppm}/^\circ\text{C}$ 0.1W resistor, 0603 case
CRCW25122R20JNEG	2	R5, R6	Vishay Dale	2.2 Ω $\pm 5\%$ $\pm 200\text{ppm}/^\circ\text{C}$ 1W resistor, 2512 case
CRCW251210K0FKEG	4	R7, R8, R11, R13	Vishay Dale	10k Ω $\pm 1\%$ $\pm 100\text{ppm}/^\circ\text{C}$ 1W resistor, 2512 case
RC2512FK-071KL	4	R9, R10, R12, R14	Yageo	1k Ω $\pm 1\%$ $\pm 100\text{ppm}/^\circ\text{C}$ 1W resistor, 2512 case
CRCW251220R0FKEG	2	R15, R16	Vishay Dale	20 Ω $\pm 1\%$ $\pm 100\text{ppm}/^\circ\text{C}$ 1W resistor, 2512 case
CRCW2512100RFKEG	2	R17, R18	Vishay Dale	100 Ω $\pm 1\%$ $\pm 100\text{ppm}/^\circ\text{C}$ 1W resistor, 2512 case
90380A005	6	S1–S6	McMaster-Carr	#2-28 thread, 0.25” long shank, 0.167” head diameter thread forming screw for plastics
94997A125	2	—	McMaster-Carr	M2.2 x 6.5c thread forming screw
93365A122	4	—	McMaster-Carr	#4-40 heat set threaded insert for plastic, 0.219” tall
90272A107	4	—	McMaster-Carr	#4-40 thread, 0.3125” long shank machine screw