

Bill of Materials

TI DESIGNS

TIPD194: Low-noise Precision Variable Reference

Item	Quantity	Designator	Description	Manufacturer	Part Number
1	5	C1, C7, C12, C17, C22	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	AVX	06035A101JAT2A
2	6	C2, C8, C11, C13, C18, C23	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	MuRata	GCM188R71H104KA57D
3	1	C3	CAP, TA, 10 μ F, 16 V, +/- 10%, 0.5 ohm, SMD	AVX	TPSB106K016R0500
4	3	C4, C5, C14	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	TDK	C1608X5R1E105K080AC
5	3	C9, C15, C19	CAP, CERM, 10uF, 25V, +/-10%, X5R, 1206	MuRata	GRM31CR61E106KA12L
6	3	C10, C16, C20	CAP, CERM, 1uF, 25V, +/-10%, X7R, 1206	AVX	12063C105KAT2A
7	4	J1, J2, J3, J4	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology, Inc.	ED555/2DS
8	1	J5	Header, 100mil, 20x2, Gold, TH	Samtec	TSW-120-07-G-D
9	1	JP1	Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S
10	1	R1	TRIMMER, 20K, 0.25W, SMD	Bourns	3224J-1-203 E
11	1	R2	RES, 0, 5%, 0.1 W, 0603	Yageo America	RC0603JR-070RL
12	19	R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21	RES, 10.0 k, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0710KL
13	4	TP1, TP3, TP4, TP5	Test Point, Multipurpose, Red, TH	Keystone	5010
14	1	TP2	Test Point, Compact, Red, TH	Keystone	5005
15	3	TP6, TP7, TP8	Test Point, Multipurpose, Black, TH	Keystone	5011
16	1	U1	Low Noise, Very Low Drift, Precision Voltage Reference, -40 to 125 degC, 8-pin SOIC(D), Green (RoHS & no Sb/Br)	Texas Instruments	REF5010AID
17	1	U2	High Precision, Low Noise Operational Amplifier, 5 to 36 V, -55 to 125 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	Texas Instruments	OPA227UA
18	1	U3	Single Output High PSRR LDO, 150 mA, Fixed 5 V Output, 2.5 to 6.5 V Input, with Low IQ, 6-pin WSON (DSE), -40 to 125 degC, Green (RoHS & no Sb/Br)	Texas Instruments	TPS71750DSER
19	1	U4	16-Bit, Parallel Input Multiplying Digital-to-Analog Converter, DB0028A	Texas Instruments	DAC8820
20	1	U5	High Precision, Low Noise Operational Amplifier, 5 to 36 V, -40 to 85 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	Texas Instruments	OPA2227UA