

Bill of Materials

TI DESIGNS

TIPD159: Voltage-Mode Multiplying DAC Reference Design

Item #	Quantity	Value	Designator	Description	Manufacturer	Part Number
1	1	10uF	C1	CAP, CERM, 10uF, 25V, +/-10%, X5R, 0805	TDK	C2012X5R1E106K125AB
2	6	1uF	C2, C4, C7, C11, C13, C16	CAP, CERM, 1 μ F, 25 V, +/- 10%, X5R, 0603	MuRata	GRM188R61E105KA12D
3	5	0.1uF	C3, C6, C10, C12, C15	CAP, CERM, 0.1 μ F, 25 V, +/- 10%, X5R, 0603	MuRata	GRM188R61E104KA01D
4	1	47uF	C5	CAP, CERM, 47uF, 25V, +/-20%, X5R, 1206	TDK	C3216X5R1E476M160AC
5	1	10uF	C8	CAP, CERM, 10 μ F, 25 V, +/- 20%, X5R, 0603	TDK	C1608X5R1E106M080AC
6	2		C9, C14	Not Installed		
7	3		J1, J2, J4	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology	ED555/2DS
8	1		J3	Header, TH, 100mil, 4x2, Gold plated, 230 mil above insulator	Samtec	TSW-104-07-G-D
9	2		JP1, JP2	Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S
10	1	1.50 ohm	R1	RES, 1.50 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031R50FKEA
11	2	0	R2, R3	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA
12	5		TP1, TP2, TP3, TP4, TP5	Test Point, Miniature, Red, TH	Keystone	5000
13	3		TP6, TP7, TP8	Test Point, Miniature, Black, TH	Keystone	5001
14	1		U1	12-Bit, Serial Input, Multiplying Digital-to-Analog Converter, DGS0010A	Texas Instruments	DAC7811IDGS
15	1		U2	Low-Noise, Very Low Drift, Precision Voltage Reference, D0008A	Texas Instruments	REF5025ID
16	2		U3, U4	High Precision OPERATIONAL AMPLIFIER, D0008A	Texas Instruments	OPA192U