

Bill of Materials

TI DESIGNS

TIPD149: 16-bit, 1MSPS, Data Acquisition System for Lowest Distortion and Noise

Item	QTY	Value	Ref Des	Description	Manufacturer	Part Number
1	1		N/A	Printed Circuit Board	Texas Instruments	6548605
2	9	1u	C1, C4, C5, C7, C10, C12, C19, C22, C23	Capacitor, X7R Ceramic +/-10%, 25WV, 0603	Murata	GRM188R71E105KA12D
3	5	0.1u	C2, C8, C11, C13, C21	Capacitor, X7R Ceramic +/-10%, 25WV, 0603	Murata	GRM188R71E104KA01D
4	1	10000p	C3	Capacitor, C0G Ceramic +/-5%, 25WV, 0603	TDK	C1608C0G1H103J
5	3	10u	C6, C9, C14	Capacitor, X7R Ceramic +/-10%, 10WV, 0805	Murata	GRM21BR71A106KE51L
6	3	1000p	C15, C17, C20	Capacitor, C0G Ceramic +/-5%, 50WV, 0603	Murata	GRM1885C1H102JA01D
7	2	10u	C16, C18	Capacitor, X7R Ceramic +/-10%, 16WV, 1206	TDK	C3216X7R1C106K
8	2		J1, J2 (Top)	Header 20 Pin SMT Plug, .100" Gold (2x10)	Samtec	TSM-110-01-L-DV-P
9	2		J1, J2 (Bottom)	Header 20 Pin SMT Socket, .100" Gold (2x10)	Samtec	SSW-110-22-F-D-VS-K
10	1		J3 (Top)	Header 10 Pin SMT Plug, .100" Gold (2x5)	Samtec	TSM-105-01-L-DV-P
11	1		J3 (Bottom)	Header 10 Pin SMT Socket, .100" Gold (2x5)	Samtec	SSW-105-22-F-D-VS-K
12	1		J4	CONN SMA JACK STRAIGHT PCB	Amphenol	132134
13	2		JP1, JP2	Header Strip, 3 pin .100" Gold (1x3)	Emerson	142-0701-201
14	2		JP3, JP4	Header Strip, 2 pin .100" Gold (1x2)	Samtec	TSW-103-07-L-S
15	6		R1, R14, R16, R27, R29, R30	Not Installed		
16	2	1k	R2, R3	Resistor, Metal Film Chip, 0.1%, 1/10W, 0603	Panasonic	ERA-3AEB102V
17	1	100	R4	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF1000V
18	2	4.7	R5, R6	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Vishay/Dale	CRCW06034R70FKEA
19	3	0.22	R7, R10, R17	Resistor, Thin Film Chip, 1%, 1/5W, 0603	Susumu	RL0816S-R22-F
20	2	1k	R8, R33	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF1001V
21	2	10	R9, R18	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Vishay/Dale	CRCW060310R0FKEA
22	3	20k	R11, R12, R32	Resistor, Metal Film Chip, 0.1%, 1/10W, 0603	Panasonic	ERA-3AEB203V
23	1	10k	R13	Resistor, Metal Film Chip, 0.1%, 1/10W, 0603	Panasonic	ERA-3AEB103V
24	4	0	R15, R21, R26, R28	Resistor, Thick Film Chip, 1/10W, 0603	Panasonic	ERJ-3GEY0R00V
25	5	47	R19, R20, R22, R23, R31	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF47R0V
26	2	10k	R24, R25	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF1002V
27	1		U1	IC ADC 16bit 1MSPS Pseudo-Diff 10-MSOP	TI	ADS8860IDGS
28	1		U2	IC OPAMP VFB R-R 95MHZ SOT23-5	TI	THS4281DBV
29	1		U3	IC LDO RGLTR 3.3V LN SOT-23-5	TI	TPS78833DBV
30	1		U4	IC OPAMP VFB RRO 205MHZ SOT23-6	TI	OPA836IDBV
31	1		U5	IC VREF SERIES PREC 4.5V 8-MSOP	TI	REF3240AIDBV
32	1		U6	IC OPAMP GP 5.5MHZ SGL SOT23-5	TI	OPA376AIDBV
33	1		U7	IC EEPROM 256KBIT 400KHZ 8TSSOP	Microchip	24LC256-I/ST
34	1		U8	IC OPAMP CHOP R-R 350KHZ SOT23-5	TI	OPA333AIDBV
35	3		N/A	0.100 Shunt - Black Shunts	3M	969102-0000-DA

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