

Bill of Materials

TI DESIGNS

TIPD115: Data Acquisition Optimized for Lowest Distortion, Lowest Noise, 18 bit, 1MSPS Reference Design

Item #	Quantity	Value	Designator	Description	Manufacturer	Part Number	Supplier Part Number 1
1	1		C1	Not Installed			
2	5	0.1u	C2, C10, C11, C14, C23	Capacitor, X7R Ceramic +/-10%, 25WV, 0603	Murata	GRM188R71E104KA01D	
3	1	10000p	C3	Capacitor, NP0 Ceramic +/-5%, 50WV, 0603	TDK	C1608C0G1H103J	
4	9	1u	C4, C5, C7, C8, C9, C12, C13, C21, C24	Capacitor, X7R Ceramic +/-10%, 25WV, 0603	Murata	GRM188R71E105KA12D	
5	3	10u	C6, C15, C22	Capacitor, X7R Ceramic +/-10%, 10WV, 0805	Murata	GRM21BR71A106KE51L	
6	3	1000p	C16, C18, C20	Capacitor, C0G Ceramic +/-5%, 50WV, 0603	Murata	GRM1885C1H102JA01D	
7	2	10u	C17, C19	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	2		J4, J5	CONN SMA JACK STRAIGHT PCB	Amphenol	132134	
					Emerson	142-0701-201	
13	2		JP1, JP2	Header Strip, 3 pin .100" Gold (1x3)	Samtec	TSW-103-07-L-S	
14	1		JP3	Header Strip, 2 pin .100" Gold (1x2)	Samtec	TSW-102-07-L-S	
15	7		R1, R2, R20, R24, R26, R34, R36	Not Installed			
16	4	1k	R3, R4, R5, R6	Resistor, Thin Film Chip, 0.1%, 1/10W, 0603	Panasonic	ERA-3AEB102V	
17	5	10	R7, R8, R9, R10, R22	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Vishay/Dale	CRCW060310R0FKEA	
18	3	0.22	R11, R16, R21	Resistor, Thin Film Chip, 1%, 1/5W, 0603	Susumu	RL0816S-R22-F	
19	3	1k	R12, R13, R37	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF1001V	
20	5	0	R14, R19, R23, R25, R30	Resistor, Thick Film Chip, 1/10W, 0603	Panasonic	ERJ-3GEY0R00V	
21	5	20k	R15, R17, R18, R27, R31	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF2002V	
22	5	47	R28, R29, R32, R33, R35	Resistor, Thick Film Chip, 1%, 1/10W, 0603	Panasonic	ERJ-3EKF47R0V	
23	1		U1	IC ADC 16-bit 1MSPS Fully Diff 10-MSOP	TI	ADS8861IDGS	
24	1		U2	IC VREF SERIES PREC 4.5V 8-MSOP	TI	REF5045IDGK	
25	1		U3	IC OPAMP CHOP R-R 350KHZ SOT23-5	TI	OPA333AIDBV	
26	1		U4	IC OPAMP VFB R-R 95MHZ SOT23-5	TI	THS4281DBV	
27	1		U5	IC OPAMP GP R-R CMOS SOT23-5	TI	OPA330AIDBV	
28	1		U6	IC REG LDO 3.3V .15A SOT-23-5	TI	TPS78833DBV	
29	1		U7	IC OPAMP DIFF R-R 145MHZ 8MSOP	TI	THS4521IDGK	
30	1		U8	IC EEPROM 256KBIT 400KHZ 8TSSOP	Microchip	24LC256-I/ST	

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