Bill of Materials

TI DESIGNS
TIPD169: 16-Bit 1MSPS Multiplexed Data Acquistion Reference Design

Item #	Quantity	Designator	Value	Description	Manufacturer	PartNumber
1	8	C1, C2, C3, C4, C9, C18, C21, C29	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	Kemet	C0603X104K3RACTU
2	2	C5, C6	22uF	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	MuRata	GRM31CR71A226KE15L
3	3	C7, C24, C32	100pF	CAP, CERM, 100pF, 50V, +/-1%, C0G/NP0, 0603	AVX	06035A101FAT2A
4	3	C8, C31, C34	10uF	CAP, CERM, 10 µF, 25 V, +/- 20%, X5R, 0603	TDK	C1608X5R1E106M080AC
5	1	C10	1200pF	CAP, CERM, 1200 pF, 50 V, +/- 5%, C0G/NP0, 0603	MuRata	GRM1885C1H122JA01D
6	5	C11, C14, C16, C33, C48	10uF	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	MuRata	GRM21BR71A106KE51L
7	0	C12	DNP	CAP, CERM, 4.7 pF, 50 V, +/- 5%, C0G/NP0, 0603	AVX	06035A4R7CAT2A
8	2	C13, C15	22uF	CAP, CERM, 22 µF, 16 V, +/- 20%, X5R, 1206	AVX	1206YD226MAT2A
9	19	C17, C19, C20, C22, C23, C25, C30, C35, C36, C37, C38, C39, C40, C41, C42, C43, C45, C46, C47	1uF	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0603	MuRata	GRM188R71A105KA61D
10	1	C26	1pF	CAP, CERM, 1 pF, 50 V, +/- 25%, C0G/NP0, 0603	AVX	06035A1R0CAT2A
11	2	C27, C28	100uF	CAP, CERM, 100 µF, 6.3 V, +/- 20%, X5R, 1206	MuRata	GRM31CR60J107ME39L
12	1	J1 (Top)		Header 20 Pin SMT Plug, .100" Gold (2x10)	Samtec	TSM-110-01-L-DV-P
13		J1 (Bottom)		Header 20 Pin SMT Socket, .100" Gold (2x10)	Samtec	SSW-110-22-F-D-VS-K
14	1	J2 (Top)		Header 10 Pin SMT Plug, .100" Gold (2x5)	Samtec	TSM-105-01-L-DV-P
15		J2 (Bottom)		Header 10 Pin SMT Socket, .100" Gold (2x5)	Samtec	SSW-105-22-F-D-VS-K
16	3	J3, J9, J10		Header, 100mil, 2x1, TH	Mill-Max	800-10-002-10-001000
17	1	J7		Header, 100mil, 4x2, Gold, TH	Samtec	TSW-104-07-G-D
18	3	J8, J12, J14		Header, 100mil, 3x1, Tin, TH	Sullins Connector Solutions	PEC03SAAN
19	1	J13		BNC female, 50 ohm, std profile, white	TE Connectivity	1-1337543-0
20	1	J15		BNC female, 50 ohm, std profile, white	TE Connectivity	1-1337543-0
21	1	J16		Conn Socket BNC straight 50 ohm PCB mount	AMP	1-1634505-0
22	2	R1, R2	4.99k	RES, 4.99 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-4991-B-T5
23	0	R12	DNP	RES, 511, 1%, 0.1 W, 0603	Vishay-Dale	CRCW0603511RFKEA
24	4	R3, R4, R13, R40	10.0	RES, 10.0 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0710RL
25	3	R5, R8, R14	0.22	RES, 0.22 ohm, 1%, 0.1W, 0603	Panasonic	ERJ-3RQFR22V
26	2	R6, R39	12.0	RES, 12.0, 1%, 0.1 W, 0603	Yageo America	RC0603FR-0712RL
27	2	R9, R10	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA
28	1	R11	20.0k	RES, 20.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060320K0FKEA
29	3	R15, R25, R33	10.0k	RES, 10.0k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD0710KL
30	1	R16	9.76k	RES, 9.76 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-9761-B-T5
31	1	R17	10.2k	RES, 10.2 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-1022-B-T5
32	1	R18	22.6k	RES, 22.9k ohm, 0.1%, 0.1W, 0603	Yageo America	RT0603BRD0722K9L
33	1	R19	1.07k	RES, 1.07 k, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-1071-B-T5
34	3	R20, R21, R23	47.0	RES, 47.0, 0.1%, 0.1 W, 0603	Susumu Co Ltd	RG1608P-470-B-T5
35	2	R24, R30	10.0	RES, 10.0, 0.1%, 0.1 W, 0603	Vishay-Dale	TNPW060310R0BEEA
36	5	R7, R26, R27, R28, R43	0	RES, 0 ohm, 5%, 0.1W, 0603	Yageo America	RC0603JR-070RL
37	1	R38	1.00k	RES, 1.00k ohm, 0.1%, 0.1W, 0603	Susumu Co Ltd	RG1608P-102-B-T5
38	1	S1		SWITCH TACTILE SPST-NO 0.05A 12V	Omron Electronic Components	B3U-1000P
39	1	U1		SINGLE-CHANNEL 2:1 MULTIPLEXER	Texas Instruments	TS5A3159ADCK
40	2	U2, U3		Precision, 20 MHz, RRIO, CMOS Operational Amplifier	Texas Instruments	OPA320AIDBVT
41	1	U4		IC, Single Schmitt-Trigger Inverter	Texas Instruments	SN74LVC1G14DCK
42	1	U5		High Bandwidth, High-Precision, Low THD+N, 16-Bit ADC Driver	Texas Instruments	OPA625IDBVR
43	1	U6		16-Bit, 1-MSPS, Single-Ended Input, SAR Analog-to-Digital Converter	Texas Instruments	ADS8860IDGSR
44	2	U7, U10		Low Noise, Very Low Drift, Precision Voltage Reference	Texas Instruments	REF5045AIDGKR
45	1	U8		1.8-V, microPower, CMOS Operational Amplifiers, Zero-Drift Series	Texas Instruments	OPA333AIDBV
46	1	U9		VERY LOW-POWER, HIGH-SPEED, OPERATIONAL AMPLIFIER	Texas Instruments	THS4281DBVR
47	1	U12		IC, Dual 4 bit binary Counters	Texas Instruments	SN74LV393AD

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