



Bill of Materials

TI DESIGNS

TIPD168: Three 12-Bit Data Acquisition Reference Designs Optimized for Low Power and Ultra-Small Form Factor

Item #	Quantity	Designator	Value	Description	Manufacturer	Part Number
1	6	C1,C22,C23,C40,C41,C46	0.1uF	Capacitor, 0402, Ceramic, 0.1uF, 10V, 10%, X5R	MURATA	GRM155R61A104KA01
2	1	C2	2.2uF	Capacitor, 0402, Ceramic, 2.2uF, 4V, 20%, X5R	MURATA	GRM155R60G225ME15D
3	6	C3,C38,C39,C54,C55,C58	1uF	Capacitor, 0402, Ceramic, 1uF,10V,10%,X7S	TDK	C1005X7S1A105K050BC
4	1	C4	0.22uF	Capacitor, 0402, Ceramic, 0.22uF,16V,10%	MURATA	GRM155R71C224KA12
5	5	C5,C7,C9,C11,C52	10uF	Capacitor, 0603, Ceramic, 10uF,6.3V,20%,X5R	MURATA	GRM188R60J106ME47D
6	2	C17,C27	1500pF	Capacitor, 0402, Ceramic, 1500pF,50V,5%,C0G/NP0	KEMET	C0402C152J5GACTU
7	2	C33,C34	15pF	Capacitor, 0402, Ceramic, 15pF,50V,1%,C0G/NP0	MURATA	GRM1555C1H150FZ01D
8	2	C36,C37	10000pF	Capacitor, 0402, Ceramic, 10000pF,50V,10%,X7R	MURATA	GRM155R71H103KA88D
9	3	C56,C57,C59	47uF	Capacitor, 0805, Ceramic, 47uF,6.3V,20%,X5R	MURATA	GRM21BR60J476ME15L
10	1	J1		Connector, Female, 50P, .8mmLS	SAMTEC	ERF8-025-01-L-D-RA-L-TR
11	1	J2		Connector, Micro SD Card,SMD,8P	TYCO ELECTRONIC	5025700893
12	1	J3		SMA Jack, Edge Mount, Gold, Straight, 50Ω	SAMTEC	SMA-J-P-X-ST-EM1
13	1	L1	1uH	Inductor, 2P, Power Choke 1uH, 30%	WURTH	744029001
14	2	P2,P4		UNINSTALLED	UNINSTALLED	HEADER,MALE,2PIN,.100CC
15	1	P3		Header W/Shunt,2P,100LS TL=.125	TYCO ELECTRONICS	103321-2
16	9	R1,R2,R3,R4,R5,R6,R7,R83,R85	10k	Resistor, 0402,10.0K,1%,1/16W	PANASONIC	ERJ-2RKF1002X
17	6	R12,R22,R62,R79,R80,R81	0k	Resistor, 0402,0Ω,1/16W, Zero Jumper	VENKEL	CR0402-16W-000T
18	2	R13,R14	1.5k	Resistor, 0402, Thick Film,5%,1/16W,1.5K	PANASONIC	ERJ-2GEJ152
19	3	R20,R21,R25	25.5	Resistor, 0402,25.5Ω,1%,1/16W	PANASONIC	ERJ-2RKF25R5X
20	5	R36,R38,R43,R64,R65	49.9	Resistor, 0402,49.9Ω,1/16W,1%, 100ppm	VISHAY	CRCW040249R9F100
21	1	R41	1M	Resistor, 0402, Thick Film,5%,1/16W,1.0M	PANASONIC	ERJ-2GEJ105
22	3	R44,R45,R71	1k	Resistor, 0402, Thick Film,30.1KΩ,1%,1/10W	PANASONIC	ERJ-2RKF3012X
23	1	R46	51.1k	Resistor, 0402,51.1K,1%,1/16W	PANASONIC	ERJ-2RKF5112X
24	3	R47,R75,R76	10	Resistor, 0402,10Ω,1/16W,1%,100ppm	VISHAY	CRCW040210R0F100
25	1	R48	99.7	Resistor, 0402, 88.7KΩ, 1/16W, 1%	VISHAY	CRCW040288K7FKED
26	5	R50,R54,R55,R78,R82		UNINSTALLED	UNINSTALLED	CRCW04020000Z0ED
27	1	R66	5.6k	Resistor, 0402, Thick Film,5%,1/16W,5.6K	PANASONIC	ERJ-2GEJ562
28	1	R74	16.2k	Resistor, 0402,16.2KΩ,1/16W,1%	VISHAY	CRCW040216K2FKED
29	1	R77	3.3k	Resistor, 0402,3.3K,1/16W,1%,100ppm	VISHAY	CRCW04023301F100
30	1	R84		UNINSTALLED	UNINSTALLED	CRCW04021002F100
31	5	TP1,TP2,TP3,TP4,TP5		Test point, Thru-hole, Miniature, 0.1LS,120TL, Black	KEYSTONE ELECTRONICS	5001
32	1	U1		IC, I2C Compatible, Serial EEPROM, TSSOP-8	ATMEL	AT24C02C-XHM
33	1	U2		IC,60mA, 5.0V, Buck/Boost Charge Pump, TSOT23-6	TEXAS INSTRUMENTS	REG71055DDC
34	2	U4,U5		1.2~5.5V,Ultralow Noise High PSRR Fast RF 100mA LDO Linear Regulator	TEXAS INSTRUMENTS	TPS79101DBVREP
35	1	U8		IC, Low-power SAR ADC, RUG-8, 1.5x1.5x0.4mm	TEXAS INSTRUMENTS	ADS7042RUG
36	1	U10		Ultralow Power Regulator	TEXAS INSTRUMENTS	OPA835IDBV

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37	1	U12		Single-Bit Dual-supply Bus Transceiver	TEXAS INSTRUMENTS	SN74AVCH1T45DBVR
38	1	U13		IC, 1.2A, High Efficient Step Down Converter with Snooze Mode, SON-8	TEXAS INSTRUMENTS	TPS62080DSG
39	1	U15		IC, Nanopower Supervisory Circuits, SOT23-5	TEXAS INSTRUMENTS	TPS3836K33DBVR
40	1	for J2		SanDisk microSDHC™ Card - 4GB	SANDISK	SDSDQ-004G-A11M