

## TI DESIGNS

TIPD212: 16-Bit 1MSPS Data Acquisition System with Isolated Inputs for High-Voltage Common Mode Rejection

Item	Manufacturer	Part Number		Reference Designators	Description
1	Samsung	CL21B106KOQNNNE		C1, C2, C6, C7, C8, C9, C15, C24, C25, C31, C35, C43, C44	CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, 0805 140
2	TDK	C1608C0G1E103J		C10, C12, C16, C21, C27, C28, C33	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0603
3	TDK	C2012X7R1E105K		C13	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805
4	TDK	C1005X7R1H104K		C14	CAP, CERM, 0.1uF, 50V, +/-10%, C0G/NP0, 0402
5	TDK	C5750X7R1C476M23		C19, C20	CAP, CERM, 47 μF, 16 V, +/- 20%, X7R, 2220
6	Murata	GRM1885C1H102JA0		C23	CAP, CERM, 1000 pF, 50 V, +/- 5%, C0G/NP0, 0603
7	AVX	06033C104JAT2A		C3, C17, C32, C37	CAP, CERM, 0.1 µF, 25 V, +/- 5%, X7R, 0603
8	Murata	GRM188R71E105KA		C4, C18, C22, C29, C34, C36, C38, C39, C40, C42, C45, C46	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603
9	ON Semi	MBR0520LT1G		D1, D2, D3, D4, D5	Diode, Schottky, 20 V, 0.5 A, SOD-123
10	Kingbright	APT2012LZGCK		D6, D7, D8	LED, Green, SMD
11	Wurth	9774050360R		H5, H6	ROUND STANDOFF M3 STEEL 5MM
12	Samtec	QTH-030-01-L-D-A		J1	Header(Shrouded), 19.7mil, 30x2, Gold, SMT
13		142-0701-801		J2, J6	Connector, End launch SMA, 50 ohm, SMT
14	Phoenix Contact	1707027		J3	Terminal Block, 7.62mm, 2 Pos, TH
15	Samtec	HTSW-102-07-G-S		J4	Header, 100mil, 2x1, Gold, TH
16	CUI	PJ-102A		J5	Connector, DC Jack 2.1X5.5 mm, TH
17	Vishay Dale	CRCW040210K0FKE		R1, R2, R14, R15, R16, R17, R21, R22, R27, R41, R42, R59	RES, 10.0k ohm, 1%, 0.063W, 0402
18	Panasonic	ERJ-3RQFR47V		R10, R12, R53, R56	RES, 0.47, 1%, 0.1 W, 0603
19	Yageo	RC0603FR-07604KL		R23, R29	RES, 604 k, 1%, 0.1 W, 0603
20	Yageo	RC0603FR-07187KL		R24, R31	RES, 187 k, 1%, 0.1 W, 0603
21	Yageo	RC0603FR-071RL		R26	RES, 1.00, 1%, 0.1 W, 0603
22	Yageo	RC0603FR-07360KL		R28, R37	RES, 360k ohm, 1%, 0.1W, 0603
23	Vishay Dale	CRCW06030000Z0E		R3, R6, R47, R49	RES, 0, 5%, 0.1 W, 0603
24	Yageo	RC0603FR-07162KL	1	R30	RES, 162 k, 1%, 0.1 W, 0603
25	Stackpole	CSR1206FKR500	1	R32	RES, 0.5, 1%, 0.5 W, 1206
26	Yageo	RC0603FR-0749K9L	1	R34	RES. 49.9 k. 1%. 0.1 W. 0603
27	Vishav Dale	CRCW0603200KFKE		R38	RES, 200k ohm, 1%, 0.1W, 0603
28	Panasonic	FRJ-2GF0R00X		R4. R5. R7. R8. R9. R11. R13. R39. R40. R43. R44. R45. R46. R48. R50. R51. R52. R54. R55. R57. R58. R60	RES. 0. 5% 0. 068 W. 0402
29	Wurth	760390014	1	T1	Transformer, 475uH, SMT
30	Texas Instruments	ADS8681	2	U1. U11	16-Bit. 1MSPS, Single-Channel, Single-Supply, SAR ADC with Programmable, Bipolar Input Range.
31	Texas Instruments	ISO7640FMDW	2	U10, U12	150 Mbps 6 kVpk Low Power Quad Channels, Digital Isolator, 2.7 V / 3.3 V / 5 V, -40 to +125 degC, 16-pin SOIC (DW), Green (RoHS & no Sb/Br)
32	Texas Instruments	TPS7A4901DGN	3	U2, U4, U7	+36V, +150mA, Ultralow-Noise, Positive LINEAR REGULATOR, DGN0008D
33	Rohm Semi	BR24G32FVJ-3AGTE	1	U3	IC EEPROM I2C BUS 32KBIT 8TSSOP
34	Texas Instruments	TLV3012AIDCKR	1	U5	Nanopower, 1.8V, Comparator with Voltage Reference, DCK0006A
35	Texas Instruments	TPS22929DDBV		U6	Ultra-Small, Low on Resistance Load Switch with Controlled Turn-on, DBV0006A
36	Texas Instruments	SN6501DBVR	1	U8	Transformer Driver for Isolated Power Supplies, DBV0005A
37	Texas Instruments	SN74AUC17RGYR	2	U9, U13	HEX SCHMITT-TRIGGER BUFFER, RGY0014A

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