

Bill of Materials

TI DESIGNS

TIPD164: PLC Analog Input Module

Item #	Quantity	Designator	Value	Description	Manufacturer	Part Number
1	18	C1, C3, C5, C7, C8, C10, C14, C15, C18, C20, C21, C23, C26, C27, C28, C29, C30, C34	0.1uF CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603		MuRata	GRM188R71H104KA93D
2	2	C2, C9	100pF CAP, CERM, 100pF, 50V, +/-5%, COG/NPO, 0603		AVX	06035A101JAT2A
3	2	C4, C6	10uF CAP, TANT, 10uF, 50V, +/-10%, 0.8 ohm, 7343-43 SMD		Vishay-Sprague	293D106X9050E2TE3
4	2	C11, C25	22uF CAP, TANT, 22uF, 10V, +/-10%, 1.5 ohm, 6032-28 SMD		Vishay-Sprague	293D226X9010C2TE3
5	1	C12	10uF CAP, CERM, 10uF, 25V, +/-20%, X7R, 1210		TDK	C3225X7R1E106M
6	7	C13, C19, C22, C24, C31, C32, C33	0.047uF CAP CER 0.047UF 16V 20% X7R 0603		Johanson Dielectrics Inc	160X14W473MV4T
7	2	C16, C17	0.01uF CAP, CERM, 0.01uF, 50V, +/-5%, X7R, 0603		Kemet	C0603C103J5RACTU
8	2	D1, D2	15V Diode, TVS, Uni, 15V, 600W, SMB		Diodes Inc.	SMBJ15A-13-F
9	6	D3, D5, D6, D7, D8, D10	DIODE TVS 5.0V 130W		Diodes.inc	EDSD5V0S1BA
10	1	D4	TVS ESD PROT ULT LOW CAP SOD-923		ON Semiconductor	ESD9L5.0ST5G
11	1	D9	DIODE TVS ARRAY 15V SOD323		Bourns	CDSOD323-T15SC
12	2	FB1, FB2	FERRITE CHIP 600 OHM 200MA 0603		MuRata	BLM18HG601SN1D
13	1	J1	CONN SOCKET 50PIN .050 R/A SNGL		Mill-Max Manufacturing Corp.	851-43-050-20-001000
14	2	J2, J7	Terminal Block, 6A, 3.5mm Pitch, 3-Pos, TH		On-Shore Technology	ED555/3DS
15	3	J3, J4, J9	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH		On-Shore Technology	ED555/2DS
16	2	J5, J6	Header, TH, 100mil, 5x1, Gold plated, 230 mil above insulator		Samtec, Inc.	TSW-105-07-G-S
17	1	J8	CONN HEADER 2POS .050 T/H GOLD"		Samtec	TMS-102-02-G-S
18	10	R1, R4, R6, R7, R11, R13, R14, R16, R17, R20	249 RES, 249 ohm, 1%, 0.1W, 0603		Vishay-Dale	CRCW0603249RFKEA
19	1	R2	165k RES 165K OHM 1/10W .1% 0603 SMD		Panasonic Electronic Components	ERA-3AEB1653V
20	1	R3	51.1k RES, 51.1k ohm, 0.1%, 0.1W, 0603		Susumu Co Ltd	RG1608P-5112-B-T5
21	2	R5, R9	249 RES 249 OHM 1/10W .1% 0603 SMD		Susumu	RG1608P-2490-B-T5
22	1	R8	2.00k RES, 2.00k ohm, 0.1%, 0.1W, 0603		Susumu Co Ltd	RG1608P-202-B-T5
23	1	R10	0 RES, 0 ohm, 5%, 0.1W, 0603		Vishay-Dale	CRCW06030000Z0EA
24	1	R12	820 RES 8.2k OHM 1/16W .02% 0805		Susumu	RG2012V-822-P-T1
25	2	R15, R18	1 RES 1.00 OHM 1/8W 1% SMD 0603		Vishay Beyschlag	MCT06030C1008FP500
26	1	R19	249 RES 249 OHM 1/2W .1% 2010 SMD		Yageo	RT2010BK07249RL
27	1	R21	100k RES, 100k ohm, 1%, 0.1W, 0603		Vishay-Dale	CRCW0603100KFKEA
28	1	RTHM	2k THERMISTOR NTC 2K 5% 0603		Vishay-Dale	NTCS0603E3202JLT
29	1	U1	IC ADC 24BIT DEL/SIG LN 28TSSOP		Texas Instruments Inc	ADS1248IPW
30	1	U2	IC REG LDO ADJ .15A 8MSOP		Texas Instruments Inc	TPS7A4901DGNR
31	1	U3	IC VREF SERIES PREC 2.5V 8-MSOP		Texas Instruments Inc	REF5025IDGKT
32	1	U4	IC OPAMP DIFF 1.5MHZ SGL 8MSOP		Texas Instruments Inc	INA159AIDGKT
33	1	U5	IC OPAMP INSTR 1MHZ 8MSOP		Texas Instruments Inc	INA826AIDGKR

Item #	Quantity	Designator	Value	Description	Manufacturer	Part Number
33	1	U6		ISOLATOR DGTL 25MBPS 4CH 16SOIC	Texas Instruments Inc	ISO7641FCDW
33	1	U7		5 Mbps Dual Channels, 1 / 1, Digital Isolator	Texas Instruments	ISO7221BD

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