Texas Instruments

Bill of Materials

TI DESIGNS

TIPD116: Data Acquisition Block for ECG Systems, discrete LEAD I ECG implementation Reference Design

Item #	Quantity	Value	Designator	Description	Manufacturer	Part Number	Supplier Part Number 1
1	2		J1, J2	Connector, TH, SMA	Emerson Network Power	142-0701-201	
2	1		J7	Connector, Header, 10-Pos (10x2), Receptacle, 100x100-mil Pitch	Samtec, Inc.	SSW-105-22-F-D-VS-K	
3	1		J3	Connector, Receptacle, 100mil, 10x2, Gold plated, SMD	Samtec, Inc.	SSW-110-22-F-D-VS-K	
4	1		J9	Terminal Block, 6A, 3.5mm Pitch, 6-Pos, TH	On-Shore Technology, Inc.	ED555/6DS	
5	2		J4, J5	Header, TH, 100mil, 3x1, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-103-07-G-S	
6	2		J6, J8	Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-102-07-G-S	
7	1		J10	Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH	On-Shore Technology, Inc.	ED555/2DS	
8	1		CLP	CAP, 0.047uF, 0805, C0G	Kemet	C0805C473J3GACTU	
9	1		CD	CAP, CERM, 1000pF, 50V, +/-5%, C0G/NP0, 0603	Kemet	C0603C102J5GAC	
10	2		CB1, CB2	CAP, CERM, 0.01uF, 50V, +/-5%, C0G/NP0, 0805	MuRata	GRM2195C1H103JA01D	
11	1		Cref	CAP, CERM, 22uF, 6.3V, +/-20%, X5R, 0805	TDK	C2012X5R0J226M	
12	2		C19, C24	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	Kemet	C0805C106K8PACTU	
13	1		CF	CAP, CERM, 4700pF, 25V, +/-5%, C0G/NP0, 0805	TDK	C2012C0G1E472J	
14	1		CA	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0805	Taiyo Yuden	EMK212B7105KG-T	
15	1		C17	CAP, CERM, 1000pF, 50V, +/-5%, C0G/NP0, 0603	TDK	C1608C0G1H102J	
16	1		R24	RES, 10.0 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310R0FKEA	
17	1		Rs5	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA	
18	1		RG	RES, 10Meg ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310M0JNEA	
19	4		C16, C25, CF5, CS	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	TDK	C1608X7R1C105K	
20	2		R38, Rref1	RES, 1.00 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031R00FKEA	
21	3		R30, Riso1, Riso2	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	
22	3		RD1, RD2, RD3	RES, 1.00Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031M00FKEA	
23	9		R33, RA1, RB1, RB2, RG1, RG2, RLP1, RLP2, RR1	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	
24	4		Rs1, Rs2, Rs3, Rs4	RES, 49.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060349K9FKEA	
25	5		R18, R35, R40, R43, R46	RES, 0 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06030000Z0EA	
26	5		R31, R32, R34, R36, R39	RES, 47 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347R0JNEA	
27	4		CF1, CF2, CF3, CF4	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0,	AVX	06035A101JAT2A	
28	4		R23, R25, R26, R27	RES, 0 ohm, 5%, 0.063W, 0402	Panasonic	ERJ-2GE0R00X	
29	2		RF1, RF2	RES, 30.0k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-0730KL	
30	1		U10	1-MHz, Micro-Power, Low-Noise, RRIO,1.8-V	Texas Instruments	OPA313	
31	1		U11	18-bit 1MSPS SAR ADC	Texas Instruments	ADS8588	
32	1		U16	3.0V, 3.9uA, SC70-3, 30ppm/°C Drift	Analog Devices	REF3330	
33	6		C1, C9, C11, C21, CC1, CC2	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603,	Kemet	C0603C104K5RACTU	

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34	1		CR1	CAP, CERM, 2000pF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H202KA01D	
35	8		FID1, FID2, FID3, R17, R21,	Fiducial mark. There is nothing to buy or	N/A, N/A, N/A, Vishay-	N/A	
36	2		U1, U2	IC, 1.8V, microPOWER Op Amp Zero-Drift	TI	OPA2333IDGK	
37	1		U4	IC, 1.8V, microPower, CMOS Op Amp, Zerø-	TI	OPA333AIDBV	
38	1		U8	IC, 256K CMOS Serial EEPROM	Microchip	24xx256-I/ST	

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