Texas Instruments

Bill of Materi

TI DESIGNS

TIDM-BIOSIGNMONITOR

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1			Printed Circuit Board					
2	1	STD		Test Point, O.025"				TP_25MIL-SM	
3	1	STD		Test Point, O.025"				TP_25MIL-SM	
4	1	STD		Test Point, O.025"				TP_25MIL-SM	
5	1	STD		Test Point, O.025"				TP_25MIL-SM	
6	1	STD		Test Point, O.025"				TP_25MIL-SM	
7	1	STD		Test Point, O.025"				TP_25MIL-SM	
8	1	STD		Test Point, O.025"				TP_25MIL-SM	
9	1	STD		Test Point, O.025"				TP_25MIL-SM	
10	1	STD		Test Point, O.025"				TP_25MIL-SM	
11	1	STD		Test Point, O.025"				TP_25MIL-SM	
12	1	STD		Test Point, O.025"				TP_25MIL-SM	
13	1	STD		Test Point, O.025"				TP_25MIL-SM	
14	1	STD		Test Point, O.025"				TP_25MIL-SM	
15	1	STD		Test Point, O.025"				TP_25MIL-SM	
16	1	STD		Test Point, O.025"				TP_25MIL-SM	
17	1	STD		Test Point, O.025"				TP_25MIL-SM	
18	1	STD		Test Point, O.025"				TP_25MIL-SM	
19	1	STD		Test Point, O.025"				TP_25MIL-SM	
20	1	STD		Test Point, O.025"				TP_25MIL-SM	
21	1	STD		Test Point, O.025"				TP_25MIL-SM	
22	1	10uF		CAP, TA, 10 µF, 10 V, +/- 10%, 3.4 ohm, SMD	Vishay Sprague	293D106X9010A2TE	293D106X9010A2TE	3216-18	
23	1	10uF		CAP, TA, 10 µF, 10 V, +/- 10%, 3.4 ohm, SMD	Vishay Sprague	293D106X9010A2TE	293D106X9010A2TE	3216-18	
24	1	1uF		CAP, CERM, 1 µF, 6.3 V, +/- 20%, X5R, 0402	TDK Corporation	C1005X5R0J105M05	C1005X5R0J105M05	0402	
25	1	2.2uF		CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C225K05	Loading...	0402	
26	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
27	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
28	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
29	1	0.01uF		CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	TDK Corporation	C1005X7R1E103K05	Loading...	0402	
30	1	1uF		CAP, TA, 1 µF, 16 V, +/- 10%, 9.3 ohm, SMD	Vishay Sprague	293D105X9016A2TE	293D105X9016A2TE	3216-18	
31	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
32	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
33	1	10uF		CAP, TA, 10 µF, 10 V, +/- 10%, 3.4 ohm, SMD	Vishay Sprague	293D106X9010A2TE	293D106X9010A2TE	3216-18	
34	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	
35	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05	0402	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
36	1	1uF		CAP, TA, 1 µF, 16 V, +/- 10%, 9.3 ohm, SMD	Vishay Sprague	293D105X9016A2TE	293D105X9016A2TE3	3216-18	
37	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
38	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
39	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
40	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
41	1	2.2uF		CAP, CERM, 2.2 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C225K05	Loading...	0402	
42	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
43	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
44	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
45	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
46	1	2200pF		CAP, CERM, 2200 pF, 50 V, +/- 10%, X8R, 0402	TDK Corporation	C1005X8R1H222K05	Loading...	0402	
47	1	0.01uF		CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	TDK Corporation	C1005X7R1E103K05	Loading...	0402	
48	1	1uF		CAP, CERM, 1 µF, 6.3 V, +/- 20%, X5R, 0402	TDK Corporation	C1005X5R0J105M05	C1005X5R0J105M05(	0402	
49	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
50	1	0.47uF		CAP, CERM, 0.47 µF, 6.3 V, +/- 10%, X5R, 0402	Murata Electronics	GRM155R60J474KE1	GRM155R60J474KE1	0402	
51	1	33pF		CAP, CERM, 33 pF, 50 V, +/- 5%, C0G/NP0, 0603	TDK Corporation	C1608C0G1H330J08	C1608C0G1H330J08(	0603	
52	1	100uF		CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1206_190	TDK Corporation	C3216X5R1A107M16	C3216X5R1A107M16	1206_190	
53	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
54	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	Samsung Electro-M	CL05A106MQ5NUNC	Loading...	0402	
55	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
56	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
57	1	0.01uF		CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	TDK Corporation	C1005X7R1E103K05	Loading...	0402	
58	1	1uF		CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C105K05	C1005X5R1C105K05(	0402	
59	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
60	1	1uF		CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C105K05	C1005X5R1C105K05(	0402	
61	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
62	1	1500pF		CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0603	Kemet	C0603C152K5RACTU	C0603C152K5RACTU	0603	
63	1	3000pF		CAP, CERM, 3000 pF, 50 V, +/- 5%, C0G/NP0, 0603			GRM1885C1H302JA(	0603	
64	1	4700pF		CAP, CERM, 4700 pF, 10 V, +/- 10%, X5R, 0402			GRM155R61A472KA(	0402	
65	1	2200pF		CAP, CERM, 2200 pF, 50 V, +/- 10%, X8R, 0402	TDK Corporation	C1005X8R1H222K05	Loading...	0402	
66	1	4700pF		CAP, CERM, 4700 pF, 10 V, +/- 10%, X5R, 0402			GRM155R61A472KA(	0402	
67	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
68	1	2200pF		CAP, CERM, 2200 pF, 50 V, +/- 10%, X8R, 0402	TDK Corporation	C1005X8R1H222K05	Loading...	0402	
69	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
70	1	10uF		CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603	TDK Corporation	C1608X5R0J106M08	Loading...	0603	
71	1	0.1uF		CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1A104K05	C1005X5R1A104K05(	0402	
72	1	2200pF		CAP, CERM, 2200 pF, 50 V, +/- 10%, X8R, 0402	TDK Corporation	C1005X8R1H222K05	Loading...	0402	
73	1	2200pF		CAP, CERM, 2200 pF, 50 V, +/- 10%, X8R, 0402	TDK Corporation	C1005X8R1H222K05	Loading...	0402	
74	1	1uF		CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C105K05	C1005X5R1C105K05(	0402	
75	1	1uF		CAP, CERM, 1 µF, 16 V, +/- 10%, X5R, 0402	TDK Corporation	C1005X5R1C105K05	C1005X5R1C105K05(	0402	
76	1	3000pF		CAP, CERM, 3000 pF, 50 V, +/- 5%, C0G/NP0, 0603			GRM1885C1H302JA(	0603	
77	1	10pF		CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	AVX Corporation	06035A100JAT2A	06035A100JAT2A	0603	
78	1	10pF		CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	AVX Corporation	06035A100JAT2A	06035A100JAT2A	0603	
79	1	35V		Diode, Schottky, 35V, 0.1A, SOD-523F	Comchip Technolo	CDBU0130L	CDBU0130L	SOD-523F	
80	1	35V		Diode, Schottky, 35V, 0.1A, SOD-523F	Comchip Technolo	CDBU0130L	CDBU0130L	SOD-523F	
81	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	
82	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	
83	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
84	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	
85	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	
86	1	600 ohm		Ferrite Bead, 600 ohm @ 100MHz, 0.2A, 0603	Murata Electronics	BLM18HG601SN1D	BLM18HG601SN1D	0603	
87	1	4.7uH		Inductor, Shielded, Ferrite, 4.7uH, 1.2A, 0.14 ohm, SM	Coilcraft	EPL3015-472MLB	Loading...	EPL3015	
88	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
89	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
90	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
91	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
92	1	47k		RES, 47 k, 5%, 0.063 W, 0402	Vishay Dale	CRCW040247K0JNE	CRCW040247K0JNE	0402	
93	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
94	1	21.5k		RES, 21.5 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040221K5FKE	CRCW040221K5FKE	0402	
95	1	10.0k		RES, 10.0 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040210K0FKE	CRCW040210K0FKE	0402	
96	1	1.00Meg		RES, 1.00 M, 1%, 0.1 W, 0402	Panasonic Electron	ERJ-2RKF1004X	ERJ-2RKF1004X	0402	
97	1	11.8k		RES, 11.8 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040211K8FKE	CRCW040211K8FKE	0402	
98	1	8.06k		RES, 8.06 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW04028K06FKE	CRCW04028K06FKE	0402	
99	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
100	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
101	1	1.00Meg		RES, 1.00 M, 1%, 0.1 W, 0402	Panasonic Electron	ERJ-2RKF1004X	ERJ-2RKF1004X	0402	
102	1	200k		RES, 200 k, 1%, 0.1 W, 0402	Panasonic Electron	ERJ-2RKF2003X	ERJ-2RKF2003X	0402	
103	1	4.99k		RES, 4.99 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW04024K99FKE	CRCW04024K99FKE	0402	
104	1	1.00Meg		RES, 1.00 M, 1%, 0.1 W, 0402	Panasonic Electron	ERJ-2RKF1004X	ERJ-2RKF1004X	0402	
105	1	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
106	1	100k		RES, 100 k, 1%, 0.1 W, 0402	Loading...	Loading...	Loading...	0402	
107	1	100k		RES, 100 k, 1%, 0.1 W, 0402	Loading...	Loading...	Loading...	0402	
108	1	51.1k		RES, 51.1 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040251K1FKE	CRCW040251K1FKE	0402	
109	1	10.0Meg		RES, 10.0 M, 1%, 0.063 W, 0402	Vishay Dale	CRCW040210M0FKE	CRCW040210M0FKE	0402	
110	1	10.0Meg		RES, 10.0 M, 1%, 0.063 W, 0402	Vishay Dale	CRCW040210M0FKE	CRCW040210M0FKE	0402	
111	1	40.2k		RES, 40.2 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040240K2FKE	CRCW040240K2FKE	0402	
112	1	40.2k		RES, 40.2 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040240K2FKE	CRCW040240K2FKE	0402	
113	1	10.0Meg		RES, 10.0 M, 1%, 0.063 W, 0402	Vishay Dale	CRCW040210M0FKE	CRCW040210M0FKE	0402	
114	1	10.0Meg		RES, 10.0 M, 1%, 0.063 W, 0402	Vishay Dale	CRCW040210M0FKE	CRCW040210M0FKE	0402	
115	1	51.1k		RES, 51.1 k, 1%, 0.063 W, 0402	Vishay Dale	CRCW040251K1FKE	CRCW040251K1FKE	0402	
116	1	3.3k		RES, 3.3 k, 5%, 0.063 W, 0402	Vishay Dale	CRCW04023K30JNE	CRCW04023K30JNE	0402	
117	1	3.3k		RES, 3.3 k, 5%, 0.063 W, 0402	Vishay Dale	CRCW04023K30JNE	CRCW04023K30JNE	0402	
118	1			Single Output High PSRR LDO, 200 mA, Fixed 3 V Ou	Texas Instruments	TPS73030DBVR	None	DBV0005A_N	
119	1	LMP2231AMFE		Single Micropower Precision Op Amp	Texas Instruments	LMP2231AMFE	None	MF05A_L	
120	1			LOW INPUT VOLTAGE STEP-UP CONVERTER IN 6	Texas Instruments	TPS61220DCK	None	DCK0006A_N	
121	1			14 bit, digital, triaxial acceleration sensor with intelliger	Bosch	BMA280	None	LGA-12P	
122	1			Precision Micropower Shunt Voltage Reference, 3-pin	Texas Instruments	LM4041AIM3-1.2	None	MF03A_N	
123	1			The Texas Instruments Dynamic NFC Interface Transp	Texas Instruments	RF430CL331HCPW	None	PW0014A_M	
124	1			High-Accuracy, Low-Power, Digital Temperature Sens	Texas Instruments	TMP112AIDRL	None	DRL0006A	
125	1			Low-Power, 2-Channel, 24-Bit Analog Front-End for Bi	Texas Instruments	ADS1292RIPBS	None	PBS0032A_N	
126	1			Mixed-Signal Microcontrollers, RGC0064B	Texas Instruments	MSP430FR5889IRG(	None	RGC0064B	
127	1			Crystal, 32.768kHz, 12.5pF, SMD	EPSON	FC-12M 32.7680KA-A	FC-12M 32.7680KA-A	Epson_FC-12M	
128	0			Battery, Lithium Polymer, 3V, 25mAh	Solicore	Not Applicable	None	Flat_Battery	
129	0			Battery, Lithium Polymer, 3V, 25mAh	Solicore	Not Applicable	None	Flat_Battery	
130	0	39pF		CAP, CERM, 39pF, 50V, +/-5%, C0G/NP0, 0402	Murata Electronics	GRM1555C1H390JA(	GRM1555C1H390JA(	0402	
131	0			CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageRef	Not Applicable	Not Applicable	Not Applicable	0603	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
132	0			Fiducial mark. There is nothing to buy or mount.				Fiducial10-20	
133	0			Fiducial mark. There is nothing to buy or mount.				Fiducial10-20	
134	0			Fiducial mark. There is nothing to buy or mount.				Fiducial10-20	
135	0	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	
136	0	0		RES, 0, 5%, 0.063 W, 0402	Panasonic Electron	ERJ-2GE0R00X	ERJ-2GE0R00X	0402	

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