

# Bill of Materials

TI DESIGNS  
TIDA-00011

DESIGNATOR	QUANTITY	DESCRIPTION	Comp.Value	Package Size	MANUFACTURER	PART NUMBER	Remarks (DNI)	ALTERNATIVE MANUFACTURER	ALTERNATIVE PART NUMBER
C1, C2	2	CAP_CERAMIC, 220NF, 10%, 16V, X5R, SMT0402	220nF	0402	TAIYO YUDEN	EMK105BJ224KV-F	Y		
C3	1	CAP_CERAMIC, 33NF, 10%, 16V, X5R, SMT0402	33nF	0402	MURATA	GRM155R61C333KA01D	Y		
C4	1	CAP_CERAMIC, 470NF, 10%, 16V, X5R, SMT0402	470nF	0402	TDK	C1005X5R1C474K	Y		
C5, C7, C9, C10, C15, C16, C	15	CAP_CERAMIC, 0.1UF, 10%, 16V, X5R, SMT0402	0.1uF	0402	MURATA	GRM155R61C104KA88D	Y		
C6, C8	2	CAP_TANTALUM, 10UF, 20%, 6.3V, 6 OHM, SMT0603	10uF	C0603_POL	NICHICON	F980J106MMA	Y		
C11, C25	2	CAP_CERAMIC, 2.2NF, 10%, 50V, X5R, SMT0402	2.2nF	0402	TDK	C1005X5R1H222K	Y		
C12, C31	2	CAP_CERAMIC, 10NF, 10%, 25V, X5R, SMT0402	10nF	0402	TDK	C1005X5R1E103K	Y		
C13, C14, C17, C32	4	CAP_TANTALUM, 2.2UF, 20%, 10V, SMT0603	2.2uF	C0603_POL	ROHM SEMICONDUCTOR	TCMTA225M8R	Y		
C22	1	CAP_CERAMIC, 2.2NF, 10%, 50V, X7R, SMT0402	2.2nF	0402	YAGEO	CC0402KRX7R9BB222	Y		
C28, C35, C37	3	CAP_TANTALUM, 4.7UF, 20%, 16V, 12 OHM, SMT0603	4.7uF	C0603_POL	NICHICON	F981C475MMA	Y		
C29, C30	2	CAP_CERAMIC, 10PF, +/-0.25 pF, 25V, COG, SMT0402	10pF	0402	AVX	04023A100CAT2A	Y		
C33, C34	2	CAP_TANTALUM, 1UF, 20%, 16V, 10 OHM, SMT0603	1uF	C0603_POL	NICHICON	F981C105MMA	Y		
C36, C45	2	CAP_TANTALUM, 1UF, 20%, 25V, 10 OHM, SMT0603	1uF	C0603_POL	NICHICON	F981E105MMA	Y		
C42, C44, C52, C53, C55, C5	8	CAP_TANTALUM, 10UF, 20%, 10V, 7.5 OHM, SMT0603	10uF	C0603_POL	NICHICON	F981A106MMA	Y		
C43, C46	2	CAP_CERAMIC, 100NF, -20%TO+80%, 50V, Y5V, SMT0805	100nF	0805	YAGEO	CC0805ZRY5V9B8104	Y		
C48, C49	2	CAP_TANTALUM, 2.2UF, 20%, 10V, SMT0603	2.2uF	C0603_POL	VISHAY	Z98D226X0010M2T	Y		
C50	1	CAP_CERAMIC, 220NF, 10%, 50V, X7R, SMT0805	220nF	0805	AVX	08055C224KAT2A	Y		
C51, C54, C56, C60	4	CAP_CERAMIC, 10NF, 10%, 50V, X7R, SMT0805	10nF	0805	KEMET	C0805C103K5RACTU	Y		
D1, D7, D11	3	LED, GREEN, SMT0402	GREEN	LED_0402	KINGBRIGHT	APHHS1005CGCK	Y		
D2, D8	2	LED, BLUE, SMT0402	BLUE	LED_0402	PANASONIC	LNJ947W8CRA	Y		
D3, D4, D5, D6	4	DIODE, DUAL SWITCHING DIODE, 0.215A, 70V, SOT-323	BAV99W	SOT-323	ON SEMICONDUCTOR	BAV99W T1G	Y		
D9	1	DIODE, SCHOTTKY, 0.35A, 40V, SOD-123	SD103AW-13-F	D_SOD123	DIODES INC	SD103AW-13-F	Y		
D10	1	LED, RED, SMT0402	RED	LED_0402	KINGBRIGHT	APHHS1005SURCK	Y		
J1	1	CONNECTOR, PLUG OF NAILS CABLE, DUAL ROW, VERTICAL, 10-PIN	TC2050-IDC-NL-430	TC2050-IDC-NL	TAG CONNECT	TC2050-IDC-NL-430	N		
J2, J4	2	CONNECTOR, MICRO-USB AB, RECEPTACLE, RIGHT ANGLE, 5-PIN	ZX62D-AB-5P8	USB-ZX62D-AB-5P8_REVISED	HIROSE	ZX62D-AB-5P8	Y		
J3	1	CONNECTOR, HEADER, SINGLE ROW, RA, 6-PIN	GRP8061VWCN-RC	CONN_GRP8061VWCN	SULLINS	GRP8061VWCN-RC	N		
J5	1	CONNECTOR, HEADER, SINGLE ROW, VERTICAL, 2-PIN	PEC02SAAN	HDR100_1X2	SULLINS	PEC02SAAN	N		
J6	1	CONNECTOR, HEADER, SINGLE ROW, VERTICAL, 6-PIN	GRP8061VWVN-RC	HDR50_1X6	SULLINS	GRP8061VWVN-RC	N		
L1	1	INDUCTOR, CHOKE COIL WIRE WOUND, 0.37A, SMT1206, 4-PIN	DLW31SN900SQ2L	IND_1206-4P	MURATA	DLW31SN900SQ2L	Y		
L2	1	INDUCTOR, FERRITE, 10UH, 58MHZ, SMT-2 PIN	10UH	IND_LPS3010_SERIES	COILCRAFT	LPS3010-103MLB	Y		
L3, L4	2	INDUCTOR, POWER CHOKE COIL, 470UH, 10%, 0.34A, SMT0805	100uH	0805	KOA SPEER	SDR0805TTEB101K	Y		
R1, R2, R4, R5, R17, R18, R3	10	RESISTOR, THICK FILM, 3.3K, 5%, 0.1W, SMT0402	3.3K	0402	PANASONIC	ERJ-2GEJ332X	Y		
R2	1	RESISTOR, THICK FILM, 270K, 5%, 0.1W, SMT0402	270K	0402	PANASONIC	ERJ-2GEJ274X	Y		
R6, R7, R8, R10, R11, R12, R	15	RESISTOR, THICK FILM, 0, JUMPER, 0.1W, SMT0402	0	0402	PANASONIC	ERJ-2GE0R00X	N		
R9, R49, R51	3	RESISTOR, THICK FILM, 47K, 5%, 0.1W, SMT0402	47K	0402	PANASONIC	ERJ-2GEJ473X	Y		
R15	1	RESISTOR, THICK FILM, 1K, 5%, 0.1W, SMT0402	1K	0402	PANASONIC	ERJ-2GEJ102X	Y		
R19, R20	2	RESISTOR, THICK FILM, 27 OHM, 5%, 0.1W, SMT0402	27	0402	PANASONIC	ERJ-2GEJ270X	Y		
R21	1	RESISTOR, THICK FILM, 33K, 5%, 0.1W, SMT0402	33K	0402	PANASONIC	ERJ-2GEJ333X	Y		
R22	1	RESISTOR, THICK FILM, 1.4K, 1%, 0.1W, SMT0402	1.4K	0402	PANASONIC	ERJ-2RKF1401X	Y		
R23	1	RESISTOR, THICK FILM, 402 OHM, 1%, 0.1W, SMT0402	402	0402	PANASONIC	ERJ-2RKF4020X	Y		
R24	1	RESISTOR, THICK FILM, 1M, 5%, 0.1W, SMT0402	1M	0402	PANASONIC	ERJ-2GEJ105X	Y		
R25, R27, R32, R45	4	RESISTOR, THICK FILM, 10K, 5%, 0.1W, SMT0402	10K	0402	PANASONIC	ERJ-2GEJ103X	Y		
R26	1	RESISTOR, THICK FILM, 8.87K, 1%, 0.1W, SMT0402	8.87K	0402	PANASONIC	ERJ-2RKF8871X	Y		
R28, R39	2	RESISTOR, THICK FILM, 100K, 5%, 0.1W, SMT0402	100K	0402	PANASONIC	ERJ-2GEJ104X	Y		
R29	1	RESISTOR, THICK FILM, 1.8M, 5%, 0.1W, SMT0402	1.8M	0402	PANASONIC	ERJ-2GEJ185X	Y		
R30	1	RESISTOR, THICK FILM, 1.18K, 1%, 0.1W, SMT0402	1.18K	0402	PANASONIC	ERJ-2RKF1181X	Y		
R36, R37	2	RESISTOR, THICK FILM, 2, 0.1W, 5%, SMT0402	2	0402	PANASONIC	ERJ-2GEJ2R0X	N		
R38	1	RESISTOR, THICK FILM, 180K, 1%, 0.1W, SMT0402	180K	0402	PANASONIC	ERJ-2RKF1803X	Y		
R40, R42	2	RESISTOR, THICK FILM, 15K, 5%, 0.1W, SMT0402	15K	0402	PANASONIC	ERJ-2GEJ153X	Y		
R41, R43	2	RESISTOR, THICK FILM, 200K, 5%, 0.1W, SMT0402	200K	0402	PANASONIC	ERJ-2GEJ204X	Y		
R48	1	RESISTOR, THICK FILM, 150K, 5%, 0.1W, SMT0402	150K	0402	PANASONIC	ERJ-2GEJ154X	Y		
R50	1	RESISTOR, THICK FILM, 75K, 1%, 0.1W, SMT0402	75K	0402	PANASONIC	ERJ-2RKF7502X	Y		
R52	1	RESISTOR, THICK FILM, 130 OHM, 5%, 0.1W, SMT0402	130	0402	PANASONIC	ERJ-2GEJ131X	Y		
S1	1	SWITCH, LIGHT TOUCH, SIDE-OPERATIONAL, SMD	EVOPSD02K	SW_EVOP5-J	PANASONIC	EVOPSD02K	Y		
S2	1	SWITCH, SPDT, SLIDE, SMD	EG1257	SW_EG1257	E-SWITCH	EG1257	Y		

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U1, U3, U4, U5		IC, NVRAM MEMORY, SOIC-8	FM24V10-G1	FM24V10_SOIC8	RAMTRON	FM24V10-G1	Y		
U2		IC, MIXED SIGNAL MICROCONTROLLER, BGA-64	MSP430F5528YFF	YFF-64	TEXAS INSTRUMENTS	MSP430F5528YFFR	Y		
U6		IC, INTEGRATED ANALOG FRONT-END FOR HEART RATE MONITORS AND	AFE4400	QFN-40(RHA-42P)	TEXAS INSTRUMENTS	AFE4400	Y		
U9		IC, 4.0 LOW ENERGY SINGLE MODE CLASS 1 SoC MODULE, QFN-32	BR-LE4.0-S2A	BR-LE4.0-D2A	BLUE RADIOS	BR-LE4.0-S2A	Y		
U10		IC, AUTOSWITCHING POWER MUX, SON-8, DRB	TPS2115ADRB	DRB-8	TEXAS INSTRUMENTS	TPS2115ADRB	Y		
U11		IC, LOW-CAPACITANCE 2-Chan +15-kV ESD-PROTECTION ARRAY, SOP-4	TPD2E001DZDR	DZD	TEXAS INSTRUMENTS	TPD2E001DZDR	Y		
U12		IC, CAP-FREE, NMOS, 400mA LDO REGULATOR WITH REVERSE CURRENT	TPS73633DRB	DRB-8	TEXAS INSTRUMENTS	TPS73633DRB	Y		
U13		IC, 1.5A USB-FRIENDLY Li-Ion BATTERY CHARGER AND POWER-PATH MAN	BQ24072RGT	RGT16	TEXAS INSTRUMENTS	BQ24072RGT	Y		
U14		IC, SYSTEM-SIDE IMPEDANCE TRACK FUEL GAUGE WITH INTEGRATED SE	BQ27425-G1Y2F	Y2F-15	TEXAS INSTRUMENTS	BQ27425-G1Y2F	Y		
U15		IC, LOW INPUT BOOST CONVERTER WITH INTEGRATED POWER DIODE A	TPS61093DSK	DSK	TEXAS INSTRUMENTS	TPS61093DSK	Y		
U16		IC, LINEAR CONTROLLER, SOIC-16, DW	UC3833DW	DW16-A	TEXAS INSTRUMENTS	UC3833DW	Y		
U17, U18	2	IC, ULTRALOW NOISE, HIGH-PSRR, LDO REGULATOR, VIN 3V TO 35V, 150m	TPS7A4901DGN	DGN_8P	TEXAS INSTRUMENTS	TPS7A4901DGN	Y		
U19		IC, TRIPLE-AXIS MEMS GYROSCOPE, LGA-24	MPU-9150	LGA-4X4MM-24P	INVENSENSE INC	MPU-9150	Y		
Y1		CRYSTAL, PIEZO CERAMIC RESONATOR, 4.00 MHz, +/-0.1%, 39pF, SMD	4MHz	CRYSTAL-2X4.5MM_3P	MURATA	CSTCR4M00G15L99-R0	Y		
Y2		CRYSTAL, PIEZO CERAMIC RESONATOR, 8.00 MHz, SMD, 0.5%, 33pF, SMD	8MHz	RESONATOR-1.3X3.2-MURATA	MURATA	CSTCE8M00G55-R0	Y		
TP1, TP2, TP3, TP4, TP5, TP	8			TP_25MIL-SMT					
D1		PhotoDiode 350-1100nm Molded Lead Frame			OSI Optoelectronics	PIN-4.0-CSL			
D2		Dual Emitter Combination 660/905nm 2 leads / Back to back			OSI Optoelectronics	DLED-660/905-CSL-2			
J1		Header, TH, 50mil, 6x1, Tin plated, 118 mil above insulator			Mill-Max	850-40-006-10-001000			

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