Bill of Materials

<mark>ti designs</mark> TIDA-00010

							ALTERNATIVE	ALTERNATIVE PART
DESIGNATOR	QUANTITY DESCRIPTION	Comp.Value	Package Size	MANUFACTURER	PART NUMBER	Remarks (DNI)	MANUFACTURER	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 SEMICONDCTOR	TCM1A225M8R	Y		
222	1 CAP, CERAMIC, 2.2NF, 10%, 50V, X7R, SMT0402	2.2nF	0402	YAGEO	CC0402KRX7R9BB222	Y		
28, C35, C37	3 CAP, TANTALUM, 4.7UF, 20%, 16V, 12 OHM, SMT0603	4.7uF	C0603_POL	NICHICON	F981C475MMA	Y		
29, C30	2 CAP, CERAMIC, 10PF, +/-0.25 pF, 25V, C0G, SMT0402	10pF	0402	AVX	04023A100CAT2A	Y		
33, C34	2 CAP, TANTALUM, 1UF, 20%, 16V, 10 OHM, SMT0603	1uF	C0603_POL	NICHICON	F981C105MMA	Y		
36, C45	2 CAP, TANTALUM, 1UF, 20%, 25V, 10 OHM, SMT0603	1uF	C0603_POL	NICHICON	F981E105MMA	Y		
42, 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	CC0805ZRY5V9BB104	Y		
C48, C49	2 CAP, TANTALUM, 22UF, 20%, 10V, SMT0603	22uF	C0603_POL	VISHAY	298D226X0010M2T	Y		
50	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		
1, D7, D11	3 LED, GREEN, SMT0402	GREEN	LED_0402	KINGBRIGHT	APHHS1005CGCK	Y		
2, D8	2 LED, BLUE, SMT0402	BLUE	LED_0402	PANASONIC	LNJ947W8CRA	Y		
3, D4, D5, D6	4 DIODE, DUAL SWITCHING DIODE, 0.215A, 70V, SOT-323	BAV99W	SOT-323	ON SEMICONDUCTOR	BAV99WT1G	Y		
)	1 DIODE, SCHOTTKY, 0.35A, 40V, SOD-123	SD103AW-13-F	D_SOD123	DIODES INC	SD103AW-13-F	Y		
10	1 LED, RED, SMT0402	RED	LED_0402	KINGBRIGHT	APHHS1005SURCK	Y		
	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		
2, J4	2 CONNECTOR, MICRO-USB-AB, RECEPTACLE, RIGHT ANGLE, 5-PIN	ZX62D-AB-5P8	USB-ZX62D-AB-5P8_REVISED	HIROSE	ZX62D-AB-5P8	Y		
3	1 CONNECTOR, HEADER, SINGLE ROW, RA, 6-PIN	GRPB061VWCN-RC	CONN_GRPB061VWCN	SULLINS	GRPB061VWCN-RC	N		
5	1 CONNECTOR, HEADER, SINGLE ROW, VERTICAL, 2-PIN	PEC02SAAN	HDR100_1X2	SULLINS	PEC02SAAN	N		
5	1 CONNECTOR, HEADER, SINGLE ROW, VERTICAL, 6-PIN	GRPB061VWVN-RC	HDR50_1X6	SULLINS	GRPB061VWVN-RC	N		
1	1 INDUCTOR, CHOKE COIL WIRE WOUND, 0.37A, SMT1206, 4-PIN	DLW 31SN900SQ2L	IND_1206-4P	MURATA	DLW31SN900SQ2L	Y		
2	1 INDUCTOR, FERRITE, 10UH, 58MHZ, SMT-2 PIN	10UH	IND_LPS3010_SERIES	COILCRAFT	LPS3010-103MLB	Y		
3, L4	2 INDUCTOR, POWER CHOKE COIL, 470UH, 10%, 0.34A, SMT0805	100uH	0805	KOA SPEER	SDR0805TTEB101K	Y		
1, R2, R4, R5, R17, R18, R3	10 RESISTOR, THICK FILM, 3.3K, 5%, 0.1W, SMT0402	3.3K	0402	PANASONIC	ERJ-2GEJ332X	Y		
3	1 RESISTOR, THICK FILM, 270K, 5%, 0.1W, SMT0402	270K	0402	PANASONIC	ERJ-2GEJ274X	Y		
6, R7, R8, R10, R11, R12, R	15 RESISTOR, THICK FILM, 0, JUMPER, 0.1W, SMT0402	0	0402	PANASONIC	ERJ-2GE0R00X	N	_	
9, R49, R51	3 RESISTOR, THICK FILM, 47K, 5%, 0.1W, SMT0402	47K	0402	PANASONIC	ERJ-2GEJ473X	Y		
15	1 RESISTOR, THICK FILM, 1K, 5%, 0.1W, SMT0402	1K	0402	PANASONIC	ERJ-2GEJ102X	Y		
19, R20	2 RESISTOR, THICK FILM, 27 OHM, 5%, 0.1W, SMT0402	27	0402	PANASONIC	ERJ-2GEJ270X	Y		
21	1 RESISTOR, THICK FILM, 27 ONN, 536, 0.1W, SMT0402	33K	0402	PANASONIC	ERJ-2GEJ333X	Y		
22	1 RESISTOR, THICK FILM, 534, 53, 61, W, 5410402	1.4K	0402	PANASONIC	ERJ-2RKF1401X	Y		
23	1 RESISTOR, THICK FILM, 402 OHM, 1%, 0.1W, SMT0402	402	0402	PANASONIC	ERJ-2RKF4020X	Y		
24	1 RESISTOR, THICK FILM, 1M, 5%, 0.1W, SMT0402	102 1M	0402	PANASONIC	ERJ-2GEJ105X	Y	—	
225, R27, R32, R45	4 RESISTOR, THICK FILM, 10K, 5%, 0.1W, SMT0402	10K	0402	PANASONIC	ERJ-2GEJ103X	Y	—	
226	1 RESISTOR, THICK FILM, 8.87K, 1%, 0.1W, SMT0402	8.87K	0402	PANASONIC	ERJ-2RKF8871X	Y	—	
28, R39	2 RESISTOR, THICK FILM, 100K, 5%, 0.1W, SMT0402	100K	0402	PANASONIC	ERJ-2GEJ104X	Y		
29	1 RESISTOR, THICK FILM, 180, 5%, 0.1W, SMT0402	1.8M	0402	PANASONIC	ERJ-2GEJ185X	Y		
30	1 RESISTOR, THICK FILM, 1.8W, 5%, 0.1W, 5W10402	1.18K	0402	PANASONIC	ERJ-2GEJ185X ERJ-2RKF1181X		—	
36, R37	2 RESISTOR, THICK FILM, 2, 0.1W, 5%, SMT0402	2	0402	PANASONIC	ERJ-2GEJ2R0X	N	—	
38	1 RESISTOR, THICK FILM, 180K, 1%, 0.1W, SMT0402	2 180K	0402	PANASONIC	ERJ-2GEJ2R0A ERJ-2RKF1803X	Y	—	
40. R42	2 RESISTOR, THICK FILM, 160K, 1%, 0.1W, SMT0402	15K	0402	PANASONIC	ERJ-2GEJ153X		—	
40, R42 41, R43	2 RESISTOR, THICK FILM, 15K, 5%, 0.1W, SMT0402 2 RESISTOR, THICK FILM, 200K, 5%, 0.1W, SMT0402	2006	0402	PANASONIC	ERJ-2GEJ153X ERJ-2GEJ204X			
41, R43 48		200K 150K	0402	PANASONIC				
48 50	1 RESISTOR, THICK FILM, 150K, 5%, 0.1W, SMT0402	150K	0402		ERJ-2GEJ154X			
50	1 RESISTOR, THICK FILM, 75K, 1%, 0.1W, SMT0402 1 RESISTOR, THICK FILM, 130 OHM, 5%, 0.1W, SMT0402		0402	PANASONIC	ERJ-2RKF7502X			
		130	11417	PANASONIC	ERJ-2GEJ131X	Y		
	1 SWITCH, LIGHT TOUCH, SIDE-OPERATIONAL, SMD	EVQPSD02K	SW_EVQPS-J	PANASONIC	EVQPSD02K	~		

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U1, U3, U4, U5	4	IC, NVRAM MEMORY, SOIC-8	FM24V10-G1	FM24V10_SOIC8	RAMTRON	FM24V10-G1	Y		
U2	1	IC, MIXED SIGNAL MICROCONTROLLER, BGA-64	MSP430F5528IYFF	YFF-64	TEXAS INSTRUMENTS	MSP430F5528IYFFR	Y		
U6	1	IC, INTEGRATED ANALOG FRONT-END FOR HEART RATE MONITORS AND	AFE4400	QFN-40[RHA-42P]	TEXAS INSTRUMENTS	AFE4400	Y		
U9	1	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	1	IC, AUTOSWITCHING POWER MUX, SON-8, DRB	TPS2115ADRB	DRB-8	TEXAS INSTRUMENTS	TPS2115ADRB	Y		
U11	1	IC, LOW-CAPACITANCE 2-Chan ±15-kV ESD-PROTECTION ARRAY, SOP-4	TPD2E001DZDR	DZD	TEXAS INSTRUMENTS	TPD2E001DZDR	Y		
U12	1	IC, CAP-FREE, NMOS, 400mA LDO REGULATOR WITH REVERSE CURRENT	TPS73633DRB	DRB-8	TEXAS INSTRUMENTS	TPS73633DRB	Y		
U13	1	IC, 1.5A USB-FRIENDLY LI-Ion BATTERY CHARGER AND POWER-PATH MAN	BQ24072RGT	RGT16	TEXAS INSTRUMENTS	BQ24072RGT	Y		
U14	1	IC, SYSTEM-SIDE IMPEDANCE TRACK FUEL GAUGE WITH INTEGRATED SE	BQ27425-G1YZF	YZF-15	TEXAS INSTRUMENTS	BQ27425-G1YZF	Y		
U15	1	IC, LOW INPUT BOOST CONVERTER WITH INTEGRATED POWER DIODE A	TPS61093DSK	DSK	TEXAS INSTRUMENTS	TPS61093DSK	Y		
U16	1	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, 150n	TPS7A4901DGN	DGN_8P	TEXAS INSTRUMENTS	TPS7A4901DGN	Y		
U19	1	IC, TRIPLE-AXIS MEMS GYROSCOPE, LGA-24	MPU-9150	LGA-4X4MM-24P	INVENSENSE INC	MPU-9150	Y		
Y1	1	CRYSTAL, PIEZO CERAMIC RESONATOR, 4.00 MHz, +/-0.1%, 39pF, SMD	4MHz	CRYSTAL-2X4.5MM_3P	MURATA	CSTCR4M00G15L99-R0	Y		
Y2	1	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	. TΡ 8	3		TP_25MIL-SMT					
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