

Bill of Materials

TI DESIGNS
 Part # MSP430F6736
 Literature # TIDM-SINGLEPHASEMETER

Qty	Value	Device	Parts	Type of component	Digikey part no
3	Push button Switch	10-XX	S1, S2, S3	Through-hole	P8006S-ND
1	RS-232 DB9 Header	F09VP	RS1	Through-hole	A32036-ND
11	2-pin Jumper header	JP1Q	ACT, JP2, JP3, JP5, JP6, REACT, AUX1, AUX2, AUX3, JP7, JP8	Through-hole	609-3296-ND
2	3-pin Jumper header	MA03-1	JP1, JP5	Through-hole	609-3296-ND
2	4-pin Jumper header	MA04-1	SV1, SV2	Through-hole	609-3296-ND
1	Do Not Populate		SV3	Through-hole	N/A
1	Light Emitting Diode	Red	LED1	Through-hole	511-1211-ND
1	Light Emitting Diode	Green	LED2	Through-hole	511-1367-ND
6	120ohm @ 100MHz	603	L1, L2, L3, L4, L5, L6	SMD	490-1011-1-ND
1	14-pin Connector	MA07-2MA07-2JTAG	JTAG	Through-hole	MHB14K-ND
2	CONN HEADER 20POS 1.27MM		RF1, RF2	SMD	Samtec: TFM-110-02-SM-D-A-K
1	Do Not Populate		R58, R7, R61	N/A	N/A
19	0R	603	R8, R37, R38, R39, R40, R42, R43, R44, R45, R46, R47, R48, R49, R51, R52, R53, R54, R55, R56	SMD	RMCF0603ZT0R00CT-ND
1	0R	805	R22	SMD	
1	0.1uF	805	C43	SMD	445-1349-1-ND
13	0.1uF	603	C2, C4, C5, C7, C12, C13, C15, C18, C36, C37, C38, C40, C42	SMD	311-1366-1-ND
4	0.047uF	603	C31, C32, C33, C34	SMD	445-5118-1-ND
2	470nF	603	C14, C16	SMD	399-3114-1-ND
1	1.5k	805	R65	SMD	RHM1.5KARCT-ND
1	1.8M	603	R23	SMD	541-1.8MGCT-ND
2	1k	603	R41, R50	SMD	RHM1.0KGCT-ND
5	1k	603	R12, R13, R14, R15, R20	SMD	P1.0KDBCT-ND
8	Do Not Populate	1N4148SOD80C	D1, D2, D3, D4, D5, D6, D7, D8	SMD	N/A
2	1k	805	R62, R63	SMD	RHM1.0KARCT-ND
2	2.2k	805	R57, R59	SMD	RHM2.2KARCT-ND
1	3.0k	603	R18	SMD	P3.0KDBCT-ND
2	4.7uF	603	C9, C39	SMD	445-7451-1-ND
7	4.7uF	805	C1, C3, C6, C11, C17	SMD	399-3134-1-ND
2	4.7uF	1210	C8, C10	SMD	445-1398-1-ND
2	Do Not Populate	603	R30, R31	SMD	N/A
1	10 ohm	603	R2	SMD	RHM10GCT-ND
3	10k	603	R1, R32, R35	SMD	RHM10KGCT-ND
1	10k	805	R64	SMD	RHM10.0KAECT-ND
3	10uF	Tantalum Polarized Cap	C44, C45, C41	SMD	399-3685-1-ND
2	13R	603	R9, R10	SMD	A103042CT-ND
3	15nF	603	C23, C24, C27	SMD	445-2670-1-ND
1	Serial EEPROM	PDIP	IC2	PDIP	24LC02B-I/SN-ND
1	32.768	Crystal 32768	Q1	Through-hole	300-8341-1-ND
1	47	603	R36	SMD	RHM47GCT-ND
1	47k	603	R3	SMD	RHM47KGCT-ND
6	47pF	603	C19, C20, C21, C22, C25, C26	SMD	445-1277-1-ND
1	51	603	R27	SMD	RHM51GCT-ND
1	59k	603	R24	SMD	A102297CT-ND
1	68	805	R60	SMD	RHM68ACT-ND
2	100	603	R4, R5	SMD	RHM100GCT-ND
1	100	603	R19	SMD	P100DBCT-ND
3	100k	603	R29, R33, R34	SMD	A106046CT-ND
1	220	805	R66	SMD	RHM220CRCT-ND
1	316k	603	R28	SMD	P316KHCT-ND
3	330k	603	R11, R16, R17	SMD	P330KDBCT-ND

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2	332k	603	R25, R26	SMD	P332KHCT-ND
2	BC860B/BC857B	BC857ASMD	T1, T2	SMD	568-6094-1-ND
4	LL103A	Diode	D14, D15, D16, D17	SMD	LLSD103ADICT-ND
2	PS8802	PS8802SO08	U2, U3	SMD	PS8802-1-F3-AXCT-ND
1	S20K680	S20K680S20K680-1	R6	Through-hole	495-1417-ND
2	SMAJ5.0CA	SMAJ	D9, D10	SMD	SMAJ5.0CABCT-ND
1	TFBS4711-TT1	TFBS4711-TT1	IRDA	SMD	751-1068-1-ND
2	4-pin Opto Isolator	4-pin Opto Isolator	OK1, OK2	Through-hole	PS2501-1A-ND
1	TI 160 Segment LCD	TI LCD	LCD1	Through-hole	TI Custom
1	F6733---PZ100	100-pin IC	IC1	SMD	296-30131-1-ND
1	10k Thermistor	603	RTH	SMD	445-2554-1-ND
1	0.22uF/305VAC		C28	Through-hole	495-4351-ND
1	1N4007	Diode	D12	Through-hole	1N4007-E3/54GICT-ND
1	1N4757A	Zenier Diode	D11	Through-hole	1N4754AVSTR-ND
2	2.2uF	100V	C30, C35	SMD	445-5207-1-ND
1	220uF	Power Cap	C29	Through-hole	P5598-ND
1	560	3W	R21	Through-hole	P560W-3TR-ND
1	DO214BA	Diode	D13	SMD	P6SMB150A-E3/52
1	ELLCTV	Power Inductor	L7	SMD	PCD1759CT-ND
1	TPS5401	Switching Regulator	U1	SMD	296-28092-1-ND

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