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TSW12J54EVM

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB	1		Printed Circuit Board		6586307	Any	-	-
1V2ADC_IN T, 1V2ADC_L DO, 1V9ADC, 1V9INT, EXT_Vcmo, J2, J3, KC705 JTAG, LMH PD, LMK_INT, LMK_LDO, LMX_INT, LMX_LDO, PG_RX1, Tdiode, VA12, VA19, Vbg, VD12	19		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.	-	-
3P3RX, GND, GND1, GND2, GND3, VADJ_RX	6	Black	Test Point, TH, Multipurpose, Black		5011	Keystone Electronics		
5VDC	1		Connector, DC Jack 2.1X5.5 mm, TH	Conn, DC Jack, pin 2mm Dia.	PJ-202AH	CUI Inc.		
12V, LD, Status1, Status2, USB_PWR	5	Green	LED, Green, SMD	1.6x0.8x0.8mm	LTST-C190GKT	Lite-On		
C2, C8, C11, C94, C95, C96, C215, C216, C217, C218, C219, C220, C221, C222, C223, C224, C225, C226, C227, C261	20	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0402	0402	GRM155R71A104KA01 D	MuRata		
C7, C9, C10, C12, C13, C14, C15, C17, C20, C21, C22, C23, C26, C28, C29, C31, C41, C42, C43, C44, C45, C46, C47, C51, C52, C53, C54, C55, C56, C57, C58, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C118, C119, C131, C132, C133, C134, C136, C140, C142, C214	51	0.1uF	CAP, CERM, 0.1uF, 6.3V, X5R, 10%, 0201	0201	C0603X5R0J104K	TDK		
C16	1	4.7uF	CAP, CERM, 4.7uF, 6.3V, +/-20%, X5R, 0402	0402	C1005X5R0J475M050B C	TDK		
C18, C19, C73, C88, C89, C103, C104, C105, C106, C107, C109, C110, C111, C112, C113, C120, C121, C124, C206, C207, C208, C209, C258, C259, C260, C273, C274	27	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X5R, 0402	0402	C1005X5R1A104K	TDK		

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C24, C115, C210	3	0.1uF	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603	0603YC104JAT2A	AVX	-	-
C25, C34, C38	3	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A101JAT2A	AVX	-	-
C27, C48, C59, C72	4	10uF	CAP, TANT, 10uF, 10V, +/-20%, 2.5 ohm, 3528-21 SMD	3528-21	293D106X0010B2TE3	Vishay-Sprague	-	-
C32, C33, C35, C37	4	4700pF	CAP, CERM, 4700pF, 10V, +/-10%, X5R, 0201	0201	GRM033R61A472KA01 D	MuRata	-	-
C39, C40, C49, C50, C60, C61, C125, C143, C205	9	1uF	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0603	0603	C1608X5R1A105K	TDK		
C74	1	100pF	CAP, CERM, 100pF, 25V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1E101JA01 D	MuRata	-	-
C75, C76, C83, C84, C245	5	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H470JA01 D	MuRata		
C77, C79, C239, C242, C253, C256	6	0.01uF	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0402	0402	GRM155R71E103KA01 D	MuRata		
C78, C80, C254, C257	4	27pF	CAP, CERM, 27pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H270JA01 D	MuRata		
C81, C82, C232, C236, C240, C243, C252, C255	8	1uF	CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402	0402	C1005X5R0J105M	TDK		
C102	1	0.01uF	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	0402	C1005X7R1C103K	TDK		
C108, C155, C201, C211	4	1uF	CAP, CERM, 1uF, 16V, +/-10%, X5R, 0603	0603	C1608X5R1C105K	TDK		
C116, C126, C129, C130, C144, C147, C148, C151, C153, C159, C164, C167, C176, C177, C185, C189, C191, C198, C199, C213, C277, C281, C283, C288, C290	25	0.1uF	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603	06033C104JAT2A	AVX		
C117, C149	2	330pF	CAP, CERM, 330pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A331JAT2A	AVX		
C122	1	10uF	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	0805	C0805C106K8PACTU	Kemet		
C127, C160	2	4.7uF	CAP, CERM, 4.7uF, 10V, +/-10%, X5R, 0603	0603	C0603C475K8PACTU	Kemet		
C128, C161, C278	3	0.01uF	CAP, CERM, 0.01uF, 100V, +/-20%, X7R, 0603	0603	06031C103MAT2A	AVX		
C135, C137	2	18pF	CAP, CERM, 18pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H180JA01 D	MuRata		
C138, C212	2	100uF	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1206	1206	GRM31CR60J107ME39 L	MuRata		
C139, C141, C150, C152, C158, C163, C165, C166, C171, C172, C186, C188, C190, C195, C196, C197, C200, C202, C203, C204, C276, C280, C282, C289	24	10uF	CAP, CERM, 10uF, 10V, +/-10%, C0G/NP0, 0603	0603	C1608X5R1A106M	TDK		
C145, C146, C173, C184	4	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	0805	EMK212BJ106KG-T	Taiyo Yuden		
C154	1	10pF	CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A100JAT2A	AVX		
C156, C157	2	47uF	CAP, CERM, 47uF, 6.3V, +/-20%, X5R, 1206	1206	GRM31CR60J476ME19 L	MuRata		
C162	1	3300pF	CAP, CERM, 3300pF, 25V, +/-10%, X7R, 0603	0603	GRM188R71E332KA01 D	MuRata		
C168	1	0.22uF	CAP, CERM, 0.22uF, 16V, +/-10%, X7R, 0603	0603	C1608X7R1C224K	TDK		
C169, C170	2	0.1uF	CAP, CERM, 0.1uF, 6.3V, +/-10%, X5R, 0402	0402	GRM155R60J104KA01 D	MuRata		
C174, C175	2	0.027uF	CAP, CERM, 0.027uF, 16V, +/-10%, X7R, 0603	0603	GRM188R71C273KA01 D	MuRata		
C178, C179	2	0.039uF	CAP, CERM, 0.039uF, 25V, +/-10%, X7R, 0603	0603	06033C393KAT2A	AVX		
C180, C181, C182, C183	4	22uF	CAP, CERM, 22uF, 10V, +/-20%, X5R, 1206	1206	GRM31CR61A226ME19 L	MuRata		
C187	1	560pF	CAP, CERM, 560pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A561JAT2A	AVX		
C192	1	4700pF	CAP, CERM, 4700pF, 16V, +/-10%, X7R, 0603	0603	GRM188R71C472KA01 D	MuRata		
C193	1	100uF	CAP, AL, 100uF, 25V, +/-20%, TH	6.3x11.2mm	EEU-EB1E101S	Panasonic		

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C194	1	10uF	CAP, CERM, 10uF, 25V, +/-10%, X6S, 1210	1210	GRM32DC81E106KA12L	MuRata		
C228, C229	2	0.5pF	CAP CER 0.5PF 50V NP0 0402	0402	500R07S0R5BV4T	Johanson Technology Inc		
C233, C237, C238, C241, C246, C248	6	4.7pF	CAP, CERM, 4.7pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H4R7CA01D	MuRata		
C244	1	560pF	CAP, CERM, 560pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H561JA01D	MuRata		
C249	1	22pF	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H220JA01D	MuRata		
C264, C265, C270, C271	4	0.01uF	CAP, CERM, 0.01uF, 25V, +/-20%, X7R, 0306	0306	LLL185R71E103MA01L	MuRata		
C266, C267, C268, C269	4	2200pF	CAP, CERM, 2200pF, 50V, +/-20%, X7R, 0306	0306	LLL185R71H222MA01L	MuRata		
C272	1	0.01uF	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0402	0402	C1005X7R1E103K	TDK		
C275	1	10uF	CAP, TA, 10uF, 10V, +/-10%, 0.9 ohm, SMD	3216-18	TPSA106K010R0900	AVX		
C279	1	15pF	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603	C0603C150J5GACTU	Kemet		
C284, C285	2	22uF	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0603	0603	C1608X5R0J226M080A C	TDK		
C286	1	10pF	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H100JA01D	MuRata		
C287	1	2.2uF	CAP, CERM, 2.2 uF, 10 V, +/- 10%, X5R, 0603	0603	GRM188R61A225KE34D	MuRata		
C291, C292	2	1pF	CAP, CERM, 1 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H1R0CA01D	MuRata		
C293, C294	2	2.7pF	CAP, CERM, 2.7 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402	GRM1555C1H2R7CA01D	MuRata		
C295, C296	2	0 ohm	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale	-	-
D1	1	30V	Diode, Schottky, 30 V, 0.5 A, SOD882	SOD882	PMEG3005EL_315	NXP Semiconductor		
D2, D4	2	1.25V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	1N4148W-7-F	Diodes Inc.		
D11, D12	2	0.5V	Diode, Schottky, 40V, 5A, SMC	SMC	MBRS540T3G	ON Semiconductor		
DEVCLK, EXT_VCO, LMKCLK, OSCin	4		Connector, SMA, Vertical, Thru hole w/SMT center pin	6.35x12.52x6.35mm	SASF546-P26-X1	Lighthouse Technologies		
EXT5V_FM C12V	1	1x3	Header, TH, 100mil, 1x3, Gold plated, 230 mil above insulator	PBC03SAAN	PBC03SAAN	Sullins Connector Solutions		
FMC_RX1	1		Connector, Receptacle, 400-Pos (40x10), 50x50-mil Pitch, SMT	2196x280x478mil	ASP-134488-01	Molex	45970-4315	Molex
FTDI_3P3V, OR, RSV, Ts ADD1, Vemo	5		Header, TH, 100mil, 3x1, Gold plated, 230 mil above insulator	TSW-103-07-G-S	TSW-103-07-G-S	Samtec, Inc.	Equivalent	Any
H3, H4	2		Standoff, Round, 3/16" x 1-3/16"L #4-40 Aluminum	Standoff	1648-440-AL	RAF	-	-
H5, H6	2		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H9, H11	2		MACHINE SCREW PAN PHILLIPS 2-56	Used in PnP output	PMSS5 256 0075 PH	B&F Fastner Supply	-	-
H10, H12	2		HEX NUT 3/16" STN STEEL 2-56	Used in PnP output	HNSS256	B & F Fastener Supply	-	-
J1	1		Header, TH, 100mil, 4x1, Gold plated, 230 mil above insulator	TSW-104-07-G-S	TSW-104-07-G-S	Samtec, Inc.		
L1, L27, L28, L29, L30, L31, L32, L33, L34	9	1000 ohm	0.25A Ferrite Bead, 1000 ohm @ 100MHz, SMD	0402	BLM15HG102SN1D	MuRata		
L2, L3, L4, L5, L19, L21, L22, L23	8	330 ohm	1.5A Ferrite Bead, 330 ohm @ 100MHz, SMD	0603	BLM18SG331TN1D	MuRata		
L6, L9, L10, L13, L15, L16, L17, L18, L26	9	26 ohm	6A Ferrite Bead, 26 ohm @ 100MHz, SMD	0603	BLM18SG260TN1D	MuRata		
L7, L14, L20, L24, L25, L35, L36, L42, L43, L44	10	120 ohm	3A Ferrite Bead, 120 ohm @ 100MHz, SMD	0603	BLM18SG121TN1D	MuRata		
L8	1	3uH	Inductor, Shielded Drum Core, Ferrite, 3uH, 3A, 0.024 ohm, SMD	CDRH6D28	CDRH6D28NP-3R0NC	Sumida		
L11	1	7uH	Inductor, Shielded Drum Core, Ferrite, 7uH, 4.35A, 0.03 ohm, SMD	MSS1038	MSS1038-702NLB	Coilcraft		
L12	1	5.5uH	Inductor, Shielded Drum Core, Superflux, 5.5uH, 10A, 0.0112 ohm, SMD	WE-HC6	744325550	Würth Elektronik eiSos		
L37	1	6.8uH	Inductor, Shielded, Ferrite, 6.8 uH, 0.57 A, 0.498 ohm, SMD	Inductor, 2x1.2x2mm	VLS2012ET-6R8M	TDK		
L38, L39	2	6.8nH	Inductor, Wirewound, Ceramic, 6.8 nH, 2.1 A, 0.054 ohm, SMD	0603	0603HC-6N8XJLU	Coilcraft		
L40, L41	2	3.6nH	Inductor, Wirewound, Ceramic, 3.6 nH, 2.3 A, 0.048 ohm, SMD	0603	0603HC-3N6XJLU	Coilcraft		
LF1	1	3900pF	CAP, CERM, 3900pF, 25V, +/-5%, C0G/NP0, 0603	0603	C1608C0G1E392J	TDK	-	-
LF2	1	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A470JAT2A	AVX	-	-
LF3	1	619	RES, 619 ohm, 1%, 0.1W, 0603	0603	RC0603FR-07619RL	Yageo America	Equivalent	Any
LF7	1	uH	Coupled inductor, 5A, 0.01 ohm, SMD	6x3.5x7 mm	ACM7060-301-2PL-TL	TDK	-	-
NCO	1		Header, TH, 100mil, 3x2, Gold plated, 230 mil above insulator	TSW-103-07-G-D	TSW-103-07-G-D	Samtec, Inc.	Equivalent	Any
OR_T0, OR_T1	2	Orange	LED, Orange, SMD	1.6x0.8x0.8mm	LTST-C190KFKT	Lite-On		
R1	1	8.06k	RES, 8.06k ohm, 1%, 0.063W, 0402	0402	CRCW04028K06FKED	Vishay-Dale		
R2, R10	2	1.2k	RES, 1.2k ohm, 5%, 0.063W, 0402	0402	CRCW04021K20JNED	Vishay-Dale		
R3, R11, R150	3	1.0Meg	RES, 1.0Meg ohm, 5%, 0.063W, 0402	0402	CRCW04021M00JNED	Vishay-Dale		
R4, R5, R6, R14, R15, R16, R105, R106, R107, R123, R130, R131	12	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	0603	CRCW060310K0FKEA	Vishay-Dale	-	-
R12	1	1.33k	RES, 1.33k ohm, 1%, 0.063W, 0402	0402	CRCW04021K33FKED	Vishay-Dale		
R13	1	3.30k	RES, 3.30k ohm, 0.1%, 0.1W, 0603	0603	RG1608P-332-B-T5	Susumu Co Ltd		
R17	1	750	RES, 750 ohm, 5%, 0.1W, 0603	0603	RC0603JR-07750RL	Yageo America		
R19, R20	2	0	RES, 0 ohm, 5%, 0.05W, 0201	0201	ERJ-1GE0R00C	Panasonic		
R25, R38, R145, R147, R148, R149	6	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	ERJ-2GE0R00X	Panasonic		

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R27, R28, R34, R35	4	100	RES, 100 ohm, 1%, 0.063W, 0402	0402	CRCW0402100RFKED	Vishay-Dale		
R31, R32, R122	3	1.3k	RES, 1.3k ohm, 5%, 0.1W, 0603	0603	RC0603JR-071K3L	Yageo America		
R33, R37	2	3.3k	RES, 3.3k ohm, 5%, 0.063W, 0402	0402	CRCW04023K30JNED	Vishay-Dale		
R39, R71, R80, R134	4	1.0k	RES, 1.0k ohm, 5%, 0.1W, 0603	0603	RC0603JR-071KL	Yageo America		
R41, R74	2	10.7k	RES, 10.7k ohm, 1%, 0.1W, 0603	0603	CRCW060310K7FKEA	Vishay-Dale		
R43, R44, R48, R59, R60, R61, R62, R63, R64, R160, R161, R178, R179, R180	14	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R45, R56, R112	3	270	RES, 270 ohm, 5%, 0.1W, 0603	0603	CRCW0603270RJNEA	Vishay-Dale	Equivalent	Any
R47	1	2.32k	RES, 2.32k ohm, 1%, 0.1W, 0603	0603	RC0603FR-072K32L	Yageo America		
R49, R77	2	4.64k	RES, 4.64k ohm, 1%, 0.1W, 0603	0603	RC0603FR-074K64L	Yageo America		
R51	1	51	RES, 51 ohm, 5%, 0.063W, 0402	0402	CRCW040251R0JNED	Vishay-Dale	Equivalent	Any
R52, R53	2	10	RES, 10 ohm, 5%, 0.1W, 0603	0603	CRCW060310R0JNEA	Vishay-Dale		
R65, R68, R109, R110, R111, R113, R114, R115, R117, R118, R124, R125	12	100	RES, 100 ohm, 5%, 0.1W, 0603	0603	CRCW0603100RJNEA	Vishay-Dale		
R66	1	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale	-	-
R67	1	12.0k	RES, 12.0k ohm, 1%, 0.1W, 0603	0603	RC0603FR-0712KL	Yageo America		
R70	1	10k	RES, 10k ohm, 5%, 0.1W, 0603	0603	RC0603JR-0710KL	Yageo America		
R72, R177	2	95.3k	RES, 95.3 k, 1%, 0.1 W, 0603	0603	RC0603FR-0795K3L	Yageo America		
R76	1	22.1k	RES, 22.1k ohm, 1%, 0.1W, 0603	0603	CRCW060322K1FKEA	Vishay-Dale		
R78	1	10.0	RES, 10.0 ohm, 1%, 0.1W, 0603	0603	RC0603FR-0710RL	Yageo America		
R79	1	732	RES, 732 ohm, 1%, 0.1W, 0603	0603	CRCW0603732RFKEA	Vishay-Dale		
R81	1	16.2k	RES, 16.2k ohm, 1%, 0.1W, 0603	0603	CRCW060316K2FKEA	Vishay-Dale		
R82	1	7.87k	RES, 7.87k ohm, 1%, 0.1W, 0603	0603	CRCW06037K87FKEA	Vishay-Dale		
R85	1	2.49k	RES, 2.49k ohm, 1%, 0.1W, 0603	0603	CRCW06032K49FKEA	Vishay-Dale		
R86, R87	2	5.90k	RES, 5.90k ohm, 1%, 0.1W, 0603	0603	CRCW06035K90FKEA	Vishay-Dale		
R88, RR6	2	4.99k	RES, 4.99k ohm, 1%, 0.1W, 0603	0603	CRCW06034K99FKEA	Vishay-Dale		
R89	1	2.80k	RES, 2.80k ohm, 1%, 0.1W, 0603	0603	CRCW06032K80FKEA	Vishay-Dale		
R91	1	4.99k	RES, 4.99k ohm, 1%, 0.063W, 0402	0402	CRCW04024K99FKED	Vishay-Dale		
R93	1	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	RC0603FR-071KL	Yageo America		
R94	1	1.0k	RES, 1.0k ohm, 5%, 0.25W, 1206	1206	CRCW12061K00JNEA	Vishay-Dale		
R96	1	357	RES, 357 ohm, 1%, 0.1W, 0603	0603	RC0603FR-07357RL	Yageo America		
R97, R98, R101, R102	4	12.4k	RES, 12.4k ohm, 1%, 0.1W, 0603	0603	CRCW060312K4FKEA	Vishay-Dale		
R99, R100, R143, RR7	4	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	ERJ-3GEY0R00V	Panasonic	-	-
R103, R132, R152	3	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R108	1	2.2k	RES, 2.2k ohm, 5%, 0.1W, 0603	0603	RC0603JR-072K2L	Yageo America		
R133, R170, R173	3	1.00k	RES, 1.00k ohm, 1%, 0.063W, 0402	0402	CRCW04021K00FKED	Vishay-Dale		
R135	1	2.10k	RES, 2.10k ohm, 1%, 0.1W, 0603	0603	CRCW06032K10FKEA	Vishay-Dale		
R136, R137, R138	3	4.7k	RES, 4.7k ohm, 5%, 0.1W, 0603	0603	CRCW06034K70JNEA	Vishay-Dale		
R144	1	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R154	1	261	RES, 261, 1%, 0.063 W, 0402	0402	CRCW0402261RFKED	Vishay-Dale		
R156, R157	2	127	RES, 127 ohm, 1%, 0.063W, 0402	0402	CRCW0402127RFKED	Vishay-Dale		
R158, R159	2	82.5	RES, 82.5 ohm, 1%, 0.063W, 0402	0402	CRCW040282R5FKED	Vishay-Dale		
R162	1	107	RES, 107 ohm, 1%, 0.063W, 0402	0402	CRCW0402107RFKED	Vishay-Dale		
R163, R164	2	2.2k	RES, 2.2k ohm, 5%, 0.063W, 0402	0402	CRCW04022K20JNED	Vishay-Dale		
R166, R167	2	560	RES, 560, 5%, 0.063 W, 0402	0402	CRCW0402560RJNED	Vishay-Dale		
R168, Ri+	2	365	RES, 365, 1%, 0.063 W, 0402	0402	CRCW0402365RFKED	Vishay-Dale		
R169, Ri-	2	22.6	RES, 22.6, 1%, 0.063 W, 0402	0402	CRCW040222R6FKED	Vishay-Dale		
R171	1	62.0k	RES, 62.0 k, 1%, 0.1 W, 0603	0603	RC0603FR-0762KL	Yageo America		
R172	1	30.1k	RES, 30.1 k, 1%, 0.1 W, 0603	0603	CRCW060330K1FKEA	Vishay-Dale		
R174	1	274k	RES, 274 k, 1%, 0.063 W, 0402	0402	CRCW0402274KFKED	Vishay-Dale		
R175	1	100k	RES, 100 k, 1%, 0.063 W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
R176	1	5.23k	RES, 5.23 k, 1%, 0.1 W, 0603	0603	CRCW06035K23FKEA	Vishay-Dale		
R182, R183	2	2.00k	RES, 2.00 k, 1%, 0.063 W, 0402	0402	CRCW04022K00FKED	Vishay-Dale		
Rf+, Rf-	2	127	RES, 127, 1%, 0.063 W, 0402	0402	CRCW0402127RFKED	Vishay-Dale		
Ro+, Ro-	2	40.2	RES, 40.2 ohm, 1%, 0.063W, 0402	0402	CRCW040240R2FKED	Vishay-Dale		
S1	1		SWITCH SLIDE SPST 4A PCB, TH	Slide Switch, TH, SPST	L101011MS02Q	C&K Components		
SH-1V2ADC_IN T_1_2, SH-1V2ADC_L DO_1_2, SH-1V9ADC_1_2, SH-1V9INT_1_2, SH-5V_12V_1_2, SH-FTDI_3P3V_1_2, SH-J2_1_2, SH-LMK_INT_1_2, SH-LMK_LDO_1_2, SH-LMX_INT_1_2, SH-LMX_LDO_1_2	11	1x2	Shunt, 100mil, Gold plated, Black	Shunt	SNT-100-BK-G	Samtec, Inc.	969102-0000-DA	3M
SH-RSV_1_2, SH-Ts ADD1_1_2, Vcmo_2_3	3	1x2	Shunt, 100mil, Gold plated, Black	Shunt	969102-0000-DA	3M	Equivalent	Any
SPI	1		Header, TH, 100mil, 4x2, Gold plated, 230 mil above insulator	TSW-104-07-G-D	TSW-104-07-G-D	Samtec, Inc.	-	-

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
T2	1		Transformer, RF, 50 ohm, 10 to 4000 MHz, SMT	4.06x4.06x3.81 mm	TCM2-43X+	Minicircuits		
TEMP	1	Red	LED, Red, SMD	LED 0805	LTST-C170KRKT	Lite-On		
TMST+, TMST-	2	50 Ohm	Connector, SMT, End launch SMA 50 ohm	SMA	142-0701-806	Emerson Network Power		
U1	1		Dual Micro-Power Rail-to-Rail Input CMOS Comparator with Push-Pull Output, 8-pin Narrow SOIC	M08A	LMC6762AIMX/NOPB	National Semiconductor		
U2	1		ADC12J4000NKE Ultra-Wideband RF Sampling Subsystem, NKE0068A	NKE0068A	ADC12J4000NKE	Texas Instruments		None
U3	1		Dual Remote Diode and Local Temperature Sensor with SMBus Interface and TruTherm Technology, 14-pin LLP, Pb-Free	SDA14B	LM95233CISD/NOPB	National Semiconductor		
U4	1		Integer-N/Fractional-N PLL with Integrated VCO, RHB0032E	RHB0032E	TRF3765IRHB	Texas Instruments		None
U5, U8	2		Micropower 800mA Low Noise "Ceramic Stable" Adjustable Voltage Regulator for 1V to 5V Applications, 8-pin PSOP, Pb-Free	MRA08A	LP3878MR-ADJ/NOPB	National Semiconductor		
U6	1		Low-Noise Clock Jitter Cleaner with Dual Loop PLLs, NKD0064A	NKD0064A	LMK04828BISQ/NOPB	Texas Instruments		None
U7	1		3-A OUTPUT SINGLE SYNCHRONOUS STEP DOWN SWITCHER WITH INTEGRATED FET(SWIFT), DDA0008B	DDA0008B	TPS54327DDA	Texas Instruments		None
U9	1		Dual 2A, 500kHz Wide Input Range Buck Regulator, 16-pin LLP, Pb-Free	SDA16A	LM26400YSDE/NOPB	National Semiconductor		
U10	1		3.0A Low Dropout Linear Regulator with Programmable Soft-Start, RGW0020A	RGW0020A	TPS74901RGW	Texas Instruments		None
U11	1		3A Fast-Transient Response Adjustable Low-Dropout Linear Voltage Regulator, 5-pin TO-263 Thin, Pb-Free	TJ5A	LP38513TJ-ADJ/NOPB	National Semiconductor		
U12	1		4-BIT DUAL-SUPPLY BUS TRANSCEIVER WITH CONFIGURABLE VOLTAGE TRANSLATION AND 3-STATE OUTPUTS, PW0016A	PW0016A	SN74AVC4T774PW	Texas Instruments		None
U13	1		Quad High Speed USB to Multipurpose UART/MPSSE IC	LQFP_10x10mm	FT4232HL	FTDI		
U14	1		300-mA, Low-IQ, Low-Dropout Regulator, DBV0005A	DBV0005A	TLV70233DBV	Texas Instruments		None
U15	1		1K, 64x16-bit, 2.5V Microwire Serial EEPROM, 8-Pin MSOP, Industrial Temperature	MSOP-MS8	93LC46B-I/MS	Microchip Technology		
U17	1		Divide-by-2 Divider	751-06	MC10EP32DG	ON Semiconductor		
U18	1	SN74LVC1G125DBV	IC, Single Bus Buffer Gate With 3-States Output	DBV	SN74LVC1G125DBV	TI		None
U19	1		8GHz Ultra Wideband Fully Differential Amplifier, RMS0014A	RMS0014A	LMH5401IRMSR	Texas Instruments		None
U20	1		Single Output High PSRR LDO, 200 mA, Adjustable 1.22 to 5.5 V Output, 2.7 to 5.5 V Input, 6-pin SOT-23 (DBV), -40 to 85 degC, Green (RoHS & no Sb/Br)	DBV0006A	TPS79301DBVR	Texas Instruments	Equivalent	None
U21	1		SIMPLE SWITCHER Buck-Boost Converter For Negative Output Voltage in uSMD, YFX008ADAC	YFX008ADAC	LMR70503TM/NOPB	Texas Instruments		Texas Instruments
U22	1		Single Output LDO, 200 mA, Adjustable -10 to -1.2 V Output, -10 to -2.7 V Input, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A	TPS72301DBVR	Texas Instruments	Equivalent	None
USB	1		MINI USB 2.0 SMT TYPE AB 5 CONTACTS R/A, SMD	9.2x9.9x4 mm	651-305-142-821	Wurth Elektronik eiSos		
uWIRE	1		Connector, 100mil Shrouded, 5x2, High-Temperature, Gold, TH	5x2 Shrouded header	N2510-6002-RB	3M		
VIN+, VIN-	2		Connector, TH, SMA	SMA	142-0701-231	Emerson Network Power		
Y1	1		OSC 100.0000MHZ 3.3V +/-25PPM SMD	7x1.3x5mm	CWX813-100.0M	Connor-Winfield		
Y2	1		Crystal, 12Mhz, 18pF, SMD	ABM3	ABM3-12.000MHZ-B2-T	Abracon Corporation		
C30, C36	0	0.22uF	CAP, CERM, 0.22uF, 6.3V, +/-20%, X5R, 0201	0201	C0603X5R0J224M	TDK		
C85, C86, C87, C114, C123, C231, C235, C250, C251	0	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X5R, 0402	0402	C1005X5R1A104K	TDK	-	-
C90, C91, C92, C93, C262, C263	0	4700pF	CAP, CERM, 4700pF, 10V, +/-10%, X5R, 0201	0201	GRM033R61A472KA01D	MuRata	-	-
C230, C234	0	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0603	0603	GRM1885C1H470JA01D	MuRata		
C247	0	2.2pF	CAP, CERM, 2.2pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H2R2CA01D	MuRata		
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
R7, R8, R9, R18, R21, R22, R23	0	0	RES, 0 ohm, 5%, 0.05W, 0201	0201	ERJ-1GE0R00C	Panasonic		
R24	0	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R26, R29, R36, R146	0	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	ERJ-2GE0R00X	Panasonic		
R30, R153	0	49.9	RES, 49.9 ohm, 1%, 0.063W, 0402	0402	CRCW040249R9FKED	Vishay-Dale		
R40, R42, R73, R75, R83, R84, R92, R95	0	0.002	RES, 0.002 ohm, 1%, 1W, 1206	1206	CSNL1206FT2L00	Stackpole Electronics Inc		
R50	0	N/A	RES, xxx ohm, x%, xW, [PackageReference]	Used in PnP output	Used in BOM report		-	-
R54, R55, R57, R58, R69, R119, R120, R121, R126, R127	0	100	RES, 100 ohm, 5%, 0.1W, 0603	0603	CRCW0603100RJNEA	Vishay-Dale		
R90	0	402	RES, 402 ohm, 1%, 0.1W, 0603	0603	RC0603FR-07402RL	Yageo America		
R104, R116, R128, R129	0	24k	RES, 24k ohm, 5%, 0.063W, 0402	0402	CRCW040224K0JNED	Vishay-Dale	-	-
R139, R140, R141	0	2.0k	RES, 2.0k ohm, 5%, 0.1W, 0603	0603	CRCW06032K00JNEA	Vishay-Dale		
R142	0	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	ERJ-3GEY0R00V	Panasonic	-	-
R151	0	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW0603000Z0EA	Vishay-Dale		
R165	0	51	RES, 51 ohm, 5%, 0.063W, 0402	0402	CRCW040251R0JNED	Vishay-Dale	Equivalent	Any
R181	0	100	RES, 100 ohm, 1%, 0.063W, 0402	0402	CRCW0402100RFKED	Vishay-Dale		
U16	0		64Kbit, 400kHz, 4.5V, I2C Serial EEPROM, 8-Pin SOIC 208mil, Commercial Temperature, Tape and Reel	SOIJ-SM8				

## Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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