

TIDA-01022 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01022	Any	Printed Circuit Board	
3P3V_RX1, 3P3V_RX2, TP6, TP12, TP13, TP14, TP17, TP18, TP21, TP22, TP23, TP24, TP25, TP26, TP31, TP32, TP33, TP34, TP35, TP36, TP37, TP38, TP39, TP40, TP41, TP42, TP43, TP44, TP45, TP46, TP47, TP48, TP49, TP54, TP55, TP56, TP57, TP58, TP59, TP60, TP61, TP62, TP63, TP77	44		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
BG1, BG2, CALSAT1, CALSAT2, CE_TP1, CE_TP2, RMPCLK1, RMPCLK2, RMPDIR1, RMPDIR2, SYNC1, TP1, TP2, TP3, TP7, TP8, TP9, Vtune_TP1, Vtune_TP2	19		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
C1, C13, C14, C27, C35, C47, C48, C61, C161, C173, C174, C187, C195, C207, C208, C221, C384, C385, C386, C387, C388, C389, C390, C412, C422, C435, C492, C500, C504, C507	30	0.01uF	GRM155R71E103KA01D	MuRata	CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	0402
C1X, C2X, C3X, C4X, C5X, C6X, C7X, C8X	8	0.5pF			WCAP-CSGP Ceramic Capacitors, 0603, NP0, 100V, 0.5pF	
C2, C3, C4, C5, C21, C22, C23, C24, C36, C37, C38, C39, C55, C56, C57, C58, C162, C163, C164, C165, C181, C182, C183, C184, C196, C197, C198, C199, C215, C216, C217, C218	32	0.01uF	LLL185R71E103MA01L	MuRata	CAP, CERM, 0.01 µF, 25 V, +/- 20%, X7R, 0306	0306
C6, C7, C8, C9, C17, C18, C19, C20, C40, C41, C42, C43, C51, C52, C53, C54, C166, C167, C168, C169, C177, C178, C179, C180, C200, C201, C202, C203, C211, C212, C213, C214	32	2200pF	LLL185R71H222MA01L	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 20%, X7R, 0306	0306
C9X, C11X, C13X, C15X, C17X	5	10uF			WCAP-CSGP Ceramic Capacitors, 1206, X7R, 25V, 10uF	
C10, C15, C44, C49, C170, C175, C204, C209	8	1pF	GRM1555C1H1R0CA01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C10X, C12X, C14X, C16X, C17X, C18X, C18X, C19X, C20X, C21X, C22X, C23X, C24X, C25X, C26X, C27X, C28X, C29X, C30X, C31X, C32X, C33X, C34X, C35X, C36X, C37X, C38X, C39X, C40X, C41X, C42X, C43X, C44X, C45X, C46X, C47X, C52X, C53X, C54X, C55X	40	100nF			WCAP-CSGP Ceramic Capacitors, 0603, X7R, 50V, 100nF	

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C11, C16, C45, C50, C171, C176, C205, C210	8	1.2pF	GRM1555C1H1R2BA01D	MuRata	CAP, CERM, 1.2 pF, 50 V, +/- 8.3%, C0G/NP0, 0402	0402
C25, C28, C31, C32, C33, C34, C59, C62, C65, C66, C67, C68, C185, C188, C191, C192, C193, C194, C219, C222, C225, C226, C227, C228	24	0.1uF	C1005X5R1A104K050BA	TDK	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X5R, 0402	0402
C29, C30, C63, C64, C189, C190, C223, C224	8	10uF	TPSA106K010R0900	AVX	CAP, TA, 10 uF, 10 V, +/- 10%, 0.9 ohm, SMD	3216-18
C48X, C49X, C50X, C51X	4	1uF			WCAP-CSGP Ceramic Capacitors, 0603, X7R, 16V, 1uF	
C69, C74, C82, C83, C109, C229, C234, C242, C243, C269, C321, C325, C334, C341, C391, C392, C394, C396, C399, C401, C402, C407, C408, C413, C415, C417, C419, C423, C424, C436, C437, C438	32	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 20%, X7R, 0402	0402
C70, C132, C133, C159, C160, C230, C292, C293, C319, C320, C475, C476, C484	13	1uF	C1608X5R1A105K080AC	TDK	CAP, CERM, 1 uF, 10 V, +/- 10%, X5R, 0603	0603
C71, C72, C73, C75, C76, C77, C78, C79, C80, C81, C84, C85, C86, C87, C88, C89, C96, C98, C100, C101, C102, C103, C104, C105, C106, C110, C111, C112, C113, C114, C115, C118, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C150, C151, C152, C153, C154, C155, C156, C157, C158, C231, C232, C233, C235, C236, C237, C238, C239, C240, C241, C244, C245, C246, C247, C248, C249, C256, C258, C260, C261, C262, C263, C264, C265, C266, C270, C271, C272, C273, C274, C275, C278, C280, C281, C282, C283, C284, C285, C286, C287, C288, C289, C290, C291, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C310, C311, C312, C313, C314, C315, C316, C317, C318, C483	131	0.1uF	GRM033C71A104KE14D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7S, 0201	0201
C92, C93, C252, C253	4	4700pF	GRM155R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0402	0402
C107, C116, C117, C267, C276, C277	6	100pF	GRM1555C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C108, C119, C134, C149, C268, C279, C294, C309, C482	9	10uF	293D106X0010B2TE3	Vishay-Sprague	CAP, TA, 10 uF, 10 V, +/- 20%, 2.5 ohm, SMD	3528-21

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C147, C485, C596, C605, C609, C622, C625, C629, C633, C637, C638, C648, C650, C658, C659, C670, C671, C688, C689, C699, C700, C708, C709, C717, C718	25	0.1uF	CGA3E2X7R1H104K080AA	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C148, C431, C441, C442, C443, C444, C445, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C458, C459, C460, C461, C462, C463, C464, C465, C467, C468, C469, C472, C489, C737, C738, C741	33	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C307	1	0.1uF	GRM033R60J104KE19D	MuRata	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X5R, 0201	0201
C308	1	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 20%, X7R, 0402	0402
C322, C338, C352, C368	4	0.01uF	520L103KT16T	AT Ceramics	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
C323, C324, C326, C332, C333, C340, C343, C353, C354, C356, C362, C363, C370, C373, C470, C473	16	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C327, C328, C331, C348, C349, C350, C357, C358, C361, C378, C379, C380	12	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603
C329, C330, C359, C360, C432	5	10uF	C0805C106K8PACTU	Kemet	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	0805
C335, C365	2	1800pF	GRM1885C1H182JA01D	MuRata	CAP, CERM, 1800 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C337, C367	2	0.056uF	C0603C563J4RACTU	Kemet	CAP, CERM, 0.056 µF, 16 V, +/- 5%, X7R, 0603	0603
C339, C369	2	1500pF	06031C152JAT2A	AVX	CAP, CERM, 1500 pF, 100 V, +/- 5%, X7R, 0603	0603
C342, C344, C345, C346, C347, C372, C374, C375, C376, C377	10	10uF	C1608X5R1A106M080AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0603	0603
C355, C364, C371, C509, C510	5	470pF	GRM1555C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402

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C381	1	10uF	EMK107BBJ106MA-T	Taiyo Yuden	CAP, CERM, 10 µF, 16 V, +/- 20%, X5R, 0603	0603
C382, C420, C428, C429, C430, C433, C439, C440	8	1uF	C1005X7S1A105K050BC	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X7S, 0402	0402
C383, C421, C434, C508, C511	5	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C393	1	3900pF	0201ZD392KAT2A	AVX	CAP, CERM, 3900 pF, 10 V, +/- 10%, X5R, 0201	0201
C395	1	47pF	GRM0335C1E470JA01D	MuRata	CAP, CERM, 47 pF, 25 V, +/- 5%, C0G/NP0, 0201	0201
C397, C400, C403, C404	4	0.1uF	GRM033R60J104KE19D	MuRata	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X5R, 0201	0201
C398	1	0.68uF	C1005X5R1A684K050BB	TDK	CAP, CERM, 0.68 µF, 10 V, +/- 10%, X5R, 0402	0402
C411	1	4.7uF	C1005X5R0J475M050BC	TDK	CAP, CERM, 4.7 µF, 6.3 V, +/- 20%, X5R, 0402	0402
C414	1	10pF	GRM1555C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C416	1	2200pF	GRM155R71E222KA01D	MuRata	CAP, CERM, 2200 pF, 25 V, +/- 10%, X7R, 0402	0402
C418	1	100pF	04025A101FAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0402	0402
C425, C426, C427	3	33pF	C0603C330J5GACTU	Kemet	CAP, CERM, 33pF, 50V, +/-5%, C0G/NP0, 0603	0603
C446	1	1uF	C1005X7S1A105K050BC	TDK	CAP, CERM, 1 µF, 10 V, +/- 10%, X7S, 0402	0402
C457, C466, C736	3	10uF	GRM188R61A106ME69D	MuRata	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0603	0603
C471, C474	2	100uF	GRM32ER61A107ME20L	MuRata	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1210	1210
C477, C478, C479, C723	4	1uF	08053D105KAT2A	AVX	CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0805	0805
C480, C481	2	1000pF	06031C102MAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 20%, X7R, 0603	0603
C486, C597, C610, C626, C630, C634	6	33uF	C3216X5R1E336M160AC	TDK	CAP, CERM, 33 µF, 25 V, +/- 20%, X5R, 1206	1206
C487, C494, C496, C497, C498, C537, C539, C540, C541, C598, C600, C602, C603, C604, C606, C611, C623, C627, C631, C635, C639, C641, C643, C644, C645, C646, C649, C651, C663, C665, C672, C674, C690, C691, C693, C701, C703, C705, C706, C707, C710, C712, C715, C719, C721	45	10uF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 µF, 25 V, +/- 20%, X7R, 1206_190	1206_190
C488, C599, C607, C612, C624, C628, C632, C636, C640, C642, C652, C653, C664, C666, C673, C675, C692, C694, C702, C704, C711, C713, C720, C722	24	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C495, C538, C601, C647, C695, C696, C697	7	22uF	JMK212BJ226MG-T	Taiyo Yuden	CAP, CERM, 22 µF, 6.3 V, +/- 20%, X5R, 0805	0805
C501, C544, C608, C654, C698	5	3300pF	GRM1885C1H332JA01D	MuRata	CAP, CERM, 3300 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C512	1	0.01uF	GRM155R71E103KA01D	MuRata	CAP, CERM, 0.01 µF, 25 V, +/- 10%, X7R, 0402	0402
C516, C517, C523, C587, C588, C594, C613, C614, C620, C655, C656, C668	12	10uF	GRM21BR61C106KE15L	MuRata	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 0805	0805
C518, C519, C589, C590, C615, C616, C657, C660, C714	9	47uF	GRM219R60G476ME44D	MuRata	CAP, CERM, 47 µF, 4 V, +/- 20%, X5R, 0805	0805
C522, C524, C593, C595, C619, C621, C667, C669, C716	9	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
C739, C740	2	16pF	GRM1885C2A160JA01D	MuRata	CAP, CERM, 16 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
D1, D3, D6, D8	4	Orange	LTST-C190KFKT	Lite-On	LED, Orange, SMD	1.6x0.8x0.8mm
D2, D4, D7, D9	4	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D5, D10	2	Green	LTST-C190GKT	Lite-On	LED, Green, SMD	1.6x0.8x0.8mm

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D11, D12, D13, D14, D15, D16, D17, D21	8	Green	LTST-C191TGKT	Lite-On	LED, Green, SMD	LED_0603
D18	1	Green	150080GS75000	Würth Elektronik	LED, Green, SMD	LED_0805
D19	1	15V	SMBJ15CA	Fairchild Semiconductor	Diode, TVS, Bi, 15 V, 24.4 Vc, SMB	SMB
D20	1	30V	MBR130T1G	ON Semiconductor	Diode, Schottky, 30 V, 1 A, SOD-123	SOD-123
FID1, FID2, FID3, FID4, FID5, FID6	6		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12	12		MPMS 003 0005 PH	B&F Fastener Supply	MACHINE SCREW PAN PHILLIPS M3 5mm	Screw M3 Phillips head
J1, J2, J3, J4, J8, J9, J12, J15, J19, J20, J26, J27, J29, J56, J57, J61, J74, OSCinM1, OSCinM2, OSCinM3, OSCinP1, OSCinP2, OSCinP3	23		142-0701-201	Emerson Network Power	Connector, TH, SMA	SMA
J5, J16, J34, J40	4		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
J6, J7, J11, J17, J18, J22, J35, J36, J37, J38, J41, J42, J43, J44, J45, J47, J49, J50, J52, J54, J64, J67, J68, J78, J79, J82, J83, J84	28		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
J10, J21	2		142-0701-201	Cinch Connectivity	Connector, SMA, TH	SMA
J13, J14, J30, J73, J76, J77, J80, J81	8		142-0771-831	Johnson	JACK, SMA, 50 Ohm, Gold, Edge Mount	JACK, SMA, 50 Ohm, Gold, Edge Mount
J23, J24, J25	3		800-10-004-10-001000	Mill-Max	Header, 100mil, 4x1, TH	Header, 4x1, 100mil, TH
J28	1		32K101-400L5	Rosenberger	SMA, 50 Ohm, Gold, TH	SMA, TH
J31, J32, J39	3		61301021121	Würth Elektronik	Header, 2.54 mm, 5x2, Gold, TH	Header, 2.54mm, 5x2, TH
J33	1		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
J46, J51	2		ASP-184330-01	SAMTEC	14 ROW .050 PITCH TERMINAL ARRAY ASM.	
J48, J53	2		5-146278-4	TE Connectivity	Header, 100mil, 4x1, Tin, TH	Header, 4x1, 100mil, TH
J55	1		RAPC722X	Switchcraft	Power Jack, mini, 2.1mm OD, R/A, TH	Jack, 14.5x11x9mm
J58, J63	2		PEC06DAAN	Sullins Connector Solutions	Header, 100mil, 6x2, Tin, TH	Header, 6x2, 100mil, Tin
J59, J60	2		TSW-116-07-G-D	Samtec	Header, 100mil, 16x2, Gold, TH	16x2 Header
J62	1		802-10-006-10-001000	Mill-Max	Header, 2.54 mm, 3x2, Gold, TH	Header, 2.54 mm, 3x2, TH
J71, J75	2		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
J72	1		651305142821		WR-COM Mini USB 2.0 Type AB SMT Horizontal 5 Contacts	
J85	1		800-10-005-10-001000	Mill-Max	Header, 100mil, 5x1, TH	Header, 5x1, 100mil, TH
L1, L3, L5, L7, L9, L11, L13, L15	8	5.6nH	LQW18AN5N6D10D	MuRata	Inductor, Wirewound, 5.6 nH, 0.9 A, 0.045 ohm, SMD	Inductor, 1.6x0.8x0.8mm
L2, L4, L6, L8, L10, L12, L14, L16	8	3.9nH	0603HC-3N9XJLU	Coilcraft	Inductor, Wirewound, Ceramic, 3.9 nH, 2.2 A, 0.054 ohm, SMD	0603
L17, L18, L19, L20	4	18nH	LQG15HS18NJ02D	MuRata	Inductor, Multilayer, Air Core, 18 nH, 0.3 A, 0.36 ohm, SMD	0402 polarized
L22, L23, L24, L25, L26, L27, L28, L29, L30, L31	10	120 ohm	BLM18AG121SN1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 0.5 A, 0603	0603
L32, L33, L34	3	26 ohm	BLM18SG260TN1D	MuRata	Ferrite Bead, 26 ohm @ 100 MHz, 6 A, 0603	0603
L35, L36, L37, L38, L39, L40, L41, L42, L43, L44, L45, L46, L47, L57, L58, L59, L68, L69, L70, L71, L72, L73, L87, L88, L89, L90, L91, L92	28	1000 ohm	BLM41PG102SN1L	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 1.5 A, 1806	1806
L48, L49, L50, L51, L52, L53, L54, L55, L56, L60, L61, L62, L63, L64, L65, L66, L67	17	120 ohm	BLM18SG121TN1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 3 A, 0603	0603
L74, L83, L84, L85, L86	5	785Ω	742792515		WE-CBF SMD EMI Suppression Ferrite Bead, 1812, 785Ω	
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W

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Q1, Q2	2	40 V	MMBT3904	Fairchild Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q3	1	20V	CSD15571Q2	Texas Instruments	MOSFET, N-CH, 20 V, 10 A, DQK0006C (WSON-6)	DQK0006C
R1, R3, R25, R27, R82, R84, R106, R108, R556, R557, R565, R566, R574, R575, R583, R584	16	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
R4, R18, R28, R42, R85, R99, R109, R123	8	4.99	CRCW04024R99FKED	Vishay-Dale	RES, 4.99, 1%, 0.063 W, 0402	0402
R6, R16, R30, R40, R87, R97, R111, R121	8	127	CRCW0402127RFKED	Vishay-Dale	RES, 127, 1%, 0.063 W, 0402	0402
R8, R12, R32, R36, R89, R93, R113, R117	8	22.6	CRCW040222R6FKED	Vishay-Dale	RES, 22.6, 1%, 0.063 W, 0402	0402
R9, R10, R13, R14, R23, R24, R33, R34, R37, R38, R47, R48, R68, R69, R78, R79, R90, R91, R94, R95, R104, R105, R114, R115, R118, R119, R128, R129, R149, R150, R159, R160, R174, R178, R181, R184, R185, R186, R188, R203, R204, R207, R215, R219, R222, R225, R226, R244, R245, R246, R247, R248, R249, R250, R251, R254, R255, R262, R263, R264, R270, R272, R277, R280, R285, R287, R293, R295, R303, R304, R306, R310, R313, R314, R315, R316, R317, R318, R320, R322, R325, R343, R346, R350, R355, R356, R357, R359, R360, R361, R390, R391, R474, R477, R479, R482, R496, R509, R519, R520, R522, R523, R524, R587, R588, R589, R636, R638, R639, R640, R641, R642, R643, R644, R645	115	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R11, R15, R35, R39, R92, R96, R116, R120	8	40.2	CRCW040240R2FKED	Vishay-Dale	RES, 40.2, 1%, 0.063 W, 0402	0402
R20, R21, R44, R45, R101, R102, R125, R126	8	365	CRCW0402365RFKED	Vishay-Dale	RES, 365, 1%, 0.063 W, 0402	0402
R49, R130, R492	3	8.06k	CRCW04028K06FKED	Vishay-Dale	RES, 8.06 k, 1%, 0.063 W, 0402	0402
R50, R61, R131, R142, R352, R353, R358	7	1.2k	CRCW04021K20JNED	Vishay-Dale	RES, 1.2 k, 5%, 0.063 W, 0402	0402
R51, R62, R132, R143	4	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
R52, R53, R58, R59, R65, R66, R74, R75, R76, R133, R134, R139, R140, R146, R147, R155, R156, R157, R368	19	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R54, R55, R56, R57, R63, R64, R71, R135, R136, R137, R138, R144, R145, R152	14	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
R60, R141	2	1.33k	CRCW04021K33FKED	Vishay-Dale	RES, 1.33 k, 1%, 0.063 W, 0402	0402
R72, R153	2	2.10k	CRCW04022K10FKED	Vishay-Dale	RES, 2.10 k, 1%, 0.063 W, 0402	0402
R73, R154, R267, R344	4	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
R77, R158	2	750	CRCW0603750RJNEA	Vishay-Dale	RES, 750, 5%, 0.1 W, 0603	0603
R80, R81, R161, R162	4	1.3k	RC0603JR-071K3L	Yageo America	RES, 1.3 k, 5%, 0.1 W, 0603	0603
R163, R166	2	1.5k	CRCW04021K50JNED	Vishay-Dale	RES, 1.5 k, 5%, 0.063 W, 0402	0402
R164, R168, R175, R180, R205, R209, R216, R221	8	50	FC0402E50R0BST1	Vishay-Dale	RES, 50, 0.1%, 0.05 W, 0402	0402
R165, R167, R169, R170, R171, R173, R206, R208, R210, R211, R212, R214, R470	13	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R172, R213	2	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
R176, R218	2	270	RC0603JR-07270RL	Yageo America	RES, 270, 5%, 0.1 W, 0603	0603
R177, R192, R199, R217, R233, R242, R374, R375, R376, R377, R378, R379, R386, R388, R403, R408, R410, R494, R506, R518, R593, R595, R596, R598, R600	25	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R179, R220	2	120	RT0603DRE07120RL	Yageo America	RES, 120, 0.5%, 0.1 W, 0603	0603
R182, R183, R223, R224	4	10.0k	CRCW040210K0DHEDP	Vishay-Dale	RES, 10.0 k, 0.5%, 0.063 W, 0402	0402
R187, R196, R227, R237	4	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R190, R231	2	330	RC0603JR-07330RL	Yageo America	RES, 330 ohm, 5%, 0.1W, 0603	0603
R194, R201, R235, R240, R475, R476, R480, R481	8	100	CRCW0402100RJNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
R258, R259, R268, R269	4	160	CRCW0402160RJNED	Vishay-Dale	RES, 160, 5%, 0.063 W, 0402	0402
R273, R274, R276, R279, R282, R283, R288, R289, R292, R294, R299, R300	12	120	CRCW0402120RJNED	Vishay-Dale	RES, 120, 5%, 0.063 W, 0402	0402
R275	1	620	RC0201FR-07620RL	Yageo America	RES, 620, 1%, 0.05 W, 0201	0201
R278, R290, R301, R302, R309, R392, R401, R592, R604, R605, R606, R607, R608, R609, R610, R646, R647, R650, R651, R654, R655, R658, R659, R662, R663, R666, R667, R670, R671, R674, R675	31	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201
R281, R291	2	51	RC0201JR-0751RL	Yageo America	RES, 51, 5%, 0.05 W, 0201	0201
R284	1	39.0k	RC0201FR-0739KL	Yageo America	RES, 39.0 k, 1%, 0.05 W, 0201	0201
R305	1	100	ERJ-1GEF1000C	Panasonic	RES, 100, 1%, 0.05 W, 0201	0201
R307, R308	2	294	RC0201FR-07294RL	Yageo America	RES, 294, 1%, 0.05 W, 0201	0201
R324, R327	2	18	CRCW040218R0JNED	Vishay-Dale	RES, 18, 5%, 0.063 W, 0402	0402
R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R362, R363, R364, R365	16	240	CRCW0402240RJNED	Vishay-Dale	RES, 240, 5%, 0.063 W, 0402	0402
R342, R345, R349, R354	4	20.0	CRCW040220R0FKED	Vishay-Dale	RES, 20.0, 1%, 0.063 W, 0402	0402
R347, R348, R366, R367	4	220	CRCW0402220RJNED	Vishay-Dale	RES, 220, 5%, 0.063 W, 0402	0402
R351	1	82.0	RC0603FR-0782RL	Yageo America	RES, 82.0, 1%, 0.1 W, 0603	0603
R369	1	47	CRCW040247R0JNED	Vishay-Dale	RES, 47, 5%, 0.063 W, 0402	0402
R370, R371, R372, R373	4	750	CRCW0603750RFKEA	Vishay-Dale	RES, 750, 1%, 0.1 W, 0603	0603
R380, R381, R382, R383, R384, R385, R406, R429, R430, R431, R544, R545, R546	13	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R393	1	33k	CRCW040233K0JNED	Vishay-Dale	RES, 33 k, 5%, 0.063 W, 0402	0402
R394, R396, R398, R400, R402, R404, R405, R407, R409, R411, R416, R420, R421, R423, R424, R425, R440, R441, R445, R447, R449, R451, R452, R454, R467, R468	26	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R395, R399	2	0	ERJ-1GN0R00C	Panasonic	RES, 0, 5%, 0.05 W, AEC-Q200 Grade 0, 0201	0201
R397, R489, R503, R513, R525	5	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R426, R427, R597, R599	4	33	CRCW060333R0JNEA	Vishay-Dale	RES, 33, 5%, 0.1 W, 0603	0603
R432, R433, R434, R435, R436, R437, R438, R439, R455, R456, R458, R459, R461, R462, R464, R465, R485, R543, R549	19	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R469	1	270	CRCW0603270RJNEA	Vishay-Dale	RES, 270, 5%, 0.1 W, 0603	0603
R472, R539	2	10.0	CRCW060310R0FKEAHP	Vishay-Dale	RES, 10.0, 1%, 0.25 W, 0603	0603
R473, R478	2	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
R484	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
R487	1	45.3k	CRCW060345K3FKEA	Vishay-Dale	RES, 45.3 k, 1%, 0.1 W, 0603	0603
R488	1	100k	CRCW0603100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R491	1	18.0k	CRCW040218K0FKED	Vishay-Dale	RES, 18.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R493, R505, R517, R529	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R502	1	12.0k	CRCW040212K0FKED	Vishay-Dale	RES, 12.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R504, R535	2	9.09k	CRCW04029K09FKED	Vishay-Dale	RES, 9.09 k, 1%, 0.063 W, 0402	0402
R515	1	43.2k	CRCW040243K2FKED	Vishay-Dale	RES, 43.2 k, 1%, 0.063 W, 0402	0402
R516, R528	2	11.3k	CRCW040211K3FKED	Vishay-Dale	RES, 11.3 k, 1%, 0.063 W, 0402	0402
R527	1	33.0k	ERA-2AEB333X	Panasonic	RES, 33.0 k, 0.1%, 0.063 W, 0402	0402
R531	1	24.3k	CRCW060324K3FKEA	Vishay-Dale	RES, 24.3 k, 1%, 0.1 W, 0603	0603
R532	1	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5 k, 1%, 0.1 W, 0603	0603
R534	1	28.7k	CRCW040228K7FKED	Vishay-Dale	RES, 28.7 k, 1%, 0.063 W, 0402	0402
R536	1	118k	CRCW0402118KFKED	Vishay-Dale	RES, 118 k, 1%, 0.063 W, 0402	0402
R537	1	105k	CRCW0402105KFKED	Vishay-Dale	RES, 105 k, 1%, 0.063 W, 0402	0402
R541, R548, R550	3	10.0k	RC1206FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.25 W, 1206	1206
R542	1	12k	CRCW060312K0JNEA	Vishay-Dale	RES, 12k ohm, 5%, 0.1W, 0603	0603
R547	1	2.2k	CRCW06032K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.1 W, 0603	0603
R555, R564, R573, R582	4	50	FC0402E50R0BTBST1	Vishay Thin Film	RES, 50, 0.1%, 0.5 W, 0402	0402
R613, R614, R617, R618, R621, R622, R625, R626, R629, R630	10	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R631, R632, R634, R635	4	10.0k	RT0603DRE0710KL	Yageo America	RES, 10.0 k, 0.5%, 0.1 W, 0603	0603
S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12	12		TCBS-6-01	Richco Plastics	HEX STANDOFF SPACER, 9.53 mm	7.9x9.5 mm
S17	1		L101011MS02Q	C&K Components	SWITCH SLIDE SPST 4A PCB, TH	Slide Switch, TH, SPST
T1, T2	2		TC1-1-43X+	Minicircuits	RF Transformer, 50 ohm, SMT	3.81x3.81mm
T3	1		TC1-1-13M+	Mini-Circuits	RF Transformer	
TP4, TP5, TP10, TP11	4	STD	STD	STD	Test Point, 0.025"	
TP15, TP16, TP20, TP27, TP28, TP29, TP30, TP50, TP51, TP52, TP53, TP64, TP65, TP66, TP67, TP68, TP69, TP70, TP71, TP72, TP73, TP74, TP75, TP76	24		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP19	1		5012	Keystone	Test Point, Multipurpose, White, TH	White Multipurpose Testpoint
U1, U4, U10, U13	4		LMH5401RMSR	Texas Instruments	8GHz Ultra Wideband Fully Differential Amplifier, RMS0014A (UQFN-14)	RMS0014A
U2, U5, U11, U14	4		LMH6401IRMZR	Texas Instruments	4.5 GHz Ultra Wideband Digital Variable Gain Amplifier, RMZ0016A (UQFN-HR-16)	RMZ0016A
U7	1		LMC6762AIM/NOPB-ND	Texas Instruments	Dual Micro-Power Rail-to-Rail Input CMOS Comparator with Push-Pull Output, 8-pin Narrow SOIC	M08A
U8, U17	2		ADC12DJ3200AAVR	Texas Instruments	6.4-GSPS Single Channel or 3.2-GSPS Dual Channel 12-bit Analog-to-Digital Converter (ADC) Family, AAV0144A (FCBGA-144)	AAV0144A
U9	1		LM95233CISD/NOPB	Texas Instruments	Dual Remote Diode and Local Temperature Sensor with SMBus Interface and TruTherm Technology, 15-pin LLP	SDA14B

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U16	1		LMC6762AIMX	Texas Instruments	Dual Micro-Power Rail-to-Rail Input CMOS Comparator with Push-Pull Output, 8-pin Narrow SOIC	M08A
U18	1		LM95233CISD	Texas Instruments	Dual Remote Diode and Local Temperature Sensor with SMBus Interface and TruTherm Technology, 15-pin LLP	SDA14B
U19, U21	2		LMX2594RHAR	Texas Instruments	High Performance, Wideband PLLatinum RF Synthesizer, RHA0040A (VQFN-40)	RHA0040A
U20, U22	2		DS90LV028AQMA	Texas Instruments	Automotive LVDS Dual Differential Line Receiver, 8-pin Narrow SOIC	M08A
U23	1		LMK00304SQ/NOPB	Texas Instruments	3.1-GHz Differential Clock Buffer/Level Translator, RTV0032A (WQFN-32)	RTV0032A
U24	1		LMK04828BISQE/NOPB	Texas Instruments	LMK04828BISQE/NOPB	
U25	1		LMK61E2-SIAR	Texas Instruments	Ultra-Low Jitter Programmable Oscillator with Internal EEPROM, SIA0008B	SIA0008B
U26, U27, U29, U30, U31, U32, U33	7		SN74AVC4T774PWR	Texas Instruments	4-Bit Dual-Supply Bus Transceiver With Configurable Voltage-Level Shifting and 3-State Outputs, PW0016A (TSSOP-16)	PW0016A
U28, U54	2		SN74LVC1G125DBVR	Texas Instruments	Single Bus Buffer Gate With 3-State Outputs, DBV0005A (SOT-5)	DBV0005A
U34	1		FT4232HL-REEL	FTDI	Quad High Speed USB to Multipurpose UART/MPSSSE IC	LQFP_10x10mm
U35	1		TLV70233DBVT	Texas Instruments	Single Output LDO, 300 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U36, U37	2		24C65T-I/SM	MICROCHIP TECHNOLOGY	64K I2C Smart Serial EEPROM, SOIC-8	
U38	1		TPS259261DRCR	Texas Instruments	12V, 5A, 30mΩ eFuse with Adjustable +/-15% Accurate Current Limit, DRC0010J (VSON-10)	DRC0010J
U39, U42, U45, U48, U51	5		TPS82130SILR	Texas Instruments	3-A 17V Step-down Converter Module with Integrated Inductor, SIL0008D (uSIP-8)	SIL0008D
U41, U44, U47	3		TPS7A8400RGRR	Texas Instruments	High-Current (3 A), High-Accuracy (1%), Low-Noise (4.4 μVRMS), LDO Voltage Regulator, RGR0020A (VQFN-20)	RGR0020A
U50	1		TPS7A8300RGRR	Texas Instruments	2A, Low-Dropout Voltage Regulator for High Speed Communication Systems, RGR0020A (VQFN-20)	RGR0020A
U53	1		TPS7A3301RGWT	Texas Instruments	Single Output High PSRR LDO, 1 A, Adjustable -1.18 to -33 V Output, -3 to -36 V Input, with Ultra-Low Noise, 20-pin VQFN (RGW), -40 to 125 degC, Green (RoHS & no Sb/Br)	RGW0020A
U55, U57, U58	3		TCA9534APWR	Texas Instruments	Remote 8-Bit I2C and Low-Power I/O Expander With Interrupt Output and Configuration Registers, PW0016A (TSSOP-16)	PW0016A
U56	1		93LC46BT-I/SN	Microchip	1K Microwire Compatible Serial EEPROM	SOIC-8
U59, U60, U61, U62	4		BAL-0006SMG	Marki Microwave	Broadband Balun, 500 kHz to 6 GHz	320x320mil
U63, U64	2		SN74LVC1G08DCKR	Texas Instruments	Single 2-Input Positive-AND Gate, DCK0005A (SOT-5)	DCK0005A
U65, U66, U67, U68, U69, U70, U71, U72	8		XLF-192+	Minicircuits	Reflectionless Low Pass Filter, SMD	3x3mm
U73	1		DS90LT012AQM/NOPB	Texas Instruments	Automotive LVDS Differential Line Receiver, 5-pin SOT-23, Pb-Free	MF05A
U74	1		NB7V33MMNTXG	ON Semiconductor	1.8V / 2.5V, 10GHz +4 Clock Divider with CML Outputs, QFN-16	3x3mm 16-QFN
U75	1	SN74LVC2G53DCU	SN74LVC2G53DCU	TI	IC, SPDT Analog Switch	VSSOP8
Y1	1		CVHD-950-100.000	Crystek Corporation	VCXO, 100 MHz, 3.3V, SMD	CVHD-950-4
Y2	1		ABM3-12.000MHZ-D2Y-T	Abrakon Corporation	Crystal, 12 MHz, 18 pF, SMD	ABM3
C12, C46, C172, C206	0	0.01uF	GRM155R71E103KA01D	MuRata	CAP, CERM, 0.01 μF, 25 V, +/- 10%, X7R, 0402	0402
C26, C60, C186, C220	0	1uF	C1608X5R1A105K080AC	TDK	CAP, CERM, 1 μF, 10 V, +/- 10%, X5R, 0603	0603
C90, C91, C97, C99, C250, C251, C257, C259	0	4700pF	GRM155R71H472KA01D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, 0402	0402
C94, C95, C254, C255, C406, C410	0	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 μF, 25 V, +/- 20%, X7R, 0402	0402
C336, C366	0	300pF	GRM1885C2A301JA01D	MuRata	CAP, CERM, 300pF, 100V, +/-5%, C0G/NP0, 0603	0603
C351, C405	0	0.1uF	GRM033R60J104KE19D	MuRata	CAP, CERM, 0.1 μF, 6.3 V, +/- 10%, X5R, 0201	0201
C409	0	12pF	C0402C120J3GACAUTO	Kemet	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C490, C491, C493, C499, C502, C503, C505, C506	0	0.1uF	GRM155R71C104JA88D	MuRata	CAP, CERM, 0.1 μF, 16 V, +/- 5%, X7R, 0402	0402
L21	0	120 ohm	BLM18SG121TN1D	MuRata	Ferrite Bead, 120 ohm @ 100 MHz, 3 A, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
L75, L76, L77, L78, L79, L80, L81, L82	0	2400-2500MHz	748112024		WE-LPF Multilayer Chip Low-Pass Filter, size 0603, 2400-2500MHz	
L93, L94, L95, L96	0	30Ω	742792310		WE-CBF SMD EMI Suppression Ferrite Bead, 1210, 30Ω	
LF1, LF2, LF3, LF4, LF5, LF6, LF7, LF8	0		LFL182G45TC3B746	MuRata	Filter for Communication Equipment, SMD	1.6x0.8mm
R2, R26, R67, R70, R83, R107, R148, R151, R193, R195, R197, R200, R229, R234, R236, R238, R239, R252, R253, R256, R257, R260, R261, R265, R266, R271, R286, R323, R326, R495, R497, R498, R499, R500, R507, R508, R510, R511, R512, R521, R586, R590, R633, R637	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R5, R19, R29, R43, R86, R100, R110, R124, R553, R554, R562, R563, R571, R572, R580, R581	0	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
R7, R17, R31, R41, R88, R98, R112, R122	0	1.21k	CRCW04021K21FKED	Vishay-Dale	RES, 1.21 k, 1%, 0.063 W, 0402	0402
R22, R46, R103, R127	0	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R189, R202, R230, R243	0	51	CRCW060351R0JNEA	Vishay-Dale	RES, 51, 5%, 0.1 W, 0603	0603
R191, R198, R232, R241, R296, R387, R389, R530, R594	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R228	0	10.0k	ERJ-2RKF1002X	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0402	0402
R297, R298, R311, R312	0	49.9	CRCW020149R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.05 W, 0201	0201
R319, R341	0	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, 0402	0402
R321, R340	0	130	CRCW0402130RFKED	Vishay-Dale	RES, 130, 1%, 0.063 W, 0402	0402
R428, R601, R602, R603	0	33	CRCW060333R0JNEA	Vishay-Dale	RES, 33, 5%, 0.1 W, 0603	0603
R483, R558, R559, R567, R568, R576, R577, R585	0	2.00k	CRCW04022K00FKED	Vishay-Dale	RES, 2.00 k, 1%, 0.063 W, 0402	0402
R486	0	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R490	0	11.0k	CRCW040211K0FKED	Vishay-Dale	RES, 11.0 k, 1%, 0.063 W, 0402	0402
R501	0	3.24k	CRCW04023K24FKED	Vishay-Dale	RES, 3.24 k, 1%, 0.063 W, 0402	0402
R514	0	34.8k	CRCW060334K8FKEA	Vishay-Dale	RES, 34.8 k, 1%, 0.1 W, 0603	0603
R526	0	24.9k	CRCW060324K9FKEA	Vishay-Dale	RES, 24.9 k, 1%, 0.1 W, 0603	0603
R533	0	19.6k	CRCW040219K6FKED	Vishay-Dale	RES, 19.6 k, 1%, 0.063 W, 0402	0402
R551, R552, R560, R561, R569, R570, R578, R579, R648, R649, R652, R653, R656, R657, R660, R661, R664, R665, R668, R669, R672, R673, R676, R677	0	0	CRCW02010000Z0ED	Vishay-Dale	RES, 0, 5%, 0.05 W, 0201	0201
R591	0	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603
U3, U6, U12, U15	0		OPA376AIDCKT	Texas Instruments	Precision, Low Noise, Low Iq Operational Amplifier, 2.2 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DCK0005A), Green (RoHS & no Sb/Br)	DCK0005A
U40, U43, U46, U49, U52	0	27 uF	NFM31PC276B0J3L	MuRata	FILTER LC HIGH FREQ 27uF 1206	3.2x1.6mm

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