

TIDA-00366 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-00366	Any	Printed Circuit Board	
C1, C55, C56, C57, C58, C59, C60, C61, C62, C71, C73, C75, C80, C85, C86, C95, C96	17	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7 μ F, 50 V, +/- 10%, X5R, 0805	0805
C2, C3, C7, C8, C9, C14, C15, C20, C21, C22, C25, C26, C30, C31, C36, C37, C38, C47, C48, C49, C52, C63, C64, C65, C66, C67, C68, C69, C70, C72, C74, C76, C82, C87, C89, C90, C91, C94, C97	39	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C4, C6, C18, C40, C41, C46, C51, C81, C83, C84, C88, C92	12	0.01uF	885012206040	Wurth Elektronik	CAP, CERM, 0.01 μ F, 16 V, +/- 10%, X7R, 0603	0603
C5, C93	2	10uF	C3225X5R1H106K250AB	TDK	CAP, CERM, 10 μ F, 50 V, +/- 10%, X5R, 1210	1210
C12, C17, C19	3	1500pF	06031C152JAT2A	AVX	CAP, CERM, 1500 pF, 100 V, +/- 5%, X7R, 0603	0603
C13, C23, C32, C34, C35, C44	6	0.1uF	C0603C104J4RACTU	Kemet	CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603	0603
C24	1	22uF	GRM21BR61E226ME44L	MuRata	CAP, CERM, 22 μ F, 25 V, +/- 20%, X5R, 0805	0805
C27, C28, C29, C39, C43, C45, C50, C53, C54	9	180pF	06035A181JAT2A	AVX	CAP, CERM, 180 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C77, C78, C79	3	0.47uF	C1608X5R1H474K080AB	TDK	CAP, CERM, 0.47 μ F, 50 V, +/- 10%, X5R, 0603	0603
C101, C102, C103, C104, C105, C106	6	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C107, C109, C110	3	820pF	GRM188R71H821KA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0603	0603
C108	1	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603	0603
C111, C112	2	3uF	B32774D1305K000	TDK	CAP, Film, 3 μ F, 1300 V, +/- 10%, 0.016 ohm, TH	31.5x18mm
D1, D8	2	100V	B1100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMA	SMA
D3, D4, D5, D6, D7, D9	6	30V	MSS2P3-M3/89A	Vishay-Semiconductor	Diode, Schottky, 30 V, 2 A, AEC-Q101, MicroSMP	MicroSMP
D12, D13, D14	3	1300V	BYG23T-M3/TR	Vishay-Semiconductor	Diode, Ultrafast, 1300 V, 1 A, SMA	SMA

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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	4		N/A	N/A	Mountin hole, NPTH Drill 3.2mm	
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1, J4	2		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
J2, J3	2		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
J8, J9, J10, J11, J12	5		7461086	Würth Elektronik	Power Element Bush, M4, 12, TH	Bush, M4, TH
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
R1, R132, R133, R134, R135	5	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R2, R18, R25, R27, R40, R41, R45, R47, R50, R62	10	7.50k	ERJ-3EKF7501V	Panasonic	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R4, R5, R9, R10, R26, R28, R29, R30, R51, R52, R53, R54, R58, R59, R60, R61, R65, R66, R67, R68	20	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R11, R44, R63, R75, R76, R77, R78, R84, R89, R112, R113, R114, R115, R116, R117, R154	16	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R12, R13, R16, R17, R19, R139, R140, R141, R142, R143, R144	11	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, 0603	0603
R14, R15, R31, R33, R43, R49, R55, R56, R57, R79, R80, R85, R86, R87, R88, R110, R158, R159, R160, R161, R162, R163, R164, R165, R166	25	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R20, R21, R32, R34, R35, R48	6	100	ERA-3AEB101V	Panasonic	RES, 100, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R23, R36, R37	3	10.7k	RG1608P-1072-B-T5	Susumu Co Ltd	RES, 10.7 k, 0.1%, 0.1 W, 0603	0603

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R69, R70, R71	3	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R72, R73, R74	3	820	CRCW0805820RJNEA	Vishay-Dale	RES, 820, 5%, 0.125 W, 0805	0805
R81	1	31.6k	CRCW060331K6FKEA	Vishay-Dale	RES, 31.6 k, 1%, 0.1 W, 0603	0603
R82, R83, R92, R93	4	39	CRCW060339R0JNEA	Vishay-Dale	RES, 39, 5%, 0.1 W, 0603	0603
R90	1	90.9k	RC0603FR-0790K9L	Yageo America	RES, 90.9 k, 1%, 0.1 W, 0603	0603
R91	1	5.76k	CRCW06035K76FKEA	Vishay-Dale	RES, 5.76 k, 1%, 0.1 W, 0603	0603
R94, R96, R98, R100, R101, R104, R111	7	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R95, R97, R99, R102, R103, R105	6	16.5	CRCW120616R5FKEA	Vishay-Dale	RES, 16.5, 1%, 0.25 W, 1206	1206
R106	1	68.1k	RT0603DRE0768K1L	Yageo America	RES, 68.1 k, 0.5%, 0.1 W, 0603	0603
R107	1	3.16k	RC0603FR-073K16L	Yageo America	RES, 3.16 k, 1%, 0.1 W, 0603	0603
R109	1	3.01k	RC0603FR-073K01L	Yageo America	RES, 3.01 k, 1%, 0.1 W, 0603	0603
R118, R119, R120	3	0.005	PWR4412-2SDR0050F	Bourns	RES, 0.005, 1%, 5 W, 20.32x4.80mm	20.32x4.80mm
R121, R123, R124, R126, R129	5	100k	CRCW1206100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.25 W, 1206	1206
R122, R125, R127, R128, R130, R131	6	1.0Meg	CRCW08051M00JNEA	Vishay-Dale	RES, 1.0 M, 5%, 0.125 W, 0805	0805
R136, R137, R138	3	1.33	CRCW08051R33FKEA	Vishay-Dale	RES, 1.33, 1%, 0.125 W, 0805	0805
R145	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
R146, R148, R150, R153, R155	5	10.0k	PHT0603Y1002BGT200	Vishay Sfernice	RES, 10.0 k, 0.1%, 0.0375 W, 0603	0603
R147	1	8.20k	RG1608P-822-B-T5	Susumu Co Ltd	RES, 8.20 k, 0.1%, 0.1 W, 0603	0603
R149, R152	2	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R151	1	5.11Meg	CRCW06035M11FKEA	Vishay-Dale	RES, 5.11 M, 1%, 0.1 W, 0603	0603
R156	1	12.0k	RG1608P-123-B-T5	Susumu Co Ltd	RES, 12.0 k, 0.1%, 0.1 W, 0603	0603
R157	1	200	RG1608P-201-B-T5	Susumu Co Ltd	RES, 200, 0.1%, 0.1 W, 0603	0603
R167	1	1.0k	RC0603JR-071KL	Yageo America	RES, 1.0 k, 5%, 0.1 W, 0603	0603
TP1, TP2, TP3, TP4, TP5, TP6, TP7	7		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1, U5, U9, U10, U11	5		OPA320AIDBVR	Texas Instruments	Precision, 20 MHz, 0.9 pA Ib, RRIO, CMOS Operational Amplifier, 1.8 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A
U2, U6, U7, U25	4		TLC372QDR	Texas Instruments	LinCMOS Dual Differential Comparators, D0008A	D0008A
U3	1		TLV1117-33IDCY	Texas Instruments	FIXED LOW-DROPOUT VOLTAGE REGULATOR, DCY0003A	DCY0003A
U4	1		REF2033AIDDCR	Texas Instruments	Low-Drift, Low-Power, Dual-Output, VREF and VREF / 2 Voltage References, DDC0005A	DDC0005A
U8	1		SN74LVC1G10DBVR	Texas Instruments	Single 3-Input Positive-NAND Gate, DBV0006A	DBV0006A
U12, U13, U14, U15, U16	5		AMC1301DWVR	Texas Instruments	200 kHz, Fully-Differential Isolation Amplifier, DWV0008A	DWV0008A
U17, U18, U19	3		UCC21520DW	Texas Instruments	4A/6A, 5KVrms Dual Isolated-channel Universal Gate Driver, DW0016A	DW0016A

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U20, U21, U22	3		TL431BQDBZT	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U23	1		TLV70433DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 24 V Input, with Ultra-Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
U24	1		MG1250H-XN2MM	Littelfuse Inc.	IGBT MOD 1200V 50A PKG H CRCT:X	107.5x45mm
C10, C98, C99, C100	0	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X5R, 0805	0805
C11	0	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C16, C33, C42	0	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0603	0603
D10, D11	0	200V	1SMB5956BT3G	ON Semiconductor	Diode, Zener, 200 V, 550 mW, SMB	SMB
J5, J6, J7	0		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
R3, R24, R39, R42, R64	0	7.50k	ERJ-3EKF7501V	Panasonic	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R6, R8, R22, R38, R46	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R7	0	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R108	0	2.61k	CRCW06032K61FKEA	Vishay-Dale	RES, 2.61 k, 1%, 0.1 W, 0603	0603

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