

TIDA-00366 REV E3 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPCB1	1		TIDA-00366	Any	Printed Circuit Board	
C1, C2, C15, C16, C29, C30	6	0.1uF	C0603X104K4RACTU	Kemet	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	0603
C3, C11, C13, C17, C25, C27, C31, C39, C41	9	180pF	GRM1885C1H181JA01D	MuRata	CAP, CERM, 180 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C4, C6, C18, C20, C32, C34, C43, C45, C48, C59, C72, C73, C79, C81, C84, C87, C92	17	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, 0805	0805
C5, C7, C9, C14, C19, C21, C23, C28, C33, C35, C37, C42, C44, C47, C49, C50, C53, C56, C58, C60, C61, C64, C66, C74, C75, C76, C77, C78, C80, C85, C86, C93, C97, C98, C104, C105, C109, C110, C111, C112	40	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
C8, C22, C36	3	1500pF	06031C152JAT2A	AVX	CAP, CERM, 1500 pF, 100 V, +/- 5%, X7R, 0603	0603
C10, C24, C38, C46, C51, C52, C54, C57, C62, C63, C65, C71	12	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0603	0603
C67, C68, C82	3	0.47uF	C1608X7R1H474K080AC	TDK	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, 0603	0603
C88, C106	2	10uF	GRT31CR61H106KE01L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X5R, AEC-Q200 Grade 1, 1206	1206
C89, C90	2	5uF	B32774D1505K	TDK	CAP, Film, 5 uF, 1300 V, +/- 10%, 0.0098 ohm, TH	31.5x22mm
C91, C96, C99, C100, C101, C102	6	10pF	885012006073	Würth Elektronik	CAP, CERM, 10 pF, 100 V, +/- 5%, C0G/NP0, 0603	0603
C103, C107, C113	3	820pF	C0603C821K5RACTU	Kemet	CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0603	0603
C108	1	22uF	CL21A226MAQNNNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 20%, X5R, 0805	0805
D3, D4, D9	3	1300V	BYG23T-M3/TR	Vishay-Semiconductor	Diode, Ultrafast, 1300 V, 1 A, SMA	SMA
D5, D6, D7, D8, D10, D11	6	30V	MSS2P3-M3/89A	Vishay-Semiconductor	Diode, Schottky, 30 V, 2 A, AEC-Q101, MicroSMP	MicroSMP
D12, D13	2	100V	B1100-13-F	Diodes Inc.	Diode, Schottky, 100 V, 1 A, SMA	SMA
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
J4, J5, J6, J7, J9	5		7461086	Würth Elektronik	Power Element Bush, M4, 12, TH	Bush, M4, TH

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J8, J12	2		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
J10, J11	2		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
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, R2, R6, R23, R27, R44, R48, R103, R106, R107, R116, R117, R125, R131, R151, R157	16	10k	RC0603JR-0710KL	Yageo	RES, 10 k, 5%, 0.1 W, 0603	0603
R3, R7, R10, R14, R17, R20, R24, R28, R31, R35, R38, R41, R45, R49, R52, R56, R59, R62, R67, R71, R87, R102, R110, R111, R127, R159, R164	27	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R4, R19, R25, R40, R46, R61	6	100	ERA-3AEB101V	Panasonic	RES, 100, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R5, R26, R47, R78, R92, R143, R145, R150, R152, R153, R156	11	100	RC0603FR-07100RL	Yageo	RES, 100, 1%, 0.1 W, 0603	0603
R8, R22, R29, R43, R50, R64	6	7.50k	ERJ-3EKF7501V	Panasonic	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R9, R30, R51	3	820	CRCW1206820RJNEA	Vishay-Dale	RES, 820, 5%, 0.25 W, AEC-Q200 Grade 0, 1206	1206
R11, R32, R53	3	10.7k	RG1608P-1072-B-T5	Susumu Co Ltd	RES, 10.7 k, 0.1%, 0.1 W, 0603	0603
R12, R13, R15, R16, R33, R34, R36, R37, R54, R55, R57, R58, R75, R76, R80, R81, R90, R91, R93, R94	20	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R65, R66, R69, R70, R73	5	200k	RC1206FR-07200KL	Yageo America	RES, 200 k, 1%, 0.25 W, 1206	1206
R68	1	0	MCR18EZHZJ000	Rohm	RES, 0, 5%, 0.25 W, 1206	1206
R72, R85, R88, R98	4	15.0k	RC0603FR-0715KL	Yageo	RES, 15.0 k, 1%, 0.1 W, 0603	0603
R74, R89	2	39	CRCW060339R0JNEA	Vishay-Dale	RES, 39, 5%, 0.1 W, 0603	0603
R79	1	2.49k	RC0603FR-072K49L	Yageo	RES, 2.49 k, 1%, 0.1 W, 0603	0603
R100, R101, R120	3	1.33	RC0805FR-071R33L	Yageo America	RES, 1.33, 1%, 0.125 W, 0805	0805
R104, R105, R114, R115, R122, R130, R141	7	0	ERJ-8GEY0R00V	Panasonic	RES, 0, 5%, 0.25 W, 1206	1206

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R108, R109, R118, R119, R126, R132	6	16.5	CRCW120616R5FKEA	Vishay-Dale	RES, 16.5, 1%, 0.25 W, 1206	1206
R112, R113, R128	3	20.0k	RC0603FR-0720KL	Yageo	RES, 20.0 k, 1%, 0.1 W, 0603	0603
R121, R123, R124	3	0.005	PWR4412-2SDR0050F	Bourns	RES, 0.005, 1%, 5 W, 20.32x4.80mm	20.32x4.80mm
R129	1	22.0k	ERJ-3EKF2202V	Panasonic	RES, 22.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R133, R139, R140, R142, R146	5	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R134, R135, R136, R137, R138	5	100k	CRCW1206100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.25 W, 1206	1206
R147	1	1.0k	RC0603JR-071KL	Yageo America	RES, 1.0 k, 5%, 0.1 W, 0603	0603
R154	1	200	RG1608P-201-B-T5	Susumu Co Ltd	RES, 200, 0.1%, 0.1 W, 0603	0603
R155	1	12.0k	RG1608P-123-B-T5	Susumu Co Ltd	RES, 12.0 k, 0.1%, 0.1 W, 0603	0603
R158, R160, R161, R162, R166	5	10.0k	PHT0603Y1002BGT200	Vishay Sfernice	RES, 10.0 k, 0.1%, 0.0375 W, 0603	0603
R163	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
R165	1	8.20k	RG1608P-822-B-T5	Susumu Co Ltd	RES, 8.20 k, 0.1%, 0.1 W, 0603	0603
R167	1	5.11Meg	CRCW06035M11FKEA	Vishay-Dale	RES, 5.11 M, 1%, 0.1 W, 0603	0603
TP1, TP2, TP3, TP7, TP8, TP9, TP10	7		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1, U5, U9	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
U2, U6, U10, U25	4		TLC372QDR	Texas Instruments	LinCMOS Dual Differential Comparators, D0008A	D0008A
U3, U7, U11	3		AMC1301DWVR	Texas Instruments	200 kHz, Fully-Differential Isolation Amplifier, DWV0008A	DWV0008A
U4, U8, U12, U15, U17	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
U13	1		TLV70450DBVR	Texas Instruments	Single Output LDO, 150 mA, Fixed 5 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
U14, U16	2		AMC1311DWVR	Texas Instruments	Precision, 2-V Input, Reinforced Isolated Amplifier, DWV0008A (SOIC-8)	DWV0008A
U18, U19, U22	3		UCC21530DWK	Texas Instruments	4-A, 6-A, 5.7-kVRMS Isolated Dual-Channel Gate Driver with Enable, DWK0014A (SOIC-14)	DWK0014A
U20	1		SN74LVC1G32	Texas Instruments	Single 2-Input Positive-OR Gate, DBV0005A, LARGE T&R	DBV0005A
U21	1		SN74LVC1G11	Texas Instruments	Single 3-Input Positive-AND Gate, DBV0006A, LARGE T&R	DBV0006A
U23	1		MIXA60W1200TED	IXYS	IGBT MOD 1200V 85A E2-Pack	107.5x45mm
U24	1		REF2033AIDDCR	Texas Instruments	Low-Drift, Low-Power, Dual-Output, VREF and VREF / 2 Voltage References, DDC0005A	DDC0005A
U26	1		TLV1117-33IDCY	Texas Instruments	FIXED LOW-DROPOUT VOLTAGE REGULATOR, DCY0003A	DCY0003A
C12, C26, C40	0	0.01uF	885012206040	Würth Elektronik	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0603	0603
C69, C70, C83, C94	0	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X5R, 0805	0805
C95	0	0.1uF	C1608X7R1H104K	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
D1, D2	0	200V	1SMB5956BT3G	ON Semiconductor	Diode, Zener, 200 V, 550 mW, SMB	SMB
J1, J2, J3	0		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
R18, R39, R60, R77, R148, R149	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603

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R21, R42, R63, R86, R99	0	7.50k	ERJ-3EKF7501V	Panasonic	RES, 7.50 k, 1%, 0.1 W, 0603	0603
R144	0	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805

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