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TIDA-01333

TIDA-01333 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-01333	Any	Printed Circuit Board	
C1, C2, C3, C4	4	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C5	1	1000pF	202R18W102KV4E	Johanson Technology	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206_190	1206_190
C6	1	47uF	ECA-1VM470	Panasonic	CAP, AL, 47 µF, 35 V, +/- 20%, TH	CAPR, 5x11mm
C7, C13, C14, C33, C36	5	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	1206
C8, C18, C19, C49, C50	5	10uF	C2012X7R1A106K125AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
C9, C12	2	2.2uF	GRM31CR71H225KA88L	MuRata	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 1206	1206
C10, C17, C25_CMCh1, C25_CMCh2, C25_CMCh3, C25_CMCh4, C30_CMCh1, C30_CMCh2, C30_CMCh3, C30_CMCh4, C34, C35, C37, C38, C39, C40, C43, C46, C47, C51, C52, C53	22	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C11, C23	2	15pF	GRM1885C1H150JA01D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C15, C16, C21	3	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0603	0603
C20	1	0.033uF	GRM188R71H333KA61D	MuRata	CAP, CERM, 0.033 µF, 50 V, +/- 10%, X7R, 0603	0603
C22	1	82pF	GRM1885C1H820JA01D	MuRata	CAP, CERM, 82 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C24, C28_CMCh1, C28_CMCh2, C28_CMCh3, C28_CMCh4, C32_NoCMCh1, C32_NoCMCh2, C32_NoCMCh3, C32_NoCMCh4	9	0.01uF	06031C103KAT2A	AVX	CAP, CERM, 0.01 µF, 100 V, +/- 10%, X7R, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C26_CMCh1, C26_CMCh2, C26_CMCh3, C26_CMCh4, C31_CMCh1, C31_CMCh2, C31_CMCh3, C31_CMCh4, C41, C42, C48	11	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C27_CMCh1, C27_CMCh2, C27_CMCh3, C27_CMCh4, C29_CMCh1, C29_CMCh2, C29_CMCh3, C29_CMCh4	8	1000pF	C0805C102JBRACTU	Kemet	CAP, CERM, 1000 pF, 630 V, +/- 5%, X7R, 0805	0805
C44	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C45	1	820pF	GRM1885C1H821JA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
D1, D4	2	100V	BAT41ZFILM	STMicroelectronics	Diode, Schottky, 100 V, 0.2 A, SOD-123	SOD-123
D2, D3	2	16V	MMSZ4703T1G	ON Semiconductor	Diode, Zener, 16 V, 500 mW, SOD-123	SOD-123
D5, D6	2	30V	B0530W-7-F	Diodes Inc.	Diode, Schottky, 30 V, 0.5 A, SOD-123	SOD-123
D7_CMCh1, D7_CMCh2, D7_CMCh3, D7_CMCh4, D10_CMCh1, D10_CMCh2, D10_CMCh3, D10_CMCh4	8	160V	SMAJ160CA	Littelfuse	Diode, TVS, Bi, 160 V, 400 W, SMA	SMA
D8_CMCh1, D8_CMCh2, D8_CMCh3, D8_CMCh4, D11_NoCMCh1, D11_NoCMCh2, D11_NoCMCh3, D11_NoCMCh4	8	Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
D9_CMCh1, D9_CMCh2, D9_CMCh3, D9_CMCh4, D12_NoCMCh1, D12_NoCMCh2, D12_NoCMCh3, D12_NoCMCh4	8	36V	SM6T36CA	STMicroelectronics	Diode, TVS, Bi, 36 V, 600 W, SMB	SMB
FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
J1, J2	2		SSHQ-123-D-08-F-LF	Major League Electronics	Female Connector, 2.54mm, 23x2, TH	Female Connector, 2.54mm, 23x2, TH

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J3	1		5-146278-3	TE Connectivity	Header, 100mil, 3x1, Tin, TH	Header, 3x1, 100mil, TH
J4	1		1844333	Phoenix Contact	Header (Shrouded), 3.5mm, 14x1, Tin, R/A, TH	Header (Shrouded), 3.5mm, 14x1, R/A, TH
K1_CMCh1, K1_CMCh2, K1_CMCh3, K1_CMCh4, K2_NoCMCh1, K2_NoCMCh2, K2_NoCMCh3, K2_NoCMCh4	8		CPC1017N	IXYS	Relay, SPST-NO (1 Form A), 0.1 A, 1.2 VDC, SMD	4.089x3.81mm
R1, R2, R3, R4, R13, R14, R15	7	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
R5, R6, R7, R8, R9, R10, R11, R12, R25, R38, R46	11	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R16, R17	2	6.65k	CRCW04026K65FKED	Vishay-Dale	RES, 6.65 k, 1%, 0.063 W, 0402	0402
R18, R27	2	1.0k	ERJ-6GEYJ102V	Panasonic	RES, 1.0 k, 5%, 0.125 W, 0805	0805
R19, R28	2	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R20	1	220k	CRCW0603220KJNEA	Vishay-Dale	RES, 220 k, 5%, 0.1 W, 0603	0603
R21	1	16.2k	CRCW060316K2FKEA	Vishay-Dale	RES, 16.2 k, 1%, 0.1 W, 0603	0603
R22, R33, R34, R35, R36, R49	6	49.9	CRCW060349R9FKEA	Vishay-Dale	RES, 49.9, 1%, 0.1 W, 0603	0603
R23	1	75k	CRCW060375K0JNEA	Vishay-Dale	RES, 75 k, 5%, 0.1 W, 0603	0603
R24	1	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R26	1	240k	CRCW0603240KJNEA	Vishay-Dale	RES, 240 k, 5%, 0.1 W, 0603	0603
R29_CMCh1, R29_CMCh2, R29_CMCh3, R29_CMCh4, R31_NoCMCh1, R31_NoCMCh2, R31_NoCMCh3, R31_NoCMCh4	8	180	CRCW0603180RJNEA	Vishay-Dale	RES, 180, 5%, 0.1 W, 0603	0603
R30_CMCh1, R30_CMCh2, R30_CMCh3, R30_CMCh4	4	200	RG2012P-201-B-T5	Susumu Co Ltd	RES, 200, 0.1%, 0.125 W, 0805	0805
R32_NoCMCh1, R32_NoCMCh2, R32_NoCMCh3, R32_NoCMCh4	4	200	RT0805BRD07200RL	Yageo America	RES, 200, 0.1%, 0.125 W, 0805	0805
R37, R39, R40, R41, R42, R43, R44, R45	8	5.11k	CRCW06035K11FKEA	Vishay-Dale	RES, 5.11 k, 1%, 0.1 W, 0603	0603
R47	1	374	CRCW0603374RFKEA	Vishay-Dale	RES, 374, 1%, 0.1 W, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R48	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
R50	1	47k	CRCW060347K0JNEA	Vishay-Dale	RES, 47 k, 5%, 0.1 W, 0603	0603
S1	1		416131160802	Wurth Elektronik	Switch, SPST, Off-On, 2 Pos, SMD	5.6x3.58mm
SH-J1	1		60900213421	Wurth Elektronik	Shunt, 2.54mm, Gold, Black	Shunt, 2.54mm, Black
T1	1	2.7uH	750316449	Wurth Elektronik	Transformer, 2.7 uH, SMT	9.5x9.78mm
TP4, TP5, TP7, TP10	4		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP6, TP11, TP12, TP13, TP14, TP26	6		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP8	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP9, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP24, TP25, TP27	12		5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
TP23	1		5003	Keystone	Test Point, Miniature, Orange, TH	Orange Miniature Testpoint
U1	1		SN74LVC2G86DCTR	Texas Instruments	Dual 2-Input Exclusive-OR Gate, DCT0008A	DCT0008A
U2, U3	2		SN74LVC1G332DCKR	Texas Instruments	Single 3-Input Positive-OR Gate, DCK0006A	DCK0006A
U4	1		24LC256-I/ST	Microchip	256K I2C CMOS Serial EEPROM, TSSOP-8	TSSOP-8
U5	1		TPS55010RTER	Texas Instruments	2.95V To 6V Input, 2W, Isolated DC/DC Converter with Integrated FETs, RTE0016F (WQFN-16)	RTE0016F
U6	1		LP2985-50DBVR	Texas Instruments	150-mA Low-noise Low-dropout Regulator With Shutdown, DBV0005A	DBV0005A
U7_CMCh1, U7_CMCh2, U7_CMCh3, U7_CMCh4	4		INA149AIDR	Texas Instruments	High Common-Mode Voltage Difference Amplifier, D0008A	D0008A
U8	1		ISOW7841DWR	Texas Instruments	ISOW7841DW, DW0016B	DW0016B
U9	1		SN74LV1T125DCKR	Texas Instruments	Single Power Supply Single Buffer Gate with 3-State Output CMOS Logic Level Shifter, DCK0005A	DCK0005A
U10	1		ISO7140CCDBQR	Texas Instruments	4242-VPK Small-Footprint and Low-Power Quad Channels Digital Isolators, DBQ0016A	DBQ0016A
U11	1		MUX36S08IPWR	Texas Instruments	MUX36xxx 36-V, Low-Capacitance, Low-Leakage-Current, Precision, Analog Multiplexers, PW0016A (TSSOP-16)	PW0016A
U12	1		ADS8681IPWR	Texas Instruments	16-bit, 1 MSPS, 5V SAR ADC with Integrated Analog Front End & Bipolar Inputs, PW0016A (TSSOP-16)	PW0016A
U13	1		OPA192IDBVR	Texas Instruments	36-V, Precision, Rail-to-Rail Input/Output, Low Offset Voltage, Low Input Bias Current Op Amp with e-trim, DBV0005A	DBV0005A
U14	1		SN74AHC594PWR	Texas Instruments	8-Bit Shift Register With Output Registers, PW0016A	PW0016A
U15	1		TS5A23157DGSR	Texas Instruments	DUAL 10-Ohm SPDT ANALOG SWITCH, DGS0010A	DGS0010A

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