

TIDA-01576_ISOLATED_DUAL_SDO REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2	2	1000pF	202R18W102KV4E	Johanson Dielectrics Inc	CAP, CERM, 1000pF, 2KV 10% X7R 1206	1206
C11, C24	2	1uF	885012206076	wurth	CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603	0603
C13	1	0.22uF	C0603C224J3RAC7867	Kemet	CAP, CERM, 0.22 μ F, 25 V, +/- 5%, X7R, 0603	0603
C15, C43	2	1uF	EMK107B7105KA-T	Taiyo Yuden	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603
C16	1	15pF	GRM1885C1H150JA01D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C18, C41, C42, C46, C48, C49, C50, C52, C54, C58, C59, C60, C66, C67	14	10uF	T491B106K016AT	Vishay-Sprague	CAP, TA, 10 μ F, 16 V, +/- 10%, 2 ohm, SMD	3528-21
C19, C23, C30	3	10uF	EMK212BB7106MG-T	Taiyo Yuden	CAP, CERM, 10 μ F, 16 V, +/- 10%, X7R, 0805	0805
C21	1	47uF	JMJ325KB7476KMHP	Taiyo Yuden	CAP, CERM, 47 μ F, 6.3 V, +/- 10%, X7R, 1210	1210
C25	1	2.2uF	GRM21BR71E225KA73L	MuRata	CAP, CERM, 2.2 μ F, 25 V, +/- 10%, X7R, 0805	0805
C31	1	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01 μ F, 25 V, +/- 10%, X7R, 0603	0603
C32, C81	2	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 μ F, 25 V, +/- 5%, X7R, 0603	0603
C33, C55, C71, C75, C76	5	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C68, C69, C77, C78	4	10uF	GRM31CR61H106KA12L	MuRata	CAP, CERM, 10 μ F, 50 V, +/- 10%, X5R, 1206	1206
C70, C74	2	1uF	C0805C105K8RACTU	Kemet	CAP, CERM, 1uF, 10V, +/-10%, X7R, 0805	0805
C72	1	0.1uF	C0603C104K8RACTU	Kemet	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0603	0603
C73	1	47uF	293D476X96R3B2TE3	Vishay-Sprague	CAP, TA, 47 μ F, 6.3 V, +/- 10%, 1.9 ohm, SMD	3528-21
C79, C80	2	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
D1, D2, D3, D4, D5, D6, D8, D10, D12, D14, D16, D18, D21, D22, D23, D24	16	19	CDSOD323-T12C	Bourns Inc.	Diode, TVS, ARRAY, 19V, SOD323	SOD-323
D7	1	SMBJ18CA	SMBJ18CA	Littelfuse Inc	TVS 18 VOLT 600 WATT BI-DIR SMB	SMB
D9, D17, D20	3	Green	LP L296-J2L2-25-Z	OSRAM	LED SmartLED Green 570NM	0603
D11	1	5.6V	SMAZ5V6-13-F	Diodes Incorporated	DIODE ZENER 5.6V 1W SMA	DO-214AC, SMA
D13, D15	2	3.6V	DZ2W03600L	Panasonic Electronic Compon	DIODE ZENER 3.6V 1W MINI2	DO-214AC, SMA
FB3, FB4	2	1000 OHM	MMZ1608B102C	TDK Corporation	FERRITE CHIP 1000 OHM 300MA 0603	0603
FID1, FID2, FID3, FID4, FID5, FID6	6					
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J12, J13, J14, J15, J16, J17, J18	17		OSTVN02A150	On Shore Technology Inc	Terminal Block, 4x1, 2.54mm, TH	TERM_BLK, 2pos, 2.54mm
J11	1		1725711	Phoenix Contact	Terminal Block, 8x1, 2.54 mm, TH	8POS Terminal Block

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Q1, Q2	2	30V	CSD17571Q2	TEXAS INSTRUMENTS	MOSFET, N-CH, 30V, 22A, SON 2X2 MM	DQK
R1, R2, R3, R4, R19, R29, R36, R48, R57, R69, R80, R94, R111, R112, R113, R114	16	22.1 E	MMA02040C2219FB300	Vishay Beyschlag	RES 22.1 OHM 1% 0.4W MELF 0204	MELF 0204
R10, R12, R14, R16, R18, R31, R38, R49, R61, R73, R78, R83, R97, R98, R99, R100	16	1.00k	RT0603FRE071KL	Yageo America	RES, 1.00k ohm, 1%, 0.1W, 0603	0603
R21, R23, R24, R26, R33, R44, R46, R50, R63, R66, R70, R74, R85, R87, R89, R91	16	1.6k	CRCW06031K60JNEA	Vishay-Dale	RES, 1.6k ohm, 5%, 0.1W, 0603	0603
R22, R25, R27, R28, R34, R39, R43, R51, R54, R56, R62, R64, R65, R75, R84, R86, R88, R90, R92, R124, R127, R131, R134, R140, R143, R156, R159, R172	28	0	RC0603JR-070RL	Yageo America	RES, 0 ohm,5%, 0.1W, 0603	0603
R35, R45, R67, R76, R126, R142, R154, R155, R157, R173, R174	11	47.0k	RT0603FRE0747KL	Yageo America	RES, 47.0k ohm, 1%, 0.1W, 0603	0603
R41, R106	2	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300 ohm, 5%, 0.1W, 0603	0603
R47, R101, R153	3	390	RC0603FR-07390RL	Yageo America	RES, 390, 1%, 0.1 W, 0603	0603
R58, R93, R145, R152, R162, R164, R166, R168, R169	9	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R115, R116, R117, R118, R119, R120, R121, R129, R130, R132, R141, R146, R147, R148, R149, R150, R151	17	0	RC1206JR-070RL	Yageo America	RES, 0 ohm,5%, 0.25W, 1206	1206

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R122, R125, R136, R139	4	357	CRCW0603357RFKEA	Vishay-Dale	RES, 357 ohm, 1%, 0.1W, 0603	0603
R133	1	51.1k	CRCW060351K1FKEA	Vishay-Dale	RES, 51.1 k, 1%, 0.1 W, 0603	0603
R137	1	16.0k	RC0603FR-0716KL	Yageo America	RES, 16.0 k, 1%, 0.1 W, 0603	0603
R138	1	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0k ohm, 1%, 0.063W, 0402	0402
R158, R160, R161, R163, R170, R171	6	49.9	RC0603FR-0749R9L	Yageo America	RES, 49.9, 1%, 0.1 W, 0603	0603
R175	1	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, 0603	0603
R176	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP9, TP11, TP12, TP13, TP14, TP16, TP18, TP19, TP22, TP23, TP24	18	STD	STD	STD	Test Point 40mil pad 20mil drill	
TP8, TP10, TP15, TP17, TP20, TP21, TP25, TP26, TP27, TP28, TP29, TP30, TP32, TP33, TP34, TP35	16	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
TP31	1				Pad, SMT 0.23 mm	
TP36	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1, U3	2		ADS8688AIDBT	TI	IC ADC 16BIT 500KSPS 8CH 38TSSOP	TSSOP-38
U2	1		REG71055DDCR	Texas Instruments	5.5 V, Buck / Boost Charge Pump, 60 mA, 3 to 5.5 V Input with 2-Cell Alkaline / Nixx Input, -40 to 85 degC, 6-pin SOT23 (DDC6), Green (RoHS & no Sb/Br)	DDC0006A
U4	1		TPS79101DBVR	Texas Instruments	Single Output High PSRR LDO, 100 mA, Adjustable 1.2 to 5.5 V Output, 2.7 to 5.5 V Input, 6-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0006A
U5, U10	2		TPS3836K33DBVR	Texas Instruments	NanoPower Supervisory Circuits, DBV0005A (SOT-5)	DBV0005A
U6	1		ISOW7841DWE	Texas Instruments	ISOW7841DWE, DW0016B (SOIC-16)	DW0016B
U7	1		REF6041IDGKR	Texas Instruments	High-Precision Voltage Reference with Integrated High-Bandwidth Buffer, DGK0008A (VSSOP-8)	DGK0008A
U8	1		ISO7820DWR	Texas Instruments	High-Immunity, 5.7kVRMS Reinforced Dual-Channel 2/0 Digital Isolator, 100Mbps, DW0016B (SOIC-16)	DW0016B
U9	1		LMT70YFQR	Texas Instruments	+/-0.1degC Precision Analog Temperature Sensor, YFQ0004ACAC (DSBGA-4)	YFQ0004ACAC
C3, C4, C5, C6, C7, C8, C10, C12, C14, C17, C20, C22, C26, C27, C28, C29, C45, C56	0	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C9, C34	0	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C35, C36, C37, C38, C39, C40, C44, C47, C51, C53, C57, C61, C62, C63, C64, C65	0	0.027uF	GRM3195C1H273JA01D	MuRata	CAP, CERM, 0.027uF, 50V, +/-5%, C0G/NP0, 1206	1206
R5, R6, R7, R8, R9, R11, R13, R15, R17, R20, R30, R32, R37, R42, R52, R53, R59, R60, R71, R72, R81, R82, R95, R96, R102, R103, R104, R105, R107, R108, R109, R110	0	22	RC0603FR-0722RL	Yageo America	RES, 22 ohm, 1%, 0.1W, 0603	0603
R40, R68, R77, R128	0	47.0k	RT0603FRE0747KL	Yageo America	RES, 47.0k ohm, 1%, 0.1W, 0603	0603
R55, R79, R123, R135, R177	0	0	RC0603JR-070RL	Yageo America	RES, 0 ohm,5%, 0.1W, 0603	0603
R144, R167, R178	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R165	0	4.7k	RC0603JR-074K7L	Yageo America	RES, 4.7 k, 5%, 0.1 W, 0603	0603