

Variant: 001\_AWR  
 Generated: 12/10/2024 2:59 PM  
 TID #: TIDEP-01037



TIDEP-01037 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC6	1		TIDEP-01037	Any	Printed Circuit Board	
2	C2, C34, C69, C154	4	0.1uF	GCM155R71H104KE02D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
3	C4, C5, C7, C8, C10, C11, C12, C14, C16, C21, C25, C26, C28, C29, C38, C101	16	0.22uF	GCM155R71C224KE02D	MuRata	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
4	C6	1	0.047uF	CGA2B3X7R1H473K050BB	TDK	CAP, CERM, 0.047 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
5	C9, C17, C48	3	2.2uF	GRT155C71A225KE13D	Murata	Multi-Layer Ceramic Capacitor 2.2uF 10V X7S ±10% 0402 Paper T/R	402
6	C13, C15, C44	3		GCM188D70J106ME36D	Murata	Chip Multilayer Ceramic Capacitors for Automotive	603
7	C18, C22, C39, C40	4		GRT155R70J105KE01D	Murata	1uF ±10% 6.3V Ceramic Capacitor X7R 0402 (1005 Metric)	402
8	C23	1	10uF	KAM05CT70G106KH	KYOCERA AVX	10 uF ±10% 4V Ceramic Capacitor X7T 0402 (1005 Metric)	402
9	C24, C49	2	4.7uF	GCJ21BR71C475KA01L	Murata	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0805 4.7uF 10%, 16VDC, X7R 15%	805
10	C30, C45	2	0.01uF	GCM155R71E103KA37D	MuRata	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X7R, 0402	402
11	C31	1	0.1uF	GRM033C71A104KE14D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7S, 0201	201
12	C32, C33	2	4.7pF	GJM1555C1H4R7B01D	MuRata	CAP, CERM, 4.7 pF, 50 V, +/- 2%, COG/NPO, 0402	402
13	C35	1	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
14	C37	1	4700pF	GCM155R71H472KA37D	MuRata	CAP, CERM, 4700 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
15	C73, C88, C100	3		CL10B105KA8NNNC	Samsung	CAP, 1uF, 25V, ±10%, X7R, 0603	603
16	C74, C137	2	4.7uF	C3216X7R1H475K160AC	TDK	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
17	C75, C76, C77, C78, C83, C117, C155, C156	8		CGA4J3X7S1A106K125AE	TDK	10uF ±10% 10V Ceramic Capacitor X7S 0805 (2012 Metric)	805
18	D1	1		TLMY1100-GS15	Vishay	Yellow 589nm LED Indication - Discrete 2.1V 0603 (1608 Metric)	603
19	D2	1		TSM24ADBZRQ1	Texas Instruments	Automotive, 24-V, unidirectional, TVS surge-protection diode 3-SOT-23 - 55 to 150	SOT23
20	J1, J2, J3	3		M50-3531042	Harwin	Header, 1.27mm, 10x1, Gold, TH	Header, 1.27mm, 10x1, TH
21	L5	1	1.5uH	TFM252012ALVA1R5MTAA	TDK	1.5 uH Shielded Thin Film Inductor 3.1 A 60mOhm Max 1008 (2520 Metric)	1008
22	L6, L11	2	470nH	TFM201610ALMAR47MTAA	TDK	Inductor, Shielded, Metal Composite, 470 nH, 3.9 A, 0.039 ohm, AEC-Q200 Grade 0, SMD	806
23	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 x 0.200 inch
24	Q1	1		SSM3K35AMFV.L3F	Toshiba	N-Channel 20V 250mA (Ta) 500mW (Ta) Surface Mount VESM	SOT-723
25	R1, R3, R6, R8, R14, R26, R34, R89, R90, R280, R281, R282	12	0	ERJ-2GE0R00X	Panasonic	0 Ohms Jumper Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	402
26	R2, R7	2	61.9	CRCW040261R9FKED	Vishay-Dale	RES, 61.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
27	R4, R9, R15, R18, R20, R23, R33, R36, R44, R49, R67, R75, R131	13	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
28	R11, R13	2	510	ERJ-2GEJ511X	Panasonic	RES, 510, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	402
29	R16	1	7.87k	CRCW04027K87FKED	Vishay-Dale	RES, 7.87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
30	R17, R21	2	82.5k	CRCW040282K5FKED	Vishay-Dale	RES, 82.5 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
31	R24, R27, R38	3	0	MCT06030200002P500	Vishay/Bevschlag	RES, 0, 5%, 0.125 W, 0603	603
32	R25, R86	2	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
33	R28, R29, R30, R31	4	0	HCJ0805ZTOR00	Stackpole	0 Ohms Jumper 0.5W, 1/2W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Metal Foil	805
34	R37	1	19.1k	CRCW040219K1FKED	Vishay-Dale	RES, 19.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
35	R45, R46, R47, R48, R51, R93	6	33.2	CRCW020133R2FNED	Vishay-Dale	RES, 33.2, 1%, 0.05 W, 0201	201
36	R50	1	47.5k	AC0402FR-0747K5L	Yageo	Res Thick Film 0402 47.5K Ohm 1% 1/16W ±100ppm/°C Molded SMD Paper T/R	402
37	R73, R74	2	100k	CRCW0402100FKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
38	R145	1	4.70k	RC0402FR-0747K7L	Yageo America	RES, 4.70 k, 1%, 0.0625 W, 0402	402
39	U1	1		AWRL6432BGAMFQ1	Texas Instruments	AWRL6432BGAMFQ1	FCCSP102
40	U2	1		MX25V1635FZQ03	Macronix	NOR Flash 16Mbit 16M x 1/8M x 2/4M x 4 Serial-SPI 3.3V 8-Pin WSON	WSON8
41	U3	1		TCAN3404DFRQ1	Texas Instruments	3.3-V Automotive CAN FD Transceivers with Standby Mode	TSOT23-8
42	U15	1		TPS65036501RAYRQ1	Texas Instruments	Automotive Camera, Radar and MCU PMIC	VQFN-HR24
43	Y1	1		FW4000044Q	Diodes	40MHz ±10ppm Crystal 8pF 50 Ohms 4-SMD, No Lead	4-SMD-2.0x1.6mm
44	C3, C20, C27	0		CGA4J3X7S1A106K125AE	TDK	10uF ±10% 10V Ceramic Capacitor X7S 0805 (2012 Metric)	805
45	C70, C71, C80, C81, C89, C90, C91	0	22uF	GRM31CR70J226ME19K	Murata	Chip Multilayer Ceramic Capacitors for General Purpose, 1206, 22uF, X7R, 15%, 20%, 6.3V	1206
46	C72, C82, C103	0	47uF	GRM31CR60J476ME19L	MuRata	CAP, CERM, 47 uF, 6.3 V, +/- 20%, X5R, 1206	1206
47	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
48	R5, R12, R32, R54, R57, R81, R82, R152	0	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
49	R10	0	0	MCT06030200002P500	Vishay/Bevschlag	RES, 0, 5%, 0.125 W, 0603	603
50	R19	0	7.87k	CRCW04027K87FKED	Vishay-Dale	RES, 7.87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
51	R22	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	402
52	R35, R85	0	0	ERJ-2GE0R00X	Panasonic	0 Ohms Jumper Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200 Thick Film	402

## IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on [ti.com](https://www.ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2024, Texas Instruments Incorporated