

Variant: 001_AWR
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TID #: TIDEP-01037



TIDEP-01037 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC8	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	GJM1555C1H4R78B01D	MuRata	CAP, CERM, 4.7 pF, 50 V, +/- 2%, COG/NP0, 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/Beyerschl	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	HJCJ0805ZT0R00	Stackpole	0 Ohms Jumper 0.5W, 1/2W Chip Resistor 0805 (2012 Metric)	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	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
38	R145	1	4.70k	RC0402FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.0625 W, 0402	402
39	U1	1		AWRL6432BGAMFQ1	Texas Instruments	AWRL6432BGAMFQ1	FCCSP102
40	U2	1		MX25V1635FZNQ03	Macronix	NOR Flash 16Mbit 16M x 1/8M x 2/4M x 4 Serial-SPI 3.3V 8-Pin WSON	WSON8
41	U3	1		TCAN30404DFRQ1	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/Beyerschl	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

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