TIDA00733 REV E Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA00733	Any	Printed Circuit Board	
C1, C41	2	1000uF	EEV-FK1H102M	Panasonic	CAP, AL, 1000 µF, 50 V, +/- 20%, 0.073 ohm, SMD	SMT Radial J16
C2, C4, C6, C8, C44, C46, C48, C50, C86, C89	10	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
C3, C5, C7, C9, C45, C47, C49, C51, C60, C81, C87, C90, C95, C99, C101, C105, C107, C108, C109, C110, C118, C121, C125, C127, C128, C129, C130, C139, C146, C147, C150, C151	32	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C10, C12, C17, C25, C31, C35, C37, C39, C42, C52, C57, C64, C71, C75, C77, C79, C106, C126	18	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
C11, C13, C18, C26, C32, C36, C38, C40, C43, C53, C58, C65, C72, C76, C78, C80, C148, C149	18	0.01uF	GCM155R71H103KA55D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, C0G/NP0, 0402	0402
C14, C16, C19, C22, C27, C28, C33, C34, C54, C56, C59, C62, C67, C68, C73, C74, C152	17	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 0805	0805
C15, C20, C21, C23, C24, C29, C30, C55, C61, C63, C66, C69, C70, C119, C142, C143, C144, C145	18	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
C82, C140	2	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	1206
C84	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X7R, 0603	0603
C91, C92, C93	3	22uF	CGA6P1X7R1C226M250AC	TDK	CAP, CERM, 22 µF, 16 V, +/- 20%, X7R, AEC-Q200 Grade 1, 1210	1210
C94	1	4.7uF	GRM21BR71A475KA73L	MuRata	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X7R, 0805	0805
C96	1	2200pF	GRM155R71H222KA01D	MuRata	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402

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C97, C100, C102, C103, C104, C112, C117, C120, C122, C123, C124, C132	12	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
C98	1	1000pF	06035A102KAT2A	AVX	CAP, CERM, 1000 pF, 50 V, +/- 10%, C0G/NP0, 0603	0603
C111, C131	2	2.2uF	GCM188R70J225KE22D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C113, C114, C115, C116, C133, C134, C135, C136	8	0.01uF	885012205031	Wurth Elektronik	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
C137, C138	2	20pF	GRM1555C1H200JA01D	MuRata	CAP, CERM, 20 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C141	1	0.022uF	GRM155R71H223KA12D	MuRata	CAP, CERM, 0.022 µF, 50 V,+/- 10%, X7R, 0402	0402
D1	1	Super Red	150060SS75000	Wurth Elektronik	LED, Super Red, SMD	LED_0603
D2	1	Yellow	150060YS75000	Wurth Elektronik	LED, Yellow, SMD	LED_0603
D5	1	17V	SMBJ17A-13-F	Diodes Inc.	Diode, TVS, Uni, 17 V, 600 W, SMB	SMB
D6	1	14V	SMBJ14A-13-F	Diodes Inc.	Diode, TVS, Uni, 14 V, 600 W, SMB	SMB
D7	1	Green	150060VS75000	Wurth Elektronik	LED, Green, SMD	LED_0603
J1, J2	2		OSTTE080161	On-Shore Technology	Terminal Block, 8x1, 3.5mm, TH	8x1 Terminal Block
J3, J4	2		0022284023	Molex	Header, 2.54mm, 2x1, Tin, TH	Header, 2.54mm, 2x1, TH
J5	1		851-43-006-20-001000	Mill-Max	Receptacle, 50mil, 6x1, Gold, R/A, TH	Receptacle, 6x1, 50mil pitch, R/A
J6, J7, J8, J9	4		35RASMT4BHNTRX	Switchcraft	Audio Jack, 3.5mm, Stereo, R/A, SMT	Phone Jack, 6x5x17mm
J10	1		1714955	Phoenix Contact	Terminal Block, 2x1, 6.35mm, Green, TH	Terminal Block, 2x1, 6.35mm, Green, TH
L1, L2, L3, L4, L5, L6, L7, L8	8	3.3uH	VAMV06077E-3R3MM2	Cyntec	Coupled inductor, 3.3 µH, 11.1 A, 0.0192 ohm, SMD	7.6x6.9mm
L9	1	2.2uH	XAL6030-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 12.7 A, 0.012 ohm, SMD	IND_6.4x3.1x6.6
L18	1	470nH	IHLP5050CEERR47M01	Vishay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 470 nH, 32 A, 0.0016 ohm, SMD	IHLP-5050CE
Q1	1	40V	BSC014N04LSI	Infineon Technologies	MOSFET, N-CH, 40 V, 100 A, 8-PowerTDFN	8-PowerTDFN
R1, R12	2	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R2	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R3, R8, R15, R17	4	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
R5, R6, R37, R54	4	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R9, R22	2	3.0	CRCW04023R00JNED	Vishay-Dale	RES, 3.0, 5%, 0.063 W, 0402	0402
R10, R83, R84, R85	4	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
R13	1	8.06	CRCW04028R06FKED	Vishay-Dale	RES, 8.06, 1%, 0.063 W, 0402	0402
R18	1	10.0	CRCW040210R0FKED	Vishay-Dale	RES, 10.0, 1%, 0.063 W, 0402	0402
R19, R24, R26, R39, R41, R43, R45, R55, R57, R59, R61	11	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R23	1	825	CRCW0402825RFKED	Vishay-Dale	RES, 825, 1%, 0.063 W, 0402	0402
R25	1	909	CRCW0402909RFKED	Vishay-Dale	RES, 909, 1%, 0.063 W, 0402	0402
R27, R32	2	11.3k	CRCW040211K3FKED	Vishay-Dale	RES, 11.3 k, 1%, 0.063 W, 0402	0402
R29, R30	2	2.49k	CRCW04022K49FKED	Vishay-Dale	RES, 2.49 k, 1%, 0.063 W, 0402	0402
R33, R47, R48, R49, R50, R63, R64, R65, R66	9	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R35, R36, R51, R52	4	600 ohm	BLM15AX601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 0.5 A, 0402	0402
R40, R42, R44, R46, R56, R58, R60, R62	8	100	CRCW0402100RFKED	Vishay-Dale	RES, 100, 1%, 0.063 W, 0402	0402
R67, R68, R69, R70, R71, R72, R80, R81	8	54.9	CRCW040254R9FKED	Vishay-Dale	RES, 54.9, 1%, 0.063 W, 0402	0402
R82	1	221	CRCW0402221RFKED	Vishay-Dale	RES, 221, 1%, 0.063 W, 0402	0402
R86	1	0.51	ERJ-3RQFR51V	Panasonic	RES, 0.51, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
S1, S2, S3	3		SKRKAEE010	Alps	Switch, Push Button, SMD	2.9x2x3.9mm SMD
SH-J1, SH-J2	2	1x2	SPC02SYAN	Sullins Connector Solutions	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt
T1, T2	2		CB35-36-CY	Panduit	Terminal 50A Lug	CB35-36-CY
TP3	1		5011	Keystone	Test Point, Multipurpose, Black, TH	Black Multipurpose Testpoint
TP5	1		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
U1, U2	2		TAS6424QDKQRQ1	Texas Instruments	Four-Channel Digital Input Automotive Digital Amplifier, DKQ0056A	DKQ0056A
U3	1		LM53635LQRNLRQ1	Texas Instruments	2.5/3.5A Synchronous Buck Regulator for Automotive Applications, RNL0022A	RNL0022A
U4	1		TLV2462AQDRQ1	Texas Instruments	Automotive Catalog Low-Power Rail-to-Rail Input / Output Operational Amplifier with Shutdown, 2.7 to 6 V, -40 to 125 degC, 8-pin SOIC (D0008A), Green (RoHS & no Sb/Br)	D0008A
U5	1		LP5907QMFX-3.3Q1	Texas Instruments	Automotive 250-mA, Ultra-Low-Noise, Low-IQ LDO, DBV0005A (SOT-23-5)	DBV0005A
U6	1		LP5912Q3.3DRVRQ1	Texas Instruments	Ultra Low-Noise, 500-mA Linear Regulator for RF and Analog Circuits - Requires No Bypass Capacitor, DRV0006A	DRV0006A
U7	1		MSP430G2332QPW2REP	Texas Instruments	MIXED SIGNAL MICROCONTROLLER, PW0020A	PW0020A
U8, U9	2		PCM1865QDBTRQ1	Texas Instruments	110 dB 4ch Audio ADCs With Universal Front End, DBT0030A	DBT0030A
U10	1		SN74LVC125AQPWRQ1	Texas Instruments	QUADRUPLE BUS BUFFER GATE WITH 3-STATE OUTPUTS, PW0014A	PW0014A
U11	1		LM74610QDGKRQ1	Texas Instruments	Zero Iq Reverse Polarity Protection Smart Diode Controller, DGK0008A (VSSOP-8)	DGK0008A
Y1	1		ABM10AIG-24.576MHZ-J4Z-T3	Abracon Corporation	Crystal, 24.576 MHz, SMD	2.5x2mm
C83	0	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402	0402
C85, C88	0	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X7R, 1210	1210
C153	0	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 µF, 50 V, +/- 10%, X7R, 0805	0805
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
R4, R7, R14, R16, R20	0	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
R11	0	1.00k	CRCW04021K00FKED	Vishay-Dale	RES, 1.00 k, 1%, 0.063 W, 0402	0402
R21, R28, R73, R74, R75, R76, R77, R78, R79	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, 0402	0402
R31	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R34, R38, R53	0	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
U12	0		LM74700QDDCRQ1	Texas Instruments	Low Iq Always ON Smart Diode Controller, DDC0006A (SOT-6)	DDC0006A

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