

**TIDA-00080\_AMC13x6 REV E1 Bill of Materials**

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C85, C90, C92, C95, C102, C103, C104, C106	9	4.7uF	C2012X5R1H475K125AB	TDK	CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805	0805
C2, C20, C32, C33, C34, C35, C36, C39, C42, C45, C46, C47, C48, C50, C52, C54, C56, C69, C71, C73, C75, C77, C86, C87, C89, C93, C96, C98, C100, C101, C105, C112, C114, C115, C118, C119, C122, C124, C127, C128, C130, C132, C133, C134, C135, C137, C150, C152	48	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
C9, C17, C18, C19, C28, C49, C70, C72, C74, C76, C78, C84, C88, C91, C107, C108, C109, C111, C113, C117, C121, C123, C125, C126, C129, C131, C136, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149	39	10uF	GMK325AB7106MM-T	Taiyo Yuden	CAP, CERM, 10uF, 35V, +/-20%, X7R, 1210	1210
C15, C27, C94, C97, C99, C110, C116, C120	8	0.01uF	06031C103J4Z4A	AVX	CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603	0603
C57, C58, C59, C60	4	1000pF	S102K29Y5PN63J5R	Vishay BC Components	CAP CER 1000PF 1KV 10% RADIAL	

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C61, C62, C63, C64, C65, C66, C67	7	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C68, C79, C80, C81, C82, C83	6	22uF	UUD1E220MCL1GS	Nichicon	CAP, AL, 22uF, 25V, +/-20%, 0.76 ohm, SMD	5x5.8
C154, C155	2	10uF	GRM31CR61H106KA12L	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206	1206
D1, D2, D3, D4, D5, D7, D14, D15, D16	9	Green	LG L29K-G2J1-24-Z	OSRAM	LED SmartLED Green 570NM	0603
D6, D17, D18, D19, D20, D21, D22, D23, D24	9	6.2V	DFLZ6V2-7	Diodes Inc.	Diode, Zener, 6.2V, 1W, PowerDI123	PowerDI123
D8, D9, D10, D26, D27, D31, D34	7	DNP	DESD1P0RFW-7	Diodes Inc	Diode, P-N, 70V, 0.2A, SOT-323	SOT-323
D11, D12, D13, D25, D28	5	DESD1P0R FW-7	DESD1P0RFW-7	Diodes Inc	Diode, P-N, 70V, 0.2A, SOT-323	SOT-323
D29, D30, D32, D33, D35, D36, D37, D38, D39, D40	10	20V	MBR0520L	Fairchild Semiconductor	Diode, Schottky, 20V, 0.5A, SOD-123	SOD-123
FB1, FB2, FB3, FB4, FB5, FB6, FB7, FB8, FB9, FB10, FB11, FB12, FB13, FB14, FB15, FB16, FB17, FB18, FB19, FB20, FB21, FB22, FB23	23	1000 OHM	MMZ1608B102C	TDK Corporation	FERRITE CHIP 1000 OHM 300MA 0603	0603
FID1, FID2, FID3, FID4, FID5, FID6, FID7, FID8	8		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J1, J2, J3, J4, J5, J6, J7, J8, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31	24	68001-402HLF	68001-402HLF	FCI	Header, Male 2-pin, 100mil spacing,	0.100 inch x 2
J9, J10, J11, J12, J13, J14, J15	7		ED120/2DS	On-Shore Technology	TERMINAL BLOCK 5.08MM VERT 2POS, TH	TERM_BLK, 2pos, 5.08mm
J32	1	2-826634-0	2-826634-0	TE Connectivity	Connector, Right Angle 2x20 pin, 100mil spacing	
MH1, MH2, MH3, MH4	4				Mountin hole, NPTH Drill 3.2mm	Screw
R1, R2, R3, R4, R5, R28, R30, R32, R60	9	3.9k	CRCW06033K90JNEA	Vishay-Dale	RES, 3.9k ohm, 5%, 0.1W, 0603	0603
R6, R9, R12, R21, R24, R27	6	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.1W, 0603	0603
R7, R8, R10, R11, R13, R19	6	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0 ohm, 5%, 0.125W, 0805	0805

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R14, R63, R64, R65	4	11.5k	CRCW060311K5FKEA	Vishay-Dale	RES, 11.5k ohm, 1%, 0.1W, 0603	0603
R15, R59, R61, R62	4	37.4k	ERA-3AEB3742V	Panasonic	RES 37.4K OHM 1/10W .1% 0603 SMD	0603
R20, R22, R23	3	0.003	WSLP39213L000FEB	VISHAY DALE	RESISTOR, SMD, 0.003 OHM, 1%, 5W, 3921	
R26, R33, R34	3	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R35, R40	2	47k	RC0603JR-0747KL	Yageo America	RES, 47 k, 5%, 0.1 W, 0603	0603
R36, R44, R45	3	0	RC0402JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.063W, 0402	0402
R38	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R39, R42, R46, R48, R51, R55	6	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603
R41	1	1.00k	ERJ-2RKF1001X	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0402	0402
T1, T2, T3, T4, T5	5	469uH	750342271	Würth Electronics Midcom	Transformer 469uH SMD	10.05mm L x 6.73mm W
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP14	12	STD	STD	STD	Test Point, 0.040 Hole	
TP16	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
	1		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1, U17, U19, U20	4		TPS7A3001DGNR	Texas Instruments	-36V, -200mA, Ultralow-Noise, Negative Linear Regulator	MSOP-PowerPAD (DGN) : 8
U5, U6, U7	3		AMC1306M25DWVR	Texas Instruments	Small Reinforced Isolated Modulator With +/-250mV Input and CMOS Interface, DWV0008A (SOIC-8)	DWV0008A
U8, U9, U10	3		AMC1336DWVR	Texas Instruments	AMC1336 Small, High-Precision, Reinforced Isolated Delta-Sigma Modulator With Input Optimized for Voltage Sensing Applications, DWV0008A (SOIC-8)	DWV0008A
U11	1		AMC1311BDWVR	Texas Instruments	Precision, 2-V Input, Reinforced Isolated Amplifier, DWV0008A (SOIC-8)	DWV0008A
U12, U13, U14, U15, U16	5		SN6501DBV	Texas Instruments	Transformer Driver for Isolated Power Supplies, DBV0005A	DBV0005A
U18, U21, U22, U23	4		TLV70450DBV	Texas Instruments	Regulator, LDO, 5V, 0.15A, SOT23-5	DBV0005A
U24	1		TLV76050DBZR	Texas Instruments	100-mA, 30-V, Fixed-Output, Linear-Voltage Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
U25	1		UCC12050DVER	Texas Instruments	500 mW, High-Efficiency, Low-Emissions, 5 kVRMS Isolated DC-DC Converter, DVE0016A (SO-MOD-16)	DVE0016A
C3, C4, C5, C6, C7, C8, C10, C11, C37, C38, C40, C41, C43, C44	0	47pF	GRM21A5C2E470JW01D	MuRata	CAP, CERM, 47pF, 500V, +/-5%, C0G/NP0, 0805	0805
C12, C13, C14, C16, C51, C53, C55	0	1500pF	06031C152KAT2A	AVX	CAP, CERM, 1500pF, 100V, +/-10%, X7R, 0603	0603
C21, C23, C25	0	4700pF	06031C472KAT2A	AVX	CAP, CERM, 4700pF, 100V, +/-10%, X7R, 0603	0603
C22, C24, C26, C29, C30, C31	0	0.1uF	C0603C104K5RACTU	Kemet	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603
R16, R17, R18	0	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70k ohm, 1%, 0.1W, 0603	0603
R25, R29	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
R31	0	0	RC0402JR-070RL	Yageo America	RES, 0 ohm, 5%, 0.063W, 0402	0402
R43	0	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603

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R58	0	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603
U2, U3, U4	0	OPA211ID	OPA211ID	Texas Instruments	IC, 1.1nV/vHz Noise, Low Power, Precision OpAmp	SO