

AMIC110 ICE

Assembly Bill of Material (BOM)

CHANGE HISTORY			
Version No.	Release Date	Change Description	Remarks
0.1	04th APR 2017	Initial Draft	

Mistral Solutions [P] Ltd.	Project name	AMIC110 ICE
#60 Adarsh regent,100 Feet Ring Road, Domlur Extension Bangalore 560 071, Ph : +91-80-30912600, Fax :+91-80-25356444	Document name	MS_TI_AMIC_ICE_EVM_BOM_REV1.1
	Date	04th APR 2017
	BOM Version	0.10
	Schematic Version	REV 1.1
	Board Revision	REV 1.1
	Project number	PROC040

Kit contents

Item #	Designator	Quantity	Value	Description	Package Reference	Manufacturer Part Number	Manufacturer	Lead Free Status	RoHS Status	REACH Status	Remarks
1	PCB1	1		Printed Circuit Board	NA	TMDXICE110	Any	NA	NA	NA	
2	LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H	Label_650x200	THT-14-423-10	Brady	Lead free	RoHS Compliant	NA	
3	H3	1		USB to TTL Serial 3.3V Cable 5.90" (1.80m) Unshielded	Cable, Accessory	TTL-232R-3V3	FTDI Chip	Lead free	RoHS Compliant	Unaffected Jun-2016	
4	H4	1		ESD Cover	Cover	NA	NA	NA	NA	NA	
5	H5	1		Printed Warranty notice	NA	NA	NA	NA	NA	NA	
6	H6	1		Printed QSG	NA			NA	NA	NA	

Populated List

Item #	Designator	Quantity	Value	Description	Package Reference	Manufacturer Part Number	Manufacturer	Lead Free Status	RoHS Status	REACH Status	Remarks
1	C1, C91, C92, C94, C95, C97, C98, C100, C101, C103, C104, C106, C107, C108, C109, C110, C111, C112, C113, C114, C119, C120, C121, C122, C124, C125, C126, C127, C128, C129, C130, C134, C135, C145, C146, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C163, C164, C165, C166, C167, C169, C182, C183	56	0.01uF	CAP. CERM, 0.01 μ F, 10 V, +/- 10%, X7R, 0201	0201	GRM033R71A103KA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
2	C2, C172, C173, C174, C175, C176	6	0.1uF	CAP. CERM, 0.1 μ F, 10 V, +/- 10%, X7R, 0402	0402	GRM155R71A104KA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
3	C3, C6, C23, C171	4	0.1uF	CAP. CERM, 0.1 μ F, 6.3 V, +/- 10%, X7R, 0402	0402	GRM155R70J104KA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
4	C5	1	1000pF	CAP. CERM, 1000 pF, 16 V, +/- 10%, X7R, 0402	0402	GRM155R71C102KA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
5	C7, C8, C32, C36, C55, C63	6	10uF	CAP. CERM, 10 μ F, 10 V, +/- 10%, X7R, 0805	0805_HV	885012207026	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
6	C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C26, C27, C41, C42, C49, C50, C60, C61, C88, C89, C90	25	0.1uF	CAP. CERM, 0.1 μ F, 16 V, +/- 10%, X7R, 0402	0402	885012205037	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
7	C24, C25, C40, C43, C47, C48, C59, C62, C72, C76, C77, C79, C83, C85, C86, C131, C132, C133	18	1uF	CAP. CERM, 1 μ F, 6.3 V, +/- 20%, X7R, 0402	0402	GRM155R70J105MA12D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
8	C28, C29, C30, C31, C51, C52, C53, C54	8	4.7pF	CAP. CERM, 4.7 pF, 50 V, +/- 5%, COG/NPO, 0201	0201	GRM0335C1H4R7CA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
9	C33, C37, C56, C64	4	0.01uF	CAP. CERM, 0.01 μ F, 16 V, +/- 10%, X7R, 0402	0402	885012205031	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
10	C34, C38, C57, C65	4	1000pF	CAP. CERM, 1000 pF, 25 V, +/- 10%, X7R, 0402	0402	885012205044	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
11	C35, C39, C58, C66	4	100pF	CAP. CERM, 100 pF, 50 V, +/- 10%, X7R, 0402	0402	CC0402KRX7R9BB101	Yageo America	Lead free	RoHS Compliant	Unaffected Dec-2015	
12	C45, C46, C68, C69, C168, C170, C70, C71, C73, C74, C75, C78, C80, C81, C82, C93, C96, C99, C102, C105, C115, C123, C136, C137, C147, C148, C162	6	20pF	CAP. CERM, 20 pF, 50 V, +/- 5%, COG/NPO, 0402	0402	GRM1555C1H200JA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
13	C84, C87	21	10uF	CAP. CERM, 10 μ F, 25 V, +/- 20%, X5R, 0603	0603	C1608X5R1E106M080AC	TDK	Lead free	RoHS Compliant	Unaffected Jun-2015	
14	C116, C117, C118, C138, C139, C140, C141, C142, C143, C144	2	2.2uF	CAP. CERM, 2.2 μ F, 10 V, +/- 10%, X7R, 0603	0603	GRM188R71A225KE15D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
15	C177	10	0.1uF	CAP. CERM, 0.1 μ F, 10 V, +/- 10%, X5R, 0201	0201L	CL03A104KP3NNNC	Samsung	Lead free	RoHS Compliant	Unaffected Jun-2016	
16	C178, C180	1	4.7uF	CAP. CERM, 4.7 μ F, 16 V, +/- 10%, X5R, 0603	0603	GRM188R61C475KAAJ	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
17	C179, C180	2	0.1uF	CAP. CERM, 0.1 μ F, 16 V, +/- 10%, X7R, 0603	0603	GRM188R71C104KA01D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
18	C184, C186	2	22uF	CAP. CERM, 22 μ F, 10 V, +/- 20%, X5R, 0603	0603	GRM188R61A226ME15D	MuRata	Lead free	RoHS Compliant	Unaffected Jun-2016	
19		2	1000pF	CAP. CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206, 190	1206, 190	202R18W102KV4E	Johanson Technology	Lead free	RoHS Compliant	Unaffected Jun-2015	

20	D2, D3, D8, D15	4	Green	LED, Green, SMD	WL-SMCW_GREEN	150060VS75000	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
21	D4, D9	2	Yellow	LED, Yellow, SMD	WL-SMCW_YELLOW	150060VS75000	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
22	D5, D10	2	Orange	LED, Orange, SMD	VLMx1500_Orange	VLM01500-GS08	Vishay-Semiconductor	Lead free	RoHS Compliant	Unaffected Dec-2015	
23	D6, D17	2	GREEN	LED, GREEN SMD	APTD1608	APTD1608LZGCK	Kingbright	Lead free	RoHS Compliant	Unaffected Dec-2015	
24	D7	1	Red	LED, Red, SMD	WL-SMCW_RED	150060RS75000	Würth Elektronik	Lead free	RoHS Compliant	Unaffected Jun-2016	
25	D11, D12, D13, D14	4	40V	Diode, Schottky, 40 V, 0.5 A, SOD-123	SOD-123	MBR0540T1G	ON Semiconductor	Lead free	RoHS Compliant	Unaffected Jun-2016	
26	D16, D19	2	RED	LED, RED SMD	APTD1608	APTD1608LSECK/J3-PF	Kingbright	Lead free	RoHS Compliant	Unaffected Dec-2015	
27	D18, D20	2	YELLOW	LED, YELLOW SMD	APTD1608	APTD1608LSYCK/J3-PF	Kingbright	Lead free	RoHS Compliant	Unaffected Dec-2015	
28	J1	1		Header, 1.27mm, 10x2, Tin, SMT	Samtec, FTR-110-51-x-D-06	FTR-110-51-S-D-06	Samtec	Lead free	RoHS Compliant	Unaffected Jun-2016	
29	J2	1		Receptacle, 0.4mm, 30x2, Gold, SMT	Hirose, DF40HC-4, 0-60DS-0, 4V	DF40HC(4,0)-60DS-0.4V(51)	Hirose Electric Co. Ltd.	Lead free	RoHS Compliant	REACH Compliant	
30	J3	1		Header, 100mil, 6x1, Tin, TH	Sullins, PEC06SAAN	PEC06SAAN	Sullins Connector Solutions	Lead free	RoHS Compliant	Unaffected Jun-2016	
31	J4, J5	2		Connector, Receptacle, 100mil, 10x2, Gold plated, TH	CONN, SSW-110-23-F-D	SSW-110-23-F-D	Samtec	Lead free	RoHS Compliant	REACH Compliant	
32	J6, J7	2		RJ-45, No LED, tab up, R/A, TH	TEC, 1-406541-1	1-406541-1	TE Connectivity	Lead free	RoHS Compliant	Unaffected Dec-2015	
33	J8	1		Power Jack, mini, 2.1mm OD, R/A, TH	CONN, RAPC722X	RAPC722X	Switchcraft	Lead free	RoHS Compliant	Unaffected Jun-2016	
34	J9	1		Header, 2.54mm, 1x2, Tin, Black, TH	Sullins, PXC01DAAN	PEC01DAAN	Sullins Connector Solutions	Lead free	RoHS Compliant	Unaffected Jun-2016	
35	L1, L2	2	2.2uH	Inductor, Shielded, Ferrite, 2.2 uH, 1.72 A, 0.059 ohm,	VLCF4020	VLCF4020T-2R2N1R7	TDK	Lead free	RoHS Compliant	Unaffected Jun-2015	
36	L3	1	3.3uH	Inductor, Shielded, Ferrite, 3.3 uH, 1.52 A, 0.078 ohm,	VLCF4020	VLCF4020T-3R3N1R5	TDK	Lead free	RoHS Compliant	Unaffected Jun-2015	
37	L4	1	1.5uH	Inductor, Shielded, Composite, 1.5 uH, 4.6 A, 0.01 ohm	XFL4020	XFL4020-152MEB	Coilcraft	Lead free	RoHS Compliant	REACH Compliant	
38	Q1, Q2, Q3, Q4, Q5, Q6	6	12V	MOSFET, N-CH, 12 V, 2.9 A, YJC0003A	YJC0003A	CSD13383F4	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
39	R218, R219, R237	11	4.7k	RES, 4.7 k, 5%, 0.063 W, 0402	0402	CRCW04024K70JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
40	R4, R5, R6, R7, R8, R41, R46, R50, R52, R57, R62, R70, R73, R77, R81, R83, R84, R89, R93, R94, R98, R102, R139, R143, R144, R146, R151, R152, R154, R156, R157, R158, R159, R160, R161, R163, R164, R165, R166, R167, R170, R171, R182, R183, R186, R187, R212	47	0	RES, 0, 5%, 0.063 W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Jun-2016	
41	R9	1	100	RES, 100, 5%, 0.063 W, 0402	0402	CRCW0402100RJNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2011	
42	R10	1	1.0k	RES, 1.0 k, 5%, 0.063 W, 0402	0402	CRCW04021K00JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
43	R14, R18, R23, R32, R33, R48, R55, R64, R76, R103, R114, R115, R119, R121, R138, R141, R142, R162, R168, R207, R208, R209, R210, R213, R214, R234	26	10k	RES, 10 k, 5%, 0.063 W, 0402	0402L	CRCW040210K0JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
44	R15, R17, R25, R27	4	1.6k	RES, 1.6k, 5%, 0.063 W, 0402	0402L	CRCW04021K60JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
45	R16, R26	2	1.2k	RES, 1.2k, 5%, 0.063 W, 0402	0402L	CRCW04021K20JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
46	R19, R20, R21, R22, R28, R29, R30, R31	8	1.5k	RES, 1.5 k, 5%, 0.063 W, 0402	0402L	CRCW04021K50JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
47	R34, R35, R36, R39, R40, R217, R238, R239, R240	9	10.0k	RES, 10.0 k, 1%, 0.063 W, 0402	0402	CRCW040210K0FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
48	R37	1	1.50k	RES, 1.50 k, 1%, 0.063 W, 0402	0402	CRCW04021K50FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
49	R38	1	240	RES, 240, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402	ERJ-2RKF2400X	Panasonic	Lead free	RoHS Compliant	Unaffected Jun-2015	
50	R42, R43, R44, R45, R58, R59, R60, R61, R169	9	49.9	RES, 49.9, 1%, 0.063 W, 0402	0402L	CRCW040249R9FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
51	R47, R63	2	4.87k	RES, 4.87 k, 1%, 0.063 W, 0402	0402	CRCW04024K87FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
52	R56, R69	2	2.4k	RES, 2.4 k, 5%, 0.063 W, 0402	0402	CRCW04022K40JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
53	R67, R68, R188, R189, R235, R236	6	2.49k	RES, 2.49 k, 1%, 0.063 W, 0402	0402L	CRCW04022K49FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
54	R78	1	165k	RES, 165 k, 1%, 0.063 W, 0402	0402	CRCW0402165KFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
55	R79, R86, R97, R100	4	200k	RES, 200 k, 1%, 0.063 W, 0402	0402	CRCW0402200KFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
56	R80	1	2.0	RES, 2.0, 0.5%, 0.1 W, 0603	0603	CRCW06032R00JNEA	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
57	R82	1	301k	RES, 301 k, 1%, 0.063 W, 0402	0402	CRCW0402301KFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
58	R85	1	4.99k	RES, 4.99 k, 1%, 0.063 W, 0402	0402	CRCW04024K99FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
59	R87, R91	2	2.00k	RES, 2.00 k, 1%, 0.063 W, 0402	0402	CRCW04022K00FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
60	R88, R95	2	1.00k	RES, 1.00 k, 1%, 0.063 W, 0402	0402	CRCW04021K00FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
61	R90	1	432k	RES, 432 k, 1%, 0.063 W, 0402	0402	CRCW0402432KFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
62	R92	1	95.3k	RES, 95.3 k, 1%, 0.063 W, 0402	0402	CRCW040295K3FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
63	R96, R99	2	162k	RES, 162 k, 1%, 0.063 W, 0402	0402	CRCW0402162KFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
64	R101, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R135, R136, R137, R172	15	100k	RES, 100 k, 5%, 0.063 W, 0402	0402	CRCW0402100KJNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
65	R140, R147, R148, R150, R153, R179	6	22	RES, 22, 5%, 0.063 W, 0402	0402L	CRCW040222R0JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
66	R145, R149	2	47	RES, 47, 5%, 0.063 W, 0402	0402L	CRCW040247R0JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
67	R155	1	2.2k	RES, 2.2 k, 5%, 0.063 W, 0402	0402L	CRCW04022K20JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
68	R174, R175	2	33k	RES, 33 k, 5%, 0.063 W, 0402	0402	CRCW040233K0JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
69	R176, R177	2	51k	RES, 51 k, 5%, 0.063 W, 0402	0402	CRCW040251K0JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
70	R178	1	3.3k	RES, 3.3 k, 5%, 0.063 W, 0402	0402L	CRCW04023K30JNED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
71	R184, R185	2	1.0k	RES, 1.0 k, 5%, 0.1 W, 0603	0603	CRCW06031K00JNEA	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
72	R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206	16	1.00k	RES, 1.00 k, 1%, 0.05 W, 0201	0201L	CRCW02011K00FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2011	
73	R220, R221, R222, R223, R224, R225, R226, R227	8	75.0	RES, 75.0, 0.1%, 0.125 W, 0805	0805_HV	CRCW080575R0FKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2015	
74	R228, R229, R230, R231, R232, R233	6	499	RES, 499, 1%, 0.05 W, 0201	0201L	CRCW0201499RFKED	Vishay-Dale	Lead free	RoHS Compliant	Unaffected Dec-2011	
75	S1	1		SWITCH TACTILE SPST-NO 0.05A 12V	SW_83U-1000P	B3U-1000P	Omron Electronic Components	Lead free	RoHS Compliant	Unaffected Dec-2015	
76	T1, T2	2	350uH	Transformer, 350 uH, SMT	Pulse_HX1188FNL	HX1188FNL	Pulse Engineering	Lead free	RoHS Compliant	Unaffected Dec-2015	
77	TP8, TP9, TP10	3		Test Point, Miniature, Black, TH	Keystone5001	5001	Keystone	Lead free	RoHS Compliant	Unaffected Jun-2016	
78	U1	1		4GBIT DDR3 SDRAM, 96-FBGA	96-FBGA	MT41K256M16TW-107 IT-P	Micron Technology	Lead free	RoHS Compliant	REACH Compliant	
79	U2	1		32 64 M-bit Serial Flash Memory With Dual/Quad SPI&Q	Winbond-WSON6x5_Code P	W25Q64FVZPIG	Winbond	Lead free	RoHS Compliant	Unaffected Jun-2016	
80	U3, U5	2		10/100 Ethernet PHY, RHB0032B	RHB0032B	DP8382ZHRHBR	Texas Instruments	Lead free	RoHS Compliant	REACH Compliant	
81	U4, U6	2		1, 4, 6 CHANNEL PROTECTION SOLUTION FOR SUPER-S	DQA0010A	TPD4E05U06DOAR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
82	U7	1		Power Management IC for Li-Ion Powered Systems, RHB	RHB0032E	TPS605250RHBR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
83	U8, U9	2		Octal Buffers/Drivers With 3-State Outputs, DGV0020A	DGV0020A_L	SN74LVC541ADGVR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
84	U10	1		Dual Bilateral Analog Switch, YZP0008ADAD	YZP0008ADAD	SN74LVC2G66VZPR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
85	U11	1		Sitara Processors, ZC20324A	ZC20324A	AMIC110BZC2A	Texas Instruments	Lead free	RoHS Compliant	REACH Compliant	
86	U12	1		Dual Buffer and Driver With 3-State Output, YZP0008AD	YZP0008ADAD	SN74LVC2G241YZPR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
87	U13, U14, U15	3		8-BIT FET BUS SWITCH 2.5-V/3.3-V LOW-VOLTAGE HIG	RGY0020A	SN74CB3032A5RGVR	Texas Instruments	Lead free	RoHS Compliant	Unaffected Jun-2016	
88	U16	1		256 kb 12C CMOS Serial EEPROM, SOIC-8	SOIC-8	CAT24C256W1-GT3	ON Semiconductor	Lead free	RoHS Compliant	Unaffected Jun-2016	
89	Y1, Y2, Y3	3		Crystal, 25 MHz, 18 pF, SMD	XTAL_ABM3	445123025M00000	CTS ELECTRONIC COMPONENTS	Lead free	RoHS Compliant	Unaffected Jun-2016	

