



Logic Product Development
PN: 1008130 Rev F

Bill of Materials

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i.MX31 SOM-LV (128 MB DDR, 2 MB NOR, 64 MB NAND, ETHERNET, AUDIO, TOUCH, ROHS)	5



BOM REPORT

Part Number 1008130

Part Description ASSEMBLY, PCB, i.MX31 SOM-LV, "C" SOM (ROHS)

Part Revision F

Part Number	Revision	Qty	Ref Des	Item Description	Initial MFG Name	Initial MFG Part Number
1008130	F			ASSEMBLY, PCB, i.MX31-10 SOM-LV "C" SOM, 128MB DDR, 2MB NOR, 64MB NAND, ETHERNET, AUDIO, TOUCH, (ROHS)		
1001329	A	23	C19-C22, C33, C59, C60, C66-C70, C72, C73, C75-C78, C81, C183-C186	CAP, CERAMIC, 10000PF, 16V, 0402	Panasonic	ECJ-0EB1C103K
1001333	A	1	Y1	CRYSTAL, 32.768KHZ, 20PPM, IND TEMP, SMT	Fox	FSX327LF
1001336	B	36	R12, R36, R41, R45, R58, R59, R64, R65, R74, R102-R104, R131, R132, R134, R136, R140, R144, R154, R156, R157, R179, R183, R184, R194-R197, R201-R208	RESISTOR, 10K OHM, 1/16W, 5%, 0402	Dale	CRCW0402103JT
1001337	A	3	R89, R133, R193	RESISTOR, 1.0K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ102X
1001340	A	1	R137	RESISTOR, 1.0M OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ105X
1001368	A	9	R9, R11, R17, R19, R125, R174, R175, R178, R198	RESISTOR, 0 OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GE0R00X
1001369	A	4	R49, R76, R80, R209	RESISTOR, 47.0K OHM, 1/16W, 1%, 0402	Dale	CRCW040247K0FKED
1001372	A	1	R152	RESISTOR, 100K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ104X
1001374	A	18	R13, R46-R48, R50-R53, R67, R68, R79, R91-R93, R95, R96, R120, R172	RESISTOR, 22 OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ220X
1001601	A	1	U26	IC, EEPROM, 3-WIRE SERIAL 2.7V, INDUSTRIAL TEMP.	Atmel	AT93C46-10TU-2.7
1001604	A	2	Q4, Q5	MOSFET, N-CH, 60V, 150MA, SOT23	Diodes Inc	2N7002-7-F
1002081	A	1	Y3	CRYSTAL, 25.0000MHZ, 50PPM, SMT	Abracon	ABM7-25.000MHZ-4-T
1002379	A	9	C45, C46, C56, C58, C61-C63, C65, C85	CAP, CERAMIC, 1UF, 10V, X7R, 0805	AVX	0805ZC105KAT2A
1002394	B	13	C188, C190, C192, C194, C196, C198, C212, C214, C218, C227, C229, C231, C233	CAP, CERAMIC, 1000PF, 50V, X7R, 0402	Yageo America	04022R102K9B20D



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1002395	A	2	C82, C83	CAP, CERAMIC, 22PF, 50V, NPO, 0402	Yageo America	0402CG220J9B200
1002396	A	82	C4, C7, C9, C11, C12, C18, C27-C29, C31, C32, C34, C35, C49, C51, C53-C55, C87-C90, C96-C107, C109-C117, C120, C124-C128, C138-C148, C151, C187, C189, C191, C193, C195, C197, C199, C201, C203, C205, C207, C209, C211, C213, C217, C221, C226, C228, C230, C232, C242	CAP, CERAMIC, 0.1UF, 16V, X5R, 0402	AVX	0402YD104KAT2A
1002435	A	7	R129, R130, R155, R180, R181, R186, R187	RESISTOR, 49.9 OHM, 1/16W, 0.5%, 0402	Susumu	RR0510R-49R9-D
1002436	A	3	R72, R75, R139	RESISTOR, 12.0K OHM, 1/16W, 0.5%, 0402	Susumu	RR0510P-123-D
1002582	A	1	U31	IC, DIGITAL LOGIC/LATCHES, QUAD POSITIVE OR GATE, 2-INPUT, TSSOP 14-PIN	TI	SN74LVC32APWR
1002594	A	2	Q1, Q2	MOSFET, N-CH, 20V, 3A, VTH VGS 1.2V, SOT23	IRF	IRLML2502TRPBF
1002604	A	2	Q8, Q12	MOSFET, P-CH, 12V, -4.3A, SOT23	INTERNATIONAL RECTIFIER	IRLML6401PBF
1002794	A	8	R42-R44, R116, R145-R148	RESISTOR, 2.2K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ222X
1002955	A	2	C16, C17	CAP, CERAMIC, 18PF, 50V, 5%, 0402	MURATA	GRM1555C1H180JZ01D (ROHS)
1002996	B	10	R23, R24, R39, R56, R142, R143, R168-R171	RESISTOR, 4.7K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ472X
1003249	A	1	R6	RESISTOR, 100 OHM, 1/16W, 5%, 0402	Yageo America	9C04021A1000JLHF3
1003577	A	6	C1, C5, C6, C10, C47, C255	CAP, CERAMIC, 22UF, 6.3V, X7R, 1206	Taiyo Yuden	JMK316BJ226KL-T
1003633	A	2	U5, U6	IC, DDR SDRAM, 512MBIT, MOBILE 1.8V	Micron	MT46H32M16LFCK-75
1003658	A	1	U10	IC, CONTROLLERS, CONFIG DEVICES, HIGH-PERFORMANCE SINGLE-CHIP 10/100 NON-PCI ETHERNET CONTROLLER	SMSC	LAN9117-MT
1003659	A	3	U1, U3, U4	IC, TRANSCEIVER, 16 BIT DUAL SUPPLY, TSSOP48	Philips	74ALVC164245DG
1003660	A	2	U16, U17	IC, ULPI HI-SPEED UNIVERSAL SERIAL BUS ON-THE-GO TRANSCEIVER, HVQFN32	Philips	ISP1504CBS
1003754	A	2	R119, R182	RESISTOR, 470K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ474X (RoHS)



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1003819	A	4	R3-R5, R185	RESISTOR, 47 OHM, 1/16W, 5%, 0402	Yageo America	9C04021A47R0JLHF3 (RoHS)
1003838	A	1	R138	RESISTOR, 12.4K OHM, 1/16W, 1%, 0402	Panasonic	ERJ-2RKF1242X (ROHS)
1003851	A	3	C71, C74, C79	CAP, CERAMIC, 10UF, 6.3V, X5R, 0805	Murata	GRM219R60J106KE19D
1003921	A	4	C25, C26, C48, C50	CAP, CERAMIC, 4.7UF, 6.3V, X5R, 0603	TDK	C1608X5R0J475M (RoHS)
1004257	A	2	Q3, Q6	TRANSISTOR, PNP, -40V, -1A, SOT-23	ZETEX	FMMT591ATA (RoHS)
1004467	A	1	R1	RESISTOR, 3.3 OHM, 1/16W, 5%, 0402	Yageo America	RC0402JR-073R3L
1004538	A	3	L1, L3, L4	INDUCTOR, 10UH, 20%, 0.9A, SMT, ROHS	Coilcraft	DO1605T-103ML
1004552	A	4	R69-R71, R167	RESISTOR, 22K OHM, 1/16W, 5%, 0402	Panasonic	ERJ-2GEJ223X
1004553	A	3	C38-C40	CAP, CERAMIC, 0.47UF, 10V, 10%, X5R, 0603	Panasonic	ECJ-1VB1A474K
1004554	A	2	C41, C42	CAP, CERAMIC, 1500PF, 50V, 10%, X7R, 0402	Panasonic	ECJ-0EB1H152K
1004669	A	3	U30, U32, U33	IC, BUFFER, 3-STATE, SOT (SC-70)	Texas Instruments	SN74LVC1G125DCKR
1004734	11	0		I.MX31 SCHEMATICS (IMX31-10)		
1004753	A	1	R159	RESISTOR, 0.020 OHM, 1/2W, 1%, 1812	Panasonic	ERJ-L12KF20MU
1004846	A	1	Y2	OSCILLATOR, 26.0000MHZ, 3.3V, 50PPM, SMT 4PAD	Commutek International LTD	JBBZ
1004857	A	5	C2, C23, C30, C64, C86	CAP, CERAMIC, 2.2UF, 6.3V, X5R, 0603	Panasonic	ECJ-1VB0J225K
1005218	A	1	U35	IC, DIGITAL LOGIC/LATCHES, QUAD 2-INPUT, NAND GATE, 14-TSSOP, LOW VOLTAGE	TI	SN74ALVC00PWR
1005321	A	2	C13, C14	CAP, CERAMIC, 6800PF, 25V, X7R, 0402	Murata	GRM155R71E682KA01D
1005389	A	1	U41	IC, EEPROM, 4K, 3-WIRE SERIAL 1.8V, INDUSTRIAL TEMP.	Atmel	AT93C66A-10TU-1.8
1005460	1	2	J1, J2	CONNECTOR, HEADER, BTB, 0.5MM, 240PIN, 2X120, TERMINAL	Samtec	BTH-120-01-L-D-A
1005482	A	5	C93-C95, C108, C118	CAP, CERAMIC, 33PF, 50V, NPO, 0402	Panasonic	ECJ-0EC1H330J
1005524	A	2	U34, U42	IC, INVERTER, SC70	Fairchild	NC7SP04P5X
1005628	A	2	U36, U37	IC, DIGITAL LOGIC/LATCHES, SINGLE 2-INPUT POSITIVE AND GATE 1.8V COMPATIBLE	Texas Instruments	SN74AUC1G08DBVR
1006399	A	4	C36, C37, C43, C44	CAP, CERAMIC, 0.22UF, 10V, X5R, 0402	Murata	GRM155R61A224KE19D
1007755	A	1	U14	IC, PROCESSOR, ARM 11, I.MX31 - M SILICON REV 2.0	Freescale	MCIMX31VKN5C



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1008134	B	0		ASSEMBLY DRAWING, SOMCR, IMX31-10 (ROHS)		
1008479	A	1		PCB, IMX31-10 LV-SOM - PRODUCTION BUILD 2		
1008836	A	1	U7	IC, FLASH, 16MBIT, PROGRAMMED IMX31 FUNCTIONAL TEST CLIENT, TESTS, AND LOLO		
1002482	A	0		IC, FLASH, 16MBIT	INTEL	JS28F160C3BD70
1008837	A	0		SOFTWARE, RAW, ARM, FUNCTIONAL TEST CLIENT 1.1.5 +TESTS+LOLO 2.3.5, MX31-10, ALL BYTES		
1008842	C	0		SOFTWARE, XML, MX31-10, FCT SERVER, TEST PARAMETERS		
1009033	A	1	U8	IC, NAND FLASH, 512MBIT, X8, 3V, REV C DIE, TSOP48	ST MICRO	NAND512W3A2CN6E
1009356	A	6	C122, C123, C152-C155	CAP, TANTALUM, 68UF, 6V, 3216-18	Kemet	T491A686K006AT
1009892	A	1	U15	IC, POWER MANAGEMENT AND AUDIO CIRCUIT, MC13783VK5, MAPBGA-247	Freescale	MC13783VK5
1000196	A	1		LABEL, MAC ADDRESS IDENTIFICATION		
1006494	B	1		LABEL, PART NUMBER, REVISION, SERIAL NUMBER, BAR CODE, ROHS		
1008132	A	1		LABEL, MODEL NUMBER, MIMX31CSOMCR-A		