威強電工業電腦 Integration Corp.

iQ7-ASL

QSeven 2.1 Computer on Module

Quick Installation Guide

Version 1.00 February, 2025

Features

- Support the Intel® N-series SoC processor N97
- Support pre-installed 8 GB LPDDR5 memory (up to 16 GB)
- Dual independent display signals via HDMI 1.4a and LVDS (or eDP)
- Support PCIe 2.5 GbE via Intel® I225-V/I226-V
- Four PCIe Gen3 x1, two USB 3.2 Gen2 (10 Gb/s), six USB 2.0 and one UART signal
- Two SATA 6Gb/s and optional on-board 16 GB eMMC (up to 64 GB)

Packing List

- 1 x iQ7-ASL computer on module
- 1 x Heatsink
- 1 x QIG (Quick Installation Guide)

Jumpers & Connectors

J_ATX_AT2: AT/ATX power mode setting jumper	
Status	Description
Short A – B	ATX power mode (default)
Short B – C	AT power mode

J_GF1: QSeven Connector							
Pin	Description	Pin	Description	Pin	Description	Pin	Description
1	GND	2	GND	117	GND	118	GND
3	GBE_MDI3-	4	GBE_MDI2-	119	LVDS_A_CLK+	120	LVDS_B_CLK+
5	GBE_MDI3+	6	GBE_MDI2+	121	LVDS_A_CLK-	122	LVDS_B_CLK-
7	GBE_LINK 1000#	8	GBE_LINK 2500#	123	LVDS_BLT_ CTRL	124	reserved
9	GBE_MDI1-	10	GBE_MDI0-	125	LVDS_DID_ DAT	126	LVDS_BLC_D AT
11	GBE_MDI1+	12	GBE_MDI0+	127	LVDS_DID_ CLK	128	reserved
13	reserved	14	GBE_ACT#	129	CAN0_TX	130	CAN0_RX
15	reserved	16	SUS_S5#	131	DP_LANE3+ / TMDS_CLK+	132	USB3_TX1-
17	WAKE#	18	SUS_S3#	133	DP_LANE3- / TMDS_CLK-	134	USB3_TX1+
19	SUS_STAT#	20	PWRBTN#	135	GND	136	GND
21	SLEEP#	22	LID#	137	DP_LANE1+/ TMDS_LANE1+	138	DP_AUX+
23	GND	24	GND	139	DP_LANE1-/ TMDS_LANE1-	140	DP_AUX-
25	GND	26	PWGIN	141	GND	142	GND
27	BATLOW#	28	RSTBTN#	143	DP_LANE2+/ TMDS_LANE0+	144	USB3_RX1-
29	SATA0_TX+	30	SATA1_TX+	145	DP_LANE2-/ TMDS_LANE0-	146	USB3_RX1+
31	SATA0_TX-	32	SATA1_TX-	147	GND	148	GND
33	SATA_ACT#	34	GND	149	DP_LANE0+ / TMDS_LANE2+	150	HDMI_CTRL_ DAT
35	SATA0_RX+	36	SATA1_RX+	151	DP_LANE0- / TMDS_LANE2-	152	HDMI_CTRL_ CLK
37	SATA0_RX-	38	SATA1_RX-	153	HDMI_HPD#	154	DP_HPD#
39	GND	40	GND	155	PCIE_CLK_ REF+	156	PCIE_WAKE#
41	BIOS_DISABLE	42	SDIO_CLK#	157	PCIE_CLK_ REF-	158	PCIE_RST#
43	SDIO_CD#	44	reserved	159	GND	160	GND
45	SDIO_CMD	46	SDIO_WP	161	PCIE3_TX+	162	PCIE3_RX+
47	SDIO_PWR#	48	SDIO_DAT1	163	PCIE3_TX-	164	PCIE3_RX-
49	SDIO_DAT0	50	SDIO_DAT3	165	GND	166	GND

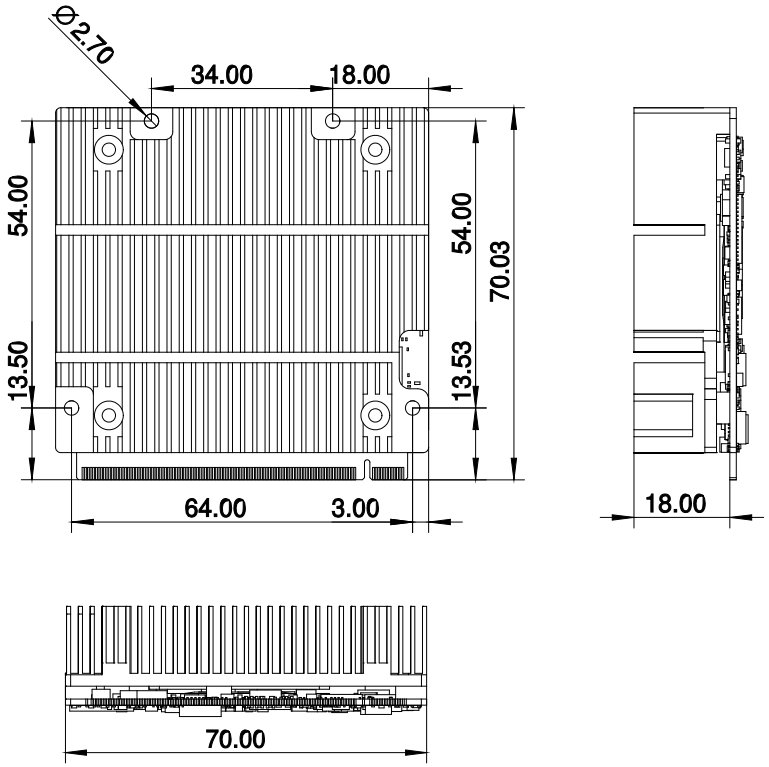
51	SDIO_DAT2	52	reserved	167	PCIE2_TX+	168	PCIE2_RX+
53	reserved	54	reserved	169	PCIE2_TX-	170	PCIE2_RX-
55	reserved	56	USB_OTG_ PEN	171	UART0_TX	172	UART0_RTS#
57	GND	58	GND	173	PCIE1_TX+	174	PCIE1_RX+
59	HDA_SYNC	60	SMB_CLK	175	PCIE1_TX-	176	PCIE1_RX-
61	HDA_RST	62	SMB_DAT	177	UART0_RX	178	UART0_CTS#
63	HDA_BITCLK	64	SMB_ALERT#	179	PCIE0_TX+	180	PCIE0_RX+
65	HDA_SDI	66	GP0_I2C_CLK	181	PCIE0_TX-	182	PCIE0_RX-
67	HDA_SDO	68	GP0_I2C_DAT	183	GND	184	GND
69	THRM#	70	WDTRIG#	185	LPC_AD0	186	LPC_AD1
71	THRMTRIP#	72	WDTRST#	187	LPC_AD2	188	LPC_AD3
73	GND	74	GND	189	LPC_CLK	190	LPC_FRAME#
75	USB3_TX0-	76	USB3_RX0-	191	SERIRQ	192	LPC_LDRQ#
77	USB3_TX0+	78	USB3_RX0+	193	VCC_RTC	194	SPKR
79	USB2_OC#	80	USB_4_5_OC#	195	FANIO_EC	196	FANOUT_EC
81	USB_P5-	82	USB_P4-	197	GND	198	GND
83	USB_P5+	84	USB_P4+	199	SPI_MOSI	200	SPI_CS0#
85	USB_2_3_OC#	86	USB_0_1_OC#	201	SPI_MISO	202	SPI_CS1#
87	USB_P3-	88	USB_P2-	203	SPI_SCK	204	reserved
89	USB_P3+	90	USB_P2+	205	VCC_5V_SB	206	VCC_5V_SB
91	N/C	92	reserved	207	reserved	208	reserved
93	USB_P1-	94	USB_P0-	209	reserved	210	reserved
95	USB_P1+	96	USB_P0+	211	NC	212	NC
97	GND	98	GND	213	NC	214	NC
99	LVDS_A0+	100	LVDS_B0+	215	NC	216	NC
101	LVDS_A0-	102	LVDS_B0-	217	NC	218	NC
103	LVDS_A1+	104	LVDS_B1+	219	VCC	220	VCC
105	LVDS_A1-	106	LVDS_B1-	221	VCC	222	VCC
107	LVDS_A2+	108	LVDS_B2+	223	VCC	224	VCC
109	LVDS_A2-	110	LVDS_B2-	225	VCC	226	VCC
111	LVDS_PPEN	112	LVDS_BLEN	227	VCC	228	VCC
113	LVDS_A3+	114	LVDS_B3+	229	VCC	230	VCC
115	LVDS_A3-	116	LVDS_B3-				

Get more information:

iQ7-ASL

IEI Resource Download Center

Dimensions (Unit: mm)



Safety Instructions

Warning! Read the QIG before connecting the system to the power source.

Warning! To prevent the system from overheating, do not operate it in an area that exceeds the maximum operating temperature described in the QIG.

Warning! Ultimate disposal of this product should be handled according to all national laws and regulations.

Support

IEI Support URL
https://new.ieiworld.com/en/online_support_form

Compliance

This equipment has been tested and found to comply with specifications for CE marking. If the user modifies and/or installs other devices in the equipment, the CE conformity declaration may no longer apply.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

According to the requirement of the WEEE legislation the following user information is provided to customers for all branded IEI Electronics products subject to the WEEE directive.
This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop o- your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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