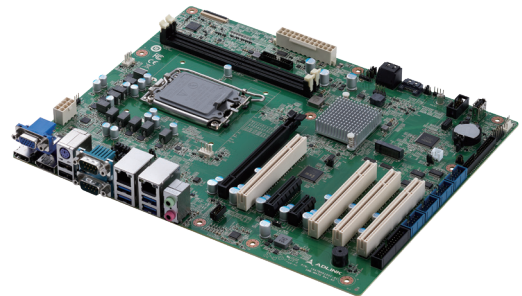


IMB-M47H

Industrial ATX Motherboard supporting
 Intel® Core™ Series 2 Processors and 14/13/12th Gen Intel® Core™ Processors

Features

- Pro Series Industrial ATX Motherboard supporting Intel® Core™ Series 2 Processors and 14/13/12th Gen Intel® Core™ Processors
- Intel® H610E Chipset
- Dual-channel DDR5 4800MHz memory up to 64GB
- Triple independent display: 1x DP1.4a, 1x VGA, 1x HDMI 2.0b
- Dual GbE ports: 1x 1GbE (Intel® I219-LM), 1x 2.5GbE (Intel® I225-V)
- Expansion slots: 1x PCIe x16 Gen5, 1x PCIe x4 Gen3, 1x PCIe x1 Gen3, 4x PCI
- TPM 2.0 onboard



Windows



Ordering Information

PN	Model Name	Chipset	Memory	PCIe x16	PCIe x4	PCIe x1	PCI	HDMI	DP	VGA	LAN	COM	SATA	M.2	USB2.0	USB3.0	TPM2.0
95-13014-10	IMB-M47H	H610E	DDR5 4800 MHz	1	1	1	4	1	1	1	2	6	3	1	5	4	Support

Packing List

Description	QTY
IMB-M47H motherboard	1
IMB-M47H I/O shield	1
M.2 screw kit	1

Embedded OS

PN	Description
92-56094-0010	Windows 10 IoT Ent LTSC 2021 High End PKEA
92-56094-2010	Windows 10 IoT Ent LTSC 2021 Value PKEA
92-56094-4010	Windows 10 IoT Ent LTSC 2021 Entry PKEA
92-56102-0010	Windows 11 IoT Ent LTSC 2024 High End PKEA
92-56102-2010	Windows 11 IoT Ent LTSC 2024 Value PKEA
92-56102-4010	Windows 11 IoT Ent LTSC 2024 Entry PKEA

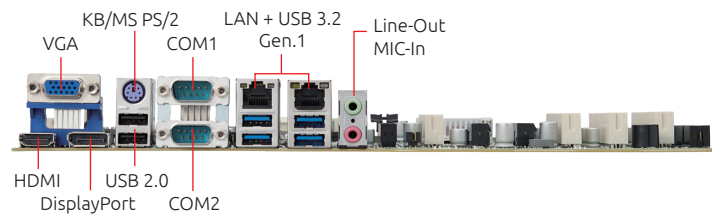
Optional Accessories

PN	Description
32-20976-0000-A0	CPU cooler for 65W CPU
32-21041-0000-A0	CPU cooler for 125W CPU
30-10057-7000	SATA port cable (7-pin)
30-25010-3010	2-port USB 2.0 cable with bracket
30-25019-2000	1-port LPT cable with bracket
30-25003-3000	2-port COM cable with bracket
30-01016-2000	Y cable for PS/2 KB & mouse

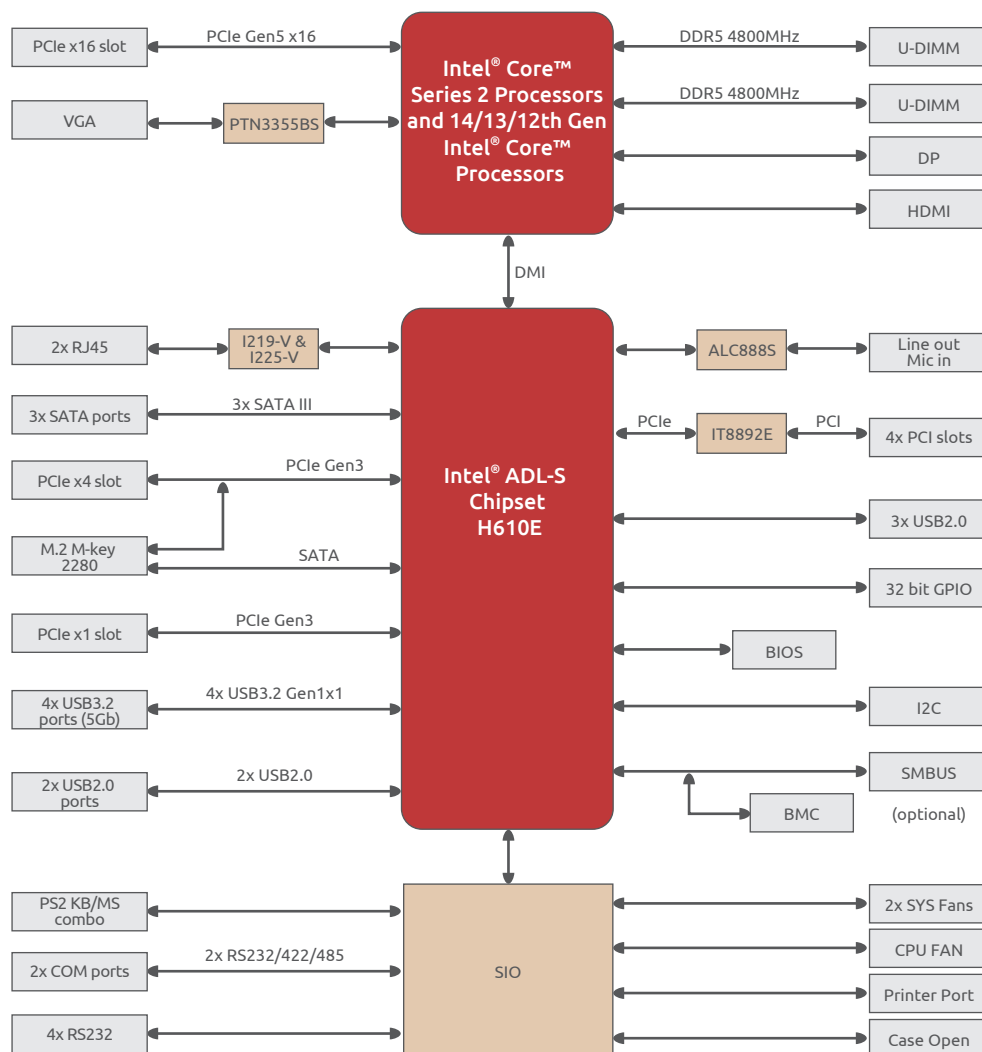
Specifications

Model	IMB-M47H
Processor System	
CPU	Intel® Core™ Series 2 Processors and 14/13/12th Gen Intel® Core™ Processors, up to 65W
Chipset	H610E
Memory	2x DDR5 UDIMMs 4800MHz, up to 64GB, non-ECC
OS Support	Windows® 10/11 (64bit) Ubuntu LTS 20.04 (32/64bit)
Display	
VGA	1
HDMI	1
DisplayPort	1
No. of Displays	3
Ethernet	
Gbe Port	2
Controller/ Frequency	1x Intel® I219-V, 1Gbps 1x Intel® I225-V, 2.5Gps
Storage	
SATA	3x SATA 6Gb/s ports
RAID	-
I/O Interfaces	
USB	4x USB 3.2 Gen 1x1 ports (5Gbps) (rear I/O) 2x USB 2.0 ports (rear I/O) 1x USB 2.0 vertical type A ports for internal dongles 2x USB 2.0 via headers
COM	2x RS-232/422/485 (rear I/O) 4x RS-232 (pin header)
PS/2	1 (rear I/O)
Audio	Realtek ALC888S
LPT	1 (pin header)
GPIO	32x GPIO
TPM	Yes (TPM 2.0)
Expansion Slots	
PCIe	1x PCIe x16 Gen5 1x PCIe x4 Gen3 1x PCIe x1 Gen3
PCI	4
M.2	1x M.2 B/M-key, 2280 (support PCIe Gen 3x4, SATA)
Mechanical and Environmental	
Dimension	ATX (305 mm x 244 mm (W x L))
Operating Temperature	0°C to 60°C
Storage Temperature	-40°C to 85°C
Relative Humidity	60 °C @ 90% RH, non-condensing
Certification	
	CE & FCC Class B

Product Illustration



Block Diagram



CPU Support List

Family	Number	CPU Core	Frequency (GHz)	Cache (MB)	Power	Since BIOS
Bartlett Lake	251E	24	2.1 GHz	36MB	65	2.04.10
Bartlett Lake	251TE	24	1.4 GHz	36MB	45	2.04.10
Bartlett Lake	221E	14	2.7 GHz	24MB	65	2.04.10
Bartlett Lake	221TE	14	1.8 GHz	24MB	45	2.04.10
Bartlett Lake	211E	10	2.7 GHz	20MB	65	2.04.10
Bartlett Lake	211TE	10	1.7 GHz	20MB	45	2.04.10
Bartlett Lake	201E	4	3.6 GHz	12MB	60	2.04.10
Bartlett Lake	201TE	4	2.9 GHz	12MB	45	2.04.10
Raptor Lake-S Refresh	i9-14900	24	2.0GHz	36MB	65	1.00.10
Raptor Lake-S Refresh	i9-14900T	24	1.1GHz	36MB	35	1.00.10
Raptor Lake-S Refresh	i7-14700	20	2.1GHz	33MB	65	1.00.10
Raptor Lake-S Refresh	i7-14700T	20	1.3GHz	33MB	35	1.00.10
Raptor Lake-S Refresh	i5-14500	14	2.6GHz	24MB	65	1.00.10
Raptor Lake-S Refresh	i5-14500T	14	1.7GHz	24MB	35	1.00.10
Raptor Lake-S Refresh	i5-14400	10	2.5GHz	20MB	65	1.00.10
Raptor Lake-S Refresh	i3-14100	4	3.5GHz	12MB	60	1.00.10
Raptor Lake-S Refresh	i3-14100T	4	2.7GHz	12MB	35	1.00.10
Raptor Lake-S Refresh	300	2	3.9GHz	6MB	46	1.00.10
Raptor Lake-S Refresh	300T	2	3.4GHz	6MB	35	1.00.10
Raptor Lake-S	i9-13900E	24	1.8GHz	36MB	65	1.00.10
Raptor Lake-S	i9-13900	24	2.0GHz	36MB	65	1.00.10
Raptor Lake-S	i9-13900TE	24	1.0GHz	36MB	35	1.00.10
Raptor Lake-S	i7-13700E	16	1.9GHz	30MB	65	1.00.10
Raptor Lake-S	i7-13700	16	2.1GHz	30MB	65	1.00.10
Raptor Lake-S	i7-13700TE	16	1.1GHz	30MB	35	1.00.10
Raptor Lake-S	i5-13500E	14	2.4GHz	24MB	65	1.00.10
Raptor Lake-S	i5-13500	14	2.5GHz	24MB	65	1.00.10
Raptor Lake-S	i5-13500TE	14	1.3GHz	24MB	35	1.00.10
Raptor Lake-S	i5-13400E	10	2.4GHz	20MB	65	1.00.10
Raptor Lake-S	i5-13400	10	2.5GHz	20MB	65	1.00.10
Raptor Lake-S	i3-13100E	4	3.3GHz	12MB	60	1.00.10
Raptor Lake-S	i3-13100	4	3.4GHz	12MB	60	1.00.10
Raptor Lake-S	i3-13100TE	4	2.4GHz	12MB	35	1.00.10
Alder Lake-S	i9-12900E	16	2.3GHz	30MB	65	1.00.10
Alder Lake-S	i9-12900	16	2.4GHz	30MB	65	1.00.10
Alder Lake-S	i9-12900TE	16	1.1GHz	30MB	35	1.00.10
Alder Lake-S	i7-12700E	12	2.1GHz	25MB	65	1.00.10
Alder Lake-S	i7-12700	12	1.6GHz	25MB	65	1.00.10
Alder Lake-S	i7-12700TE	12	1.4GHz	25MB	35	1.00.10
Alder Lake-S	i5-12500E	6	2.9GHz	18MB	65	1.00.10
Alder Lake-S	i5-12500	6	3.0GHz	18MB	65	1.00.10
Alder Lake-S	i5-12500TE	6	1.9GHz	18MB	35	1.00.10
Alder Lake-S	i5-12400	6	2.5GHz	18MB	65	1.00.10
Alder Lake-S	i3-12100E	4	3.2GHz	12MB	60	1.00.10
Alder Lake-S	i3-12100	4	3.3GHz	12MB	60	1.00.10
Alder Lake-S	i3-12100TE	4	2.1GHz	12MB	35	1.00.10
Alder Lake-S	G7400E	2	3.6GHz	6MB	46	1.00.10
Alder Lake-S	G7400TE	2	3.0GHz	6MB	35	1.00.10
Alder Lake-S	G6900E	2	3.0GHZ	4MB	46	1.00.10
Alder Lake-S	G6900TE	2	2.4GHz	4MB	35	1.00.10