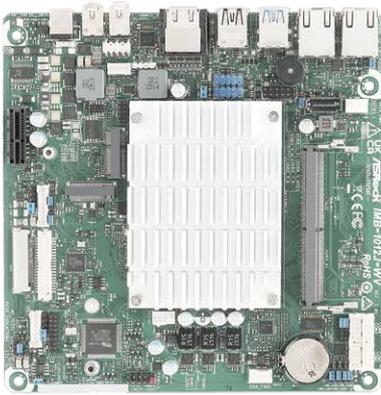


# IMB-1012J-WV

Mini-ITX Motherboard



## KEY FEATURES

- Intel® Alder Lake-N Processors
- 1 x 262-pin SO-DIMM DDR5 4800 MHz, up to 32GB
- 1 x PCIe x1 (Gen3), 3 x USB 3.2 Gen2, 5 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 4 x COM, 1 x SATA3
- 2 x Realtek 1 Gigabit LAN
- Supports Triple display, 2 x HDMI 2.0b, 1 x LVDS, 1 x eDP 1.4b
- 9~28V DC-In / 12V DC-In only (BOM option)

## SPECIFICATIONS

### Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in x 0.9-in, 17.0 cm x 17.0 cm x 2.28 cm)
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### Processor System

CPU	Intel® Alder Lake-N Processors IMB-1012J-WV (N97, QC, Max Speed Up to 3.6GHz, 12W) <small>*For other CPU SKUs request, please contact regional Sales for availability</small>
BIOS	AMI SPI 256 Mbit

### Memory

Technology	Single Channel DDR5 4800 MHz
Capacity	32GB
Socket	1 x 262-pin SO-DIMM

### Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 2.0b Max resolution up to 4096 x 2160@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz
eDP	eDP 1.4b Max resolution up to 4096x2160@60Hz
MultiDisplay	Triple display

### Expansion Slot

PCIe	1 x PCIe x1 (Gen3)
M.2	1 x M.2 (Key E, 2230) with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless

### Audio

Interface	Realtek ALC256 HD, High Definition Audio
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### Ethernet

Controller/ Speed	LAN1: Realtek RTL8111H with 10/100/1000 Mbps LAN2: Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

### Rear I/O

HDMI	2 x HDMI 2.0b
Ethernet	2 x 1 Gigabit LAN
USB	3 x USB 3.2 Gen2 1 x USB 2.0
Audio	2 (Mic-In, Line-Out)
DC Jack	1

### Internal Connector

USB	4 x USB 2.0 (2 x 2.54 pitch header)
COM	COM1 (RS-232/422/485) COM2, COM3 (RS-232) COM4 (RS-232/TTL 5V/ccTalk, switch by Jumper setting)
GPIO	4 x GPI, 4 x GPO
LVDS	1
eDP	1
SATA PWR Output	1
Speaker Header	1

### Storage

M.2	1 x M.2 (Key M, 2280/3052) with PCIe Gen3 x1 and SATA3 for SSD
SATA	1 x SATA3 (6Gb/s)

### Security

TPM	TPM Header Intel® PTT
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### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

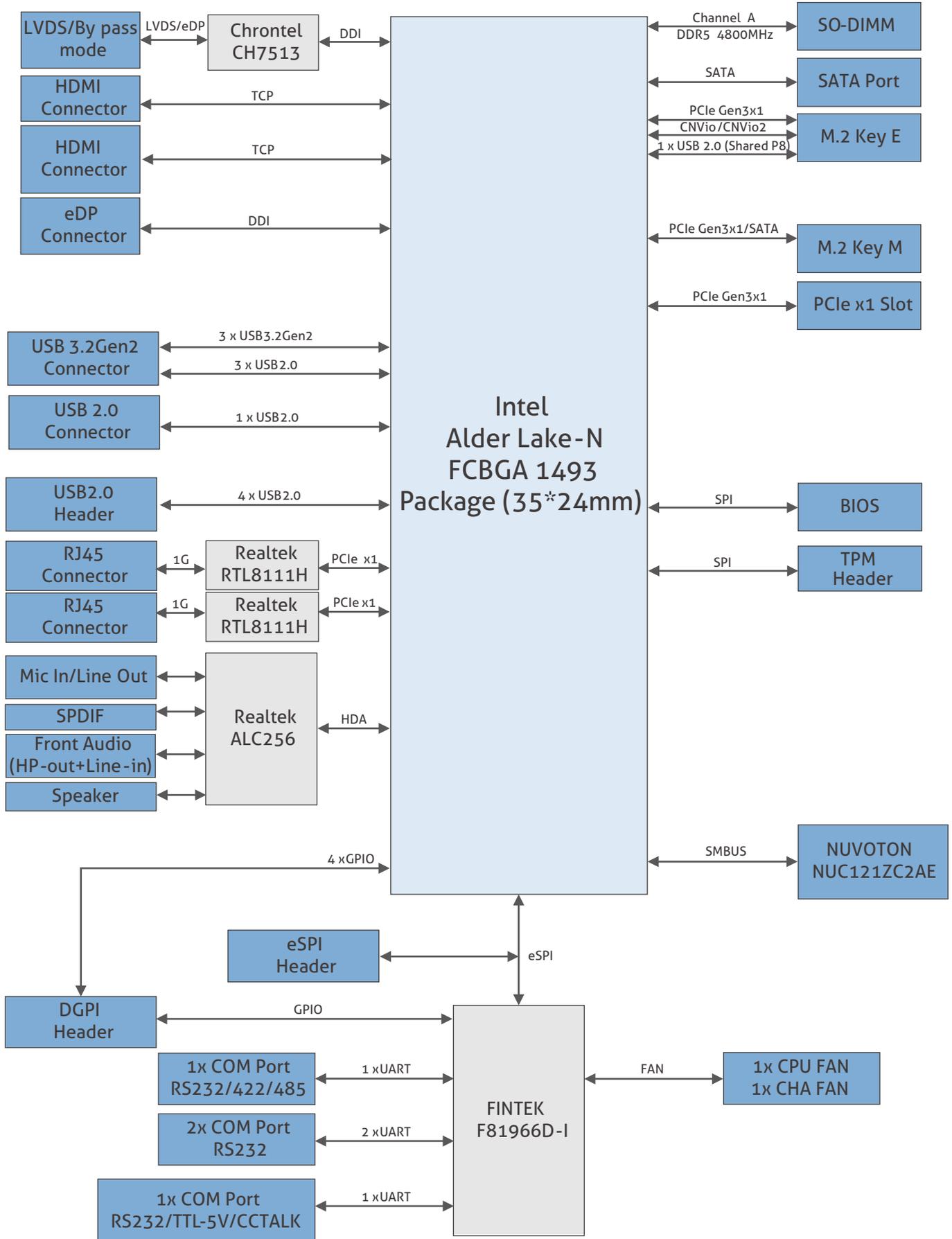
### Power Requirements

Input PWR	9~28V DC-In / 12V DC-In only (BOM option)
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

### Environment

Operating Temp	-20°C ~ 70°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

BLOCK DIAGRAM



## ORDERING INFORMATION

### Ordering Information

Model	IMB-1012J-WV
CPU	N97
HDMI	2
LVDS/eDP	1/1
1 Gbe LAN	2
COM	4
USB 3.2	3
USB 2.0	5
SATA III	1
M.2 E-Key	1
M.2 M-Key	1
TPM	FW TPM

### Packing List (Bulk)

Description	Quantity
I/O Shield	1
Thin I/O Shield	1
SCREW M3*2.5	2

### I/O View



### Packing List (Gift)

Description	Quantity
SATA Power Cable	1
COM Cable	2
SATA Data Cable	1
I/O Shield	1
Thin I/O Shield	1
SCREW M3*2.5	2