

3.5" SBC

JF35-ADN1-N305 Series

Intel® Alder Lake-N SoC Processor with DDR5 up to 32GB, provide optional 64GB eMMC onboard, Support three M.2 slots, two 2.5GbE ports, triple displays, ten USB ports, 12~28V wide-voltage DC-in

Features

1. Intel® Alder Lake-N SoC Processor (TDP 15W)
2. 1* DDR5 4800MHz SO-DIMM up to 32GB
3. 2* Intel i225V 2.5GbE
4. 2* HDMI 2.0b, 1* eDP (co-layout LVDS), 1* LVDS w/Inverter
5. 1* SATAIII (6Gb/s), 6* COM, 1* USB3.2 (Gen.2) Type-A, 8* USB2.0, 1* USB Type-C (ALT mode)
6. 1*M.2 M-key(2280) support NVMe, 1*M.2 E-key(2230) support CNVi, 1*M.2 B-key(3042/3052) support 4G/5G module
7. Support 12~28V DC-in
8. Support Onboard TPM2.0 (optional)

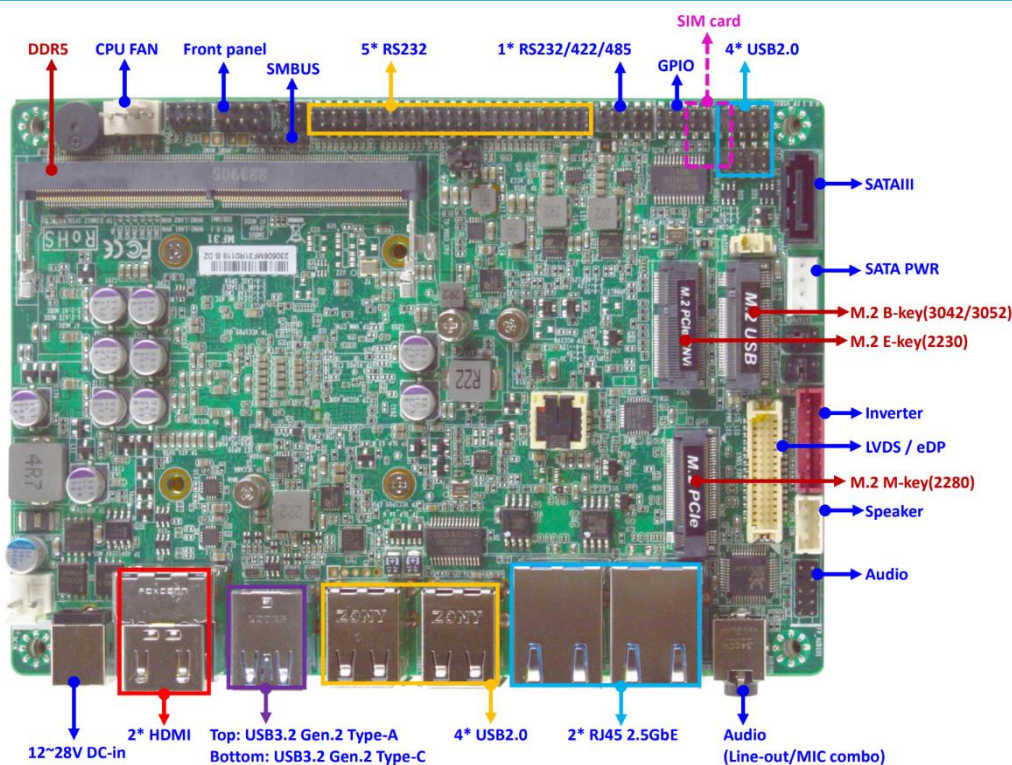


intel. FC CE RoHS COMPLIANT

Overview

The JETWAY JF35-ADN1-N305 Series is 3.5" form factor board adopts the Intel® Alder Lake-N SoC Processor with 15W TDPs. The board supports one SO-DIMM DDR5 4800MHz memory up to 32GB, one SATAIII (6 Gb/s) interface, one M.2 M-key and 64GB onboard eMMC (optional) for storage devices. Featuring the integrated Intel® 2.5 Gigabit Ethernet controller, the JF35-ADN1-N305 Series offers two 10/100/1000/2500 Base-TX Ethernet device for network transmission. Two USB3.2 Gen.2 ports, eight USB2.0 ports and six COM ports provide versatile expansion. The board also support one M.2 E-key (2230) slot and one M.2 B-key (3042/3052) slot. The JF35-ADN1-N305 Series offers two HDMI2.0b ports and one LVDS (co-layout eDP) with triple independent displays. Because of the above features, JF35-ADN1-N305 Series is suitable for Medical Device, IOT Solution, Edge computing and Industrial PCs applications.

I/O Diagram



Specifications

Model	- JF35-ADN1-N30500 (CPU: N305, Default) - JF35-ADN1-N30502 (CPU: N305, w/TPM2.0) - JF35-ADN1-N30504 (CPU: N305, w/onboard 64GB eMMC) - JF35-ADN1-N30508 (CPU: N305, w/TPM2.0, onboard 64GB eMMC)
Form Factor	3.5" (5.8-in * 4.0-in, 148 * 102mm)
Processor System	- Intel® Alder Lake-N N305 SoC Processor (TDP 15W) - AMI 256Mb Flash ROM BIOS <i>*Support recover crashed BIOS data tool by a USB flash pen driver:</i> <i>1. Using JetBIOS SW back up tool with any external USB ports</i>
Memory	1* DDR5 4800MHz SO-DIMM up to 32GB
Storage	1* SATAIII (6 Gb/s) 1* M.2 M-key (2280, PCIe Gen.3 x2 interface) support NVMe 64GB eMMC 5.1 onboard (JF35-ADN1-N30504/ JF35-ADN1-N30508 only)
Expansion	1* M.2 E-key (2230, USB2.0/PCIe Gen.3 x1 interface) support CNVi 1* M.2 B-key (3042/3052, USB3.1/USB2.0 interface) support 4G/5G Module
Ethernet	2* Intel® i225-V 2.5GbE
Graphics	- Intel® UHD Graphics, shared memory 2* HDMI 2.0b (Max Resolution: 4096x2160@60Hz) 1* LVDS (Max Resolution: 1920x1200@60Hz) (co-lay eDP) 1* DP 1.4a (Max Resolution: 4096x2304@60Hz) from external USB Type-C ALT mode - Support Triple Displays
Audio	HD audio: Realtek ALC897 (Default) / Realtek ALC888S
Watchdog Timer	- From Super I/O to drag RESETCON# 256 segments (10sec ~ 255min)
Internal I/O	4* USB2.0 1* LVDS (w/Inverter) /eDP 1* SATAIII 1* SATA PWR 5* RS232 1* RS232/422/485 (COM1) support 5V/12V select 1* M.2 M-Key (2280, PCIe Gen.3 x2 interface) support NVMe 1* M.2 E-Key (2230, USB2.0/PCIe Gen.3 x1 interface) support CNVi 1* M.2 B-key (3042/3052, USB3.1/USB2.0 interface) support 4G/5G Module 1* Nano SIM slot (along with M.2 B-key) 1* GPIO (8 bit) 1* Chassis intrusion 1* Audio front Header 1* Speaker 1* SMBUS 1* AT mode 1* 2pin power connector - Support onboard TPM2.0 (JF35-ADN1-N30502/ JF35-ADN1-N30508 only)
External I/O	2* HDMI 2.0b 1* USB3.2 (Gen.2) Type-C support DP1.4a display output 1* USB3.2 (Gen.2) Type-A 4* USB2.0 2* RJ45 2.5 GbE Ethernet 1* Audio (Line-out/MIC combo) 1* DC-in (12-28V)
Power	12~28V DC-in PWR - AT: Directly PWR on as Power input ready - ATX: Press Button to PWR on after Power input ready
Compliance	CE, FCC, LVD, RoHS, REACH
Temperature	- Operating Temperature: 0 ~ 60° C - Storage Temperature: -20 ~ 85° C - Humidity: 10% ~ 90% RH @40°C (non-condensing)
OS Support	- Windows 10, Windows 11, Linux Coming soon
Warranty	2 Years limited warranty

* Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

Standard Accessories

Part Number	Description
-----	JF35-ADN1-N305 Series M/B
1* HCS3XXMHT03S-5F 1* HCS376MHT01S-F	Flat type Heatsink
G01-SATA3-BL-1F	1* SATA cable
G01-PW4PS2S-322-1F	1* SATA Power Y cable
G01-COM-H2M22-1F	2* COM cable

Mechanical Drawings (Unit=mm)

