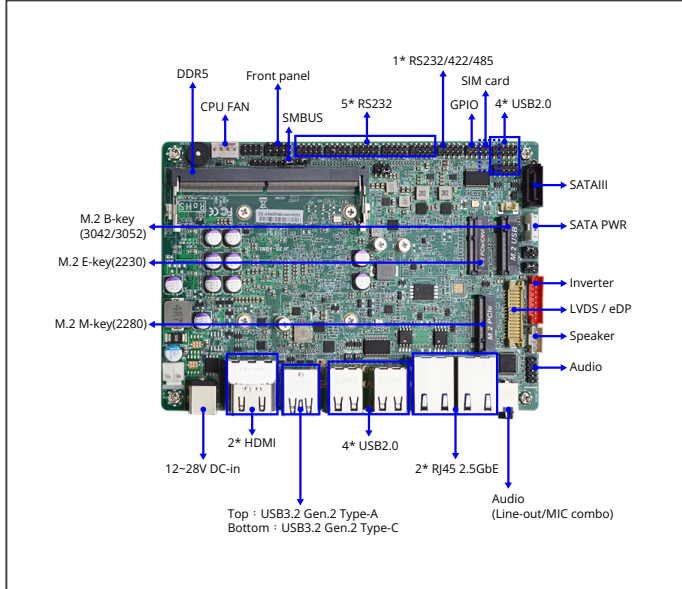


# JF35-ADN1

3.5" SubCompact Board with Intel® Processor N-series Processors (formerly Alder Lake N)



## Features

- 1 x DDR5 4800MHz SO-DIMM up to 32GB
- 2 x Intel i225V 2.5GbE
- 2 x HDMI 2.0b, 1\* eDP (co-layout LVDS), 1\* LVDS w/Inverter
- 1 x SATAIII (6Gb/s), 6\* COM
- 1\* USB3.2 (Gen.2) Type-A, 8\* USB2.0, 1\* USB Type-C (ALT mode)
- 1 x M.2 M-key(2280) support NVMe, 1 x M.2 E-key(2230) support CNVi,
- Support 12~28V DC-in
- Support RVP, OCP, and OVP design

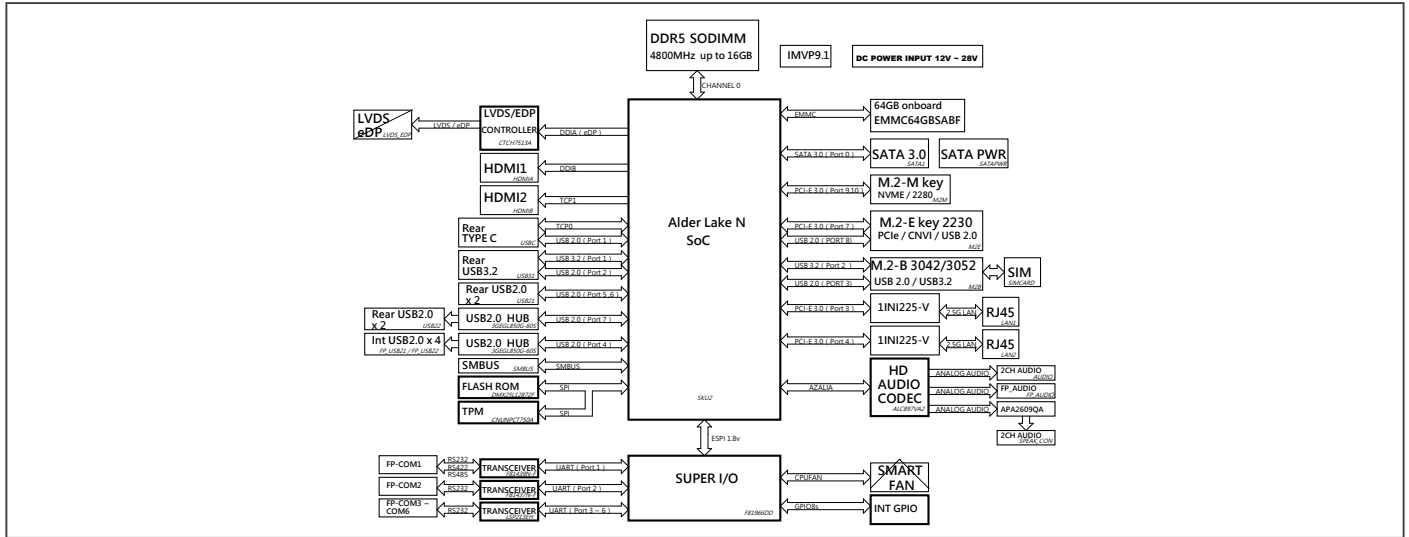
## Packing List

Part Number	Description	QTY per Board
	1 x JF35-ADN1 MB	
HCS3XXMHT03S-5F	Flat type Heatsink (assembled)	1
HCS376MHT01S-F	CPU plate (assembled)	1
G01-SATA3-BL-1F	SATA cable, 50cm	1
G01-PW4PS2S-322-1F	SATA Power Y cable, 5.0pitch for 32cm, 2.54pitch for 20cm	1
G01-COM-H2M22-1F	COM Port Cable, 22cm, Pitch 2.0	2

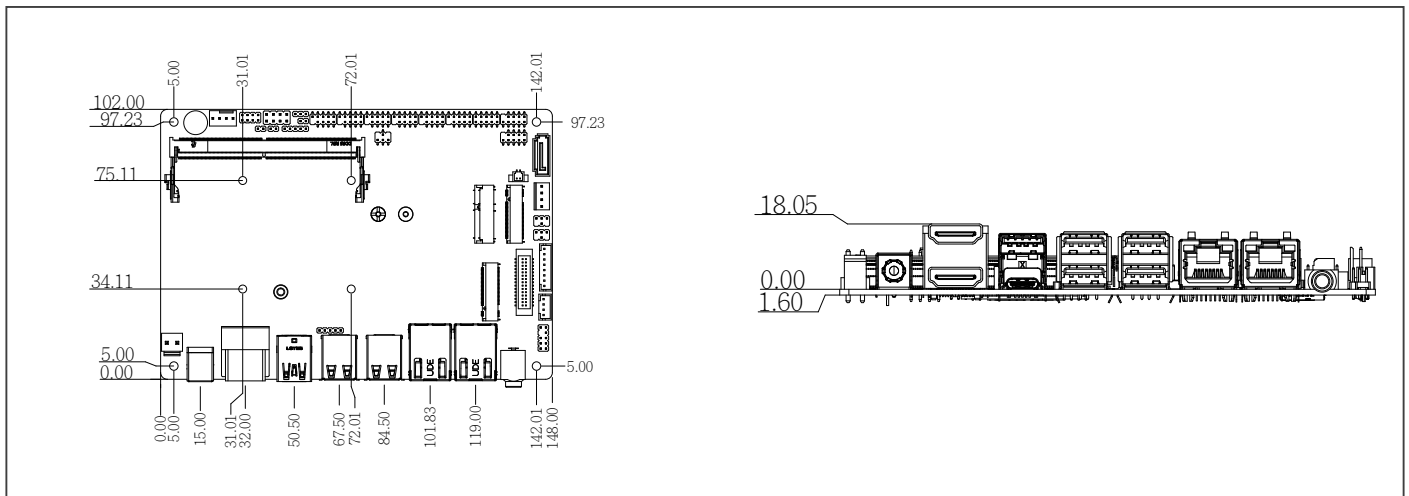
## Specifications

SYSTEM	
FORM FACTOR	3.5" SBC
CPU	Onboard Intel® Processor N-series Processors (formerly Alder Lake N) Intel® Processor N97 *For additional compatible CPUs, please contact regional sales
CPU TDP	12W
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	1 x DDR5 4800MHz, Single Channel SODIMM up to 32GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (optional)
RTC Battery	Lithium Battery 3V/220mAh
DIMENSION (L X W)	148mm x 102mm (5.8" x 4")
OS SUPPORT	Windows 10 (64bit), Windows 11 Linux, TBC
POWER	
POWER REQUIREMENT	+12-28V
POWER SUPPLY TYPE	AT/ATX
CONNECTOR	2-pin Header
DISPLAY	
CONTROLLER	Intel® UHD Graphics
LVDS/eDP/MIPI-DSI	1 x LVDS, up to 1920x1 20 0@60Hz (support 12V/2A panel) (optional eDP)
DISPLAY INTERFACE	2 x HDMI 2.0b, up to 4096x2160@60Hz 1 x DP 1.4a, up to 4096x2304@60Hz (from external USB Type C)
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek ALC897
AUDIO INTERFACE	1x external Line-out/MIC combo
Speaker	1 x internal speaker
EXTERNAL I/O	
ETHERNET	2 x Intel® i225-V, 10/100/2500Base
USB	1 x USB3.2 Gen 2 Type C (ALT mode) 1 x USB3.2 Gen 2 4 x USB2.0
SERIAL PORT	—
VIDEO	2 x HDMI 2.0b 1 x DP 1.4a (from external USB Type C)
DC	1 x 12-28V DC-in
INTERNAL I/O	
USB	4 x USB2.0
SERIAL PORT	1 x RS232/422/485 (COM 1 support 5W/12V) 5 x RS232
VIDEO	1 x LVDS (optional eDP)
AUDIO	1 x Audio Header 3W amplifier
GPIO	8-Bit
SMBUS	Yes
I2C	—
FAN	1 x CPU Smart Fan
SIM	Nano
FRONT PANEL	HDD LED, PWR LED Power Button, Reset
OTHERS	1 x Chassis intrusion, 1 x AT mode
STORAGE	
SATA	1 x SATA3 1 x SATA Power Connector
MINI PCI-E/MSATA	—
M.2	1 x M-Key 2280 (PCIe 3.0 x2) support NVMe
eMMC	Onboard 64GB eMMC 5.1 (optional)
EXPANSION	
M.2	1 x E-Key 2230 (USB2.0/PCIe 3.0 x1) support CNVi 1 x B-key 3042/3052 (USB3.1/USB2.0) support 4G/5G module
OTHERS	—
ENVIRONMENT & CERTIFICATION	
OPERATING TEMPERATURE	0°C ~ 60°C (32°F ~ 140°F)
STORAGE TEMPERATURE	-20°C ~ 85°C (-4°F ~ 185°F)
OPERATING HUMIDITY	10% ~ 90% relative humidity, non-condensing
CERTIFICATION	Meet CE/FCC Class A

## Block Diagram



## Dimension Unit: mm



## Ordering Information

Part Number	JF35-ADN1-N97000	JF35-ADN1-N97002	JF35-ADN1-N97004	JF35-ADN1-N97008
CPU	N97 TDP 12W	N97 TDP 12W	N97 TDP 12W	N97 TDP 12W
DISPLAY	2 x HDMI 2.0b 1 x DP 1.4a (from external USB Type C) 1 x LVDS (optional eDP)	2 x HDMI 2.0b 1 x DP 1.4a (from external USB Type C) 1 x LVDS (optional eDP)	2 x HDMI 2.0b 1 x DP 1.4a (from external USB Type C) 1 x LVDS (optional eDP)	2 x HDMI 2.0b 1 x DP 1.4a (from external USB Type C) 1 x LVDS (optional eDP)
LAN	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE
USB	1 x USB3.2 Gen 2 Type C (ALT mode) 1 x USB3.2 Gen 2 8 x USB2.0	1 x USB3.2 Gen 2 Type C (ALT mode) 1 x USB3.2 Gen 2 8 x USB2.0	1 x USB3.2 Gen 2 Type C (ALT mode) 1 x USB3.2 Gen 2 8 x USB2.0	1 x USB3.2 Gen 2 Type C (ALT mode) 1 x USB3.2 Gen 2 8 x USB2.0
RS-232	5	5	5	5
RS-232/422/485	1	1	1	1
STORAGE	1 x SATA 1 x M.2 M Key 2280	1 x SATA 1 x M.2 M Key 2280	1 x SATA 1 x M.2 M Key 2280	1 x SATA 1 x M.2 M Key 2280
EXPANSION SLOT	1 x M.2 E Key 2230 1 x M.2 B Key 3042/3052	1 x M.2 E Key 2230 1 x M.2 B Key 3042/3052	1 x M.2 E Key 2230 1 x M.2 B Key 3042/3052	1 x M.2 E Key 2230 1 x M.2 B Key 3042/3052
TPM		2.0		2.0
POWER	12~28V	12~28V	12~28V	12~28V
OPERATING TEMP	0°C ~ 60°C	0°C ~ 60°C	0°C ~ 60°C	0°C ~ 60°C
OTHERS	GPIO, SMBUS, nano SIM, Speaker	GPIO, SMBUS, nano SIM, Speaker	GPIO, SMBUS, nano SIM, Speaker	GPIO, SMBUS, nano SIM, Speaker
eMMC			64GB eMMC	64GB eMMC