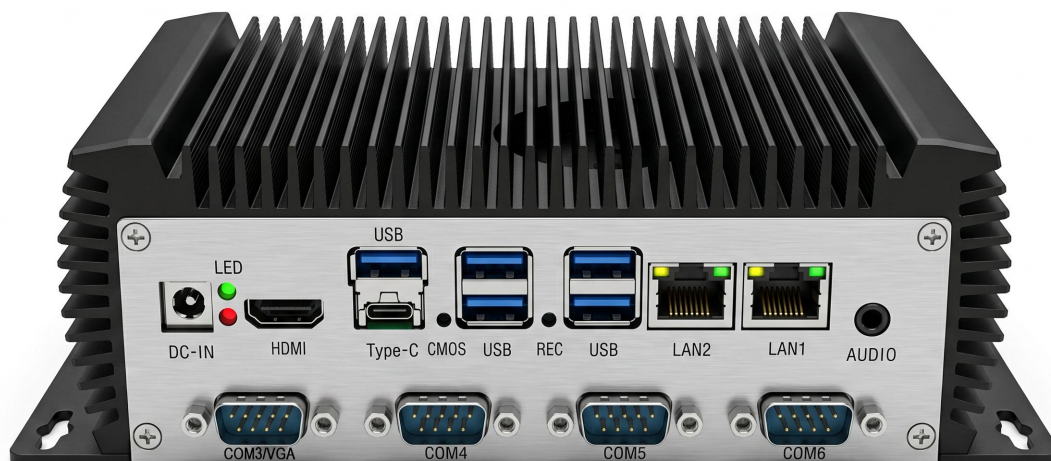


DY35-N100 IPC

User Manual



Product Name DESCRIPTION: DY35-ALDN

PCB Version : V 0.1

Statement:

The contents of this manual do not constitute a commitment by our company. Our company reserves the right to make changes to this manual without prior notice. We are not liable for any indirect, direct, intentional or unintentional damage or potential hazards caused by improper installation or use.

Warning

To avoid the danger of electric shock:

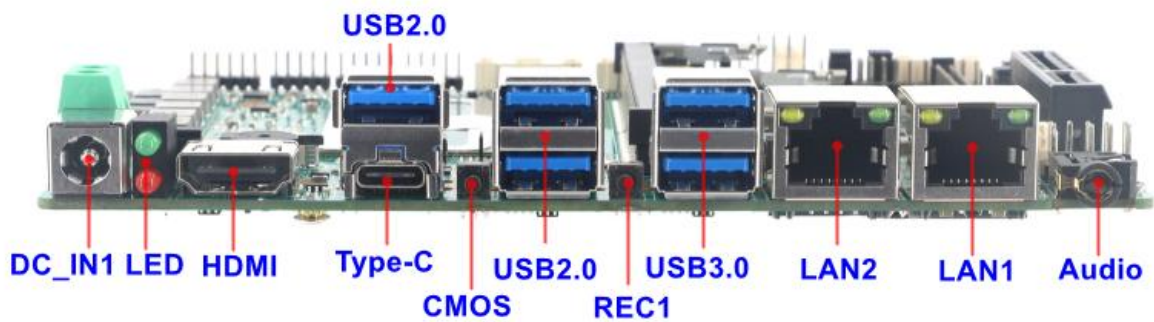
- Do not connect or disconnect any cables, install, maintain, or reconfigure this product during thunderstorms.
- Connect all power cords correctly and use grounded power outlets.
- Connect all devices that need to be connected to this product to the correctly wired outlets.
- Try to connect or disconnect the signal cable using only one hand.

When replacing the system battery, please use a battery of the same type. The battery contains lithium, and improper use, handling, or disposal may result in an explosion.

I. Motherboard Detailed Specifications:

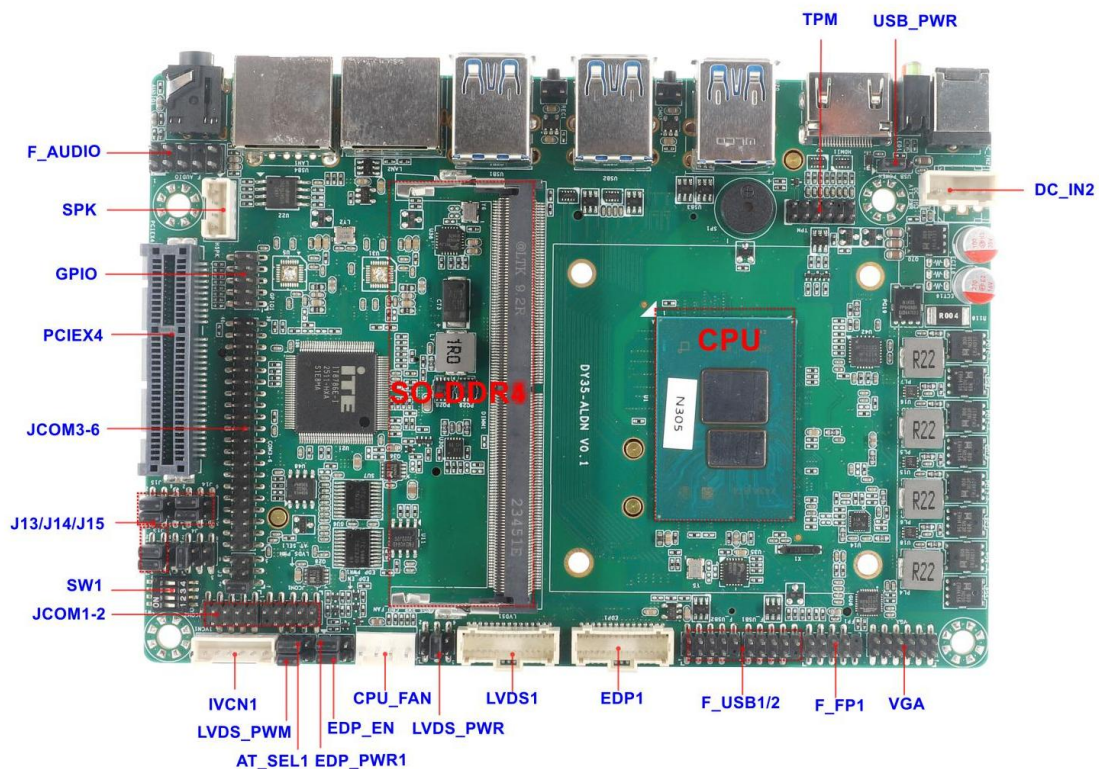
Motherboard Model	● DY35-ALDN V0.1
Processor	● Supports N series of processors including N95, N97, N100, N150, N200, N300, etc.
Display chip	● Intel® UHD Graphics integrated graphics
Display output	● IO PORT: HDMI ● VGA (Pin header, 2X6 P2.0mm) ● LVDS (Pin header, default display; supports different resolutions, default 1920x1080) ● EDP (Pin header, optional, remark at order notes) ***EDP / LVDS only one can be displayed (Use the EDP_EN pin to switch)
Memory	● 1 SO-DIMM single memory module, supports DDR4 2666 / 3200 MHz, MAX : 16GB
Storage	● 1*M.2 M Key 2280 Slot, supports NVMe/SATA protocols (adaptive).
Expansion slot	● 1* M.2 E Key 2230 socket, supports WIFI + Bluetooth module ● 1*PCIEx4 (Expansion card that supports its interface)
Audio	● 1*Realtek A LC 897 High Definition Audio Driver
Network	● 2 * Intel I226-V 2.5GbE network card (optional 2*RTL8111H 1G, remark at order notes)
USB	● 2 *USB3.0 (IO interface) ● 8* USB 2.0 ports (4* internal Pin + 1 Type-C I/O port + 3*I/O ports)
Serial Port	● 6*COM, where COM 1-2 support RS232/RS422/RS485 ; COM 3-6 support RS232.
I/O chip	● IT8786E-I HX LQFP-128
BIOS	● AMI BIOS
Powered by	● DC_IN: 12V (11V-27V optional, remark at order notes)
Cooling system	● Built-in CPU cooler [Internal: 1*CPU_FAN 1x4Pin]
Environment	● Operating temperature: 0~60℃; Storage temperature: -20℃~ 60 ℃ ● Humidity: 0%~95% relative humidity, non-condensing.

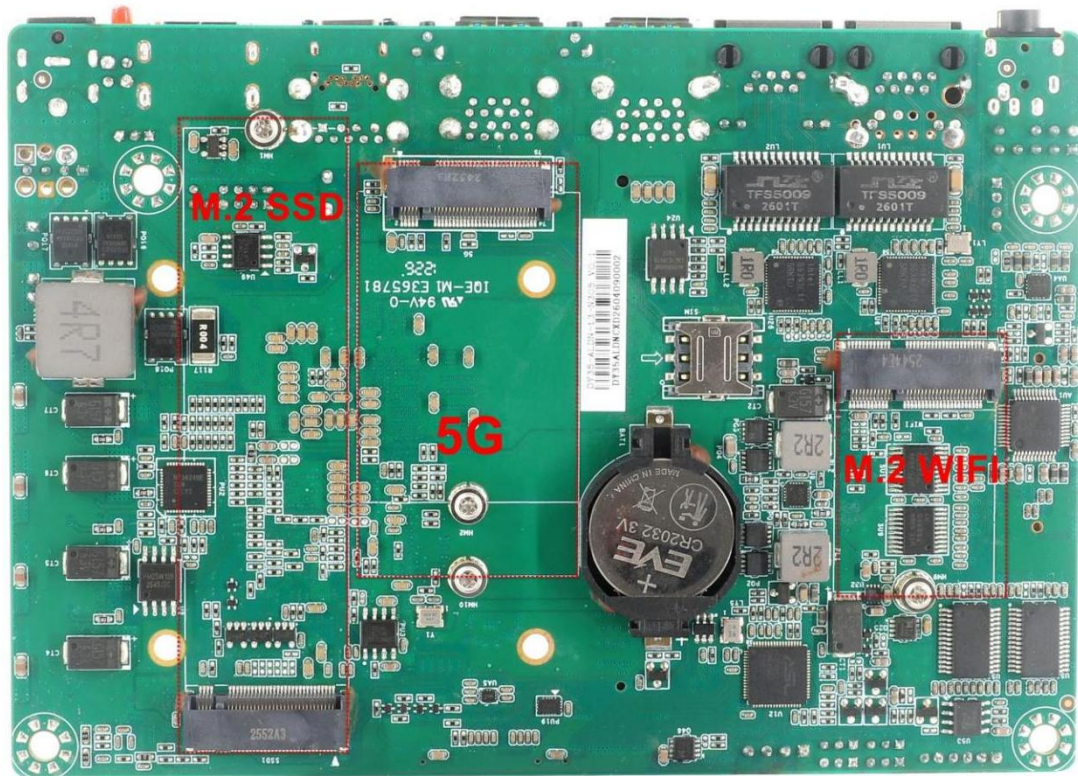
II. IO Panel:



I/O panel	● DC_IN 1 : [DC JACK OD5.5 , DC12V motherboard power supply]
	● LED : [Power/Hard Drive Indicator Light]
	● HDMI : [Default resolution is 1920x1080/60Hz when using HDMI+LVDS+VGA triple display; optional 4K @60Hz single display]
	● USB 3.0 [2 units]
	● Type-C [One USB 2.0 port, display not supported]
	● USB 2.0 [3 ports]
	● CMOS Clear CMOS
	● REC1: [One-click restore, achieved with software]
	● LAN1: [Intel I226-V 2.5GbE network card , optional RTL811H 1G, remark at order notes]
	● LAN2: [Intel I226-V 2.5GbE network card , optional RTL811H 1G, remark at order notes]
	● AUDIO : [Combo Jack, Line-OUT, MIC IN]

III. Internal Interfaces:

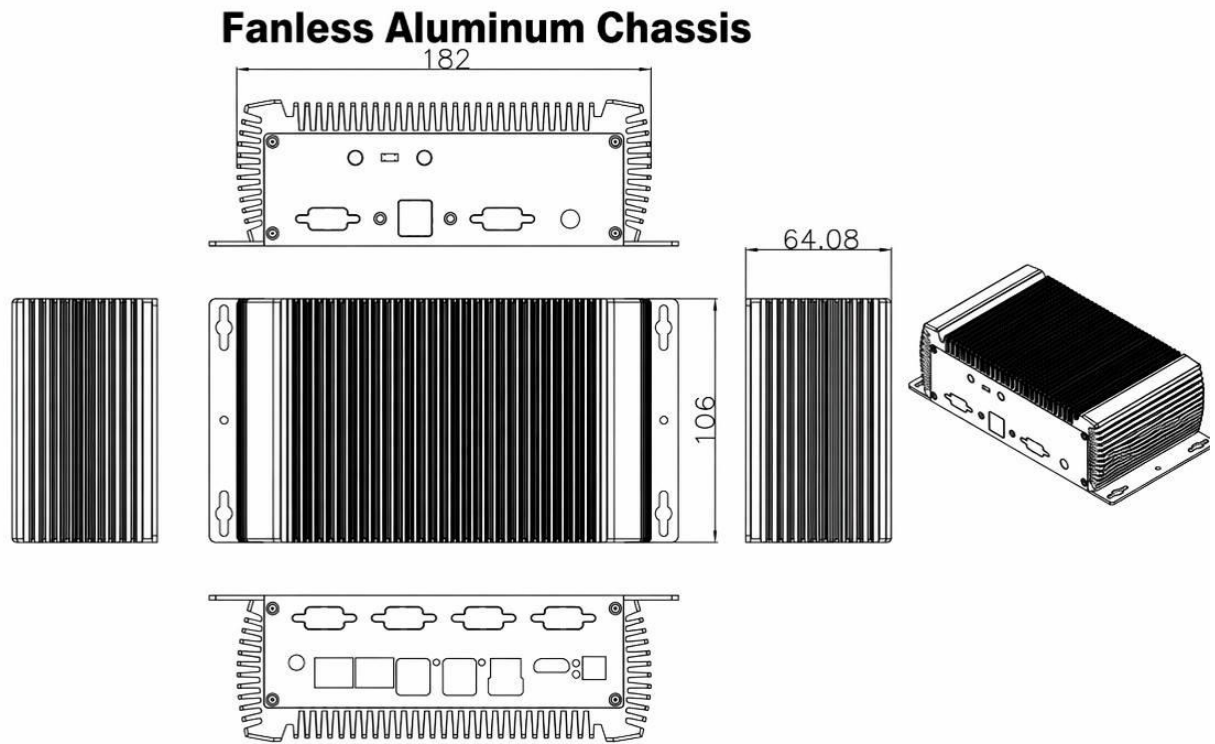




CPU	Supports the entire range of processors including N95, N97, N100, N150, N200, N250, N300, and N305.
SO-DDR5	1 * SO-DIMM DDR4 memory module 2666 / 3200MHz MAX: 16 GB
M.2 WIFI	The M.2 E Key 2230 socket supports Wi-Fi and Bluetooth modules.
M.2 SSD	The M.2 M Key 2280 Slot supports NVMe/SATA protocols (adaptive).
DC_IN2	Default wafer, 4 pins with 2.54mm lead pitch; optional CONN 2PIN 5.08mm Phoenix connector (180°) and ATX2x2 4P Socket.
AT_SEL1	The 1x3 Pin header JMP, Default 1-2 =Disables Auto Power-on; Switching 2-3=Enables Auto Power-on.
PCIe x4	64PIN extension slot(expansion cards that support its interface)
CPU _ FAN	1x4 Pin Wafer CPU_FAN Connector (PWM Control)
F_PP1	2x5 P2.0 Pins, N10
F_USB1/2	4*USB 2.0 ports [2x5 P2.0 pins, N9]
F_A UDIO	Front microphone/audio header [2x5 P2.54 header, N8]
SPK	1x4 wafer [2x3W, 8 ohms/4 ohms, amplifier speaker interface]
USB_P WR	2 x [1x3Pin Header] JMP defaults to 1-2 = VCC5, switching to 2-3 = 5VSB .

VGA	● 2x6 P2.0 Pins
EDP1	● interface 2*1 5 Header 1.0 mm SMT pins
EDP_PWR	● 1 * 3 Header 2.0mm pins, 3.3V/5V, default 3.3V (set to pins 1-2)
EDP_EN	● 1 * 3 Header 2.0mm pins , for switching between LVDS and EDP displays. ● By default, pins 1 and 2 of the jump cap support LVDS display, and pins 2 and 3 support EDP display.
LVDS1	● interface 2*1 5 Header 1.0 mm header , default 1920 *1080 resolution
LVDS_PWR	● 2*3 Header 2.0mm pins, 3.3V/5V/12V, default 5V (Pin3-4)
LVDS_PWM	● 1 * 3 Header 2.0mm pins , default Jumper 1-2
SW1	● 2x4 digital switch to adjust different LVDS screen resolutions; default resolution is 1920*1080.
IVCN1	● 1x 6- pin Wafer P2.0mm, LVDS screen backlight power supply
JCOM1-2	● Supports RS232 and RS485, achieved via BIOS and internal Jumper J13/J14/J15.
J13/J14/J15	● Serial ports JCOM1 / JCOM2 , RS232 /485 protocol switching ● Default RS232 serial ports: J13(1-3), J13(2-4), J14(1-3), J14(2-4), J15(1-3), J15(2-4) ● RS485 serial port: J13(3-5), J13(4-6), J14(3-5), J14(4-6), J15(3-5), J15(4-6) in conjunction with BIOS settings.
JCOM3-6	● 4 *COM pins , 2*20 Header 2.0 mm
GPIO	● 2 * 5 Header 2.0mm Pins , Control Interface
TPM	● 2 * 6 Header P 2.0mm N10 Pins , for connecting external encryption devices.
5G	● M.2 key-B, used with a SIM card

IV. Case Size and Structure



Case Size: 182*106*64.08MM

V. Full IO Ports



VI. Adapter

