VT-SBC35-ADLN-N97

Single Board Computer

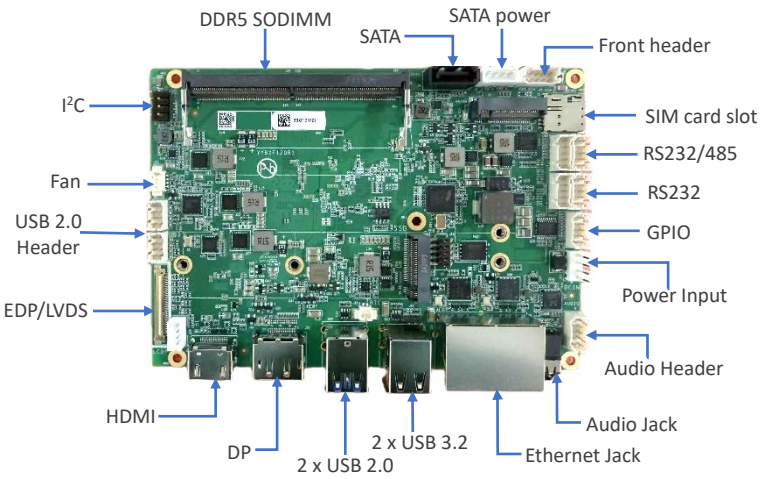
Brief Introduction

VT-SBC35-ADLN-N97 Single Board Computer comes in a 3.5-inch form factor that is ideal for integration into embedded devices. The board is powered by Intel® IOTG Alder Lake-N processor N97. This quad-core processor features low power consumption while offering robust processing capabilities, making it a good choice for embedded systems, edge computing, and IoT devices.

This product is equipped with major display interfaces such as HDMI, DP, eDP, and LVDS, supporting 4K video output and three independent displays in extended mode and ensuring smooth visual performance for modern display scenarios. In addition, VT-SBC35-ADLN-N97 provides an RJ45 Ethernet jack for IoT connectivity and M.2 B Key slot for expansion.

VT-SBC35-ADLN-N97 offers the choice between Windows 10/11 IoT and Ubuntu 22.04 operating systems to deliver great compatibility with development tools and software frameworks for embedded environments. This board is equipped with multiple internal connectors such as eDP, USB, SATA, M.2 SSD, and GPIO, ensuring flexible integration and expansion capabilities for a wide range of application scenarios such as smart retail, HMIs, and commercial display.

Exterior and Features

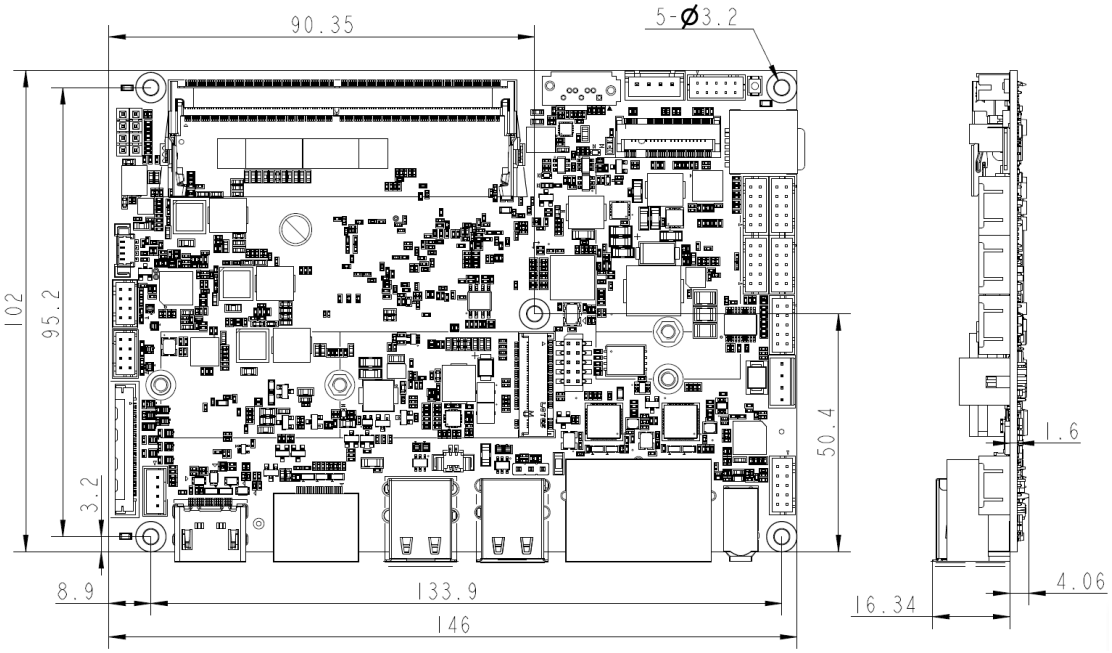


VT-SBC35-ADLN-N97
Intel® IOTG Alder Lake-N Processor N97
Display output up to 4K
Up to three displays in extended mode
Multiple interfaces for flexible expansion
Gigabit Ethernet, Wi-Fi 6, BT 5.4
Windows 10/11 IoT, Ubuntu 22.04
Compact and scalable

VT-SBC35-ADLN-N97 Single Board Computer Datasheet

VT-SBC35-ADLN-N97			
System	CPU	Intel® IOTG Alder Lake-N Processor N97, quad-core, up to 3.6GHz, 12W TDP	
	SIO	Fintek F81966	
	Memory	DDR5 SO-DIMM, up to 16GB	
	Storage	eMMC 5.1, default: 64GB	
		1 × SATA 3.0, up to 600MB/s	
		SSD expansion by M.2 M-Key	
Communication	Ethernet	2 × RJ45, 2500 Mbps	
	Wi-Fi/BT	Optional: 802.11 a/b/g/n/ac/ax, Bluetooth 5.4	
	Cellular	Optional: 4G/5G (M.2 B key)	
Media	Display interface	1 × HDMI 2.1b, up to 4096 × 2160@30Hz	
		1 × DP 1.4a, up to 4096 × 2160@60Hz	
		1 × eDP 1.4b/LVDS, up to 4096 × 2304@60Hz	
	Multi-display	Up to 3 independent displays in extended mode	
	Audio	1 × 3.5mm combo audio jack	1 × Line in header
		1 × Line out header	1 × Speaker header, up to 2W
I/O	Serial port	2 × RS232 header	2 × RS232/RS485 header
	USB	2 × USB 3.2 Type-A	2 × USB 2.0 Type-A
		4 × USB 2.0 internal header	
	GPIO	1 × 8-bit (4 × GPI, 4 × GPO) GPIO header	
	SIM	1 × SIM card slot	
	Front Panel	1 × Front panel header (power, reset, LED)	
	SATA power	1 × SATA power header	
	Fan	1 × Smart fan connector	
Expansion	M.2	1 × M.2 B-key (2280/2242, SATA/PCIe for SSD expansion)	
		1 × M.2 B-key (3042/3052, PCIe/USB 3.0 for 4G/5G)	
		Optional: 1 x M.2 E-key (2230, PCIe x1/USB 2.0 for Wi-Fi & BT expansion)	
	I^2C	1 x I^2C	
Miscellaneous	RTC	Supported	
	Watchdog timer	Supported	
Power	Input	12~36V DC	1 × Power header
Software	Operating system	Windows 10/11 IoT, Ubuntu 22.04	
	BIOS	UEFI BIOS	
Mechanical	Dimensions	146 mm × 102 mm (3.5-inch)	
Environment Condition	Temperature	Operating: 0°C~+60°C	Storage: -20°C~+80°C
	Humidity	Operating and storage: RH 10%-85% (Non-condensing)	
	Cooling mode	Fanless, heat sink	

Product Outlines



Packaging Information

Nomenclature

VT-SBC35-ADLN-N97-[OS-WLAN-C]

- Cellular connectivity: **Null**-NA, **4G**-4G, **5G**-5G
- WLAN: **Null**-NA, **W**-Wi-Fi & Bluetooth
- Operating system: **X10**-Windows 10 IoT, **X11**-Windows 11 IoT, **U**-Ubuntu 22.04

Example Ordering No.	Operating System	WLAN	Cellular Connectivity
VT-SBC35-ADLN-N97-U4G	Ubuntu 22.04	-	4G
VT-SBC35-ADLN-N97-X10W4G	Windows 10 IoT	Wi-Fi & Bluetooth	4G
VT-SBC35-ADLN-N97-UW5G	Ubuntu 22.04	Wi-Fi & Bluetooth	5G
VT-SBC35-ADLN-N97-X11W5G	Windows 11 IoT	Wi-Fi & Bluetooth	5G

Packing List	
VT-SBC35-ADLN-N97 single board computer	1

Optional Accessories	
12V/5A power adapter	1
Power cord	1