

IP32S

Intel® Pentium® N4200 x86 Embedded Board



KEY FEATURES

- 3.5" Form Factor (146mm x 102mm / 5.7 x 4 inches)
- Intel® Pentium® Apollo Lake N4200 Processor
- System memory DDR3L 1600 / 1866 MHz, SO-DIMM Max 8GB
- Intel® HD Graphics Engine
- 2 x Giga LAN, one with PoE function
- 2 x USB 3.0, 1 x RS232/422/485, 1 x Micro HDMI (Optional)

INTRODUCTION

Winmate x86 Embedded Board Series combines compact design with powerful performance, featuring multiple advanced processor options. Designed with industrial-grade components, advanced and versatile customization capabilities, this Embedded Board ensures reliable operation in harsh environments with a wide power input range of 9-36V and extended temperature tolerance (-40 to +85°C). Ideal for space-constrained industrial applications, they deliver seamless integration and optimized performance.

SPECIFICATIONS

System Specification

Processor	Intel Pentium N4200 1.1GHz (up to 2.5GHz)	Memory	4GB(Default) (Default) 8GB (Optional)
Storage	128GB SSD(Default) (Default) 256GB SSD (Optional) 512GB SSD (Optional) 1TB (Optional)	Ethernet controller	2 x Intel® Ethernet Controller
Security	TPM 2.0	Operating System	Windows 10 IoT Enterprise (64 bit) (Optional) Linux Ubuntu 20.04 (Optional)
WLAN	Support (Optional)	BT	Support (Optional)

IO Ports

Power Input	1 x 12V DC, 3-Pin Terminal Block	USB Port	2 x USB3.2 Gen1x1 (Type-A)
Serial Port	1 x RS232/422/485 (Default RS232)	Video	1 x Micro HDMI (Optional)
Expansion Port	1 x M.2 2242 B-Key Slot (for SATA III SSD) 1 x M.2 2230 E-Key Slot (for Wi-Fi module)	LAN	2 x 2.5 Giga LAN RJ45 Connector, one with PoE(PD, 802.3 at)(Optional)

Internal IO Ports

Power input	1 x 3pin Terminal Block	Power output	1 x 2pin(1x2) red wafer for 5V DC out
USB	2 x 8pin(2x4) for 4 x USB 2.0 1 x FPC connector(CN8) for touch screen	UART	1 x 6pin(1x6) for UART
Serial port	1 x 10pin(2x5) for RS232	Display	1 x 40pin DF13 connector for LVDS.Co-lay for eDP (Default) 1 x 40pin FPC connector Co-lay for LVDS(CON3) (Optional)
Backlight	1 x 7pin(1x7) for panel backlight	SATA	1 x SATA III 1 x 8pin(2x4) for SATA power
DIDO	1 x 14pin(2x7) for Digital input/output	VR	1 x 5pin(1x5) MCU debug port
OSD	1 x 10pin(2x5) for OSD control	Speaker	2 x 2pin(1x2) for Speaker

