

IB32

Intel® Celeron® N2930 x86 Embedded Motherboard



KEY FEATURES

- 3.5" Form Factor (146 mm x 102 mm), x86 Embedded motherboard
- Intel® Celeron® N2930 1.83GHz Processor
- Intel® ATOM SoC Integrated
- Integrated VGA, Dual-channel 24-bit LVDS, HDMI
- 1 x DDR3L SO-DIMM 1066 MHz, max. 8GB
- 2 x Gigabit Ethernet
- Supports 1 x SATA II, 4 x COM, 1 x USB 3.0, 5 x USB 2.0 12 x GPIO, 1 x 1394b, 1 x Mini PCIe slot

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 Celeron N2930 1.83GHz (up to 2.16GHz)	Memory	4GB(Default) (Default) 8GB (Optional)
Storage	128GB SSD(Default) (Default) 256GB SSD (Optional) 512GB SSD (Optional)	Ethernet controller	2 x Intel® Ethernet Controller
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, 2.5φ DC jack	USB Port	1 x USB3.2 Gen1x1 (Type-A) 1 x USB2.0 (Type-A)
Serial Port	1 x RS232/422/485 (Default RS232)	Video	1 x HDMI 1.4 (Optional)
Expansion Port	1 x mPCIe slot(for SSD) 1 x mPCIe slot(for Wi-Fi module)	LAN	2 x Giga LAN RJ45 Connector
mini PCIe	1 x Mini PCIe		

Internal IO Ports

Power input	1 x 2pin(1x2) for 12V DC in	Power output	1 x 2pin(1x2) blue wafer for 3.3V DC out 1 x 2pin(1x2) red wafer for 5V DC out 1 x 2pin(1x2) yellow wafer for 12V DC out
USB	2 x 8pin(2x4) for 4 x USB 2.0	Serial port	3 x 10pin(2x5) for RS232
Display	1 x 40pin DF13 connector for LVDS (Default)	Backlight	1 x 7pin(1x7) for panel backlight

	1 x 10pin(2x5) for VGA (Optional)		
SATA	1 x SATA II 1 x 8pin(2x4) for SATA power	DIDO	1 x 14pin(2x7) for Digital input/output
VR	1 x 3pin(1x3) for Digital panel backlight brightness control 1 x 5pin(1x5) VRD debug port	Fan	1 x 3pin(1x3) for CPU Fan
OSD	1 x 10pin(2x5) for OSD control	Speaker	2 x 2pin(1x2) for Speaker
Backup battery	1 x 2pin(1x2) for RTC battery	Audio	1 x 12pin(2x6) for Line in/Line out/ Mic in
BIOS debug	1 x 10pin(2x5) for LPC debug		

Certification

Certification	CE, FCC
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Mechanical

Dimension	146 x 102 mm
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Environment

Operating Humidity	10% to 95% RH, Non-Condensing	Operating Temperature	0°C to 60°C
Storage Temperature	-40°C to 70°C		

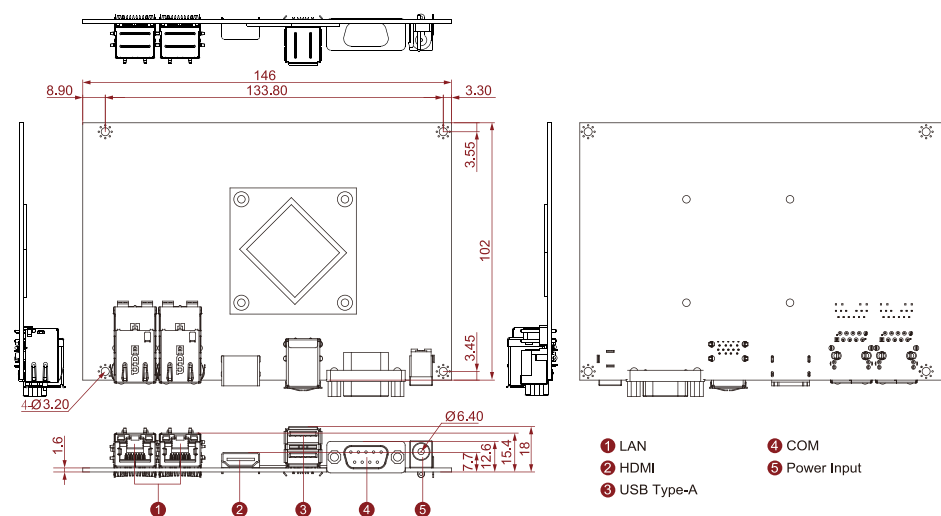
Accessory

Accessory	1 x Installation Guide	Optional Accessory	1 x SATA cable (94H007Z070K0) (Optional) 1 x SATA Power cable (94HE08Z150E0) (Optional) 1 x COM cable (94G309E100E1) (Optional) 1 x 2-Port USB 2.0 Type A cable (94E808E080K0) (Optional) 1 x 12V 84W Adapter (922D084W12V1) (Optional) 1 x Power cord (Varies by country) (Optional) 1 x CPU Heatspreader (98K000A000N2) (Optional) 1 x Membrane (98K000A000N1) (Optional) 2 x Speaker (612620000007) (Optional)
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Power

Power Rating	12V DC in
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DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.