

# IB70

## Intel® Celeron® N2930 Mini-ITX Embedded Board



### KEY FEATURES

- Intel® Celeron® Bay Trail-M N2930 1.83GHz Processor
- Mini ITX Form Factor, industrial sbc design
- DDR3L 1066MHz dual-channel SO-DIMM supported up to 8GB
- 12V DC Power Input
- Integrated VGA, Dual-Channel 24-bit LVDS, eDP(Optional),HDMI(Optional)
- Supports 1xSATA II, 4xCOM, 1xUSB 3.0, 7xUSB 2.0 12-Pin GPIO Connector, 2xMini PCIe Slot

### INTRODUCTION

Winmate's Mini-ITX Embedded Board offers a compact, high-performance solution for a wide range of industrial applications, including automation, transportation, medical, and gaming. Powered by optional processors such as Intel® Core™, Celeron®, or Atom™, and supporting up to 16GB of DDR4 memory, it delivers fast, reliable performance for multitasking and complex tasks. With extensive I/O options, including Gigabit Ethernet, USB 3.0, HDMI, and multi-display support, it ensures seamless integration and enhanced visual experiences. Built with industrial-grade components, it is designed to withstand harsh environments, making it a durable, efficient choice for space-constrained applications.

### SPECIFICATIONS

#### System Specification

<b>Processor</b>	Intel Celeron N2930 1.83GHz (up to 2.16GHz)	<b>Memory</b>	2 x SO-DIMM, DDR3L 1600 MHz, 4GB 8GB (Optional)
<b>Storage</b>	1 x mSATA SSD 128GB 256GB (Optional) 512GB (Optional) 1 x SATA III for 2.5" SSD/HDD (Optional)	<b>Ethernet controller</b>	2 x Intel® Ethernet Controller
<b>Operating System</b>	Windows 7 Embedded Systems (Optional) Windows 10 IoT Enterprise (64 bit) (Optional) Linux Ubuntu 20.04 (Optional)	<b>WLAN</b>	Support (Optional)
<b>BT</b>	Support (Optional)		

#### IO Ports

<b>Power Input</b>	1 x 12V DC, Din4 pin connector	<b>USB Port</b>	1 x USB3.2 Gen1x1 (Type-A) 3 x USB2.0 (Type-A)
<b>Serial Port</b>	1 x RS232/422/485 (Default RS232) 2 x RS232	<b>Video</b>	1 x VGA
<b>Audio</b>	Mic in Line in Line out	<b>Expansion Port</b>	1 x mPCIe slot(for SSD) 1 x mPCIe slot(for Wi-Fi module)
<b>LAN</b>	2 x Giga LAN RJ45 Connector	<b>PS/2</b>	2 x PS/2

#### Internal IO Ports

<b>Power input</b>	1 x 4pin(2x2) for 12V DC in	<b>Power output</b>	1 x 2pin(1x2) blue wafer for 3.3V DC out 2 x 2pin(1x2) red wafer for 5V DC out 1 x 2pin(1x2) yellow wafer for 12V DC out
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<b>USB</b>	2 x 8pin(2x4) for 4 x USB 2.0	<b>Serial port</b>	1 x 10pin(2x5) for RS232
<b>Display</b>	1 x 40pin DF13 connector for LVDS 1 x 30pin DF13 connector for eDP (Optional) 1 x 18pin FFC connector for HDMI (Optional)	<b>Backlight</b>	1 x 7pin(1x7) for panel backlight
<b>SATA</b>	1 x SATA II 1 x 8pin(2x4) for SATA power	<b>DIDO</b>	1 x 14pin(2x7) for Digital input/output
<b>VR</b>	1 x 3pin(1x3) for Digital panel backlight brightness control 1 x 5pin(1x5) VRD debug port	<b>Fan</b>	1 x 3pin(1x3) for CPU Fan 1 x 3pin(1x3) for System Fan
<b>OSD</b>	1 x 10pin(2x5) for OSD control	<b>Speaker</b>	2 x 2pin(1x2) for Speaker
<b>LPT</b>	1 x 20pin(2x10) for Parallel Port(LPT)	<b>Backup battery</b>	1 x RTC battery holder
<b>BIOS debug</b>	1 x 10pin(2x5) for LPC debug		

### Certification

<b>Certification</b>	CE, FCC
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### Mechanical

<b>Dimension</b>	170 x 170 mm
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### Environment

<b>Operating Humidity</b>	30% to 90% RH, Non-Condensing	<b>Operating Temperature</b>	-20°C to 60°C
<b>Storage Temperature</b>	-25°C to 65°C		

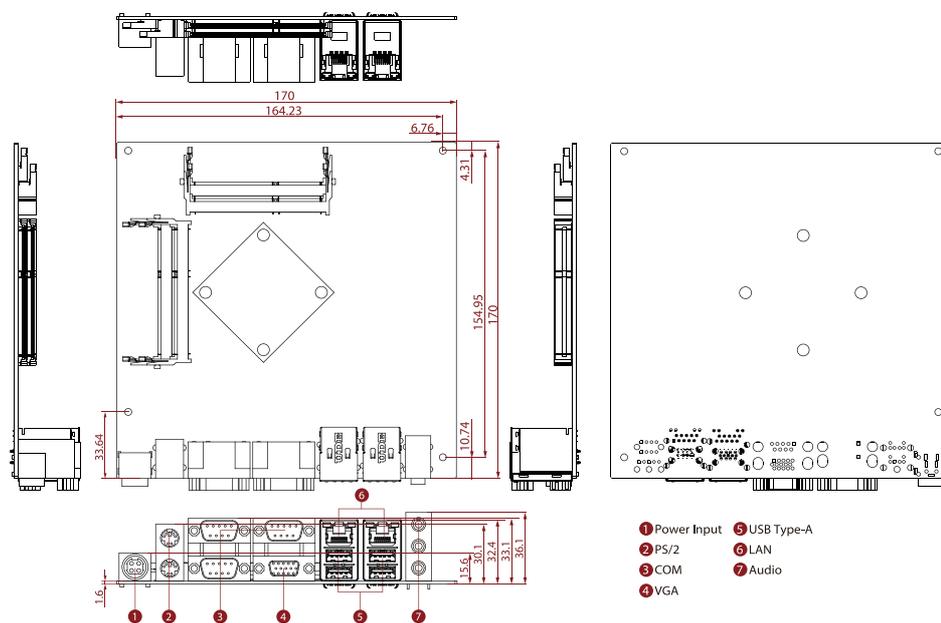
### Accessory

<b>Accessory</b>	1 x Installation Guide	<b>Optional Accessory</b>	1 x SATA cable (94H007Z070K0) (Optional) 1 x SATA Power cable (94HE08Z150E0) (Optional) 2 x COM cable (94G309E100E1) (Optional) 1 x 2-Port USB 2.0 Type A cable (94E808E080K0) (Optional) 1 x 12V 84W Adapter (922D084W12V0) (Optional) 1 x Power cord (Varies by country) (Optional) 1 x CPU Heatspreader with Fan (98K000A000N5) (Optional) 1 x Membrane (98K000A000N1) (Optional) 2 x Speaker (612620000007) (Optional)
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### Power

<b>Power Rating</b>	12V DC
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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.