

IP70

Intel® Pentium® N4200 Mini-ITX Embedded Board



KEY FEATURES

- Intel® Pentium® N4200 Processor
- Mini ITX Form Factor (170 x 170 mm)
- DDR3L 1866MHz SO-DIMM support up to 8 GB
- 12V Single Voltage Power Input
- Multi display supports DP / HDMI (Optional) / LVDS / eDP (Optional) panel



SPECIFICATIONS

| System Specification | |
|----------------------------|--|
| Processor | Intel® Pentium® N4200 (2M Cache, up to 2.5 GHz) |
| Storage | 1 x M.2 2242 SSD 64GB M.2 2242 SSD up to 512GB (Optional) |
| Security | TPM 2.0 |
| Memory | 2 x SODIMM, DDR3L 1866 MHz, 4GB 8GB (Optional) |
| Ethernet controller | 2 x Intel® Ethernet Controller I210-AT |
| Operating System | Windows 10 IoT Enterprise (Optional) Linux Ubuntu 18.04 (Optional) |
| IO Ports | |
| Power Input | 1 x 12V DC, Din4 pin connector |
| Serial Port | 1 x RS232/422/485 (Default RS232) 1 x RS232 2 x RS232 (Optional) |
| Audio | 1 x Mic in 1 x Line out |
| LAN | 2 x Giga LAN RJ45 Connector |
| Brightness Knob | 1 x Brightness Adjustment Knob |
| USB Port | 4 x USB3.0 (Type-A) |
| Video | 1 x DP1.2 1 x HDMI 1.4 (Optional) 1 x VGA (Optional) |
| Expansion Port | 1 x M.2 2242 Key B slot for SSD 1 x M.2 2230 Key E slot for WiFi (Optional) 1 x PCIe 2.0 x1 (Optional) |
| Indicator | 1 x LED Indicator for power 1 x LED Indicator for storage |
| Internal IO Ports | |
| Power input | 1 x 4pin(2x2) for 12V DC in |
| Power output | 2 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 | 1 x 10pin(2x5) for RS232/422/485 3 x RS232 (Optional) |
| Display | 1 x 40pin DF13 connector for LVDS 1 x 30pin DF13 connector for eDP (Optional) 1 x 10pin P=2.0mm wafer for VGA (Optional) |
| Backlight | 1 x 7pin(1x7) for panel backlight |
| SATA | 2 x SATA III 1 x 8pin(2x4) for SATA power (SATA2 is only available when M.2 SATA is not in use; SATA2 and M.2 SATA cannot be used concurrently.) |
| DIDO | 1 x 14pin(2x7) for Digital input/output |
| VR | 1 x 3pin(1x3) for Digital panel backlight brightness control 1 x 3pin(1x3) VR/Software brightness switch jumper 1 x 3pin(1x3) PWM/DC brightness switch jumper 1 x 3pin(1x3) 3.3V/5V PWM Level switch jumper |
| Fan | 2 x 3pin(1x3) for 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 | | |

Certification

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|----------------------|---------|
| Certification | CE, FCC |
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Mechanical

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| Dimension | 170 x 170 mm |
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Environment

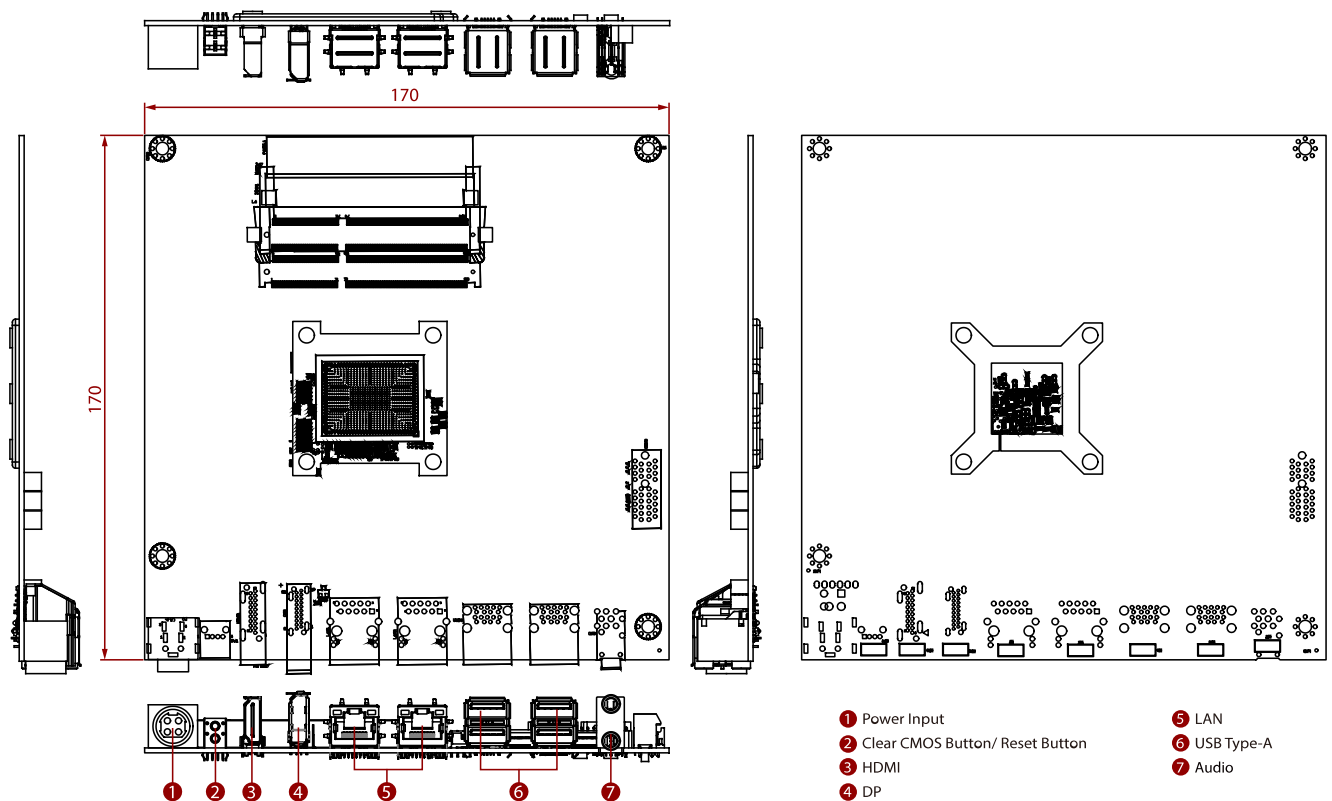
| | | | |
|----------------------------|----------------------------------|------------------------------|--------|
| Operating Humidity | 60 °C @ 95% RH, (non-condensing) | Operating Temperature | 0~60°C |
| Storage Temperature | -40~70°C | | |

Accessory

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| Accessory | Manual & Driver CD |
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DIMENSIONS UNIT:MM

Winmate IP70 Embedded Board



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.