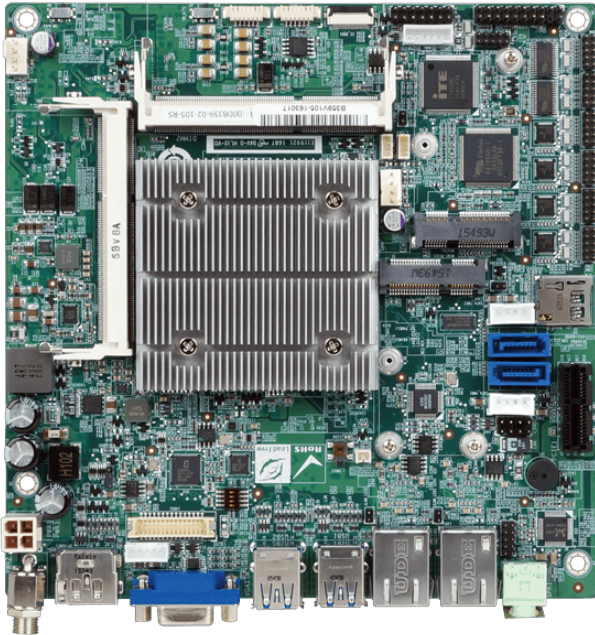


tKINO-BW

Thin Mini-ITX SBC supports 14nm Intel® Pentium®/Celeron® on-board SoC



Features

- » Thin Mini-ITX form factor with 14nm Intel® Pentium®/Celeron® on-board SoC processor supports DDR3L memory
- » Supports USB 3.0, two SATA 6Gb/s
- » Triple independent display, supporting 4K resolution
- » Supports IEI jumperless function

Specifications

| System | |
|--------------------------|--|
| CPU | Intel® Pentium® N3710 on-board SoC (up to 2.56GHz, quad-core, 2MB cache, TDP=6W) Intel® Celeron® N3160 on-board SoC (up to 2.24GHz, quad-core, 2MB cache, TDP=6W) Intel® Celeron® N3060 on-board SoC (up to 2.48GHz, dual-core, 2MB cache, TDP=6W) Intel® Celeron® N3010 on-board SoC (up to 2.24GHz, dual-core, 2MB cache, TDP=4W) |
| Memory | Two 204-pin 1333/1600 MHz single-channel DDR3L SDRAM unbuffered SO-DIMM |
| Memory Max. | 8GB |
| Physical Characteristics | |
| Net Weight | 400g |
| Storage | |
| Storage | 2 x SATA :6Gb/s with 5V output 1 x mSATA :colay SATA2 1 x SD/MicroSD card |
| I/O Interface | |
| Display Output | 1 x VGA :up to 1920x1200@60Hz 1 x LVDS :18/24-bit dual-channel (up to 1920x1200@60Hz) |
| Ethernet | 1 x Description: Dual Realtek RTL8111E PCIe GbE controller |
| Audio | Description: Realtek ALC662 HD codec 1 x Line out :on rear IO 1 x Speaker :1x4 pin 1 x Front Audio :2x5 pin |
| I/O Interface | 4 x Internal RS-232 :2x5 pin, P=2.0 2 x Internal RS-232/422/485 :2x5 pin, P=2.0 2 x Internal USB 2.0 :2x4 pin, P=2.54 1 x PS/2 :1x6 pin 1 x DIO :8-bit digital I/O (2x5 pin) |
| Expansion | 1 x PCIe x1 1 x PCIe mini Card Slot |
| Other Features | |

| | |
|-----------------------|---|
| TPM | 2x10 pin |
| Power | |
| Power Consumption | 12V@1.61A (Intel® Celeron® N3710 CPU with two 4 GB 1600 MHz DDR3L memory) |
| Power Supply | 1 x External DC power jack (ø5.5 mm) |
| | 1 x Internal power connector (2x2 pin) Input Voltage Range: 9V ~ 30V |
| | Support AT/ATX mode |
| Environment | |
| Operating Temperature | -20°C ~ 60°C |
| Storage Temperature | -30°C ~ 70°C |
| Humidity | 5% ~ 95%, non-condensing |
| Certifications | |
| Safety & EMC | CE/FCC compliant |

Ordering Information

| | |
|-----------------|--|
| tKINO-BW-N4-R20 | Thin Mini-ITX SBC supports Intel® Pentium® quad-core processor N3710 up to 2.56GHz (6W), VGA/LVDS/DP+HDMI™, SATA, dual GbE, USB 3.0, HD Audio and RoHS |
|-----------------|--|

Packing List

| | |
|--|-------------------|
| 1 x tKINO-BW single board computer with heatsink | 1 x I/O shielding |
| 1 x SATA cable | 1 x QIG |