Specifications

- **SoC**
  - 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)
  - Intel® Atom® x5-E8000 on-board SoC(up to 2.00 GHz, quad-core, 2M cache, TDP=5W)

- **BIOS**
  - AMI UEFI BIOS

- **Memory**
  - One 204-pin 1600/1333 MHz single-channel DDR3L SDRAM SO-DIMM slot supports up to 8 GB

- **Graphics Engine**
  - Intel® HD Graphics Gen 8 Engine with 16 low-power execution units, supporting DX11.1, OpenGL 4.2 and OpenCL 1.2

- **Display Output**
  - Dual independent display
  - 2 x Mini HDMI (up to 3840x2160@30Hz)

- **Ethernet**
  - LAN1: Realtek RTL8111 controller

- **External I/O Interface**
  - 1 x USB 2.0
  - 1 x USB 3.0

- **Internal I/O Interface**
  - 1 x RS-232 (1x9 pin, P=1.25)
  - 1 x SATA 6G/s with 5V SATA power connector
  - 2 x USB 2.0 (2x4 pin, P=2.0)

- **Audio**
  - 1 x HD audio (2 x 5 pin, support 7.1 channel HD audio by AC-KIT-892HD-R10)

- **Front Panel**
  - 1 x Front panel (1x10 pin, power LED, HDD LED, power button, reset button)

- **LAN LED**
  - 1 x LAN LED (1x2 pin)

- **Expansion**
  - 1 x M.2 2242 (B key)

- **Fan Connector**
  - 1 x Smart fan connector (1x4 pin)

- **Power Supply**
  - 12V input only
  - 1 x Power terminal block (1x2 pin)
  - Support AT/ATX mode

- **Power Consumption**
  - 12V@1.52A (Intel® Pentium® processor N3710 with 8 GB 1600 MHz DDR3L memory)

- **Watchdog Timer**
  - Software programmable supports 1~255 sec. system reset

- **Operating Temperature**
  - -20°C ~ 60°C

- **Storage Temperature**
  - -30°C ~ 70°C

- **Operating Humidity**
  - 5% ~ 95%, non-condensing

- **Dimensions**
  - 100mm x 72mm

- **Weight**
  - GW: 30g / NW: 250g

Features

- Pico-ITX SBC supports Intel® 14nm Pentium®/Celeron® on-board SoC
- IEI jumper-less function
- Dual independent display support
- 1333/1600 MHz 1.35V DDR3L SDRAM up to 8 GB supported
- COM, USB 3.0, SATA 6Gb/s and Audio support
- 1 x M.2 B key slot for expansion possibility
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Ordering Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYPER-BW-N4-R10</td>
<td>Pico-ITX SBC with Intel® Pentium® 14nm quad-core N3710 up to 2.56GHz (6W) on-board SoC with dual Mini HDMI, PCIe Gbe, M.2, USB 3.0, SATA 6Gb/s, COM, Audio and RoHS</td>
</tr>
<tr>
<td>HYPER-BW-N3-R10</td>
<td>Pico-ITX SBC with Intel® Celeron® 14nm quad-core N3160 up to 2.24GHz (6W) on-board SoC with dual Mini HDMI, PCIe Gbe, M.2, USB 3.0, SATA 6Gb/s, COM, Audio and RoHS</td>
</tr>
<tr>
<td>HYPER-BW-N2-R10</td>
<td>Pico-ITX SBC with Intel® Celeron® 14nm dual-core N3060 up to 2.48GHz (6W) on-board SoC with dual Mini HDMI, PCIe Gbe, M.2, USB 3.0, SATA 6Gb/s, COM, Audio and RoHS</td>
</tr>
<tr>
<td>HYPER-BW-N1-R10**</td>
<td>Pico-ITX SBC with Intel® Celeron® 14nm dual-core N3010 up to 2.24GHz (4W) on-board SoC with dual Mini HDMI, PCIe Gbe, M.2, USB 3.0, SATA 6Gb/s, COM, Audio and RoHS</td>
</tr>
<tr>
<td>HYPER-BW-E8-ECO-R10</td>
<td>Pico-ITX SBC with Intel® Celeron® 14nm quad-core x5-E8000 up to 2.00GHz (5W) on-board SoC with dual Mini HDMI, PCIe Gbe, M.2, USB 3.0, SATA 6Gb/s, COM, Audio, ECO packing and RoHS</td>
</tr>
<tr>
<td>32001-008600-200-RS</td>
<td>Dual-port USB cable, 210mm, P=2.0</td>
</tr>
<tr>
<td>AC-KIT-892HD-R10</td>
<td>Realtek ALC892 7.1 Channel HD Audio peripheral board, RoHS</td>
</tr>
</tbody>
</table>

**By order production, MOQ: 100