**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, TDP=4W)
- **BIOS**
  - AMI UEFI BIOS
- **Memory**
  - 1.35V DDR3L 1333/1600 MHz SDRAM 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**
  - Triple independent display support
  - 2 x HDMI (up to 3840x2160@30Hz)
  - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
- **Ethernet**
  - LAN1: Realtek RTL8111GN
  - LAN2: Realtek RTL8111GN
- **External I/O Interface**
  - 1 x RS-232
  - 2 x USB 3.1 Gen 1 (5Gb/s) (on rear I/O)
- **Internal I/O Interface**
  - 1 x eMMC4.51 (optional)
  - 2 x SATA 6Gb/s with 5V SATA power connector (no RAID)
  - 1 x KB/MS (1x6 pin)
  - 1 x mSATA
  - 4 x USB 2.0 (2x4 pin, P=2.0)
- **SMBus**
  - 1 x SMBus (1x4 pin)
- **I²C**
  - 1 x I²C (1x4 pin)
- **Audio**
  - Realtek ALC662 HD codec
  - 1 x Front audio (2x5 pin)
- **Front Panel**
  - 1 x Power LED & HDD LED (1x6 pin)
  - 1 x Power button (1x2 pin)
  - 1 x Reset button (1x2 pin)
  - 2 x LAN LED (1x2 pin)
- **Expansion**
  - 1 x Full/Half-size PCIe Mini slot (with SIM card holder)
  - 1 x Full/Half-size PCIe Mini slot (supports mSATA, colay with SATA port 2)
- **Digital I/O**
  - 8-bit digital I/O (1x10 pin, P=1.25)
  - 1 x Smart fan connector (1x4 pin)
- **Power Supply**
  - 12V only DC input
  - 1 x Internal power connector (2x2 pin)
- **Power Consumption**
  - 12V@1.52A (Intel9 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: 146mm x 102mm
  - Weight: GW: 600g/ NW: 250g
- **CE/FCC compliant**

**Features**

- **3.5” SBC supports Intel® 14nm Pentium®/Celeron® on-board SoC**
  - Triple independent display support
  - 1.35V DDR3L 1333/1600 MHz SDRAM up to 8 GB
  - COM, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, PCIe Mini, mSATA and Audio support
  - Two full-size PCIe Mini slots (one with SIM holder for WLAN/WWAN expansion)
  - IIE One Key Recovery solution allows you to create rapid OS backup and recovery

**Packing List**

- 1 x WAFER-BW single board computer
- 1 x Audio cable
- 1 x Power cable
- 2 x SATA with power cable kit
- 1 x RS-232/422/485 cable
- 1 x QIG

**Ordering Information**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAFER-BW-N4-R20</td>
<td>3.5” SBC supports Intel® Pentium® quad-core processor N3710 up to 2.56GHz (6W) with dual HDMI and LVDS, Dual PCIe GBE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, COM, Audio and RoHS</td>
</tr>
<tr>
<td>WAFER-BW-N3-R20</td>
<td>3.5” SBC supports Intel® Celeron® quad-core processor N3160 up to 2.24GHz (6W) with dual HDMI and LVDS, Dual PCIe GBE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, COM, Audio and RoHS</td>
</tr>
<tr>
<td>WAFER-BW-N2-R20</td>
<td>3.5” SBC supports Intel® Celeron® dual-core processor N3060 up to 2.48GHz (6W) with dual HDMI and LVDS, Dual PCIe GBE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, COM, Audio and RoHS</td>
</tr>
<tr>
<td>WAFER-BW-N1-R20**</td>
<td>3.5” SBC supports Intel® Celeron® dual-core processor N3010 up to 2.24GHz (6W) with dual HDMI and LVDS, Dual PCIe GBE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, COM, Audio and RoHS</td>
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**By order production, MOQ: 100**