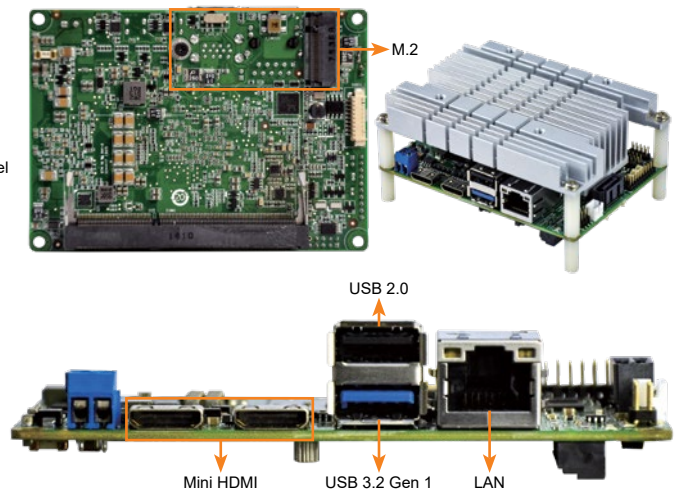
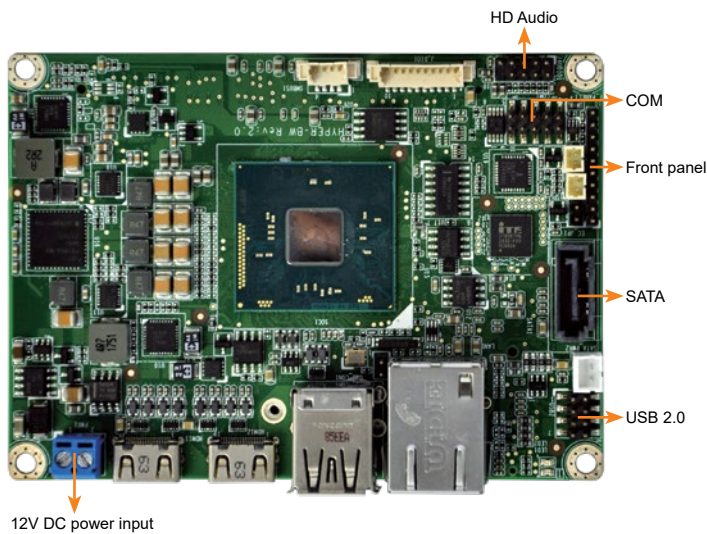


# HYPER-BW

Pico-ITX SBC with Intel® 14nm Pentium®/Celeron® on-board SoC with dual Mini HDMI, M.2, GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS



## 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 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface
  - 1 x RS-232 (1x9 pin, P=1.25)
  - 1 x SATA 6Gb/s with 5V SATA power connector
  - 2 x USB 2.0 (2x4 pin, P=2.0)
- ◆ Audio
  - 1 x HD audio (2x5 pin, support 7.1 channel HD audio by IEI AC-KIT-888S-R10 kit)
- ◆ 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)
- ◆ Digital I/O
  - 8-bit digital I/O (2x5 pin)
- ◆ Power Supply
  - 12V DC 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:600g/ NW:250g
- ◆ CE/FCC compliant



## 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 3.2 Gen 1 (5Gb/s), SATA 6Gb/s and Audio support
- 1 x M.2 B key slot for expansion possibility

## Packing List

1 x HYPER-BW single board computer with heatsink	1 x RS-232 cable
1 x SATA with power cable kit	1 x QIG

## Ordering Information

Part No.	Description
HYPER-BW-N4-R20	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 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS
HYPER-BW-N3-R20	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 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS
HYPER-BW-N2-R20	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 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS
HYPER-BW-N1-R20**	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 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS
HYPER-BW-E8-R20	Pico-ITX SBC with Intel® Atom® 14nm quad-core x5-E8000 up to 2.00GHz (5W) on-board SoC with dual Mini HDMI, PCIe GbE, M.2, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio and RoHS
HYPER-BW-E8-ECO-R20	Pico-ITX SBC with Intel® Atom® 14nm quad-core x5-E8000 up to 2.00GHz (5W) on-board SoC with dual Mini HDMI, PCIe GbE, M.2, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, COM, Audio, ECO packing and RoHS (10 pcs/pack)
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0
32102-045100-100-RS	DC JACK 5.5*2.5+NUT to open end power cable, 100mm
63040-010036-111-RS	12V 36W AC/DC adapter
AC-KIT-892HD-R10	Realtek ALC892 (Colay ALC888) 7.1 Channel HD Audio peripheral board, RoHS

\*\*By order production, MOQ: 100