

Specifications

| System | |
|-----------------------------|---|
| Form Factor | PICO-ITX |
| CPU | Intel® 8th Generation Core™ i7/i5/i3/Celeron SoC i7-8665UE (4C, 1.7GHz, up to 4.4GHz) i5-8365UE (4C, 1.6GHz, up to 4.1GHz) i3-8145UE (2C, 2.2GHz, up to 3.9GHz) 4305UE (2C, 2GHz) |
| CPU Frequency | Up to 4.4GHz |
| Chipset | Intel® Whiskey-U SoC Processor |
| Memory Type | DDR4 2400MHz SODIMM x 1, Max. 32GB |
| Max. Memory Capacity | Up to 32GB |
| BIOS | UEFI only |
| Wake On LAN | Yes |
| Watchdog Timer | 255 Levels |
| Power Requirement | +12V AT/ATX (default) |
| Power Supply Type | Lockable & phoenix Terminal co-lay |
| Power Consumption (Typical) | TBD |
| System Cooling | Heat-spreader, cooler optional |
| Dimension | 3.94" x 2.84" (100mm x 72mm) |
| Gross Weight | TBD |
| Operating Temperature | 32°F ~ 140°F (0°C ~ 60°C) |
| Storage Temperature | -40°F ~ 176°F (-40°C ~ 80°C) |
| Operating Humidity | 0% ~ 90% relative humidity, non-condensing |
| MTBF (Hours) | TBD |
| Certification | CE, FCC |

Features

- 8th Intel® Core™ i7/i5/i3/Celeron Processor SoC
- Non-ECC DDR4 SODIMM Slot x 1, up to 32GB
- Dual HDMI ports (HDMI 1.4b)
- GbE x 2, SATA 6.0 Gb/s x 1, GPIO x 4
- USB 3.2 Gen 2 x 2 (Rear), USB 2.0 x 2 Pin header, RS-232/422/485 x 2
- Full size mSATA/mPCIe x 1 (Select by BIOS), M.2 2230 (E key) x 1
- 12V Only (Terminal block and DC barrel co-design)



| Display | |
|----------------|---|
| Chipset | Intel® 8th Generation Core™ i7/i5/i3/Celeron SoC i7-8665UE (4C, 1.7GHz, up to 4.4GHz) i5-8365UE (4C, 1.6GHz, up to 4.1GHz) i3-8145UE (2C, 2.2GHz, up to 3.9GHz) 4305UE (2C, 2GHz) |
| Resolution | HDMI 1.4b up to 3840 x 2160 x 2 |
| LCD Interface | — |
| I/O | |
| Storage/SSD | mini-PCIe(Full) x 1 (PCIe[x1]x1), USB 3.2 Gen 1/2.0,SATA) SATA 6.0Gb/s x 1, (5V Power) |
| Ethernet | Realtek 8111G*2 10/100/1000Mbps |
| USB Port | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header |
| Serial Port | RS-232/422/485 x 2 |
| Audio | — |
| DIO | 4-bit |
| Expansion Slot | M.2 2230 E key x 1 (For WIFI/BT, PCIe/USB signal only) SMBUS/I2C/LPC/eSPI x 1 |
| SIM | — |
| TPM | — |
| Touch | — |

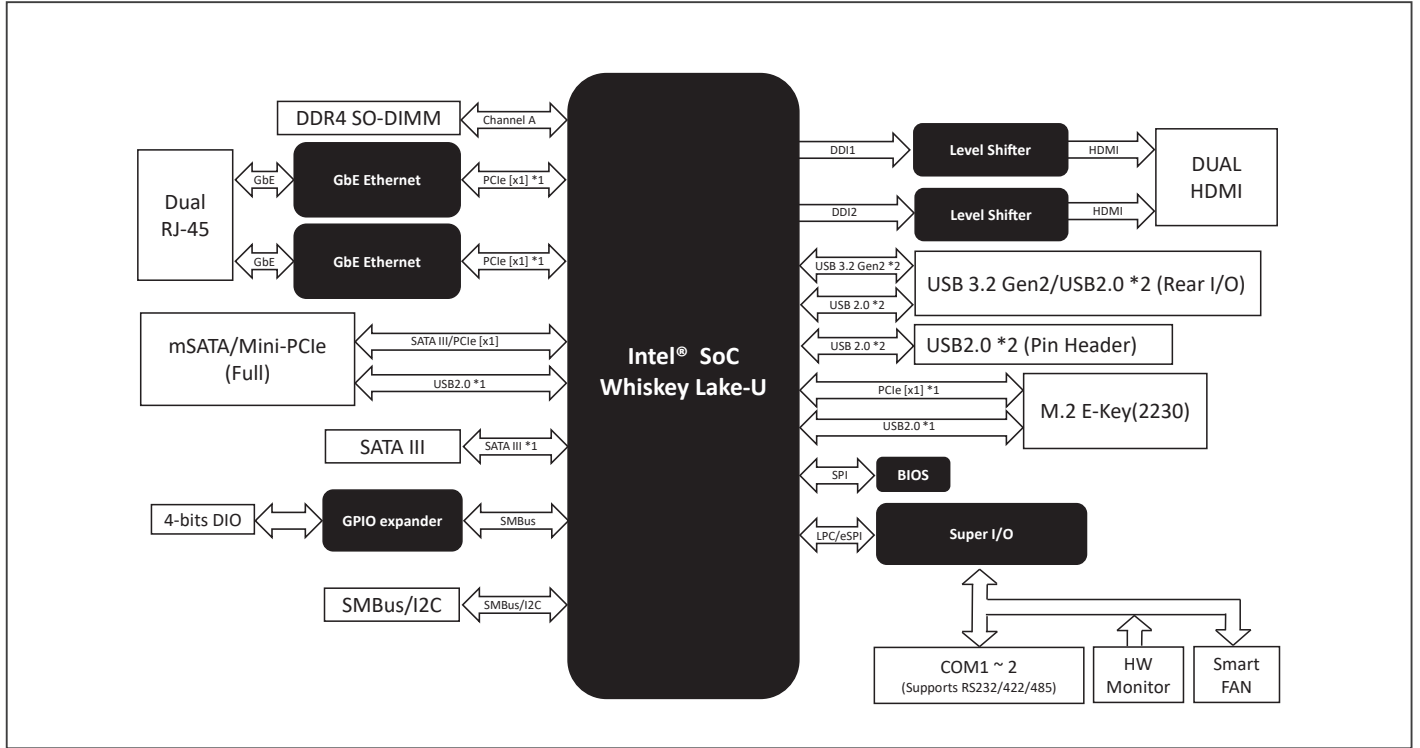
Packing List

- PICO-WHU4

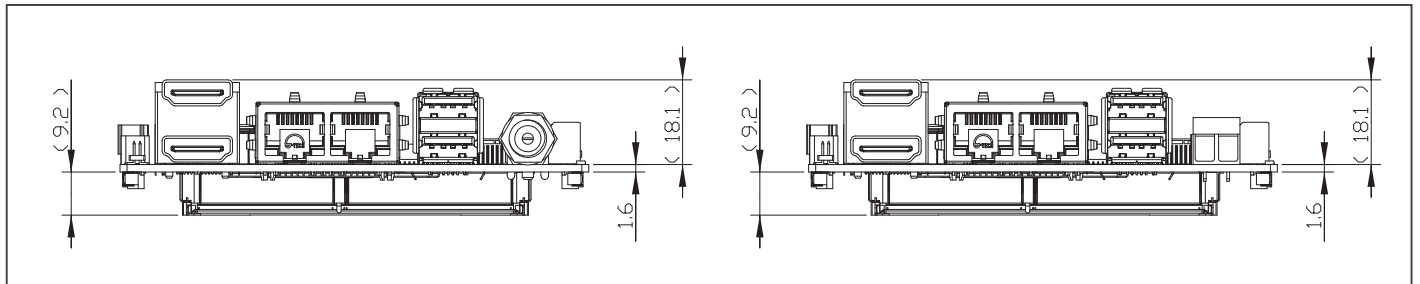
Optional Accessories

| Part Number | Description | Qty. |
|-----------------|---|------|
| 1702150155 | (TF)Power Cable.15P SATA(F).2P 2.0mm Housing(PH).15cm | 1 |
| 1709070500 | (TF)SATA CABLE.7P Pitch 1.27mm.50cm | 1 |
| 1701200102 | (TF)SERIAL Cable.WL1010H-2*10P 1.0mm Housing.Dual DB9(M).10cm | 1 |
| 170010010D | USB cable (2 Port), 10cm | 1 |
| 1702030176 | (TF)Power Cable.3P DC jack.TERMINAL*2.17cm.TKS-G21-LN05 | 1 |
| PICO-WHU4-FAN01 | Integrated Cooler for PICO-WHU4, assemble with PICO-WHU4 directly | 1 |
| PICO-WHU4-HSP01 | Heat Spreader for PICO-WHU4 | 1 |

Block Diagram



Dimension Unit: mm



Ordering Information

| Part Number | CPU | Memory | Thermal | Display | Storage | LAN | USB | RS-232 | RS-232/422/485 | Expansion Slot | Power | Power Temp | Others |
|--------------------|----------------|-------------|----------|----------|--------------------------------------|---------|--|--------|----------------|----------------------|-----------------------|------------|--------|
| PICO-WHU4-A11-0001 | Celeron 4305UE | DDR4 Socket | Optional | HDMI x 2 | SATAIII x 1 mSATA (Full size) x 1 | GbE x 2 | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header | — | 2 | M.2 2230 (E Key) x 1 | +12V (Terminal block) | 0°C ~ 60°C | — |
| PICO-WHU4-A11-0002 | i3-8145UE | DDR4 Socket | Optional | HDMI x 2 | SATAIII x 1 mSATA (Full size) x 1 | GbE x 2 | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header | — | 2 | M.2 2230 (E Key) x 1 | +12V (Terminal block) | 0°C ~ 60°C | — |
| PICO-WHU4-A11-0003 | i5-8365UE | DDR4 Socket | Optional | HDMI x 2 | SATAIII x 1 mSATA (Full size) x 1 | GbE x 2 | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header | — | 2 | M.2 2230 (E Key) x 1 | +12V (Terminal block) | 0°C ~ 60°C | — |
| PICO-WHU4-A11-0004 | i7-8665UE | DDR4 Socket | Optional | HDMI x 2 | SATAIII x 1 mSATA (Full size) x 1 | GbE x 2 | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header | — | 2 | M.2 2230 (E Key) x 1 | +12V (Terminal block) | 0°C ~ 60°C | — |
| PICO-WHU4-A11-DC02 | i3-8145UE | DDR4 Socket | Optional | HDMI x 2 | SATAIII x 1 mSATA (Full size) x 1 | GbE x 2 | USB 3.2 Gen 2 x 2 (Rear) USB 2.0 x 2 Pin header | — | 2 | M.2 2230 (E Key) x 1 | +12V (DC Jack) | 0°C ~ 60°C | — |