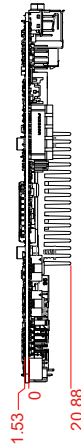
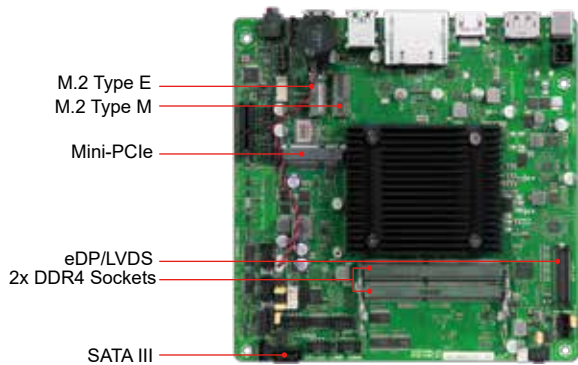




WADE-8173-J6412

Intel® Celeron® Processor J6412 based Mini-ITX Board with HDMI, DP, LVDS/eDP, Dual GbE, USB 3.2 Gen2, SATA III, Mini PCIe, M.2

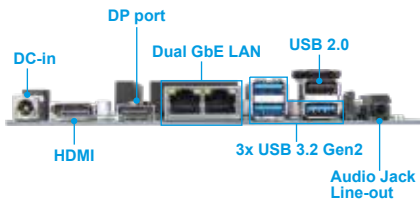


WADE-8173-J6412 is based on Intel® Celeron® processor J6412. With dual channel DDR4 SO-DIMM memory and rich I/O sets, the Portwell WADE-8173-J6412 Mini-ITX embedded board empowers energyefficient solutions for point-of-sale (POS) and industrial automation applications.

FEATURES

- Intel® Celeron® Processor J6412(formerly Elkhart Lake)
- Two SO-DIMM support DDR4 DRAM up to 32GB
- Supports Dual Ethernet, 6x COM Ports
- Supports 3x USB 3.2 Gen2, 5x USB 2.0, 1x SATAIII port
- Supports one PCIe x1(Gen3), one M.2 Key E 2230 with PCIe x1 and USB2.0 for Wireless, one M.2 Key M 2242/2260/2280 with PCIe x2 and SATA signal for SSD and one full/half size Mini PCIe socket with PCIe x1(with SIM holder) and one Full size SD card slot

REAR I/O



ORDERING GUIDE

| | |
|-----------------|--|
| AB1-3P59 | (R).WADE-8173-J6412. Mini-ITX ESB.Intel Elkhart lake SoC Processor J6412 w/DDR4/DP/LVDS/HDMI/dual GbE LAN/SATA |
|-----------------|--|

PACKING LIST

| |
|--|
| One WADE-8173-J6412 motherboard |
| Two I/O shields |
| Two SATA cables |
| One SATA power cable |

GENERAL

| | |
|---------------------|--|
| Processor | Intel® Celeron® processor J6412 in FCBGA1493 package, 2.0 GHz (2.6 GHz turbo), 1.5 MB L2 Cache, 10W TDP |
| Chipset | N/A |
| BIOS | AMI uEFI BIOS |
| Memory | Support 2x SO-DIMM sockets up to 32GB DDR4 3200 MHz non-ECC memory |
| Storage Devices | 1x SATAIII ports |
| Watchdog Timer | Programmable watchdog timer |
| Hardware Monitoring | Temperature (CPU & System) |
| Expansion Interface | - 1x PCIe x1 Gen 3 - 1x M.2 Key E 2230 with PCIe x1 and USB 2.0 for Wireless - 1x M.2 Key M 2242/2260/2280 with PCIe x2 and SATA signal for SSD - 1x full/half size Mini PCIe socket with PCIe x1(with SIM holder) - 1x Full size SD card slot |

I/O INTERFACE

| | |
|-------------|--|
| Audio | - Intel® High Definition Audio interface Realtek® ALC897 High Definition Audio - 1x audio jack support Line-out |
| Ethernet | 2x RJ45 connectors on rear I/O (Realtek® RTL8111H) |
| Serial port | - 1x RS232/422/485 port on pin header - 5x RS232 ports on pin header |
| USB | - 3x USB 3.2 Gen2 on rear I/O - 1x USB 2.0 on rear I/O - 4x USB 2.0 on pin header |
| GPIO | 8-bit GPI/GPO |

DISPLAY

| | |
|--------------------|--|
| Graphic Controller | - Integrated Intel® UHD Graphics - Supports DirectX 12, OpenGL 4.5, OpenCL 1.2 |
| Display Interface | Triple Displays - DP1: resolution up to 4096x2160 - DP2: resolution up to 4096x2160 (colay with HDMI) - HDMI: resolution up to 3840x2160 (Default) - LVDS: resolution up to 1920x1200 (Default) - eDP: resolution up to 4096x2160 (colay with LVDS) |

Mechanical & Environment

| | |
|--------------|--|
| Dimension | 170mm(L) x 170mm(W) |
| Power Supply | 12V DC in (1x external DC jack; 1x internal 4 pin power connector) |
| Environment | - Operation Temperature: 0°C to 60°C - Storage Temperature: -20°C to 80°C - Relative Humidity: 5% to 95%, non-condensing |
| MTBF | Over 100,000 hours at 40°C |



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