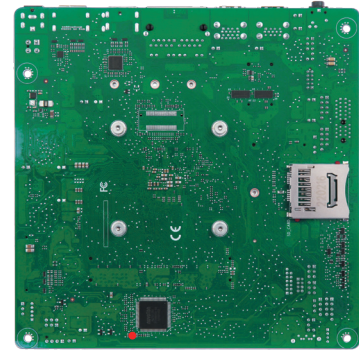
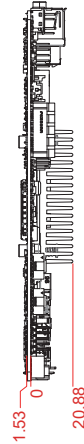
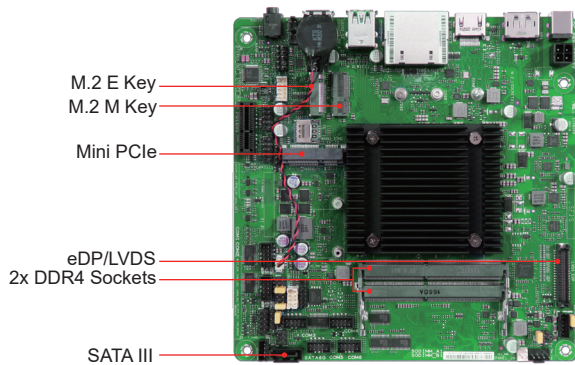


# WADE-8173-J6412

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

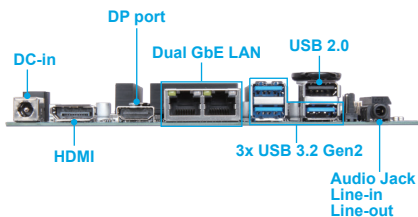


WADE-8173-J6412 is based on Intel® Celeron® processor J6412. With dual-channel DDR4 SO-DIMM memory and rich I/O sets, the Portwell WADE-8173-J6412 Mini-ITX embedded board empowers energy-efficient solutions for point-of-sale (POS) and industrial automation applications.

## FEATURES

- Intel® Celeron® Processor J6412 (formerly Elkhart Lake)
- Two SO-DIMM support DDR4 DRAM up to 16GB
- Support dual Ethernet, 6x COM Ports
- Support 3x USB 3.2 Gen2, 5 x USB 2.0, 1 x SATAIII port
- Supports 1x mini-PCIe, 2x M.2 socket (Key M & Key E)

## REAR I/O



## ORDERING GUIDE

<b>AB1-3P59</b>	(R)WADE-8173-J6412. Mini-ITX ESB.Intel Elkhart lake SoC Processor J6412 w/DDR4/DP/LVDS/HDMI/dual GbE LAN/SATA
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## 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 3200MHz non-ECC memory
Storage Devices	- 1x SATAIII ports - 1x M.2 socket (Key M, 2242/2260/2280)
Watchdog Timer	Programmable watchdog timer
Hardware Monitoring	Temperature (CPU & System)
Expansion Interface	- 1x PCIe Gen3 x1 - 1x full/half size Mini PCIe socket with PCIe x1 - 1x M.2 (Key M, 2242/2260/2280) for SSD - 1x M.2 (Key E, 2230) for WiFi/BT device

## I/O INTERFACE

Audio	- Intel® High Definition Audio interface Realtek® ALC897 High Definition Audio - 1x audio jack support Line-out/Line-in
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 (1 x external DC jack; 1 x 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



\*All information provided is subject to change without notice. Last updated: September 15, 2022