# DX6412

Intel® Elkhart Lake Celeron® J6412 Processor based Fanless Industrial PC with 6COM



#### **Features**

CPU: Intel<sup>®</sup> Elkhart Lake Celeron<sup>®</sup> J6412 Processor

Memory: Single Channel SO-DIMM DDR4 up to 32GB

Display via: Intel® UHD Graphics via DP, HDMI

I/O Ports: 4xUSB3.2, 4xUSB2.0. 2xLAN, 6xCOM

Ethernet: 10/100/1000Mbps

Storage: SATA3.0, M.2 for SSD

Dimension: 255mm x 220mm x 60mm

Power: 12V DC-in





#### Introduction

Maxtang's DX6412 fanless embedded industrial PC incorporating the Intel® Celeron J6412 processor supports dual displays via HDMI2.0 plus DP, optimizing easy maintenance in complex industrial environments. The DX6412 supports single-channel SO-DIMM DDR4 memory of up to 32GB for more powerful computing performance. Along with a versatile I/O array and flexible expansion capacity, it fully satisfies all the needs of industrial automation with the performance demanded by vision inspection, motion control, and surveillance applications.



Linux



The Fanless construction not only overcomes contaminant and noise challenges presented by harsh IA environments, the elimination of problematic structural elements that negatively affect MTBF greatly increases lifecycle expectations for the platform. The DX series retains the robust design of all other Maxtang industrial product lines at a new extremely cost-effective price point for high performance.





H/W Monitor

Watchdog

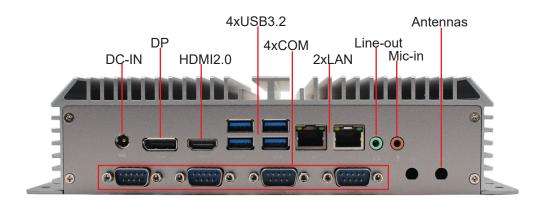


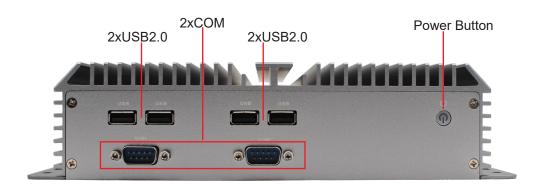


GPIO

Brightness

#### I/O Interfaces





## **Technical Specifications**

| Processor        | CPU             | J6412 (4 Cores/ 4 Threads)                         |
|------------------|-----------------|--|
|                  | Base Frequency  | 2.00GHz  |
|                  | Burst Frequency | 2.60GHz  |
|                  | Cache           | 1.5 MB L2 Cache                                    |
|                  | TDP             | 10W  |
|                  | BIOS            | AMI UEFI BIOS                                      |
| Memory           | Type            | Single Channel SO-DIMM DDR4                        |
|                  | Max. Capacity   | 32GB   |
| Display          | GPU             | Intel® UHD Graphics for 10th Gen Intel® Processors |
|                  | Display via     | 1xHDMI + 1xDP                                      |
| Ethernet         | Speed           | 10/100/1000Mbps                                    |
|                  | Controller      | Realtek RTL8111H                                   |
|                  | Interface       | 2x RJ45  |
| Audio            | Audio Codec     | Realtek HD   |
|                  | Interface       | Line-out, Mic-in                                   |
| Storage          | SATA3.0         | 1  |
|                  | M.2             | 1x M.2 for 2280/2242 SATA SSD, optional 4G module  |
| Expansion        | M.2             | 1x M.2 for WiFi                                    |
|                  | SIM             | Optional   |
| I/O Interface    | LAN             | 2x RJ45  |
|                  | COM             | 6x RS232 (Optional RS485 for COM_6 )               |
|                  | USB3.2          | 4  |
|                  | USB2.0          | 4  |
|                  | Line-out        | 1  |
|                  | Mic-in          | 1  |
| Dimension        | Size            | 255mm x 200mm x 60mm                               |
| Power            | Standard Port   | 12V DC-in  |
| Temperature      | Operating Temp. | -20°C to 60°C                                      |
|                  | Storage Temp.   | -40°C to 80°C                                      |
| Cooling Method   |                 | Passive  |
| Operating System |                 | Win10/11 64bit, Linux 64bit                        |
|                  |                 |  |

<sup>\*</sup> All specifications and photos are subject to change without notice.

### Block Diagram (mm)

