

# emPC-X

## x86 Intel Atom based Embedded Controller



### PRODUCT DESCRIPTION

The emPC-X is an industrial, compact and fanless embedded controller system. It is based on various Intel Atom processors. The system combines a strong CPU unit with a fanless and robust system design, two Ethernet ports and a variety of RS232/485 and CAN/CANopen interfaces, which makes it very suitable for real-time machine control or IoT gateway applications. In addition, emPC-X systems can be expanded with an expansion module to provide digital and analogue I/Os.

### FEATURES

#### Processor

- Intel Atom E3825 (2 x 1.33 GHz, 1 MB L2 Cache)
- Intel Atom x5-E3940 (4 x 1.6/1.8 GHz, 2 MB L2 Cache)

#### Memory

- Up to 4 GB DDRL system memory with 1.067 GB/s<sup>1)</sup>
- 128 kB battery-free NVRAM

#### Storage

- Internal CFast Socket for SATA SSD
- SD card slot (optional)

#### External Interfaces

- 2 x 10/100/1000 MBit/s Ethernet
- 3 x USB 2.0
- Up to 4 x 9-pin D-SUB connector for CAN or serial ports
  - SJA1000 CAN Controller
  - Physical Layer ISO/DIS 11898-2 (up to 1 MBit/s)
- Serial ports with RTS/CTS only
- DVI-D graphic interface

#### Environment

- Ambient operating temperature -20 °C ... 50 °C<sup>2)</sup>
- Non-operating temperature -20 °C ... 75 °C
- Humidity: 0 % ... 80 % r.H., non-condensing
- Dimensions (w x h x d):
  - 2 D-SUB: 65.0 x 115.5 x 116.0 mm
  - 4 D-SUB: 82.6 x 115.5 x 116.0 mm
- Weight approx. 0.8 kg

#### Power Supply

- Input 9 ... 34 V<sub>DC</sub>
- Power consumption 12 W

#### Expansion

- Expansion boards available for additional I/O and other peripherals

#### Software

- Linux Debian
- Windows 10 IoT  
For special operating system images do not hesitate to contact our sales team.
- CODESYS IEC 61131-3 runtime environment

<sup>1</sup> 2 GB DDR3L memory with Intel Atom E3825

<sup>2</sup> Operating temperature with Intel Atom E3825: 0 °C ... 50 °C

<sup>3</sup> Available with 2 D-SUB: 2 x RS232 or 2 x CAN/CANopen or 1 x RS232 & 1 x CAN/CANopen  
4 D-SUB: additional 2 x RS232/485 or 2 x CAN/CANopen  
More interfaces on request.