# IPC/POE Series

Industrial PoE (Power over Ethernet) Board

CFast

mPCIe

4x PoE M12 x-coded

CFast

mPCIe

4x PoE RJ45
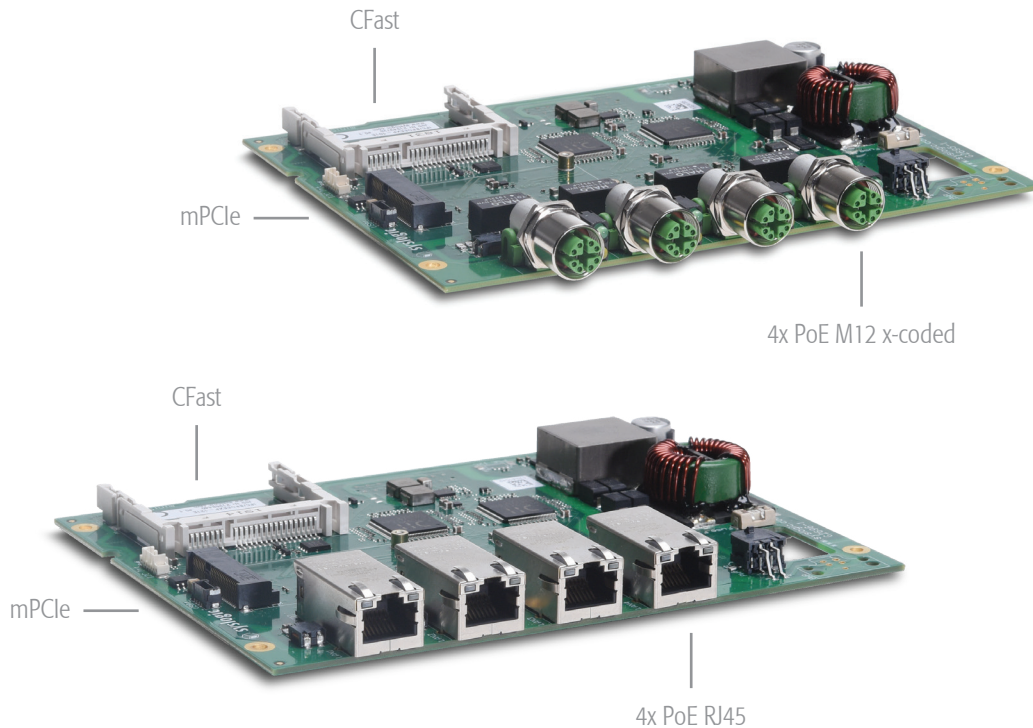
# IPC/POE Series

The IPC/POE Series adds Power over Ethernet (PoE) to Syslogic embedded products. This enables rapid integration into existing products for a fast time to market.
The board also includes a CFast header for additional storage as well as a mini PCIe slot for additional expansion possibilities.

- **4 channel PoE+ IEEE802.3at, 48VDC out**
- **Extended temperature range**
- **24/7 continuous operation**
- **Shock- and vibration resistant**

Windows 10

NVIDIA. Linux for Tegra (L4T)

## Product Highlights

Internally powerd by Syslogic host system,
no external power source required for PoE PD's
Four full bandwith GbE ports, each with a
dedicated NIC
Shock- and vibration resistant
Operating temperature -40°C to +85°C
Industrial electronics design
Long term availability

## Product Features

4x Gbit PoE+
mPCIe slot
miniSIM slot
CFast slot
M12 x-coded or RJ45 ports

## Markets / Applications

Automated Guided Vehicles (AGV)
Agriculture
Railway
Transportation
Industrial automation

CE

Reliable embedded computer and display solutions.

| | Order Code | IPC/BPOEEXP-101E [1] | IPC/BPOEEXP-121E [1] |
|---|---|---|---|
| **Power over Ethernet** | | | |
| Full bandwith Gbit Ethernet PoE+ IEEE802.3at with 4 dedicated NIC's (Intel I210-IT) PSE - Power sourcing equipment, producing 48VDC out for PoE powered devices (PD) | | 4 (M12-x) | 4 (RJ45) |
| Total max Power draw at PSEs/PDs [4] | | 45W/39W | 45W/39W |
| **Communication Interfaces** | | | |
| Regular unpowered (full bandwith) GBit Ethernet with 4 dedicated NIC's (Intel I210-IT) instead of PoE+ | | on request | on request |
| CFast socket [5] | | 1 | 1 |
| Mini PCIe socket | | 1 | 1 |
| miniSIM slot (to mPCIe socket) | | 1 | 1 |
| USB 2.0 interface (for additional Syslogic I/O extensions) [2] | | 1 | 1 |
| I2C interface (for additional Syslogic I/O extensions) [2] | | 1 | 1 |
| **Technical Data** | | | |
| Dimensions [mm] | | w160x d121.5 x h20 | w160x d121.5 x h20 |
| Net weight [gram] | | 200 | 200 |
| Input voltage range, non-isolated (gets power internally from mainboard) | | 9 ... 45VDC | 9 ... 45VDC |
| Idle power consumption typ. in Watt @ 24V | | 1 | 1 |
| **Software support** | | | |
| NVIDIA Linux 4 Tegra, ARM64 (NVIDIA Jetson based products) | | • | • |
| Linux x86, Kernel 4.9 or higher | | • | • |
| Windows 10 IoT | | • | • |
| Windows Embedded Standard 7 | | • | • |
| **Environmental Conditions** | | | |
| Operating temperature ambient (component level) [3] | | -40°C to +85°C | -40°C to +85°C |
| Storage temperature | | -40°C to +85°C | -40°C to +85°C |
| Conformal coating | | optional | optional |
| Shock: designed to meet EN60068-2-27 | | • | • |
| Vibration: designed to meet EN60068-2-6 | | • | • |
| EMI conformity EN55032/55035/EN-50121-3-2 | | • | • |
| Designed to meet agriculture EMI conformity ISO14982 | | • | • |

[1] Please contact factory for minimum order quantities
[2] on internal connector | Mating plug type: Molex Pico-Blade 51021-0400 with AWG26 contacts 50079-8100
[3] Depending on host system, installation situation and interface connection. Please see user documentation.
[4] Derating may apply, depending on host system
[5] Requires SATA support on expansion connector of host system

syslogic
*industrial computing*