

Ethernet, Serial and GPS I/O Module



EMX form factor I/O module with Ethernet ports, serial ports and support for a GPS receiver

Full Featured EMX I/O Module

EMX-ESG is an EMX Compact form factor I/O module featuring two PCI Express Gigabit Ethernet ports, an LPC UART with 6 serial ports, 14 GPIO lines, and support for a GPS receiver.

GPS Receiver

EMX-ESG supports a Condor 23-channel GPS receiver.

EMX Bus Interface

EMX-ESG provides a full EMX stackthrough bus interface, allowing it to be integrated into any EMX stack. The EMX bus supports four PCIe x 1 lanes and the LPC bus.

Rugged Design

Extended temperature operation of -40°C to +85°C is tested and guaranteed. EMX-ESG was designed with harsh applications in mind.

Key Features

- ◆ Two Gigabit Ethernet ports
- ◆ Six serial ports:
 - 4 RS-232/422/485
 - 2 RS-232 (3.3V logic level optional)
- ◆ 14 GPIO lines
- ◆ Support for GPS receiver
- ◆ Driver support for:
 - Windows Embedded Standard 7
 - Windows CE 6
 - Linux 2.6
- ◆ +5VDC or +3.3VDC
- ◆ EMX expansion bus for stackable I/O
- ◆ EMX Compact form factor (95 x 95 mm)
- ◆ Extremely rugged -40°C to +85°C (-40°F to +185°F) operating temperature

SPECIFICATIONS

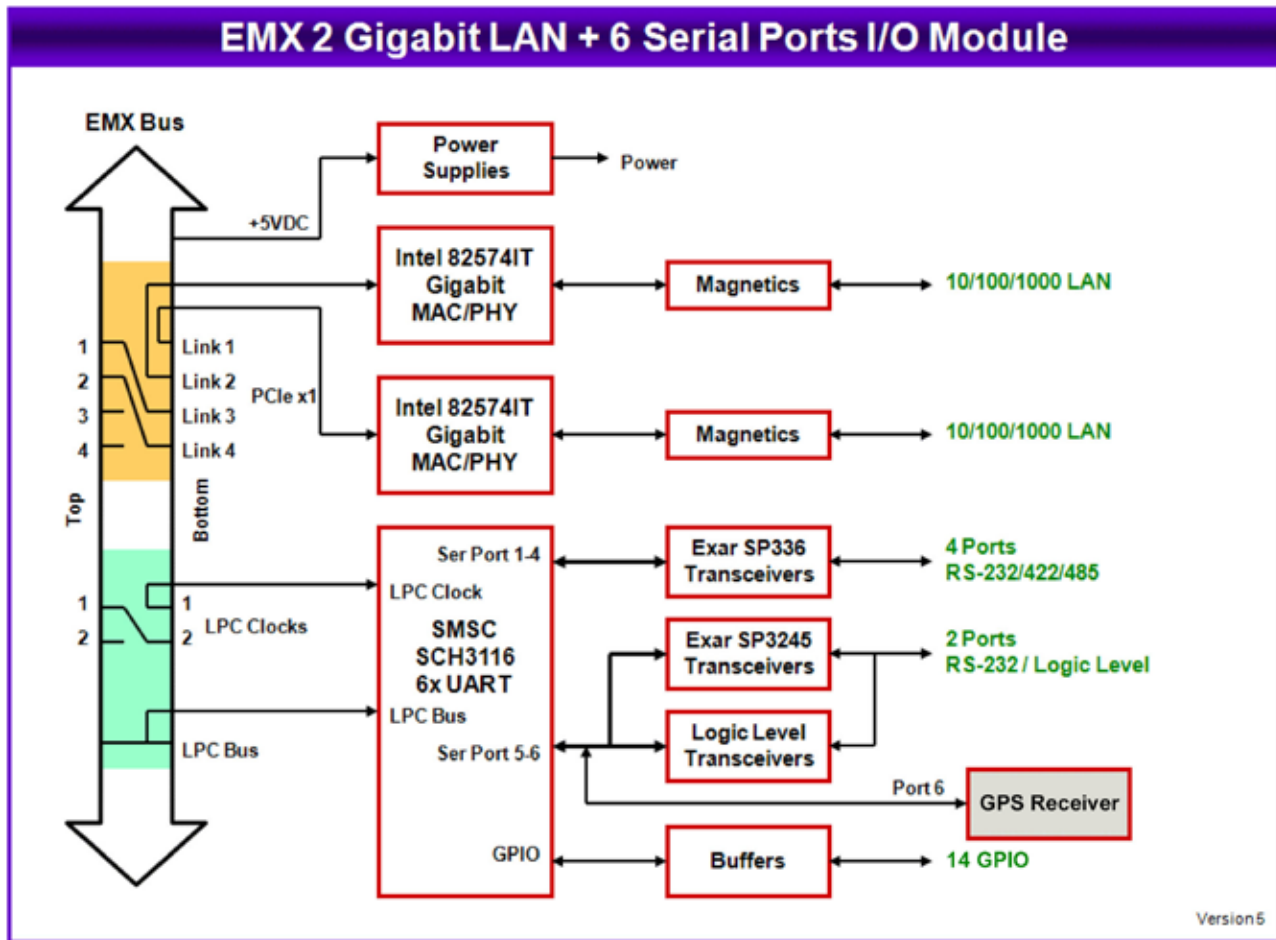
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|------------------------------|--|
| Ethernet | 2 Gigabit Ethernet ports based on Intel 82574IT Ethernet chips |
| Serial | 4 RS-232/422/485 ports 2 RS-232 ports (3.3V logic level optional) All 6 ports from SMSC SCH3116 UART |
| GPIO | 14 general purposed digital I/O lines Programmable direction with I/O buffers 3.3V logic level with 5V compatibility |
| GPS Receiver | Supports Condor 23-channel GPS receiver |
| Input Power | +5VDC or +3.3VDC |
| Bus Interface | EMX bus passthrough |
| Form Factor | EMX Compact 3.75" x 3.75" (95mm x 95mm) |
| Operating Temperature | -40°C to +85°C (-40°F to +185°F) |
| Weight | 3.2oz (90.7g) |
| RoHS | Compliant |

Software Support

EMX-ESG is supplied with all required firmware and drivers, enabling its immediate operation without any development effort. This includes drivers for Windows Embedded Standard 7, Windows CE 6 and Linux 2.6.

ORDERING INFORMATION

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|-----------------------|---|
| EMX-ESG777 | EMX-ESG I/O module with 6 serial, 2 LAN, 14 GPIO |
| EMX-ESG614 | EMX-ESG I/O module with 6 serial, 14 GPIO |
| EMX-ESG200 | EMX-ESG I/O module with dual Gigabit Ethernet |
| EMX-ESG777-GPS | EMX I/O module with 6 serial, 2 LAN, 14 GPIO, GPS |
| EMX-ESG614-GPS | EMX I/O module with 6 serial, 14 GPIO, GPS |



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