EM-2260 Series

Arm-based industrial computer-on-module with 4 serial ports, 2 LAN ports, 8 DI/DO, and 1 VGA port

Features and Benefits

- Cirrus Logic EP9315 Arm9 CPU, 200 MHz
- 128 MB RAM onboard, 32 MB flash disk
- Graphical user interface for external VGA output connection
- 2 kV optically isolated RS-232/422/485 serial ports
- Dual 10/100 Mbps Ethernet ports for network redundancy
- 8 DI and 8 DO channels
- Supports CompactFlash and USB 2.0 hosts
- Ready-to-run WinCE 6.0 platform
- Full-function development kit for quick evaluation and application development
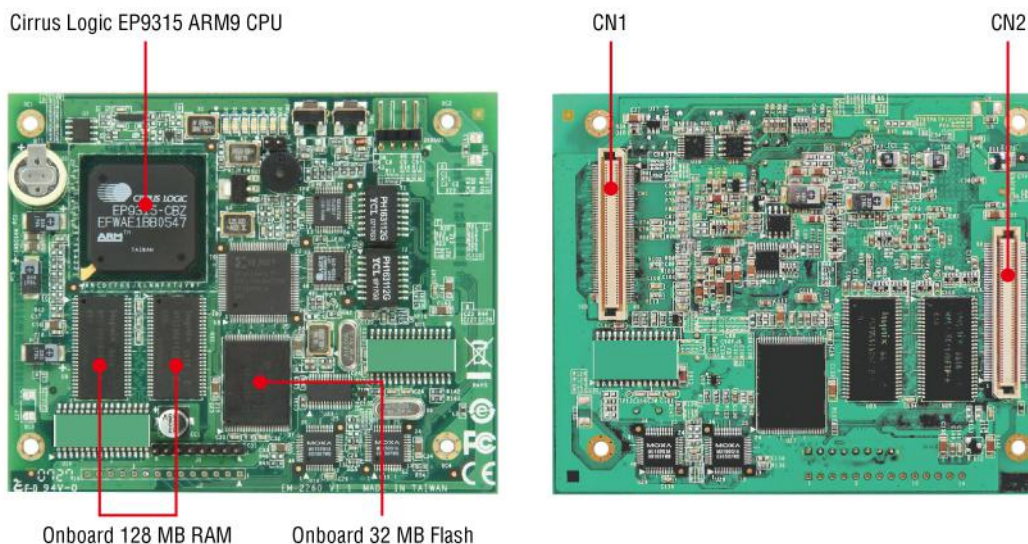
Certifications

CE FC

Introduction

The EM-2260 embedded module features 4 RS-232/422/485 serial ports, dual Ethernet ports, and an Enhanced Integrated Drive Electronic (EIDE) interface for designing an external storage connection, such as a CompactFlash socket or USB port signals. The module has a compact design that is easily integrated with a variety of industrial applications, including gas stations, vending machines, and ticketing machines, and offers a powerful serial communication capability for better system integration. Programmers will find the preinstalled, ready-to-run Windows CE 6.0 platform and full-function development kit a great benefit when developing software and building reliable communication bases for industrial automation applications.

The EM-2260 embedded module uses the Cirrus Logic EP9315 Arm9, 32-bit, 200 MHz RISC CPU. This powerful computing engine supports several useful communication functions, but will not generate a lot of heat. The built-in 32 MB NOR Flash ROM and 128 MB SDRAM give you enough memory to run your application software directly on the EM-2260. With its built-in VGA output interface, the EM-2260 is suitable for use with SCADA systems in industrial applications, such as manufacturing automation, production line process monitoring, and mining automation, that require VGA and HMI features.

The EM-2260 Development Kit provides users with a handy tool for first-time evaluation to test the functionality of the embedded core module. It has several peripherals built-in, including RS-232/422/485 ports and digital input and output, making it suitable for developing a variety of industrial applications.

Appearance

Cirrus Logic EP9315 ARM9 CPU

CN1

CN2

Onboard 128 MB RAM

Onboard 32 MB Flash

Specifications

Computer

CPU	Cirrus EP9315 Arm9, 200 MHz
SDRAM	128 MB
Flash	NOR Flash, 32 MB
Pre-installed OS	EM-2260-LX: µCLinux EM-2260-CE: Microsoft Windows CE 6.0

Digital Inputs

Digital Input Channels	DIs x 8
Input Voltage	3.3 V, CMOS level

Digital Outputs

Digital Output Channels	DOs x 8
Digital Output	3.3 V, CMOS level

Ethernet Interface

Ethernet Ports	Auto-sensing 10/100 Mbps ports (RJ45 connector) x 2
Magnetic Isolation Protection	1.5 kV (built-in)

Display

Resolution	1024 x 768

Serial Interface

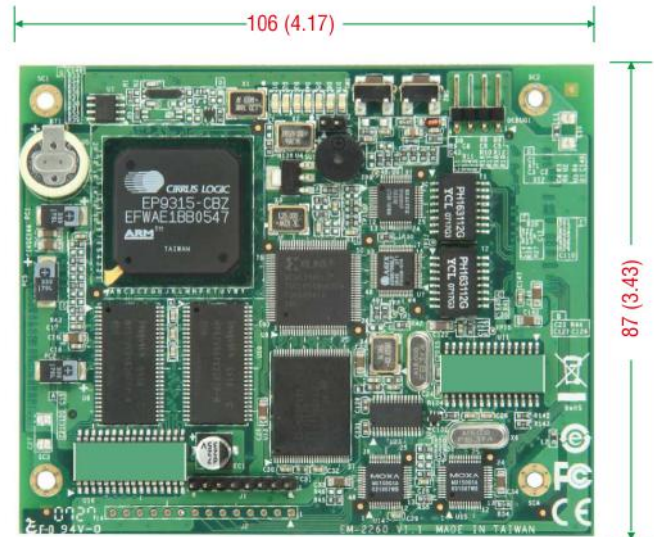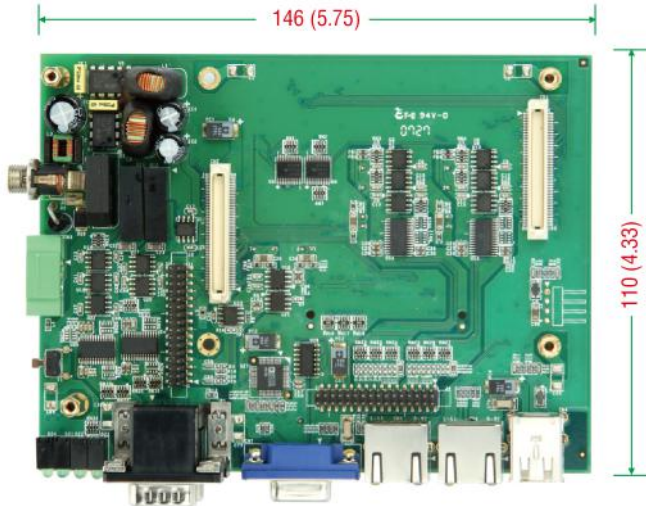|	
Serial Ports	4 x RS-232/422/485

Serial Signals

Console Port	1 x 4-pin header to DB9 console port
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark

MOXA
Reliable Networks ▲ Sincere Service

Flow Control	RTS/CTS, XON/XOFF, ADDC® (automatic data direction control) for RS-485, RTS Toggle (RS-232 only)
Baudrate	50 bps to 921.6 kbps
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND

Power Parameters

Input Voltage	12 VDC
Input Current	480 mA @ 12 VAC
Power Consumption	5.8 W

Reliability

Alert Tools	Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger	Built-in WDT

Physical Characteristics

Dimensions	106 x 87 mm (4.17 x 3.43 in)
Weight	70 g (0.16 lb)

Environmental Limits

Operating Temperature	-10 to 60°C (14 to 140°F)
Storage Temperature (package included)	-20 to 80°C (-4 to -176°F)

Standards and Certifications

EMC	EN 55032/24, EN 61000-3-2 Class A, EN 61000-3-3, CISPR 32, FCC Part 15B Class A
Green Product	RoHS, CRoHS, WEEE

MTBF

Time	131,832 hrs
Standards	Telcordia (Bellcore) Standard

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

Ordering Information

Model Name	Description
EM-2260-CE	Arm-based embedded core module with 4 serial ports, 8 x DI and 8 DO channels, 2 Ethernet ports, VGA, CompactFlash, USB, WinCE 6.0 OS
EM-2260-LX	Arm-based embedded core module with 4 serial ports, 8 x DI and 8 DO channels, 2 Ethernet ports, VGA, CompactFlash, USB, Linux OS