

UNO-1140/F

x86 SoC Fanless Box PC
with 1 x LAN, 8 x Isolated COM

NEW



UNO-1140

UNO-1140F



Features

- Onboard Advantech EVA-4150 486SX SoC
- Four isolated RS-232/485 and four isolated RS-485 ports with automatic flow control
- Industrial-grade serial port design without data loss
- One 10/100Base-T RJ-45 LAN ports
- Two USB 2.0 ports and one internal CompactFlash®
- Compact size, small footprint, saves space
- Front-accessible I/O and DIN-rail design for easy installation in control cabinet
- Wide operating temperature range up to 75° C
- Windows® CE 5.0, DOS, and Linux ready solution
- Onboard system & I/O LED indicators
- Fanless design with no internal cabling
- Grounding isolation between chassis and system
- IP40 ingress protection

Introduction

UNO-1140/F is a DIN-rail mounted Fanless Box PC, which provides several serial communication ports and Ethernet interfaces. With a compact size, small foot print and front accessible I/Os, UNO-1140/F is very convenient for wiring and DIN-rail installation in the control cabinet. The wide operation temperature support and industrial serial port design makes UNO-1140/F a perfect communication gateway even in critical environments. With OS and driver support on WinCE, Linux, users can integrate applications easily with an application ready platform that can provide a versatile function to fulfill diverse requirements.

Specifications

General

- Certifications** CE, FCC Class A, UL, CCC
- Dimensions (W x H x D)** 68 x 155 x 140 mm (2.6" x 6.1" x 5.6")
- Enclosure** Aluminum + SECC
- Mounting** DIN-rail, Wallmount
- Industrial Grounding** Isolation between chassis and power ground
- Power Consumption** 18 W (Typical)
- Power Requirement** 9 ~ 36 V_{DC} (e.g +24 V @ 1 A) (Min. 24 W), AT
- Weight** 1 kg
- OS Support** DOS (for UNO-1140 only), Windows CE 5.0, Linux
- System Design** Fanless design with no internal cabling

System Hardware

- CPU** Advantech EVA-X4150 SoC, 486SX grade, 150MHz
- Memory** Onboard 64 MB Industrial grade SDRAM
- Indicators** LEDs for Power, CF, LAN (Active, Status) and Serial (Tx, Rx)
- Keyboard/Mouse** 1 x PS/2
- Storage** CF: 1 x internal type I/II CompactFlash® slot
- Display** DB15 VGA connector, supports up to 1024 x 768 @ 60 Hz
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec

Environment

- Ingress Protection** IP40
- Operating Temperature** IEC 68 2-2 (with 100% CPU/ I/O loading)
-20 ~ 75° C (-4 ~ 167° F)
- Operating Humidity** 20 ~ 95% (non-condensing)
- Shock Protection** IEC 68 2-27
CompactFlash®: 50 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash®: 5 Grms @ 5 ~ 500 Hz

I/O Interface

- Serial Ports** UNO-1140: 4 x RS-232/485 with DB9 connectors, Automatic RS-485 data flow control
UNO-1140F: 4 x isolated RS-232/485 with DB9 connectors, 4 x isolated RS-485 with screw terminal, Automatic RS-485 data flow control
- Serial Port Speed**
COM1~COM4 RS-232 : 50~115.2 kbps
RS-485 : 50~115.2 kbps
COM5~8 (UNO-1140F) RS-485 : 300~921.6 kbps (max)
- Serial Port Protection** 500V_{DC} Isolation Protection (UNO-1140F)
2000V_{DC} EFT Protection
- LAN** 1 x 10/100 Base-T RJ-45 ports
- USB** 2 x USB, USB 2.0 compliant

Reserved Functions

- PC/104 Slot*** PC/104 slot, space supports 2 cards, supports +5 V

*Note: This function is reserved for projects

Ordering Information

- UNO-1140-V10E** EVA SoC Fanless Box PC, 64MB RAM, 4 x COM
- UNO-1140F-V10E** EVA SoC Fanless Box PC, 64MB RAM, 8 x Iso. COM

Accessories

- UNO-FPM11-AE** UNO-1100 series VESA mount kit