

UNO-1140/F

486SX-grade SoC DIN-rail PC
with 1 x LAN, 8 x Isolated COM

NEW



UNO-1140

UNO-1140F



Introduction

UNO-1140/F is a DIN-rail mounted, which provides several serial communication ports and Ethernet interfaces. With a compact size, small footprint 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)** 71 x 155 x 140 mm (2.8" x 6.1" x 5.9")
- **Enclosure** Aluminum + SECC
- **Mounting** DIN-rail, Wallmount
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 10 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
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE

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)

Features

- Onboard Advantech EVA-4150 486SX SoC
- Four isolated RS-232/485 and four isolated RS-485 ports with automatic flow control for UNO-1140F; Four RS-232/485 ports for UNO-1140
- Industrial-grade serial port design without data loss
- One 10/100 Base-T RJ-45 port
- 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

- **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 port
- **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 DIN-rail PC, 64MB RAM, 4 x COM
- **UNO-1140F-V10E** EVA SoC DIN-rail PC, 64MB RAM, 8 x Iso. COM

Accessories

- **UNO-FPM11-BE** UNO-1100 series VESA mount kit
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility

19

Embedded Controllers

20

PC-based Controllers

21

PAC

22

Motion Control

23

RS-485 I/O

24

Ethernet I/O

25

Building Automation

26

Self-service Terminals

27

eHome Platforms