UNO-1140/F

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

UNO-1140   UNO-1140F

Features

- Onboard Advantech EVA-X4150 SoC, 486SX grade, 150 MHz processor
- 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

Introduction

UNO-1140/F are DIN-rail mounted PCs which provide several serial communication ports and Ethernet interfaces. With their compact size, small footprint and front accessible I/Os, UNO-1140/F are convenient for wiring and DIN-rail installation in control cabinets. Their wide operating temperate range and industrial serial port design make UNO-1140/F excellent communication gateways even in critical environments. With OS and driver support on WinCE and Linux, users can integrate applications easily with application ready platforms that can provide versatile functions to fulfill diverse requirements.

Specifications

General

- **Certifications** CE, FCC Class A, UL, CCC
- **Dimensions (W x H x D)** 71 x 152 x 139 mm (2.8" x 6" x 5.5")
- **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** 1.0 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 level timer interval, from 1 to 255 sec

Environment

- **Ingress Protection** IP40
- **Operating Temperature** IEC 60068-2-2 (with 100% CPU/ I/O loading) -20 ~ 75° C (-4 ~ 167° F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Shock Protection** IEC 60068-2-27 CompactFlash®: 50 G @ wall mount, half sine, 11 ms

- **Vibration Protection** IEC 60068-2-64 (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

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