

UNO-3072

Intel® Pentium® M UNO w/2 x PCI slot,
1 x PC Card



UNO-3072L

UNO-3072



Features

- Onboard Pentium® M or Celeron® M processor
- Provides 512 KB battery-backup SRAM (UNO-3072 only)
- Two RS-232 & two RS-232/422/485 ports with RS-485 automatic flow control
- Two 10/100Base-T RJ-45 ports and four USB ports
- Two PCI-bus expansion slots for versatile applications
- Industrial proven design; anti-shock up to 50 G, anti-vibration up to 2 G
- 4-ch isolated DI, 4-ch isolated DO with timer, counter and interrupt handling
- Supports dual power inputs
- Windows® 2000/XP driver ready and Linux driver support
- Windows XP (SP2) Embedded Ready Platforms with write protection (EWF)
- Embedded Linux ready solution

Introduction

Advantech's UNO-3072 series is high-performance Pentium M/Celeron M grade, embedded automation computer with two PCI expansion slots. UNO-3072 features a rugged and field-proven design offering dual power inputs and battery backup SRAM. Different from general industrial PCs, UNO-3072 is more compact and reliable. They are open platforms which can fulfill any demanding requirement from the industrial field, and it is an ideal solution for industrial automation and control.

UNO-3072 provide embedded operating system with a pre-configured image that has optimized onboard device drivers, and support Windows XP Embedded to fulfill the toughest requirements for complete functionality and high reliability.

Specifications

General

- **Certifications** CE, FCC class A
- **Dimensions (W x D x H)** 140 x 237 x 177 mm (5.5" x 9.3" x 7.0")
- **Enclosure** Aluminum
- **Mounting (Option)** Wall/Panel/Stand
- **Power Consumption** 24 W (typical, no PCI cards)
- **Power Input** 16 ~ 36 V_{DC} (e.g. +24 V @ 2 A) (Min. 48 W), AT
- **Weight (Net)** UNO-3072L: 4.2 kg, UNO-3072: 4.4 kg
- **OS Support** Windows XP embedded, Windows 2000/XP, WinCE 5.0, Linux

System Hardware

- **CPU** Celeron M 1.0 GHz or Pentium M 1.4/1.6 GHz
- **Memory** 512 MB DDR SDRAM
- **Battery Backup RAM** 512 KB (UNO-3072 only)
- **Expansion Slots** 2 x PCI V 2.2
(Note: The heat dissipation in the PCI cards may affect thermal performance)
- **Indicators** LEDs for power, power input 1, power input 2, power fault, IDE, diagnosis, 4 COM ports Tx/Rx (UNO-3072 only), and alarm for battery backup (UNO-3072 only). Programmable buzzer.
- **Keyboard/Mouse** 1 x PS/2
- **PC Card (UNO-3072 only)** 1 x PC card slot, supports CardBus (Card-32), and 16-bit (PCMCIA 2.1/JEIDA4.2) card supports +5 V, +3.3 V and +12 V @ 120 mA working power
- **PCI Slot Power** 12 V @ 2.5 A, -12 V @ 0.8 A, +5 V @ 4 A, +3.3 V @ 3 A
- **Storage**
 - SSD 1 x internal type I/II CompactFlash® slot
1 x external type I/II CompactFlash slot (UNO-3072 only)
 - HDD Built-in HDD bracket for installation of one standard 2.5" HDD
- **VGA** DB15 VGA connector, support to CRT mode:

- **Watchdog Timer** 1600 x 1200 @ 85 Hz
Programmable
- **Communications**
 - **Clock** Battery-backup RTC for time and date
 - **LAN** 2 x 10/100Base-T RJ-45 ports
 - **Serial Ports** 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors
Automatic RS-485 data flow control
 - **Serial Ports Speed** RS-232: 50 bps ~ 115.2 kbps
RS-422/485: 50 bps ~ 921.6 kbps (Max.)
 - **USB Ports** 4 x USB, USB UHCI, Rev. 2.0 compliant
 - **Digital Inputs (4-ch. wet contact DI0-DI3)**
 - 2,000 V_{DC} isolation
 - 50 ~ 70 V_{DC} over-voltage protection
 - ±50 V_{DC} input range and 10 kHz speed
 - Interrupt handling speed: 10 kHz
 - **Digital Outputs (4 ch. DO0-DO3)**
 - 2,000 V_{DC} isolation and 200 mA max/channel sink current
 - Keep output status after system hot reset
 - 0 ~ 40 V_{DC} output range and 10 kHz speed
 - **Counters/Timers (2 x 16-bit)**
 - Counter source: DI1 & DI3, Pulse output: DO2 & DO3
 - Can be cascaded as one 32-bit counter/timer
 - Down counting, preset counting value
 - Timer time base: 100 kHz, 10 kHz, 1 kHz, 100 Hz
- **Environment**
 - **Humidity** 95% @ 40° C (non-condensing)
 - **Operating Temperature** -20 ~ 55° C (-4 ~ 131° F) @ 5 ~ 85% RH (UNO-3072)
-20 ~ 60° C (-4 ~ 140° F) @ 5 ~ 85% RH (UNO-3072L)
 - **Shock Protection** IEC 68 2-27
CompactFlash: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
 - **Vibration Protection** IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz
HDD: 1 Grms @ 5 ~ 500 Hz

