UNO-3072/3074

Intel® Pentium® M Automation Computer with 2/4 x PCI, PC Card

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UNO-3072 **UNO-3074**

Features

- Onboard Pentium® M processor
- Onboard 512 KB battery-backup SRAM
- 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 2.0 ports
- Two/ Four 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 and Embedded Linux support
- Windows XP (SP2) Embedded ready platforms with write protection (EWF)
- Onboard system & I/O LED indicators
- Supports Boot from LAN function
- Fanless design with no internal cabling
- Isolation between chassis and power ground

Specifications

General

- **Certifications** — CE, FCC class A, UL, CCC
- **Dimensions (W x D x H)** — 140 x 237 x 179 mm (5.5" x 9.3" x 7.0" for UNO-3072) 193 x 237 x 179 mm (7.6" x 9.3" x 7.0" for UNO-3074)
- **Enclosure** — Aluminum
- **Mounting (Option)** — Wall/Panel/Stand
- **Power Consumption** — 24 W (typical, no PCI cards)
- **Power Requirements** — 9 ~ 36 V_{DC} (e.g. +24 V @ 2 A) (Max. 5A), AT. (16 ~ 36 V_{DC} for 12 V PCI boards)
- **Weight (Net)** — 4.4 kg for UNO-3072-P11E 7.0 kg for UNO-3074-P32E
- **OS Support** — WES, Windows XP embedded, Windows 2000/XP, Windows CE 5.0/6.0, QNX
- **System Design** — Fanless with no internal cabling
- **Remote Management** — Built-in Advantech DiagAnywhere agent on Windows CE/XPe

System Hardware

- **CPU** — Pentium M 1.4/1.8 GHz
- **Memory** — 1 GB DDR SDRAM built-in
- **Battery Backup SRAM** — 512 KB
- **Expansion Slots** — 2/4 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, and Alarm for battery backup. Programmable buzzer.
- **Keyboard/Mouse** — 1 x PS/2
- **PC Card** — 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 (total combined power consumption on the PCI slots should be less than 40W)
- **Storage**
  SSD — 1 x internal type I/II CompactFlash® slot 1 x external type I/II CompactFlash slot
  HDD — Built-in 2.5" SATA/IDE HDD bracket
- **Display** — DB15 VGA connector, 1600 x 1200 @ 85 Hz
- **Watchdog Timer** — Programmable 256 levels timer interval, from 1 to 255 sec

Communications

- **Clock** — Battery-backup RTC for time and date
- **LAN** — 2 x 10/100Base-T RJ-45 ports (Built-in boot ROM in flash BIOS)
- **Serial Ports** — 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors Automatic RS-485 data flow control
- **Serial Port Speed** — RS-232: 50 bps ~ 115.2 kbps RS-422/485: 50 bps ~ 921.6 kbps (Max.)
- **USB Ports** — 4 x USB, USB EHCI, Rev. 2.0 compliant
- **Digital Inputs (4-ch. wet contact DI0 ~ DI3)**
  - 2,000 VDC isolation
  - 50 ~ 70 VDC over-voltage protection
  - ±50 VDC input range and 10 kHz speed
  - Interrupt handling speed: 10 kHz
- **Digital Outputs (4 ch. DO0 ~ DO3)**
  - 2,000 VDC isolation and 200 mA max/channel sink current
  - Keep output status after system hot reset
  - 0 ~ 40 VDC 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 (with CF card)** — (IEC 60068-2-2, 100% CPU/ I/O loading) -20 ~ 55° C (-4 ~ 131° F) @ 5 ~ 85% RH
- **Shock Protection** — IEC 68 2-27 CompactFlash: 50 G @ wall mount, half sine, 11 ms HDD: 20 G @ wall mount, half sine, 11ms
- **Vibration Protection** — IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.) CompactFlash: 2 Grms @ 5 ~ 500 Hz HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-3072-P12BE** — Pentium M 1.4 GHz, 1 GB RAM Automation Computer
- **UNO-3074-P32BE** — Pentium M 1.8 GHz, 1 GB RAM Automation Computer
- **PCLS-DIAGAW10** — Advantech Remote Monitoring & Diagnosis Utility