# UNO-3074

## Intel® Pentium® M UNO w/4 x PCI, 1 x PC Card Slot

**NEW**



Windows Embedded | RoHS COMPLIANT 2002/95/EC | CE FCC

## Features

- Onboard Pentium® M or Celeron® M processor
- Provides 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 ports
- 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 driver ready and Linux driver support
- Windows XP (SP2) Embedded Ready Platforms with write protection (EWF)
- Embedded Linux ready solution

## Introduction

Advantech's UNO-3074 series is high-performance Pentium M/Celeron M grade, embedded automation computers with four PCI expansions. UNO-3074 features a rugged and field-proven design offering dual power inputs and battery backup SRAM. Different from general industrial PCs, UNO-3074 is more compact and reliable. This is an open platform which can fulfill any demanding requirement from the industrial field, and it is an ideal solution for industrial automation and control.

UNO-3074 provides 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)** — 180 x 237 x 179 mm (7.1" x 9.3" x 7.0") 193 x 237 x 179 mm (7.6" x 9.3" x 7.0", only for UNO-3074-P32E)
- **Enclosure** — Aluminum
- **Mounting (Option)** — Wall/Panel/Stand
- **Power Consumption** — 24 W (typical, no PCI cards)
- **Power Input** — 20 ~ 36 VDC (e.g. +24 V @ 4 A) (Min. 96 W), AT 9 ~ 36 VDC (only install with 3.3/5V PCI cards, Max. 5A)
- **Weight (Net)** — 5.0 kg, 6.0 kg for UNO-3074-P32E
- **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/ 1.8 GHz
- **Memory** — 512 MB/ 1 GB DDR SDRAM
- **Battery Backup RAM** — 512 KB
- **Expansion Slots** — 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 @ 5 A, -12V @ 0.8 A, +5 V @ 8 A, +3.3 V @ 6 A
- **Storage**
  SSD: 1 x internal type I/II CompactFlash® slot
  1 x external type I/II CompactFlash slot
  HDD: Built-in HDD bracket for installation of one standard 2.5" HDD
- **VGA** — DB15 VGA connector, support to CRT mode: 1600 x 1200 @ 85 Hz
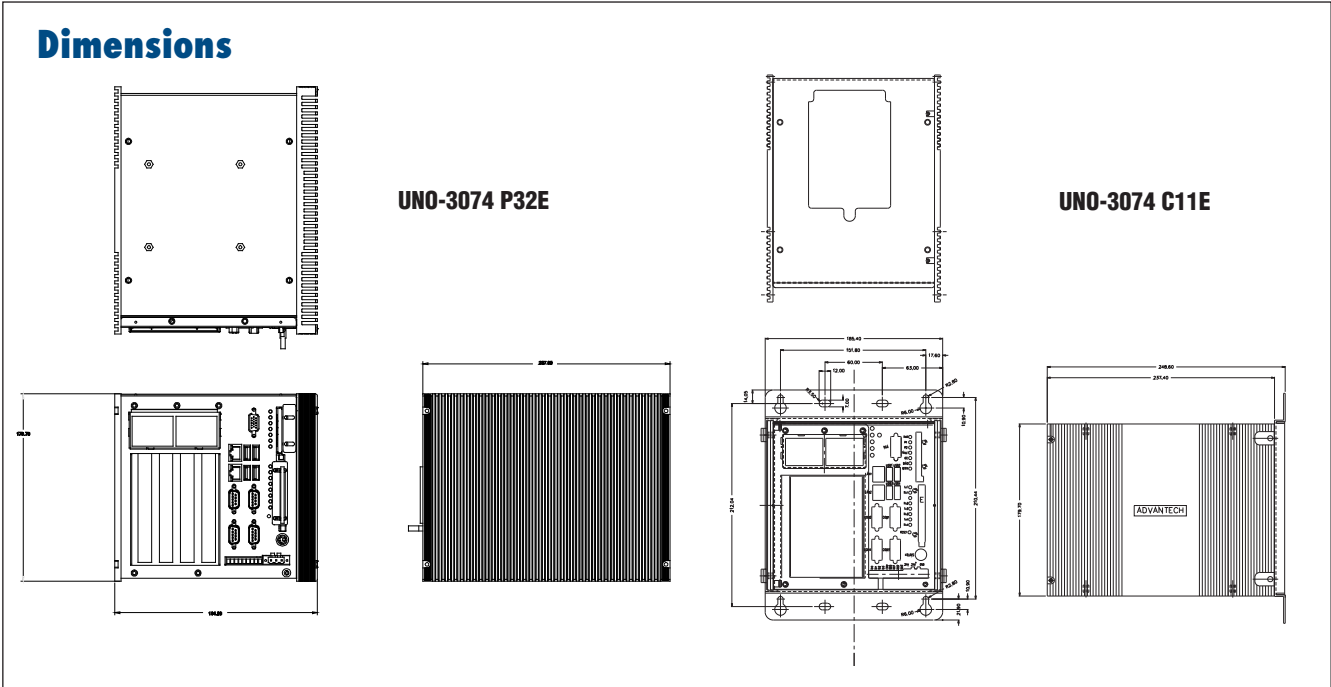- **Watchdog Timer** — Programmable

### Communications

- **Clock** — Battery-backup RTC for time and date
- **LAN** — 2 x 10/100Base-T RJ-45 ports
- **Serial Ports** — 2 × 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
- **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

## Dimensions



**UNO-3074 P32E**

**UNO-3074 C11E**

# Ordering Information

- **UNO-3074-C11E** — C-M 1.0G, 512MB RAM UNO-3074
- **UNO-3074-P11E** — P-M 1.4G, 512MB RAM UNO-3074
- **UNO-3074-P32E** — P-M 1.8G, 1GB RAM UNO-3074

**Accessories**

- **UNO-WM74-AE** — Wallmounting kit: only for UNO-3074-C11E/ UNO-3074-P11E
- **UNO-PM70-AE** — Panel mounting kit for UNO-3000 series
- **UNO-SM70-AE** — Stand mounting kit for UNO-3000 series



**UNO-WM74-AE**

**UNO-SM70-AE**

**UNO-PM70-AE**