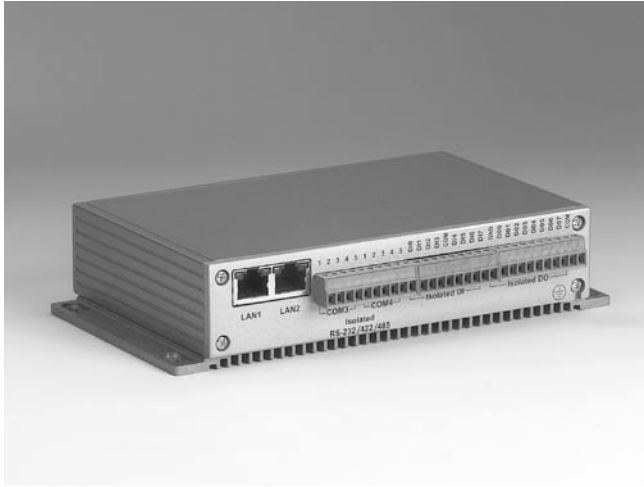


# UNO-2050E

AMD GX2 UNO with 2 x LAN,  
4 x COM, 16 x DI/O



## Features

- Onboard GX2 400 MHz
- Two RS-232 and two isolated RS-232/422/485 with automatic flow control
- Two 10/100 Base-T RJ-45 port
- Isolated 8-ch DI and 8-ch DO with counter and timer
- Windows® CE 5.0 & 6.0, Windows XP Embedded SP2, and Linux ready solution
- Fanless and no internal cabling design

## Introduction

UNO-2050E is an X86-grade platform with dual LAN and 16-channel isolated digital I/O and timer/counter. In addition, it also provides two RS-232 and two isolated RS-232/422/485 communication ports with RS-485 automatic flow control functionality. Therefore, the UNO-2050E is an ideal solution for embedded controllers.

UNO-2050E is available with a pre-configured Windows CE image with optimized onboard device drivers. Microsoft Windows CE is a compact, highly efficient, real-time operating system designed for embedded systems without mechanical HDD limitations. To expand storage capability, the UNO-2050E allows the addition of an external 2.5" HDD using Advantech's UNO HDD expansion kit. It can be used for large data backup requirements and popular OS installations such as Microsoft Windows and Linux OS. Significant anti-vibration (1G w/HDD) is maintained even with the mechanical HDD inside. UNO-2050E is the perfect embedded application ready platform that can shorten development time and offer a rich networking interface to fulfill diverse application requirements.

## Specifications

### General

- **Dimensions (W x D x H)** 188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")
- **Enclosure** Aluminum
- **Mounting** Wall, DIN 35 rail
- **Power Consumption** 15 W (Typical)
- **Power Input** 9 ~ 36 V<sub>DC</sub> (e.g +24 V @ 1 A) (Min. 24 W), AT
- **Weight** 0.8 kg
- **OS Support** Windows XP Embedded, Windows 2000 & XP, Windows CE 5.0 & 6.0, Linux

### System Hardware

- **CPU** AMD GX2 400 MHz
- **Memory** Onboard 256 MB DDR SDRAM
- **Indicators** LEDs for power, IDE, programmable diagnostic LED, and one programmable buzzer.
- **Keyboard/Mouse** 1 x PS/2
- **Storage** SSD: 1 x internal type I/II CompactFlash® slot  
HDD: expansion kit for one standard 2.5" HDD (Optional)
- **VGA** DB15 VGA connector
- **Watchdog Timer** Programmable

### Communications

- **Counter/Timer** 2 x 16-bit: counter source: DI6 & DI7, Pulse output: DO6 & DO7. Can be cascaded as one 32-bit counter/timer, Down counting, preset counting value, interrupt handling, Timer time base: 100/10/1 kHz, 100 Hz
- **Digital Inputs** 8 ch. wet contact 2,000 V<sub>DC</sub> isolation, 2,000 V<sub>DC</sub> ESD protection, 70 V<sub>DC</sub> over-voltage protection  
0 ~ 50 V<sub>DC</sub> input range and 10 kHz speed; Interrupt handling.

- **Digital Outputs** 8 ch. 2,000 V<sub>DC</sub> isolation and 200 mA max/channel sink current. Keeps output status after system hot reset.  
5 ~ 40 V<sub>DC</sub> output range and 10 kHz speed
- **LAN** 2 x 10/100Base-T with RJ-45 port
- **Serial Ports** 2 x standard RS-232 (COM1/COM2)  
2 x isolated RS-232/422/485 (COM3/COM4)  
Automatic RS-485 data flow control  
RS-232/422/485 (COM3/COM4) with 2000 V<sub>DC</sub> (EFT) surge protection & 2000 V<sub>DC</sub> isolation  
RS-232: 50 ~ 115.2 kbps (COM1/COM2)  
RS-232: 50 ~ 230.4 kbps (COM3/COM4)  
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **Serial Port Speed**

### Environment

- **Humidity** 95% @ 40° C (non-condensing)
- **Operating Temperature** -10 ~ 55° (14 ~ 131° F)
- **Shock Protection** IEC 68 2-27  
CompactFlash: 20 G @ DIN, half sine, 11 ms,  
50 G @ Wall/Panel, half sine, 11 ms  
IEC 68 2-6  
CompactFlash: 2 Grms @ sine, 5 ~ 500 Hz,  
1 Oct./min, 1hr/axis.  
HDD: 1 Grms @ sine, 12 ~ 300 Hz, 1 Oct./min,  
1hr/axis.
- **Vibration Protection**

## Ordering Information

- **UNO-2050E-IDA0E** GX2 400 M, 256 MB RAM UNO-2050E

### Accessories

- **UNO-HD20-AE** UNO-2000 HDD expansion kit
- **UNO-FPM21-AE** UNO & FPM integration kit
- **UNO-ADAM42-AE** UNO-2000 & ADAM integration kit