

# UNO-2059E

## AMD Geode™ GX Automation Computer with 4 x COM, LAN, PC Card



### Features

- Onboard AMD Geode GX533 (400 MHz) CPU
- 2 x RS-232/485, 2 x RS-232/422/485 with automatic flow control
- 1 x 10/100Base-T RJ-45 port
- 2 x USB ports and 1 x type I/II PC card
- One programmable diagnostic LED and buzzer
- Windows® CE 5.0 & 6.0, Windows XP Embedded SP2, and Linux ready solution
- Fanless design with no internal cabling
- Isolation between chassis and power ground

### Introduction

Advantech's UNO-2059E is an X86-grade platform that offers USB and PC card interfaces to fulfill I/O device expansion needs. In addition, it also offers two RS-232/485 and two RS-232/422/485 communication ports with automatic flow control functionality. The UNO-2059E is an ideal compact solution for large computing and communication requirements.

UNO-2059E 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-2059E allows the addition of an external 2.5" HDD using Advantech's 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.

### Specifications

#### General

- **Certifications** CE, FCC class A
- **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** Wallmount, DIN-rail
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 15 W (typical)
- **Power Requirements** 10 ~ 48 V<sub>DC</sub> (e.g. +24 V @ 1 A) (Min. 24 W), AT
- **Weight** 0.8 kg
- **OS Support** WES Windows XP Embedded, Windows 2000 & XP, Windows CE 5.0 & 6.0, Linux, QNX
- **System Design** Fanless with no internal cabling
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE / XPe

#### System Hardware

- **CPU** AMD Geode GX533 (400 MHz)
- **Memory** Onboard 256 MB DDR SDRAM
- **Indicators** LEDs for power, IDE, diagnosis (programmable) and LAN (Active, Status)  
Buzzer for diagnosis (programmable)
- **Keyboard/Mouse** 1 x PS/2
- **Storage** SSD: 1 x internal type I/II CompactFlash® slot  
HDD: expansion kit for 2.5" IDE HDD (Option)
- **Display** DB15 VGA connector, 1024 x 768 @ 60 Hz
- **Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec

#### I/O Interface

- **Serial Ports** 2 x RS-232/485, 2 x RS-232/422/485  
- Automatic RS-485 data flow control  
- RS-422/485 surge protection up to 2,000 V<sub>DC</sub>

- **Serial Port Speed** RS-232: 50 ~ 230.4 kbps;  
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **USB Ports** 2 x USB ports, OpenHCI, Rev. 1.1 compliant
- **LAN** 1 x 10/100Base-T RJ-45 port
- **PC Card** 1 x PC card slot  
Supports CardBus (Card-32) Card and 16-bit (PCMCIA 2.1/JEIDA4.2) Card  
Supports +5 V, +3.3 V and 12 V @ 120 mA Power

#### Environment

- **Humidity** 95 % @ 40° C (non-condensing)
- **Ingress Protection** IP40
- **Operating Temperature** (IEC 60068-2-2, 100% CPU/ I/O loading)  
-10 ~ 55° C (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
- **Vibration Protection** 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,  
1 hr/axis.

### Ordering Information

- **UNO-2059E-IDA0E** GX2 400 MHz, 256 MB RAM Automation Computer

#### Accessories

- **UNO-HD20-AE** UNO-200 HDD expansion kit
- **UNO-FPM21-AE** UNO-2000 series VESA mount kit
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility

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