UNO-2059GL

AMD Geode™ LX Automation Computer with 4 x COM, LAN

Features

- Onboard AMD Geode GX533 LX800 500MHz CPU
- 2 x RS-232/485, 2 x RS-232/422/485 with automatic flow control
- 1 x 10/100Base-T RJ-45 port and 2 x USB 2.0 ports
- 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

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

Introduction

Advantech's UNO-2059GL is an X86-grade platform that offers USB 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-2059GL is an ideal compact solution for large computing and communication requirements.

The UNO-2059GL 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-2059GL 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

- **Certification**   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_{DC} (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 LX800 500MHz
- **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_{DC}
- **Serial Port Speed**   RS-232: 50 ~ 230.4 kbps;
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **USB Ports**   2 x USB ports, EHCI, Rev. 2.0 compliant
- **LAN**   1 x 10/100Base-T RJ-45 port

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-2059GL-G30E**   LX800 500MHz, 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