UNO-2052

GX1-300 UNO with 2xCAN, LAN, USB, RS-232, 8xIsolated DI/O, 2xAI

NEW

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Features

- On-board GX1-300 MHz, 64/128 MB SDRAM
- Provides two CAN interfaces
- Provides one 10/100 Base-T RJ-45 port and one USB port
- Isolated 8-channel DI/O and 2-channel AI
- One programmable diagnostic LED and buzzer.
- Supports Modbus/RTU and Modbus/TCP devices.
- Supports ADAM series for remote data acquisition and control
- Windows CE .NET ready solution.

Introduction

The Advantech UNO-2052 is a 586-grade platform that offers dual CAN 2.0B interfaces, digital I/O and thermcouple input functions. Combined with CAN 2.0B interfaces, the UNO-2052 is an ideal solution for automobile and logistics applications.

UNO-2052 comes with a built-in Windows® CE solution offering a pre-configured 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-2052 allows the addition of an external 2.5" HDD using Advantech's UNO HDD extension kit. It can be used for large data backup requirements and popular OS installations such as Microsoft Windows and Linux OS. Significant anti-vibration is maintained even with the mechanical HDD inside. (1 G)

UNO-2052 is the perfect embedded application-ready-platform to shorten development time and offer a rich networking interface to   ll diverse application requirements.

Specifications

- **CPU** NS Geode GX1-300 MHz, 64/128 MB SDRAM onboard
- **VGA/Keyboard/Mouse** DB-15 VGA Connector, PS/2 keyboard & mouse
- **Serial Port** 1 × standard RS-232
- **Speed RS-232** 50 ~ 115.2 Kbps
- **USB interface** One USB ports, USB OpenHCI, Rev. 1.0 compliant
- **LAN** One 10/100Base-T RJ-45 Ports
- **CAN** Dual isolated CAN 2.0B interfaces.
  CAN controller: SJA-1000
  CAN transceiver: 82C250
- **4-ch isolated digital input** 2,000 V_{DC} isolation, 2,000 V_{DC} ESD protection and 70 V_{DC} overvoltage protection
  - 0 ~ 50 V_{DC} input range and 5 KHz speed
  Digital input levels:
  Dry contact: Logic level 0: Close to GND
                 Logic level 1: Open
  Wet contact: Logic level 0: +2 V max
                 Logic level 1: +4 V ~ +50V
- **4-ch isolated digital output** 2,000 V_{DC} isolation and 200 mA max / channel sink current
  Keep output status after system hot reset
  5 ~ 30 V_{DC} output range and 5 KHz speed
  Open collector to 30 V
  30 mA max. load
  Power dissipation: 300 mW
- **2-ch thermocouple input** Input type: Thermocouple: T/K/J-type.
  Input range: +-15 mV, +-50 mV, +-100 mV, +- 500 mV, +-1 V, +-2.5 V, +-20 mA
  -T/C type and temperature range:
  J 0 ~ 760°C, K 0 ~ 1370°C, T -100 ~ 400°C
  E 0 ~ 1000°C
- **SSD** One internal Type I / Type II CompactFlash™ card slot
- **HDD** Offer HDD ext. kit for inst. of one standard 2.5" HDD.
- **Watchdog Timer** Programmable.

- **LED** Power LED, IDE LED and one programmable diagnostic LED and buzzer.
- **Power supply** 9 ~ 36 V_{DC}
- **Anti-Shock** 20 G @ DIN IEC 68 section 2-27, half sine, 11 ms 50 G @ Wall/Panel IEC 68 section 2-27, half sine, 11 ms.
- **Anti-Vibration** 2 G w/ CF @ IEC 68 section 2-6, sine, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.
  1 G w/ HDD @ IEC 68 section 2-6, sine, 12 ~ 300 Hz, 1 Oct./min, 1 hr/axis.
- **Operating temperature** -10 ~ 55° @ 5 ~ 85% relative humidity.
- **Related Humidity** 95 % @ 40° C
- **Power consumption** 0.6 A max @ +24 V input or 1.2 A max @ +12 V input
- **Power requirement** 1 A typical @ +24 V input or 1.5 A typical @ +12 V inp.
- **Operating temperature** -10 ~55° C (14 ~ 131° F)
- **Chassis size (WxDxH)** 188.8 x 106.5 x 35.5 mm (7.5" × 4.2" × 1.4")
- **Weight** 0.8 kg

Driver Support

- **CE** UNO configuration utility. DI/O & AI driver. CAN driver. Programmable LED and buzzer Driver. Watchdog timer Driver.
- **Linux** DI/O & AI driver. CAN driver. Programmable LED and buzzer Driver. Watchdog timer Driver.
- **Windows 2000/XP** DI/O & AI driver, CAN driver. Programmable LED and buzzer Driver. Watchdog timer Driver. Modbus/TCP, Modbus/RTU DLL Driver.

Ordering Information

- **UNO-2052-GDA0** GX1-300 UNO with 64MB SDRAM, 2xCAN bus,LAN, USB, RS-232, 8xDI/O, 2xAI
- **UNO-2052CE-GDA0** GX1-300 UNO with 2xCAN bus,LAN, USB, RS-232, 8xDI/O, 2xAI and Windows CE .NET 4.1 OS.
- **UNO-2052-HDA0** GX1-300 UNO with 128MB SDRAM, 2xCAN bus,LAN, USB, RS-232, 8xDI/O, 2xAI
- **UNO-HD20-A** UNO-2000 HDD extension kit

ADVANTECH   **Universal Network Controller**