

AMAX-2050

GX2-400 Machine Control Box with AMONet Interface

NEW



Features

- Onboard AMD Geode™ GX2 processor, up to 256 MB onboard DDR
- 128 Kbyte battery backup RAM
- Supports AMONet series for remote motion control and data acquisition
- Two RS-232 and One RS-422/485 ports with automatic flow control
- One 10/100Base-T RJ-45 port and two USB ports
- Four programmable diagnostic LEDs, and one buzzer
- KW ready solution (AMAX-2050KW only)
- Suitable for DIN-rail mounting
- One Isolated CAN port (AMAX-2050FCE only)

Introduction

Advantech's AMAX-2050 is a Pentium® III grade platform with an onboard AMONet controller, which is designed for embedded machine automation applications. It provides special mechanism to protect machine builder's IP, also the self diagnostic function. From the peripheral point of view, with one AMONet master port AMAX-2050 can control up to 2048 I/O points and 256 axes. Also, AMAX-2050 offers one LAN and dual USB interfaces to fulfill user's various communication needs. In addition, it also offers two RS-232 and one RS-422/485 communication port with automatic flow control functionality.

AMAX-2050 supports Windows CE .NET, which offers a pre-configured image with optimized onboard device drivers. MULTIPROG supports all IEC 61131-3 programming languages. Depending on the task to be handled, your experience and company standards, you may choose one of the five standardized programming languages. The use of MULTIPROG offers you many advantages. As all essential data can be displayed in MULTIPROG, frequent switching between different tools during PLC programming and commissioning is no longer necessary. Observers guarantee data consistency with other tools, thus the engineering effort for the programming of PLCs is reduced.

Specifications

General

- **Certifications** CE
- **Dimensions (W x H x D)** 47.6 x 156 x 125 mm
- **Power Consumption** 8 W (Typical), 15 W (Max.)
- **Power Supply Spec.** Min. 15 W (9 ~ 36 V_{DC}) (e.g. +24 V @ 625 mA)
- **OS Support** Windows® CE .NET 5.0

System Hardware

- **CPU** AMD Geode GX2-400
- **Battery Backup RAM** 128 KB
- **Indicators** Power, CF, Alarm for RAM backup battery and 4 programmable diagnostic LEDs
- **Keyboard/Mouse** 1 x PS/2
- **Memory** 256 MB DDR onboard
- **Storage** SSD: 1 x Internal (Master) & 1 x External (Slave) type I/II CompactFlash® slot
- **VGA** DB15 VGA connector
- **Watchdog Timer** Programmable

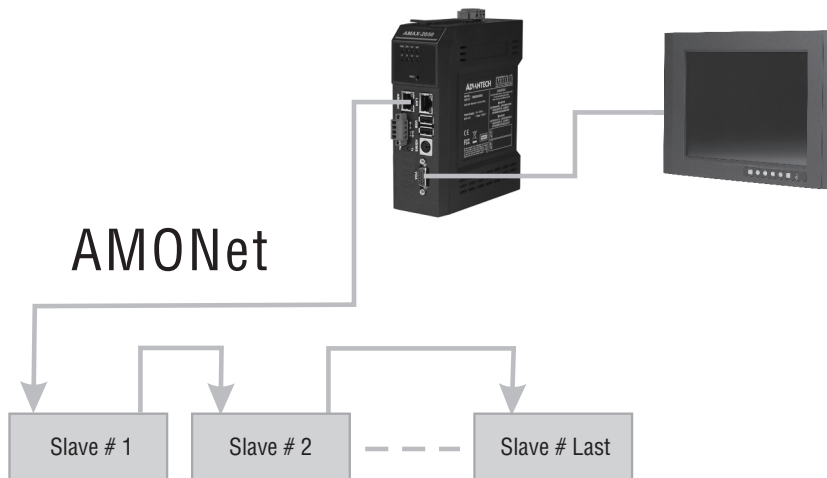
Communications

- **Serial Ports** 2 x RS-232, 1 x RS-422/485
Automatic RS-485 data flow control
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **CAN** 1 x Isolated CAN port (AMAX-2050FCE only)
- **LAN** 1 x 10/100 Base-T RJ-45 ports
- **USB Ports** 2 x USB, UHCI, Rev. 1.1 compliant
- **AMONet Rings** 1 x Isolated AMONet, connect up to 2048 DIO channels or 64 motion axes

Environment

- **Operating Humidity** 5 ~ 85% RH, non-condensing (refer to IEC 68-2-3)
- **Operating Temperature** 0 ~ 50° C

System Architecture



*Slave can be Motion or Digital I/O modules
 **Last Slave module needs [Terminator] setting

Ordering Information

- **AMAX-2050KW** GX2-400 Machine Control Box with AMONet Interface
- **AMAX-2050FCE** GX2-400 Machine Control Box with AMONet and CAN Interface

Related Slave Modules

- **AMAX-2210** 1-axis AMONet RS-485 Motion Slave Module
- **AMAX-2211/PMA** 1-axis AMONet RS-485 Motion Slave Module for Panasonic Minus A
- **AMAX-2212/J2S** 1-axis AMONet RS-485 Motion Slave Module for Mitsubishi MR-J2S
- **AMAX-2213/YS2** 1-axis AMONet RS-485 Motion Slave Module for Yaskawa Sigma-II
- **AMAX-2241/PMA** 4-axis AMONet RS-485 Motion Slave Module for Panasonic Minus A
- **AMAX-2242/J2S** 4-axis AMONet RS-485 Motion Slave Module for Mitsubishi MR-J2S
- **AMAX-2243/YS2** 4-axis AMONet RS-485 Motion Slave Module for Yaskawa Sigma-II
- **AMAX-2752SY** 32-ch Isolated Digital Input Module
- **AMAX-2754SY** 32-ch Isolated Digital Output Module
- **AMAX-2756SY** 16/16-ch Isolated Digital Input/Output Module
- **AMAX-2710** 12-bit, 16kS/s, 16-ch Analog Input, 4-ch Analog Output Slave Module

Accessories

- **PCL-10220M-2** SCSI 20-pin cable, 2 m (Optional for AMAX-2242/J2S)
- **PCL-10150M-2** SCSI 50-pin cable, 2 m (Optional for AMAX-2241/PMA and AMAX-2243/YS2)
- **MPPROG-BAS33** KW Multiprog Softlogic Development Kit Basic Edition v3.3 for Windows NT/2000/XP (128-byte I/O)
- **MPPROG-ADV33** KW Multiprog Softlogic Development Kit Advanced Edition v3.3 for Windows® NT/2000/XP (64k-byte I/O)