AMAX-2050KW
AMAX-2050FCE

GX2-400 Machine Control Box with AMONet Interface

GX2-400 Machine Control Box with AMONet and CAN Interface

NEW

AMAX-2050FCE   AMAX-2050KW

RoHS COMPLIANT 2002/95/EC   CE

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
- 2 x RS-232 ports and 1 x RS-422/485 port with automatic flow control
- 1 x 10/100 Base-T RJ-45 port and 2 x USB ports
- 4 x programmable diagnostic LEDs and 1 x buzzer
- KW ready solution (AMAX-2050KW only)
- Suitable for DIN-rail mounting

Introduction

Advantech's AMAX-2050KW is a Pentium® III grade platform with an onboard AMONet controller, which is designed for embedded machine automation applications. From the peripheral point of view, with one AMONet master port AMAX-2050KW can control up to 2048 I/O points or 256 axes. Also, AMAX-2050KW 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 ports with automatic flow control functionality.

AMAX-2050KW 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. AMAX-2050FCE comes with a built-in CAN interface to ensure data transmission and support for the DLL library, making it suitable for WinCE development.

Specifications

General

- **Certifications**   CE
- **Dimensions (L x W x H)** 125 x 47.6 x 151 mm (4.9" x 1.8" x 5.9")
- **Power Consumption**   Typical: 8 W
                              Max.:15 W
- **Power Supply**   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**   512 KB
- **Indicators**   Power, CF, alarm for RAM backup battery and 4 x programmable diagnostic LEDs
- **Keyboard/Mouse**   1 x PS/2
- **Memory**   256 MB DDR onboard
- **Storage**   SSD: 1 x internal (Master Card) & 1 x external (Slave Module) type I/II CompactFlash® slot
- **VGA**   DB15 VGA connector
- **Watchdog Timer**   Programmable

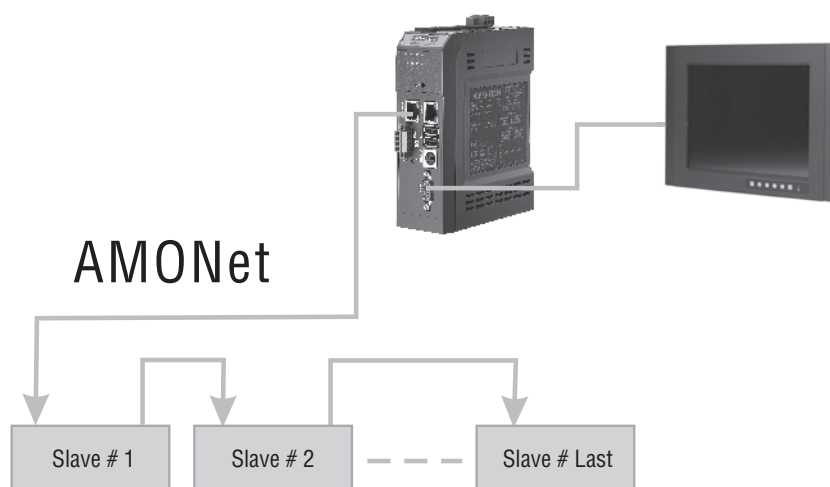### Communications

- **Serial Ports**   2 x RS-232 and 1 x RS-422/485
                              Isolation with automatic RS-485 data flow control
- **Serial Port Speed**   RS-232: 50 ~ 115.2 kbps
                              RS-422/485: 50 ~ 921.6 kbps max.
- **LAN**   1 x 10/100 Base-T RJ-45 ports (support RTL 8100B LAN chip)
- **USB Ports**   2 x USB, UHCI, Rev. 1.1 compliant
- **AMONet Rings**   1 x isolated AMONet, connect up to 2048 digital I/O channels or 64 motion axes
- **CAN Port**   1 (AMAX-2050FCE)

Environment

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

System Architecture

AMONet

Slave # 1   Slave # 2   - - - -   Slave # Last

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

Ordering Information

- **AMAX-2050KW** — Machine Control Box w/ AMONet Interface
- **AMAX-2050FCE** — Machine Control Box w/ AMONet and CAN Interface
- **AMAX-2241/PMA** — 4-axis AMONet Motion Module for Panasonic Minas A
- **AMAX-2242/J2S** — 4-axis AMONet Motion Module for Mitsubishi MR-J2S
- **AMAX-2243/YS2** — 4-axis AMONet Motion Module for Yaskawa Sigma-II
- **AMAX-2752SY** — 32-ch Isolated Digital Input AMONet Module
- **AMAX-2754SY** — 32-ch Isolated Digital Output AMONet Module
- **AMAX-2756SY** — 16/16-ch Isolated Digital I/O AMONet Module
- **PCL-10220M-2** — 20-pin SCSI Cable, 2 m
- **PCL-10150M-2** — 50-pin SCSI Cable, 2 m
- **MPROG-BAS33** — KW Multiprog v3.3 (128-byte I/O)
- **MPROG-ADV33** — KW Multiprog v3.3 (64k-byte I/O)