

# PCIE-1203IO

## EtherCAT IO Master PCIE Card



### Features

- 667MHz dual-core ARM processor
- 2 x EtherCAT ports for 250/200us cycle time
- Up to DI 1024 CH / DO 1024 CH / AI 128 CH / AO 128 CH IO Control
- Diagnostics for fast error handling can trace command and error message

### Introduction

The PCIE-1203IO is a 2-port EtherCAT PCI Express Card. It is a ready-to-use EtherCAT development platform for all PC-based industrial automation. The EtherCAT protocol stack is executed autonomously on the card. It allows the host to handle up to two EtherCAT networks with extremely short cycle time for pure I/O applications. For EtherCAT IO port, communication cycle time is up to 250us and for fast I/O ports the cycle time is no more than 200us in a high speed I/O system. Real-time and high-precision capability are features of PCIE-1203IO. In addition, all Advantech motion controllers use the "Common Motion API" architecture which is a unified user programming interface and graphical utility. This architecture saves application maintenance and upgrades. Programmers can benefit from using any Advantech SoftMotion controller without changing large amounts of the application code. User-friendly examples decrease programming load, helping users complete configuration and diagnosis easily.

### Specifications

#### EtherCAT

- **Number of Rings** 2 (IO x 1, Fast IO x 1)
- **Cable Type** CAT5 UTP/STP Ethernet cable and above
- **Cycle Time** IO: up to 250us  
Fast IO: 200 us
- **Communication IO Slave** 1024-CH DI and 1024-CH DO  
128-CH AI and 128-CH AO

#### General

- **Bus Type** PCI Express
- **Certification** CE, FCC Class A
- **Connectors** 2 x RJ45
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Power Consumption** 5 V<sub>DC</sub> @ 0.5 A typical
- **Humidity** 5 ~ 95% RH, non-condensing (IEC 60068-2-3)
- **Operating Temp.** 0 ~ 60°C (32 ~ 140°F)
- **Storage Temp.** -20 ~ 85°C (-4 ~ 185°F)

### Ordering Information

- **PCIE-1203IO-00AE** EtherCAT IO Master PCIE Card