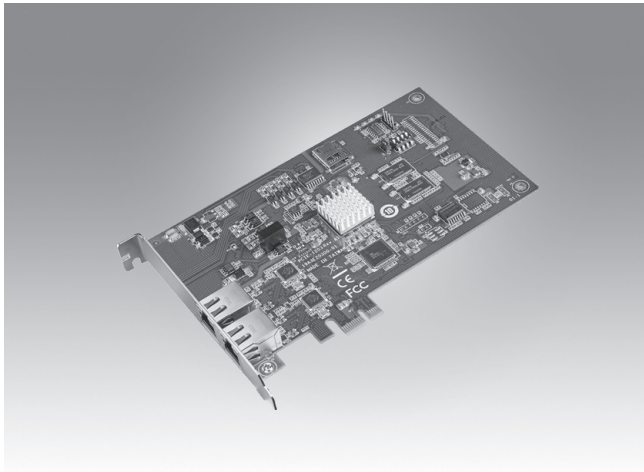


# PCIE-1203L

## Basic EtherCAT PCIE MDevice Card



### Features

- 667MHz dual-core ARM processor
- 2 x EtherCAT ports for high-performance of motion and I/O applications
- Supports common motion SDK for rapid application development
- Up to 64 axes support for motion control
- Supports point to point move
- Supports 2 axis linear interpolation
- Supports programmable acceleration/deceleration rate
- Programmable interrupt
- RDY dedicated input channels & SVON/ERC dedicated output channels are switchable for general input and output purposes
- Diagnostics for fast error handling and trace command and error message

### Introduction

The PCIE-1203L is a 2-port EtherCAT PCI Express Card. It is a ready-to-use EtherCAT development platform for a 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 Motion and pure I/O applications. For EtherCAT motion 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-1203. 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 (Motion x 1, I/O x 1)
- **Cable Type** CAT5 UTP/STP Ethernet cable and above
- **Cycle Time** Motion: up to 500us  
I/O: 200 us
- **Communication Motion Slave** 64 Servo Drive Max
- **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-1203L-10A** Basic 10-Axis EtherCAT PCIE MDevice Card
- **PCIE-1203L-16A** Basic 16-Axis EtherCAT PCIE MDevice Card
- **PCIE-1203L-32A** Basic 32-Axis EtherCAT PCIE MDevice Card
- **PCIE-1203L-64AE** Basic 64-Axis EtherCAT PCIE MDevice Card