

# PCIe-8332/PCIe-8334/PCIe-8338

### 16/32/64-axis PCIe EtherCAT Master Motion Controller

#### **Features**

- PCI Express<sup>®</sup> x 1 compliant
- Up to 64-axis motion control & 10,000 I/O point control via EtherCAT
- EtherCAT cycle times up to 250µs
- Broad range of compatible EtherCAT slaves
- Dedicated emergency stop input
- 4CH isolated digital input/4CH isolated digital output
- 1CH pulsar input
- Point-table functions for contouring application
- Support for up to 16D linear interpolation, 3D circular and 3D spiral interpolation
- 8 program tasks downloadable for standalone application
- Card ID selection



#### Introduction

ADLINK PCIe-8332/PCIe-8334/PCIe-8338 is a hardware-based EtherCAT motion controller able to support up to 64 synchronized axes and over 10,000 points simultaneously. The PCIe-8332/PCIe-8334/PCIe-8338 features dedicated isolated emergency stop input (EMG), and configurable isolated high-speed digital input as not only generic sensor input but also pulsar input, with up to 1MHz input frequency.

Optimum jitter control is provided in minimal cycles of 250µs to optimize synchronous I/O performance for vertical automation applications in semiconductor, electronic manufacturing, and others.

The PCIe-8332/PCIe-8334/PCIe-8338 provides an out-of-shell application-ready (APS) function library to generate multi-dimensional, highly synchronized, time-deterministic event-triggered motion & I/O control. A wide range of compatible 3rd party slaves are easily designed with ADLINK's APS function library. ADLINK's MotionCreatorPro 2™ utility is fully compliant with the Microsoft® Windows™ environment, that allows complete EtherCAT motion and I/O configuration and function evaluation as well as compiling program download functions.

#### Software Support

OS Information

Windows 7/10 32/64-bit

- Library
  - APS function library for Motion & I/O Control
  - VS C#, VS VB.NET, and VS C++ compatible
- Utility

MotionCreatorPro 2™

#### **Ordering Information**

PCIe-8332

16-axis PCIe EtherCAT Master Motion Controller

PCIe-8334

32-axis PCIe EtherCAT Master Motion Controller

PCIe-8338

64-axis PCIe EtherCAT Master Motion Controller

## **Specifications**

	PCIe-8332	PCIe-8334	PCIe-8338
EtherCAT Communication	PCIE-6332	PCIe-6534	PCIE-0550
	1010000 1000 1000		
EtherCAT Cycle Time	1CH @ 250µs / 500µs / 1000µs / 2000µs		
Max. Number of Axes	16	32	64
Motion I/O Interface Signals			
Emergency Stop In	1CH		
Isolated I/O Signals			
Digital Input	4CH (2CH configured as Pulsar Input)		
Pulsar Input Mode	CW/CCW; 1x/2x/4x AB Phases		
Pulsar Input Frequency	Up to 1MHz		
Digital Input Voltage	24Vdc (typ.) / 5Vdc for pulsar connection		
Digital Input Type	Sourcing type		
Digital Output	4CH, Isolated		
Digital Output Voltage	24V (typ.)		
Digital Output Type	90mA, NPN sinking type		
General Specification			
Operating Temp	0°C to +60°C (32°F to 140°F)		
Humidity	5% to 95%, non-condensing		
<b>Environmental Specification</b>			
Safety compliance	CE/FCC, RoHS		

