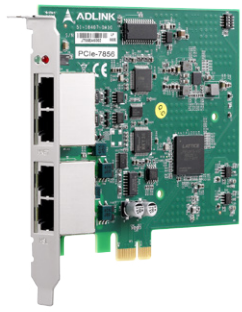
PCIe-7856/PCIe-7853

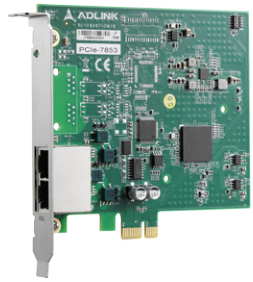
Master-Slave Distributed Motion & I/O Master Controller

Features

- Connected I/O points: up to 2,016 points
- Connected motion axes: up to 256 axes (PCIe-7856 only)
- Programmable timer interrupt
- RJ-45 jack for easy installation
- Software selectable transmission speed: 3/6/12 Mbps for HSL
- Software selectable transmission speed for Motionnet: 2.5/5/10/20 Mbps (PCIe-7856 only)
- Non-volatile RAM onboard



PCIe-7856



PCIe-7853

Introduction

The PCIe-7856/7853 is a PCI Express interface card providing two ports for Motionnet (PCIe-7856 only) and HSL systems for distributed motion and I/O in machine automation applications. HSL technology allows thousands of I/O points to be scanned at the millisecond-level in real time by using a master-slave architecture. Use of commercial Ethernet cables with RJ-45 connectors allows for simplified setup of the HSL slave modules as close as possible to sensor devices which results in a dramatic reduction of wiring. System integrators can benefit from HSL networks that integrate discrete I/O and analog I/O modules, enabling rapid response and real-time scanning.

Software Support

- **OS Information**
  - Windows 10/8/7 (32/64 bit)
- **Software Compatibility**
  - PCIe-7856
    - APS SDK
    - VB, VC++, BCB, Delphi, VB.net, C# compatible
  - PCIe-7853
    - HSL LinkMaster Utility
    - VB6, VC++, C# compatible

Ordering Information

- **PCIe-7856**
  Master-slave distributed motion & I/O master controller
- **PCIe-7853**
  High Speed Link master controller

Specifications

Model Name		PCIe-7856	PCIe-7853
Bus		PCI Express x1, Plug and Play	
Master Controller		Dedicated Motion Controller	NA
		Motionnet ASIC master control (80 MHz external clock)	NA
		Dedicated I/O Controller: HSL ASIC master control (48 MHz external Clock)	
Interface	Motion	RS-485 with transformer isolation	NA
		Half duplex communication	NA
		2.5/5/10/20 Mbps transmission rate can be set by software (20 Mbps default)	NA
	HSL	RS-422 with transformer isolation	
		Full duplex communication	
		3/6/12 Mbps transmission rate can be set by software (6 Mbps default)	
Connectors		RJ45 connector x4 (MRJ45 connector for Motionnet; HRJ45 connector for HSL)	RJ-45 connector x2 (HRJ45 connector for HSL)
Interrupt		Status read back	
Storage Temperature		-20˚C to +80˚C (-4˚F to 176˚F)	
Power Consumption		+3.3 V @ 1.2 A (typical)	
		+5 V @ 1.5 A (typical)	
Dimensions		119.5 mm x 100.2 mm (L x W) (4.66” x 3.9”)	
Operating Systems		Windows 10/8/7 (32/64 bit)	
Software Compatibility		VB, VC++, BCB, Delphi, VB.net, C# compatible	VB6, VC++, C# compatible
		Various sample programs with source codes	
Software Recommendations		APS SDK	HSL LinkMaster Utility
Certifications		FCC Part 15 B / EN 55032&55035	

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