

# PCI-7856

## Master-Slave Distributed Motion & I/O Master Controller



NEW

### Introduction

The PCI-7856 is a PCI interface card which offers two ports for Motionnet 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 master-slave architecture. Commercial Ethernet cables with RJ45 connector are used for simplified setup of the HSL slaves modules as close as possible to sensor devices which results in a dramatic reduction of wiring. System integrators can benefit from HSL network because it integrates discrete I/O and analog I/O modules. This local network features rapid response, real-time scanning.

### Features

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

### Software Support

#### Windows® Platform

- Available for Windows® 7/Vista (32-bit)/XP
- Recommended programming environments: VB/VC+ +/BCB/Delphi

#### MotionCreatorPro 2

MotionCreatorPro 2™ is a Windows-based application development software package included with ADLINK Motion control products. An on-screen display lists all installed axes information and I/O signal status. This utility thus enables the most of ADLINK motion control products to provide precise positioning control with less effort.

(See page 1-21 for more information on MotionCreatorPro 2.)

### Ordering Information

#### PCI-7856

Master-slave distributed motion & I/O master controller

### Specifications

■ Bus	PCI local bus specification Rev. 2.1 compliant
■ Master Controller	<ul style="list-style-type: none"> <li>• Dedicated Motion Controller: Motionnet ASIC master control (80 MHz external clock)</li> <li>• Dedicated I/O Controller: HSL ASIC master control (48 MHz external Clock)</li> </ul>
■ Interface	<p><b>Motionnet</b></p> <ul style="list-style-type: none"> <li>• RS-485 with transformer isolation</li> <li>• Half duplex communication</li> <li>• 2.5/5/10/20 Mbps transmission rate can be set by software (20 Mbps default)</li> </ul> <p><b>HSL</b></p> <ul style="list-style-type: none"> <li>• RS-485 with transformer isolation</li> <li>• Full duplex communication</li> <li>• 3/6/12 Mbps transmission rate can be set by software (6 Mbps default)</li> </ul>
■ Connector	RJ45 connector x 4 (MRJ45 connector for Motionnet; HRJ45 connector for HSL)
■ Interrupt	Status read back
■ LED Indicator	Link status (Red for Motionnet Link status; Green for HSL Link status)
■ Storage Temperature	-20°C to 80°C
■ Power Consumption	+3.3 V @ 1.2 A (typical) +5 V @ 1.5 A (typical)
■ Dimensions	119.50 mm (L) x 100.20 mm (W)

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