

Master-Slave Distributed Motion & I/O Master Controller



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 mater-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

OS Information

- Windows® 8/7/XP
- RTX 5.x/6.x/8.1a

■ Software Compatibility

- VB/VC++/BCB/Delphi
- Various sample programs with source codes

■ Software Recommendations

MotionCreatorPro2

Ordering Information

■ PCI-7856

Master-slave distributed motion & I/O master controller

Specifications

■ Bus	PCI local bus specification Rev. 2.1 compliant
■ Master Controller	Dedicated Motion Controller:
	Motionnet ASIC master control (80 MHz external clock)
	Dedicated I/O Controller:
	HSL ASIC master control (48 MHz external Clock)
■ Interface	Motionnet
	RS-485 with transformer isolation
	Half duplex communication
	• 2.5/5/10/20 Mbps transmission rate can be set by software (20 Mbps default)
	HSL
	RS-485 with transformer isolation
	Full duplex communication
	• 3/6/12 Mbps transmission rate can be set by software (6 Mbps default)
■ 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 (-4°F to 176°F)
Power Consumption	+3.3 V @ I.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")