PCI-7856 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) • FSI • RS-485 with transformer isolation • Half duplex communication • LED Indicator • RJ45 connector x 4 (MRJ45 connector for Motionnet; HRJ45 connector for HSL ink status (Red for Motionnet Link status; Green for HSL Link status) • Interrupt • Storage Temperature • 20°C to +80°C (-4°F to 176°F) • Power Consumption • 4.3.3 V@ 1.2 A (typical) • Storage Temperature • Dimensions		
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 • Full duplex communication • J/6/12 Mbps transmission rate can be set by software (6 Mbps default) 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	Bus	PCI local bus specification Rev. 2.1 compliant
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