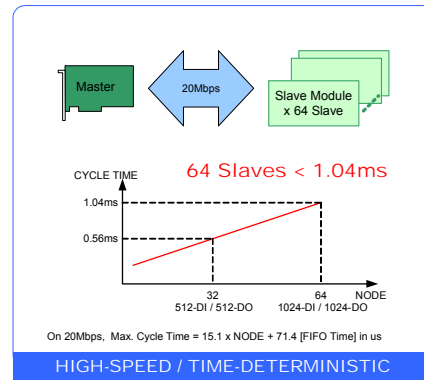
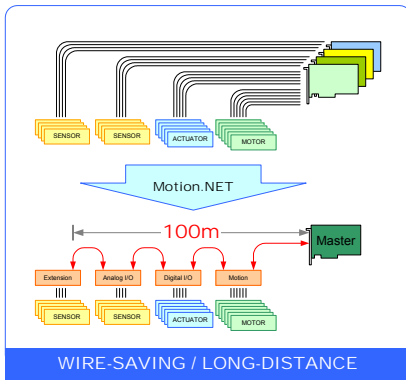


Introduction

Overview

Motionnet is a series product based on innovative architecture and designed for versatile industrial automation applications, especially those with motion control requirements. Motionnet products are divided into 2 parts - **Master Card** and **Slave Module**. The communication between master and slave is based on a proprietary RS-485 technology with **Wire-Saving/Long-Distance** and **High-Speed/Time-Deterministic** features. The communication interface between master and host PC is accomplished by the way of Memory Mapping. Motionnet delivers slaves that mount on a standard industrial DIN rail and connects a bank of digital I/O, Motion and different modules. The master collects information from distributed slaves and publishes the data to its host PC or vice versa.



Master Card

Motionnet provides two kinds of master products, one is **basic master** and the other is **advanced master**. **Basic master** transfers data between host and slaves directly without any operation in between. **Advanced master** is equipped with a processor that is used to interpret commands from host to slaves and/or feedbacks results from slaves to host. Each port of the master can control up to 2048 I/O points or 64 axes or as a combination of I/O and Motion together. The master uses with different bus interface to communicate with the host PC, including **PC/104** and PCI. Due to the high-speed communication, Motionnet can also be considered as serialized ISA bus products. Customers can replace most ISA or PC/104 cards with Motionnet series products. Motionnet lowers total system costs with integrated software and distributed hardware that makes the product easier to set up and maintain.

Slave Module

Motionnet provides 3 categories of slaves, one is for **motion control**, the second is for **digital I/O** and the last is for miscellaneous function. Motionnet provides customer motion control modules that can be used together with either servo driver/motor or stepping driver/motor from different vendors. For digital I/O, there are 3 main types; they are 32In, 32Out and 16In/16Out. With these slaves you can connect your actuators/sensors directly and easily. You can access I/O points nearby or 100 meters away using simple wiring. The last is miscellaneous functions, mainly for analog type I/O to connect with different sensor types including thermocouples, RTD's, strain gauges etc.

Customized Extensions

In addition to the above outstanding features Motionnet supports customized extensions easily. The customized extensions range from Motion, Digital I/O to even intelligent functions. Products can be easily extended to support the functionality of DCS (Distributed Control System)

Conclusion

Motionnet provides engineers the freedom to quickly and easily place control/measurement nodes near motor/drivers and actuators/sensors, avoiding the inconvenience and cost of point-to-point wiring.

PPCI-L112



Basic / Advanced PCI Motionnet Master Card with DSP

Features

- ◆ Max. 20Mbps transfer rate
- ◆ 2 independent Motionnet Master Rings
- ◆ Max. 128 Motionnet slave modules support
- ◆ Easy installation with RJ45 phone jack and LED diagnostic

Specifications

- ◆ Number of Line: 2
- ◆ Transmission speed: 2.5Mbps, 5Mbps, 10Mbps, 20Mbps with automatic data flow control
- ◆ Serial interface: half duplex RS-485 with transformer isolation
- ◆ Cable type: CAT5 UTP/STP Ethernet cable
- ◆ Surge protection: 10KV
- ◆ Communication distance: Max. 100m (20Mbps/32 slave modules)
- ◆ Communication slave module number: 2 Lines with Max. 128 (1 Ring with 64 slaves)

General

- ◆ PCI Spec. 2.2; supports 32-bit, 3.3V/5V DC operation
- ◆ Power consumption: +5V DC at 0.5A typical
- ◆ Working temperature: 0 to 60°C

<Reference figure>



PPCI-L112

Software Supporting

- ◆ **Windows 2000/XP WDM driver**
Support BCB/VB/VC++ programming on Windows 2000/XP platform with DLL
- ◆ **Motionnet EzLink**
Motionnet EzLink is a windows utility assists the customers to diagnose



Motionnet EzLink