

## 10 Mbps ARCNET (ANSI 878.1) Controller 5V 48-Pin TQFP Tray



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** QFP48

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The COM20022I is a member of the family of Embedded ARCNET Controllers from Standard Microsystems Corporation. The device is a general purpose communications controller for networking microcontrollers and intelligent peripherals in industrial, automotive, and embedded control environments using an ARCNET protocol engine. The small 48 pin package, flexible microcontroller and media interfaces, eight-page message support, and extended temperature range of the COM20022I make it the only true network controller optimized for use in industrial, embedded, and automotive applications. Using an ARCNET protocol engine is the ideal solution for embedded control applications because it provides a deterministic token-passing protocol, a highly reliable and proven networking scheme, and a data rate of up to 10 Mbps when using the COM20022I. A token-passing protocol provides predictable response times because each network event occurs within a predetermined time interval, based upon the number of nodes on the network. The deterministic nature of ARCNET is essential in real time applications. The integration of the 2Kx8 RAM buffer on-chip, the Command Chaining feature, the 10 Mbps maximum data rate, and the internal diagnostics make the COM20022I the highest performance embedded communications device available. With only one COM20022I and one microcontroller, a complete communications node may be implemented.

SOHARD ARCNET Analyzer "SH ARCALYZER-USB" (PCMCIA also available) by clicking this link.

## Key Features

Data Rates up to 10 Mbps

Selectable 8/16 Bit Wide Bus with Data Swapper

Programmable DMA Channel

Programmable Reconfiguration Times

48 Pin TQFP RoHS Compliant Packages

Ideal for Industrial/Factory/Building Automation and Transportation Applications

Deterministic (ANSI 878.1) Token Passing ARCNET Protocol

Minimal Microcontroller and Media Interface Logic Required

Flexible Interface for Use with All Microcontrollers or Microprocessors

Automatically Detects Type of Microcontroller Interface

Full 2K x 8 On-Chip Dual Port RAM

Command Chaining for Packet Queuing

Sequential Access to Internal RAM

Software Programmable Node ID

Eight 256 Byte Pages Allow Four Pages TX and RX Plus Scratch-Pad Memory

Next ID Readable

Internal Clock Scaler and Clock Multiplier for Adjusting Network Speed

Operating Temperature Range of -40°C to +85°C

Self-Reconfiguring Protocol

Supports up to 255 Nodes

Supports Various Network Topologies (Star, Tree, Bus...)

CMOS, Single +5V Supply

Duplicate Node ID Detection

Powerful Diagnostics

Receive All Packets Mode

Traditional Hybrid Interface for Long Distances up to Four Miles at 2.5 Mbps

RS485 Differential Driver Interface for Low Cost, Low Power, High Reliability

## Recommended For You

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**COM20022I3V-HT**

Microchip Technology, Inc  
QFP48

**KSZ8851-16MQL**

Microchip Technology, Inc  
PQFP-128

**KSZ8851-16MLL**

Microchip Technology, Inc  
LQFP48

**KSZ8893MQL**

Microchip Technology, Inc  
QFP128

**LAN91C111-NE**

Microchip Technology, Inc  
QFP

**KSZ8851SNL**

Microchip Technology, Inc  
VQFN32

**KSZ8893MQLI**

Microchip Technology, Inc  
QFP128

**KSZ8863RLLI**

Microchip Technology, Inc  
LQFP-48

**KSZ8895FQXI**

Microchip Technology, Inc  
PQFP128

**KSZ8895RQXI**

Microchip Technology, Inc  
PQFP128

**KSZ8895MQXIA**

Microchip Technology, Inc  
PQFP-128

**LAN91C93I-MU**

Microchip Technology, Inc  
QFP

**LAN9420I-NU**

Microchip Technology, Inc  
TQFP128

**PM7324-BGI**

Microchip Technology, Inc  
BGA

**PM7326-BGI**

Microchip Technology, Inc  
BGA