
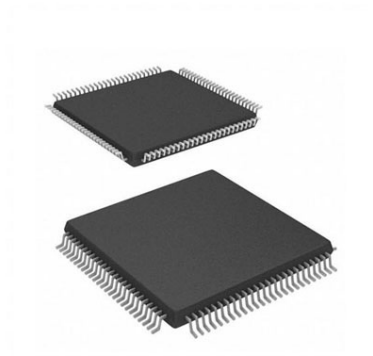


Ethernet CTRLR Single Chip 10Mbps/100Mbps 3.3V 100-Pin TQFP Tray

Manufacturer:	Microchip Technology, Inc
Package/Case:	TQFP100
Product Type:	Communication & Networking ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The LAN9218(i) is a full-featured, single-chip 10/100 Ethernet controller designed for embedded applications where performance, flexibility, ease of integration and system cost control are required. The LAN9218(i) has been specifically architected to provide the highest performance possible for any given architecture. The LAN9218(i) is fully IEEE 802.3 10BASE-T and 802.3u 100BASE-TX compliant, and supports HP Auto-MDIX.

The LAN9218(i) includes an integrated Ethernet MAC and PHY with a high-performance SRAM-like slave interface. The simple, yet highly functional host bus interface provides a glue-less connection to most common 16-bit and 32-bit microprocessors and microcontrollers. The LAN9218(i) includes large transmit and receive data FIFOs with a high-speed host bus interface to accommodate high bandwidth, high latency applications. In addition, the LAN9218(i) memory buffer architecture allows the most efficient use of memory resources by optimizing packet granularity.

The 93AA46AE48 EEPROM device from Microchip comes with a factory programmed, globally unique EUI-48™ MAC Address. This Ethernet controller will automatically detect and load the EUI-48™ node address from the 93AA46AE48 EEPROM at start-up or reset. *The LANCheck online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Key Features

Highlights

- Optimized for the highest performance applications
- Efficient architecture with low CPU overhead
- Easily interfaces to most 32-bit and 16-bit embedded CPU's
- Integrated PHY with HP Auto-MDIX Support
- Supports audio & video streaming over Ethernet: multiple high-definition (HD) MPEG2 streams

Target Applications

- Video distribution systems, multi-room PVR
- Cable, satellite, and IP set-top boxes
- Digital video recorders and DVD recorder/players
- Digital TV
- Digital media clients/servers and home gateways

Video-over IP Solutions, IP PBX & video phones

Wireless routers & access points

High-end audio distribution systems

Key Benefits

Non-PCI Ethernet controller for the highest performance applications

Highest performing non-PCI Ethernet controller

32-bit interface with fast bus cycle times

Burst-mode read support

Eliminates dropped packets

Internal buffer memory can store over 200 packets

Automatic PAUSE and back-pressure flow control

Minimizes CPU overhead

Supports Slave-DMA

Interrupt Pin with Programmable Hold-off timer

Reduces system cost and increases design flexibility

SRAM-like interface easily interfaces to most Embedded CPU's or SoC's

Reduced-Power Modes

Numerous power management modes

Wake on LAN*

Magic packet wakeup*

Wakeup indicator event signal

Link Status Change

Single chip Ethernet controller

Fully compliant with IEEE 802.3/802.3u standards

Integrated Ethernet MAC and PHY

10BASE-T and 100BASE-TX support

Full- and Half-duplex support

Full-duplex flow control

Backpressure for half-duplex flow control

Preamble generation and removal

Automatic 32-bit CRC generation and checking

Automatic payload padding and pad removal

Loop-back modes

Flexible address filtering modes

One 48-bit perfect address

64 hash-filtered multicast addresses

Pass all multicast

Promiscuous mode

Inverse filtering

Pass all incoming with status report

Disable reception of broadcast packets

Integrated 10/100 Ethernet PHY

Supports HP Auto-MDIX

Auto-negotiation

Supports energy-detect power down

Host bus interface

Simple, SRAM-like interface

32 or 16-bit data bus

16Kbyte FIFO with flexible TX/RX allocation

One configurable host interrupt

Miscellaneous features

Low-profile 100-pin TQFP, RoHS Compliant package

Integrated 1.8V regulator

General Purpose Timer

Optional EEPROM interface

Support for 3 status LEDs multiplexed with Programmable GPIO signals

Single 3.3V Power Supply with 5V tolerant I/O

Commercial and Industrial (LAN9218i) Temperature Support

Recommended For You

LAN91C111-NE

Microchip Technology, Inc

QFP

LAN91C931-MU

Microchip Technology, Inc

QFP

LAN94201-NU

Microchip Technology, Inc

TQFP128

LAN91C96-MU

Microchip Technology, Inc
TQFP100

LAN91C111i-NC

Microchip Technology, Inc
QFP

LAN91C96-MS

Microchip Technology, Inc
QFP

LAN91C111I-NU

Microchip Technology, Inc
TQFP128

LAN91C111-NC

Microchip Technology, Inc
QFP

LAN9252I/ML

Microchip Technology, Inc
QFN-64

LAN9215-MT

Microchip Technology, Inc
QFP100

LAN91C111I-NS

Microchip Technology, Inc
QFP128

LAN91C111-NU

Microchip Technology, Inc
QFP

LAN9118-MT

Microchip Technology, Inc
TQFP100

LAN9252I/PT

Microchip Technology, Inc
TQFP64

LAN9221I-ABZJ

Microchip Technology, Inc
QFN56