LAN8700C-AEZG-TR

Data Sheet

Ethernet Controller, 100 Mbps, IEEE 802.3-2005, 1.6 V, 3.6 V, QFN, 36 Pins

Images are for reference only

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-36
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	

Please submit RFQ for LAN8700C-AEZG-TR or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The Microchip LAN8700/LAN8700i is a low-power industrial temperature (LAN8700i), variable I/O voltage, analog interface IC with HP Auto-MDIX support for high-performance embedded Ethernet applications. The LAN8700/LAN8700i can be configured to operate on a single 3.3V supply utilizing an integrated 3.3V to 1.8V linear regulator. An option is available to disable the linear regulator to optimize system designs that have a 1.8V power plane available.

The LAN8700/LAN8700i consists of an encoder/decoder, scrambler/descrambler, wave-shaping transmitter, output driver, twisted-pair receiver with adaptive equalizer and baseline wander (BLW) correction, and clock and data recovery functions. The LAN8700/LAN8700i can be configured to support either the Media Independent Interface (MII) or the Reduced Media Independent Interface (RMII).

The LAN8700/LAN8700i is compliant with IEEE 802.3-2005 standards (MII Pins tolerant to 3.6V) and supports both IEEE 802.3-2005 compliant and vendor-specific register functions. It contains a full-duplex 10-BASE-T/100BASE-TX transceiver and supports 10-Mbps (10BASE-T) operation on Category 3 and Category 5 unshielded twisted-pair cable, and 100-Mbps (100BASE-TX) operation on Category 5 unshielded twisted-pair cable.

*The LANCheck online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Features

Note: The LAN8700/LAN8700i are not recommended for new designs. The LAN8710/LAN8720 are the suggested replacement devices for these products.

Features

Single-Chip Ethernet Physical Layer Transceiver (PHY)

ESD Protection levels of ±8kV HBM without external protection devices

ESD protection levels of EN/IEC61000-4-2, ±8kV contact mode, and ±15kV for air discharge mode per independent test facility

Application

Set-Top Boxes

Network Printers and Servers

LAN on Motherboard

10/100 PCMCIA/CardBus Applications

Embedded Telecom

Comprehensive flexPWR® Technology

Flexible Power Management Architecture

LVCMOS Variable I/O voltage range: +1.6V to +3.6V

Integrated 3.3V to 1.8V regulator for optional single supply operation

Regulator can be disabled if 1.8V system supply is available

Performs HP Auto-MDIX in accordance with IEEE 802.3ab specification

Cable length greater than 150 meters

Automatic Polarity Correction

Latch-Up Performance Exceeds 150mA per EIA/JESD 78, Class II

Energy Detect power-down mode

Low Current consumption power-down mode

Low operating current consumption:

39mA typical in 10BASE-T and

79mA typical in 100BASE-TX mode

Supports Auto-negotiation and Parallel Detection

Supports the Media Independent Interface (MII) and Reduced Media Independent Interface (RMII)

Compliant with IEEE 802.3-2005 standards

MII Pins tolerant to 3.6V

IEEE 802.3-2005 compliant register functions

Integrated DSP with Adaptive Equalizer

Baseline Wander (BLW) Correction

Vendor Specific register functions

Low profile 36-pin QFN RoHS compliant package (6 x 6 x 0.9mm height)

4 LED status indicators

Commercial Operating Temperature 0° C to 70° C

Industrial Operating Temperature -40° C to 85° C version available (LAN8700i)

Applications

Video Record/Playback Systems

Cable Modems/Routers

DSL Modems/Routers

Digital Video Recorders

Personal Video Recorders

IP and Video Phones

Wireless Access Points

Digital Televisions

Digital Media Adaptors/Servers

POS Terminals

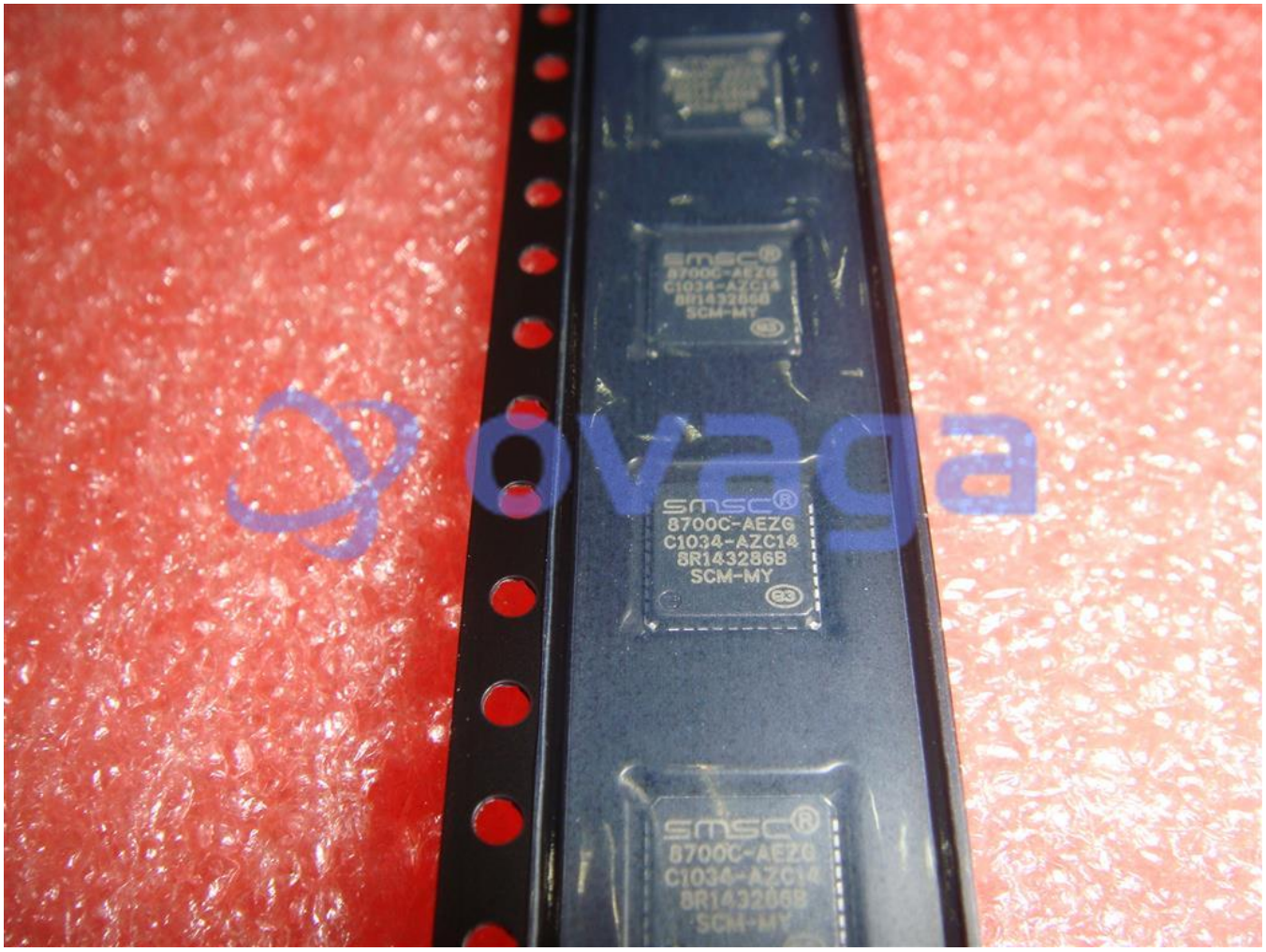
Automotive Networking

Gaming Consoles

Security Systems

POE Applications

Access Control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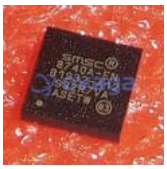
Related Products



[LAN8740A-EN](#)

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QFN-32

[LAN8700C-AEZG](#)

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[LAN8700IC-AEZG-TR](#)

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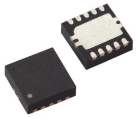
VQFN-36



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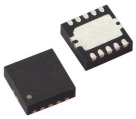

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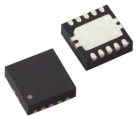

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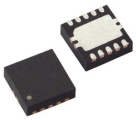

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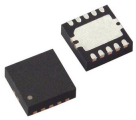

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