



LAN8720A/LAN8720Ai

Small Footprint RMII 10/100 Ethernet Transceiver with HP Auto-MDIX Support



PRODUCT FEATURES

Datasheet

Highlights

- Single-Chip Ethernet Physical Layer Transceiver (PHY)
- Comprehensive flexPWR[®] Technology
 - Flexible Power Management Architecture
 - LVCMOS Variable I/O voltage range: +1.6V to +3.6V
 - Integrated 1.2V regulator
- HP Auto-MDIX support
- Miniature 24-pin QFN lead-free RoHS compliant package (4 x 4 x 0.85mm height).

Target Applications

- Set-Top Boxes
- Networked Printers and Servers
- Test Instrumentation
- LAN on Motherboard
- Embedded Telecom Applications
- Video Record/Playback Systems
- Cable Modems/Routers
- DSL Modems/Routers
- Digital Video Recorders
- IP and Video Phones
- Wireless Access Points
- Digital Televisions
- Digital Media Adaptors/Servers
- Gaming Consoles
- POE Applications (Refer to SMSC Application Note 17.18)

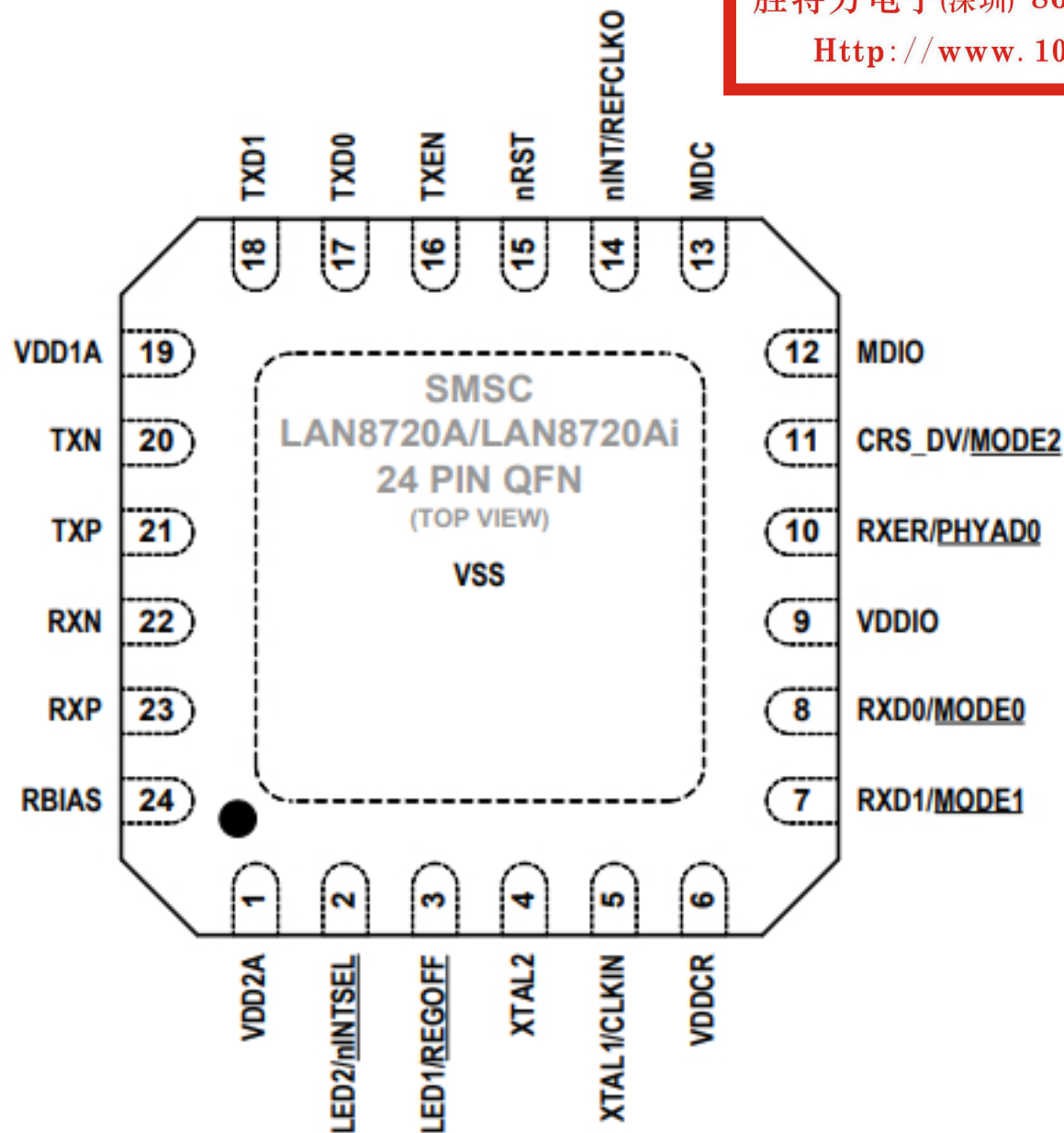
Key Benefits

- High-Performance 10/100 Ethernet Transceiver
 - Compliant with IEEE802.3/802.3u (Fast Ethernet)
 - Compliant with ISO 802-3/IEEE 802.3 (10BASE-T)
 - Loop-back modes
 - Auto-negotiation
 - Automatic polarity detection and correction
 - Link status change wake-up detection
 - Vendor specific register functions
 - Supports the reduced pin count RMII interface
- Power and I/Os
 - Various low power modes
 - Integrated power-on reset circuit
 - Two status LED outputs
 - Latch-Up Performance Exceeds 150mA per EIA/JESD 78, Class II
 - May be used with a single 3.3V supply
- Additional Features
 - Ability to use a low cost 25Mhz crystal for reduced BOM
- Packaging
 - 24-pin QFN (4x4 mm) Lead-Free RoHS Compliant package with RMII
- Environmental
 - Extended commercial temperature range (0°C to +85°C)
 - Industrial temperature range version available (-40°C to +85°C)

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Chapter 2 Pin Description and Configuration

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



NOTE: Exposed pad (VSS) on bottom of package must be connected to ground

Figure 2.1 24-QFN Pin Assignments (TOP VIEW)

Note: When a lower case "n" is used at the beginning of the signal name, it indicates that the signal is active low. For example, nRST indicates that the reset signal is active low.

Note: The buffer type for each signal is indicated in the BUFFER TYPE column. A description of the buffer types is provided in [Section 2.2](#).