

# Factsheet

## SI79C90

### Local Area Network Controller

**Silicon Cores™**

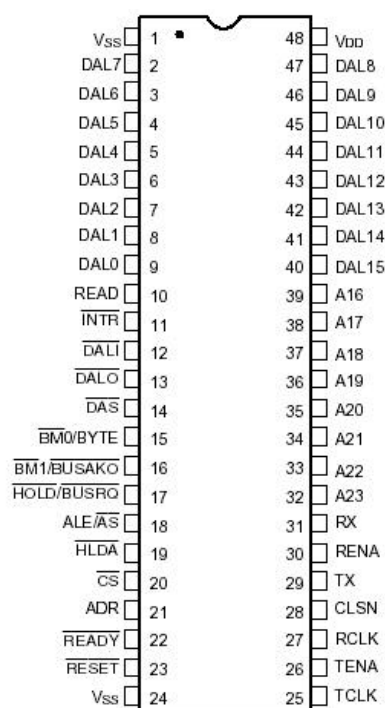
Core to the Intelligent Network™

#### Product Features

- Compatible with Ethernet and IEEE 802.3 10BASE 5 Type A, and 10BASE 2 Type B, 10BASE-T.
- Easily interfaced with 80x86, 680x0, Am29000®, Z8000™, LSI-II™ microprocessors.
- Can be programmed by the host using its internal control and status registers.
- Supports 16 bit wide multiplexed data bus and 24 bit wide address bus.
- Flexible parallel bus interface so as to easily interface with variety of 16 bit microprocessors with minimum glue logic.
- On-board DMA and buffer management, 64-byte Receive, 48-byte Transmit FIFOs.
- Network and packet error reporting.
- Back-to-back packet reception with as little as 0.5 ms interframe spacing.
- Incorporates number of self-test and diagnostic routines to test the operation. Reports both network and packet errors.
- Fully synthesizable Register Transfer Level (RTL) VHDL.

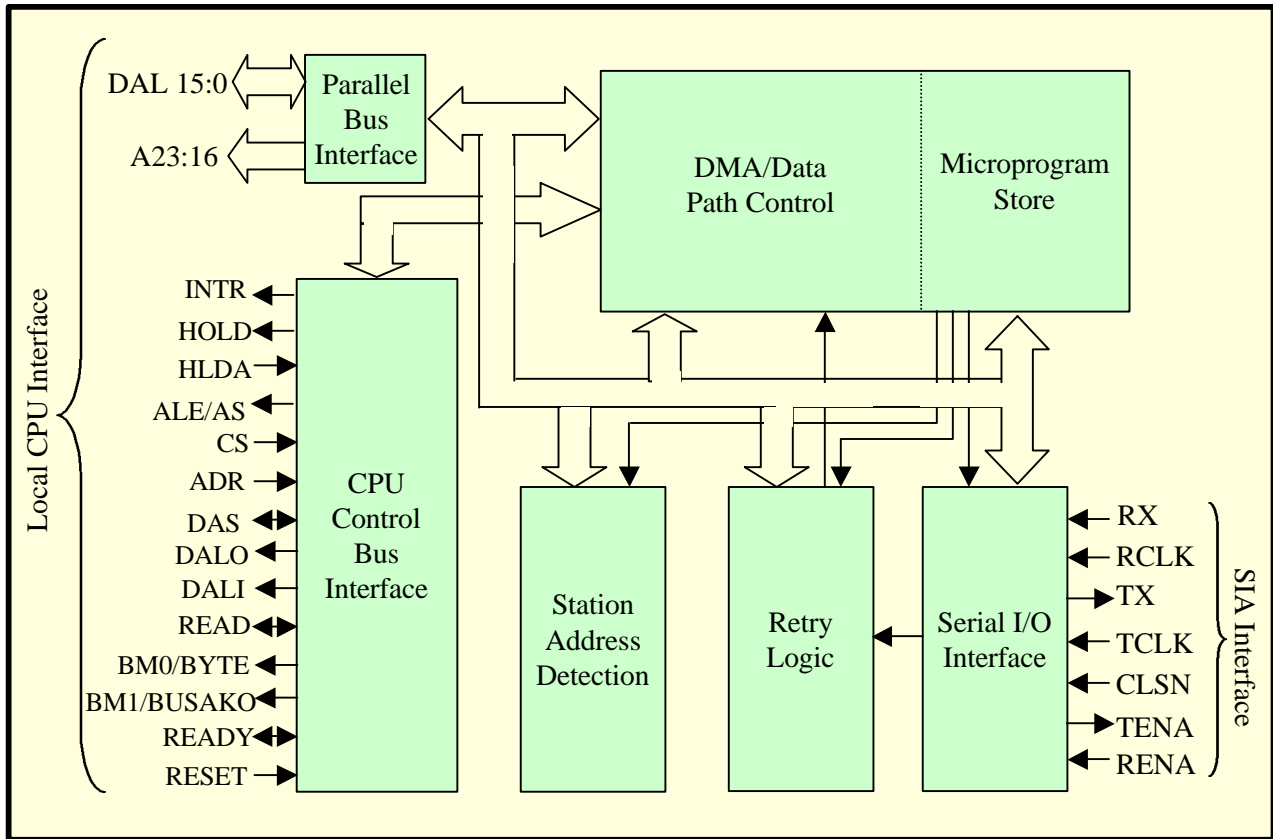
The SI79C90 Local Area Network Controller for Ethernet is an IP core designed to greatly simplify interfacing a microcomputer or minicomputer to an IEEE 802.3/Ethernet Local Area Network. The SI 79C90 interfaces a minicomputer or microcomputer with the IEEE 802.3 / Ethernet Local Area Network. Its versatile bus interface logic interfaces the peripheral chip with Intel, Motorola, Zilog or AMD microprocessors. The serial I/O interface is compatible with Ethernet IEEE 802.3 draft specifications. On-board DMA, advanced buffer management, and extensive error reporting and diagnostics facilitate design and improve system performance.

**SI79C90  
GLANCE**



There are several LAN technologies in use today, but Ethernet is by far the most popular. The widespread popularity of Ethernet ensures that there is a large market for Ethernet equipment, which also helps keep the technology competitively priced. Silicon Interfaces' Ethernet family IP cores can be easily inserted into the complex ethernet subsystem. The result is, very less time to market, cost and performance efficiency.

## SI79C90 Block Representative Schematic:



The dream and vision has always been to be in the cutting edge of technology and to work the best. With an iron grip and commitment, the company has established state-of-art development facilities and implemented processes so that only the best software and services exit the doors of *Silicon Interfaces*.

### Contact:

Email: [info@siliconinterfaces.com](mailto:info@siliconinterfaces.com)

Phone: (+91-22) 2491 3024; Fax: (+91-22) 2498 1379

In USA: (+1-408) 866 2458; Fax: (+1-408) 866 6586

In UK: (+44-20) 8543 4436; Fax: (+44-20) 8544 1311

# SI79C90 GLANCE

*Silicon Interfaces*®

a software and vlsi design center

**Notice:** Information in this document is indicative. Product specifications are subject to change without notice. *Silicon Interfaces* shall not be responsible for direct, indirect or consequential damages that may accrue through typographical errors or otherwise. No license, expressed or implied to any intellectual property rights is granted by this document. Product names mentioned herein may be trademarks and/or registered trademarks of their respective owners. Rights are hereby acknowledged.

***Silicon Interfaces* is the world's answer to integrated solutions for Design Services needs for SOC, ASIC & FPGA for Wireless, Cable & Optical Networking, Fiber Channel & Inter-connect, Data Communications and Storage. *Silicon Interfaces* is operating since 1990 primarily in USA, Europe and Pacific Rim.**