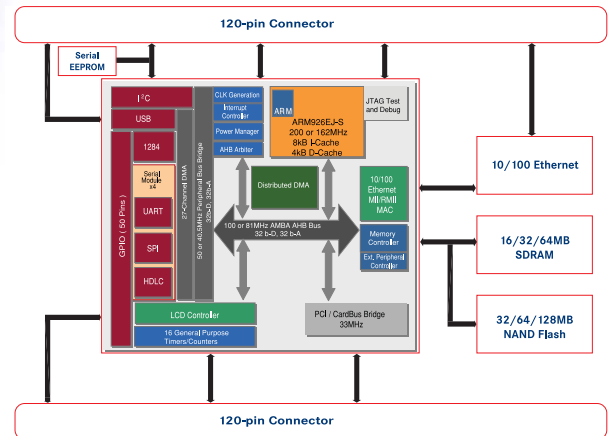


# ConnectCore™ 9P

Compact ARM9 Core Module



Compact, high-performance 32-bit NET+ARM processor module family combines superior performance and design integration flexibility with complete embedded software platform support.



## Features/Benefits

- 240-pin core processor module in compact 60 x 44 mm form factor
- Powerful 32-bit NET+ARM processor - NS9750/9360 with ARM926EJ-S core
- Up to 128 MB Flash/128 MB RAM
- On-board 10/100 Ethernet MAC/PHY
- Up to 4 high-speed serial ports - UART and SPI configurations
- USB host and device mode support
- Fast-mode I2C hardware interface
- On-chip LCD controller (TFT/STN)
- Integrated real-time clock w/support for external battery
- Up to 73 shared GPIO port options
- External memory bus interface
- PCI v2.2/Cardbus option (NS9750)
- Complete software support for NET+OS®, LxNETES™ Linux and Microsoft® Windows® CE 5.0

## Overview

The ConnectCore 9P modules are part of the ConnectCore embedded core processor module family. They combine superior performance and a complete set of integrated peripherals and component connectivity options in a compact and versatile form factor.

Built on leading NetSilicon® 32-bit NET+ARM technology, the network-enabled ConnectCore 9P family provides a modular and scalable core processor solution that significantly minimizes software and hardware design risk and dramatically improves the time-to-market aspects of your product development process.

The wide range of available embedded software platform options makes it the ideal choice for your network-enabled product solutions, whether your application requires the small footprint, fast response time, and secure networking offered by our ThreadX®-based NET+OS environment, the comprehensive and scalable set of feature-complete high-level software components and applications of Microsoft Windows CE, or the flexibility and power of the open Linux environment and its extensive software library.

Complete and royalty-free development kits supporting the NET+OS, LxNETES Linux and Microsoft Windows CE environments are available for platform evaluation and product development use. All development kits include a development board, hardware debugging options, board support packages, sample code, documentation, cables and related accessories.

Please contact us at 1-877-OEM-DIGI or 952-912-3444 for additional information or to discuss your specific application requirements.



**HARDWARE**

**ConnectCore 9P 9750**

- 32-bit NET+ARM (ARM926EJ-S) RISC processor NS9750 @ 200 MHz
- Up to 128 MB NAND Flash and 64 MB SDRAM
- 32-bit PCI v2.2/Cardbus Bridge (33 MHz)
- 16 General Purpose Timers/Counters
- Up to 50 GPIO port options

**ConnectCore 9P 9360**

- 32-bit NET+ARM (ARM926EJ-S) RISC processor NS9360 @ 177 MHz
- Up to 128 MB NAND Flash and 128 MB SDRAM
- 8 General Purpose Timers/Counters or 4 PWM functions
- Up to 73 GPIO port options

**ConnectCore 9P Family**

- Integrated 10/100 Mbps Ethernet MAC/PHY
- Up to 4 serial interfaces w/UART and SPI mode
- Integrated USB 2.0 compliant host/device interface
  - Full speed (12 Mbps) and low speed (1.5 Mbps) mode
- On-chip I<sup>2</sup>C bus interface (100/400 kHz)
- Flexible LCD controller with support for TFT/STN displays
  - Up to SVGA resolution with up to 18/24 bpp
- External memory bus interface
  - 32-bit data bus and 28-bit address bus
- Real-Time Clock (RTC) w/support for external battery backup
- 8 KB serial EEPROM for configuration storage
- On-board JTAG interface

**DEVELOPMENT KITS**

- NET+OS 6.1
  - Hardware debugger
  - GNU development tool chain
    - gcc v3.2.1, Insight v5.1.1
    - binutils v2.13.1, newlib v1.11.0
  - ThreadX™ RTOS
  - Fusion™ TCP/IP stack
    - DNS, SNMPv2, LDAP, POP, SMTP, PPP, FTP, SNTp, Telnet, FastIP, Fast Sockets, Multi-Homing
  - Universal IP address assignment
    - Static IP, DHCP, BOOTP, Auto-IP
  - Allegro embedded web server
  - SSL/TLS with DES/3DES/AES encryption
  - Flash/RAM file system with wear-leveling
  - SMICng SNMP MIB compiler
  - Micro XML SAX parser
- Microsoft Windows CE 5.0
  - Complete BSP (Board Support Package) for Microsoft Windows CE 5.0 w/source code
- LxNETES 3.1
  - Linux kernel v2.6.11
  - GNU development tool chain
    - gcc v3.3.3, gdb v6.2
    - uClibc v0.9.26, Busybox v1.00
  - JFF2/NFS file system support
  - I<sup>2</sup>C, USB, PCI, EEPROM support
  - BOA single-tasking HTTP server

**ENVIRONMENTAL**

- Storage temperature: -50° C to +125° C (-58° F to +257° F)
- Operating temperature: 0° C to 70° C (32° F to 158° F)
- Relative humidity: 5% to 90% (non-condensing)
- Altitude: 12,000 feet (3658 meters)

**POWER REQUIREMENTS**

- **ConnectCore 9P 9750**
- 3.3VDC @ 600 mA (max)

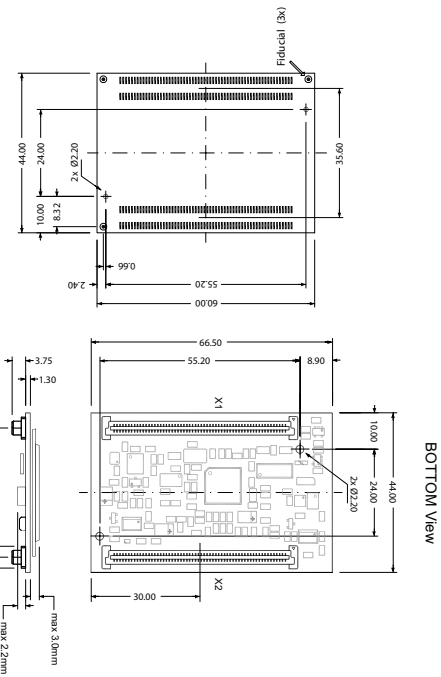
- **ConnectCore 9P 9360**
- 3.3VDC @ 400 mA (max)

**ETHERNET INTERFACE**

- Standard: IEEE 802.3
- Physical layer: 10/100Base-T
- Data rate: 10/100 Mbps (auto-sensing)
- Mode: Full- or half-duplex (auto-sensing)

**DIMENSIONS**

- Length: 2.362 in (6.000 cm)
- Width: 1.732 in (4.400 cm)
- Height: 0.395 in (1.000 cm)



**MODEL..... PART NUMBERS**

Model	North America	International
ConnectCore 9P 9360 NET+OS 6.3 Development Kit (GNU+Raven)	FS-9082	FS-9082
ConnectCore 9P Module (9360) Development Kit for LxNETES - Linux	FS-9064	FS-9064
ConnectCore 9P 9360 Development Kit for Windows CE with annual support	FS-9066	FS-9066

Bulk packs and population options available. Please visit our website for a complete list of available part numbers and product support options.

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