ConnectCore® 7U

Universal ARM7 Core Module

Embedded ARM core processor module offers a wide range of connectivity options and integrated networking support in a compact DIP form factor.

Overview

The ConnectCore 7U core processor module utilizes Digi's high-performance NS7520 NET+ARM microprocessor, providing the ideal core processor platform for product designs demanding an additional level of performance, connectivity and flexibility. Combining core processing capabilities with long-term product availability, it is suited for applications including transportation, security/access control, building and industrial automation, retail, warehousing and others.

The module offers 16 MB of SDRAM and up to 8 MB of on-board Flash memory, an integrated 10/100 Mbit Ethernet MAC/PHY, up to two configurable UART/SPI ports, an I2C bus interface option, 16 shared GPIO ports for application-specific use, and an external 10-bit address/8-bit data bus interface for component integration flexibility.

The Digi JumpStart Kit® for NET+OS® delivers a ThreadX-based, IPv6-ready, royalty-free turnkey solution with all of the integrated building blocks needed for secure network-enabled embedded software development.

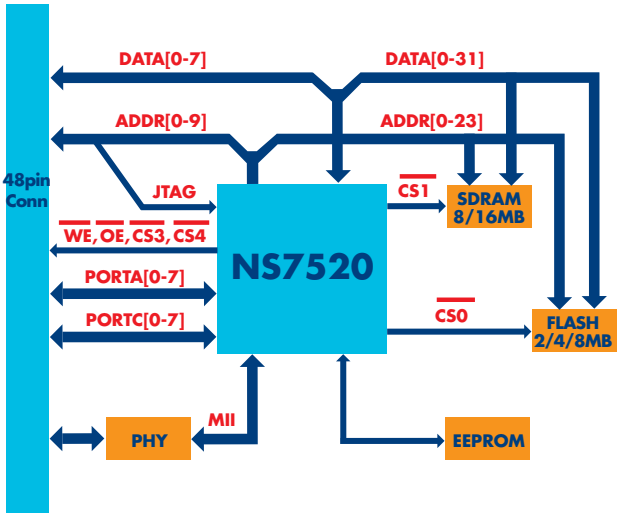
Platforms and Services

Supported Software Platform

Support


Design Services

Block Diagram



Features/Benefits

- Compact and versatile 48-pin DIP form factor
- Powerful 32-bit Digi NS7520 (ARM7) processor
- Integrated on-chip 10/100 Ethernet networking
- Peripheral interface flexibility
- Digi processor technology for true long-term product availability
- Complete IPv6-ready NET+OS development platform
- Seamless migration path to fully integrated Digi NET+ARM system-on-chip solution

Digi JumpStart Kit® Overview

Digi JumpStart Kit® for NET+OS®

This royalty-free turnkey solution for embedded software development is based on the ThreadX Real-Time Operating System (RTOS), one of the most reliable and field-proven RTOS solutions available. In addition to ThreadX, NET+OS provides the integrated building blocks needed to create product solutions with leading network security using Digi embedded modules and microprocessors.

For professional NET+OS software development, the Eclipse based Digi ESP™ Integrated Development Environment (IDE) with graphical user interface and high-speed USB 2.0 hardware debugger is provided out-of-the-box.

- Royalty-free turn-key solution for embedded development
- Built on field-proven and compact ThreadX RTOS
- Fully integrated support for secure, IPv4/IPv6 networking applications
- Professional software development using Windows-based Digi ESP IDE

Please refer to the feature specs on our website for detailed information about the specific software platform capabilities.

Digi JumpStart Kit® Contents

Software Platform	NET+OS®
Module	ConnectCore 7U w/ 8 MB Flash, 16 MB SDRAM, Ethernet MAC/PHY
Development Board	2 serial ports (RS-232, TTL), 2 user push-buttons, 2 user LEDs, Prototyping area, User/Application header, Status LEDs, Character display connector, Reset button, JTAG connector, 5VDC power supply
CD/DVD	Digi NET+OS CD: NET+OS 7.x, Digi ESP IDE, BSP Source code, Sample code, Support, Documentation
Documentation	Quick start guide, Digi ESP tutorial, NET+OS porting guide, NET+OS API documentation, Advanced Web Server, Hardware reference manual, Development board schematics
Power Supplies and Accessories	External wall power supply (110/240VAC) with interchangeable outlet adapters (North America, EU, UK and Australia), JTAG adapter, Ethernet cable, Serial cable
Other	Digi JTAG Link USB 2.0 hardware debugger
Part Numbers (worldwide)	CC-7U-NET

ConnectCore™ 7U

Hardware

Processor Type	32-bit NS7520 processor
ARM Core	ARM7TDMI
Processor Speed	55 MHz
Memory Base Population	2/8 MB NOR flash
	16 MB SDRAM
Serial EEPROM	8 KB
UART	Up to 230 Kbps
GPIO	Up to 16 shared GPIO ports
SPI	Master mode
I^2C	Standard mode (100 kHz)
External Memory Bus	10-bit address / 8-bit data; 2 external chip selects