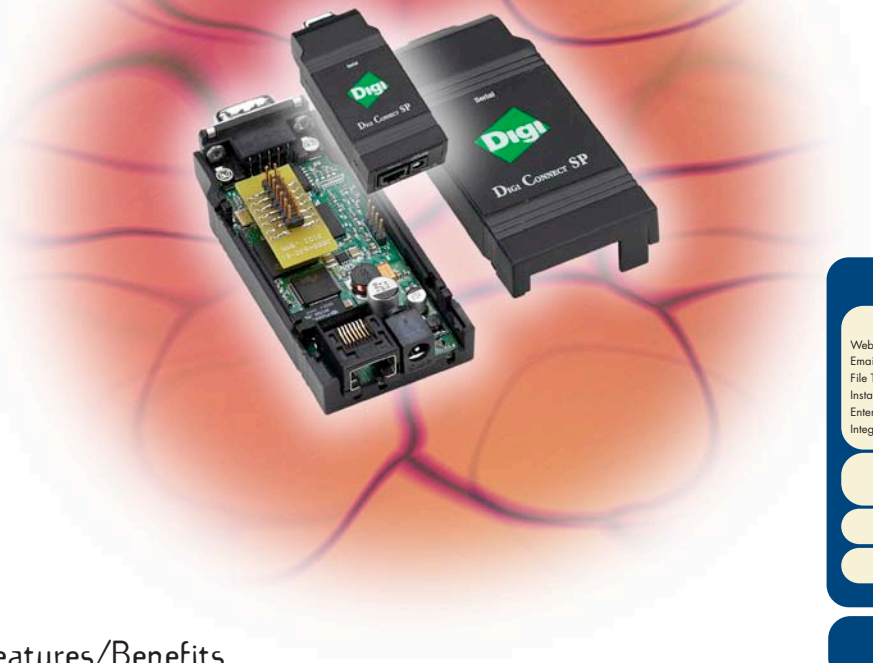
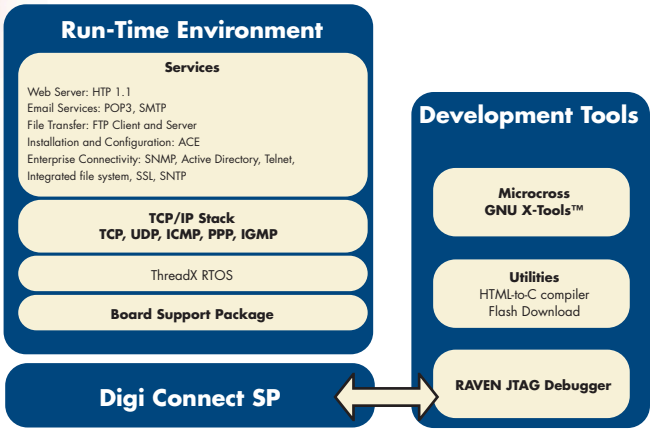
Digi Connect® SP
Development Kit

Tools



The Digi Connect SP device server delivers a powerful, compact and cost-effective off-the-shelf hardware platform for embedded networking solutions.



Features/Benefits

- **Compact off-the-shelf hardware platform for custom network applications**
- **Switch-selectable RS-232/422/485 interface**
  - **Throughput up to 230,400 bps**
- **Integrated 10/100 Mbit network interface**
- **Flexible power input of 9-30VDC**
- **Significantly improves time-to-market by eliminating hardware design process**
- **Easy-to-use and royalty-free, out-of-the-box development kit solution**
- **Quick and cost-effective embedded application software development**
- **Seamless migration path to a fully integrated system-on-chip solution**

Overview

The Digi Connect SP device server is the ideal platform for your custom web- and network-enabled embedded applications. Combining Digi and NetSilicon® technology, it eliminates the hardware design effort and delivers a true device networking solution that is powerful enough to meet your future performance requirements.

Built on leading NetSilicon 32-bit NET+ARM technology, the Digi Connect SP device server provides a powerful off-the-shelf hardware platform for embedded web- and network applications with a seamless migration path to embedded modules and a fully integrated NetSilicon system-on-chip solution using the award-winning family of Ethernet-enabled NET+ARM microprocessors.

The Digi Connect SP Development Kit is an easy-to-use and royalty-free development platform that significantly reduces traditional design risk and accelerates the overall software development process. Based on the NetSilicon NET+Works® development platform, it delivers all integrated building blocks and tools to quickly and cost effectively create flexible and secure embedded applications for integrated high-performance web- and networking solutions.

Digi International makes device networking easy by developing products and technologies that are cost-effective and easy to use. With over 20 million ports shipped worldwide, Digi has been offering the highest levels of performance, flexibility, and quality since 1985.

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

Features/Specifications

FEATURES

- 32-bit NET+ARM high-performance RISC processor (NS7520 55 MHz)
- 4 MB Flash and 16 MB RAM integrated
- Switch-selectable RS-232/422/485 interface (DB-9M)
  - Throughput up to 230,400 bps
  - 7, 8 data bits
  - 1, 1.5, 2 stop bits
  - Mark/space/even/odd parity
  - Full signal support with software/hardware flow control
- Auto-sensing 10/100 Mbit Ethernet interface and network link

Development Kit with:

- Digi Connect SP w/JTAG
- Macgraigor Raven JTAG debugger
- NET+Works software components
  - Microcross™ GNU X-Tools with command line and visual GDB debugger
  - ThreadX® Real-Time Operating System with picokernel™ architecture
  - Fusion™ TCP/IP stack with full networking protocol and extended networking services support
    - TCP, UDP, ICMP, IGMP, DNS, SNMPv2, LDAP, POP, SMTP, PPP, FTP, SNTP, Telnet, FastIP, Fast Sockets, Multi-Homing
  - Universal IP address assignment through Address Configuration Executive (ACE)
    - Static IP, DHCP, BOOTP, Auto-IP, RARP, ARP/Ping
  - Allegro Software embedded web server with HTTPS support
  - SSL 3.0/TLS 1.0 with strong encryption
    - DES (56-bit)
    - 3DES (168-bit)
    - AES (128/256-bit)
  - Flexible and robust file system supporting RAM and Flash (with wear leveling)
- SMICng MIB compiler
- Micro XML SAX parser
- Additional utilities
  - HTML-to-C compiler
  - Flash download
- Sample code
- Documentation
  - Digi Connect SP Hardware Reference
  - NET+OS® Programmer's Guide
  - NET+OS API Reference
  - NET+OS Advanced Web Server Toolkit
  - NS7520 Hardware Reference
- Cables
  - Straight-thru and crossover serial cables
  - Straight-thru and crossover network cables
- Loop-back adapter
- Power supplies

ENVIRONMENTAL

- Storage temperature: -40° C to +90° C (-40° F to +194° F)
- Operating temperature: 0° C to 60° C (32° F to 140° F)
- Relative humidity: 5% to 90% (non-condensing)
- Altitude: 12,000 Feet (3658 Meters)

REGULATORY APPROVALS

- FCC Part 15, Class A
- EN 55022
- EN5J024
- VCCI
- AS 3548
- UL60950
- CSA 22.2 NO.60950
- EN 60950

POWER REQUIREMENTS

- 9-30VDC @ 370 mA

DIMENSIONS

- Length: 3.876 in (9.846 cm)
- Width: 1.680 in (4.267 cm)
- Depth: 0.999 in (2.537 cm)
- Weight: 2.29 oz (6.50 g)

LEDS

- Network link
- Ethernet activity
- Custom (red)

MODEL.....PART NUMBERS

Model	North America	International
Digi Connect SP Development Kit (GNU)	DC-SP-01-GN	DC-SP-01-GN

Please visit website for a complete list of available part numbers.

DIGI SERVICE AND SUPPORT

You can purchase with confidence knowing that Digi is here to support you with expert technical support and a strong five-year warranty. http://support.digi.com

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