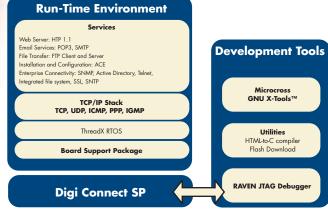


# Digi Connect® SP Development Kit

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.



www.digi.com





### 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
- 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<sup>™</sup> 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, FastlP, 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 UL60950
- EN 55022
- CSA 22.2
- EN5J024
- NO.60950
- VCCI
- EN 60950
- AS 3548



### 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)

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### MODEL..

Digi Connect SP Development Kit (GNU)

### EL.....PART NUMBERS



### Model

North America DC-SP-01-GN International 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

### **Digi International**

11001 Bren Road E. Minnetonka, MN 55343 USA PH: 877-912-3444 952-912-3444

FX: 952-912-4952 Email: info@digi.com www.digi.com

### Digi International GmbH

Joseph-von-Fraunhofer Str. 23 D-44227 Dortmund Germany

PH: +49-231-9747-0 FX: +49-231-9747-111 www.digi.de

## Digi International (HK) Limited

Suite 1703-05, 17/F. K Wah Centre 191 Java Road North Point, Hong Kong PH: +852-2833-1008 FX: +852-2572-9989

### NetSilicon

411 Waverley Oaks Road #304 Waltham, MA 02452 USA PH: 800-243-233, 781-647-1234 FX: 781-893-1338 Email: info@netsilicon.com



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