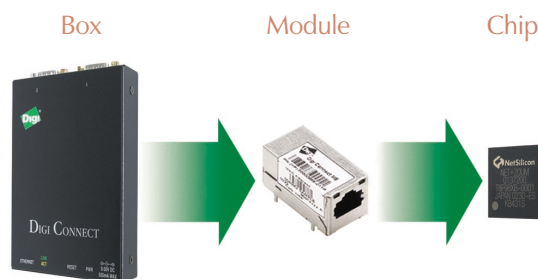# Digi Connect ME™

Embedded Device Server

The Digi Connect ME embedded device server web- and network-enables products without the complexities of extensive hardware and software integration by combining versatility and performance in a robust and extremely compact design.

Box   Module   Chip

Seamless migration to total integration

Future proof protection - software development migrates fully to chip solutions.

Features/Benefits

> **Embedded device server providing web-enabled network connectivity**

> **Extremely small footprint with robust on-board TCP/IP stack**

> **High-speed TTL serial interface with up to 230 Kbps throughput**

> **Integrated 10/100 Mbit network interface (RJ-45)**

> **Five GPIO port options for application-specific use**

> **Simple product integration using chassis-mount or board-mount**

> **Innovative 802.3af power pass-thru option for entirely network powered products**

> **Easy configuration through user-friendly and fully customizable web interface**

> **Universal IP address assignment for seamless network integration**

> **Strong encryption for security sensitive environments**

> **Intelligent management and configuration through SNMP**

www.digi.com

Overview

The world is in the early stages of an extraordinary but quiet technology revolution. The advances of personal computers and the proliferation of the Internet have laid the groundwork for the rapidly emerging era of networked devices. Billions of electronic devices will work invisibly, collaborating with each other and with people. This world of connected devices will offer new levels of customer service, product maintenance and support through enhanced remote monitoring, control and sharing of information.

The Digi Connect ME embedded device server enables original equipment manufacturers to keep pace with ever-evolving networking technology by easily adding web-enabled network connectivity to existing products. All without the complexities of extensive hardware and software integration work and at a fraction of the time and cost that would be required to develop a custom solution.

Unique and industry-leading features such as a fully customizable web interface, custom Java applet support, enhanced security with strong DES/3DES/AES encryption based on the SSL/TLS standard, five integrated GPIO port options for added integration flexibility, an innovative 802.3af power pass-thru option to create entirely network-powered products, intelligent device management and configuration via SNMP, and patented RealPort® COM/TTY port redirection software make it an ideal solution for any embedded application that requires versatility and performance in a robust and extremely compact form factor.

Built on leading 32-bit ARM® technology and an integral part of the Digi device server product line, the Digi Connect ME embedded device server combines true plug-and-play functionality with the freedom and flexibility of complete product customization options based on the NetSilicon NET+Works development platform, which also offers a seamless migration path to a fully integrated NetSilicon system-on-chip solution using the award-winning family of Ethernet-enabled NET+ARM microprocessors.

An integration kit and a complete development kit containing a development board, documentation, sample code, cables and accessories are available for evaluation and development use.

Digi®

Connectware™

Making

DEVICE NETWORKING
easy ™

Features/Specifications

FEATURES

- 32-Bit NET+ARM high-performance RISC processor (NS7520 55MHz)
- High-speed TTL Serial Interface
  - Throughput up to 230,400 bps
  - Full signal support for TXD, RXD, RTS, CTS, DTR, DSR and DCD
  - Hardware and software flow control
- 2MB Flash and 8MB RAM integrated
- Auto-sensing 10/100Base-T network interface with on-board RJ-45 connector
- 5 selectable General Purpose Input/Output (GPIO) ports
- 802.3af power pass-thru
- Robust on-board IP stack
  - TCP, UDP, DHCP, SNMP, SSL/TLS, HTTP, SMTP, ICMP, IGMP and ARP
- Industry-leading low latency
- Firmware field-upgradeable via HTTP
- Secure web-based configuration (HTTP/HTTPS)
- Fully customizable web interface with support for custom Java applets and XML based configuration
  - Applet space: 512kb
- Universal IP address assignment
  - Static IP, DHCP
- Event notification via e-mail (SMTP)
- Configuration and management through SNMP (read/write)
- Strong SSL V3.0/TLS V1.0 based encryption
  - DES (56 Bit)
  - 3DES (168 Bit)
  - AES (128/256 Bit)
- Patented RealPort COM/TTY port redirection for Microsoft Windows, UNIX, and Linux environments

PINOUTS

Pin Number	Signal Name	Description
1	VETH+	Power Pass-Thru +
2	VETH-	Power Pass-Thru -
3	N/A	Position Removed
4	N/A	Position Removed
5	N/A	Position Removed
6	N/A	Position Removed
7	RXD	Receive Data (Input)
8	TXD	Transmit Data (Output)
9	RTS/GPIO 4	Request to Send (Output) / GPIO
10	DTR/GPIO 5	Data Terminal Ready (Output) / GPIO
11	CTS/GPIO 2	Clear to Send (Input) / GPIO
12	DSR/GPIO 3	Data Set Ready (Input) / GPIO
13	DCD/GPIO 1	Data Carrier Detect (Input) / GPIO
14	RESET	Reset
15	+3.3V	Power
16	GND	Ground
17	Reserved	Reserved
18	Reserved	Reserved
19	Reserved	Reserved
20	Reserved	Reserved

Samtec FTS-110-01-F-DV-TR 20-pin micro header (10-pin double row) with 1.27 mm (.50") pitch, positions 3-6 removed.

REGULATORY APPROVALS

- FCC Part 15, Class B
- EN 55022, Class B
- UL 60950
- EN 60950
- CSA 22.2 No 60950

POWER REQUIREMENTS

- +3.3Vdc @ 250 mA typical (825 mW)

LEDS

- Network Link / Diagnostic, Network Activity

ENVIRONMENTAL

- Ambient temperature: -40ºC to 85ºC (-40ºF to 185ºF)
- Relative humidity: 5% to 95% (non-condensing)
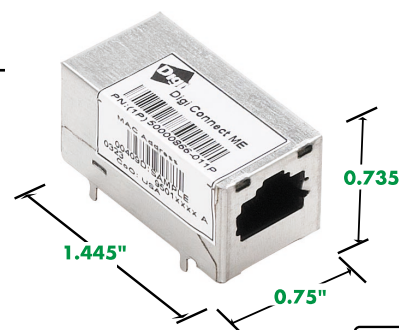- Altitude: 12,000 Feet (3658 Meters)

DIMENSIONS

- Length: 1.445 in. (36.703 mm)
- Width: 0.75 in. (19.05 mm)
- Height: 0.735 in. (18.669 mm)

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

Model	North America	International
Digi Connect ME (single-unit pack)	DC-ME-01T	DC-ME-01T
Digi Connect ME (50-unit bulk pack)	DC-ME-01T-50	DC-ME-01T-50
Digi Connect ME Integration Kit	DC-ME-01T-KT	DC-ME-01T-KT
Digi Connect ME Development Kit (GNU)	DC-ME-01T-GN	DC-ME-01T-GN

Please contact us at 1-877-OEM-DIGI or 952-915-3444 for additional information or to discuss your application requirements.

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

Designed for Microsoft® Windows® XP Windows® 2000

Designed for Microsoft® Windows® Server 2003

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