

MiiNePort W1 Series

Wireless LAN embedded serial device servers



Features and Benefits

- IEEE 802.11 b/g compatible
- AES, WEP 64/128-bit, WPA, WPA2, PSK, 802.11i security support
- Low power consumption (1.18W)
- 1 serial port, up to 921.6 kbps
- 1 Ethernet port, 10/100 Mbps
- HTTPS/SSH support for configuration
- Fast roaming to enhance connection reliability

Certifications



Introduction

The MiiNePort W1 Series provides serial to IEEE 802.11 b/g embedded wireless solution that includes compact sizes and ultra-low power consumption as features. Numerous operation modes are designed to fulfill the requirements of embedded module application. Complete driver support reduces software redesign effort and accelerate time to market.

Specifications

Embedded System

CPU	32-bit Arm Core
Memory	
Flash	16 MB
SDRAM	64 MB
Input/Output Interface	
Configurable DIO Channels (by software)	8
Ethernet Interface	
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3x for flow control
10/100BaseT(X) Port	Auto MDI/MDI-X connection
Ethernet Software Features	
Configuration Options	Web Console (HTTP/HTTPS), Windows Utility, Telnet Console, Serial Console
Management	ARP, Device Search Utility (DSU), DHCP Client, DNS, HTTP, IPv4, SMTP, SNMPv1/v2c/v3, TCP/IP, Telnet, UDP, Web Console, ICMP
Windows Real COM Drivers	Windows 95/98/ME/NT/2000, Windows XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows 2008 R2/2012/2012 R2 (x64), Windows Embedded CE 5.0/6.0, Windows XP Embedded
Linux Real TTY Drivers	Kernel versions: 2.4.x, 2.6.x, 3.x, 4.x, and 5.x

Fixed TTY Drivers	SCO UNIX, SCO OpenServer, UnixWare 7, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i, Mac OS X
Android API	Android 3.1.x and later
MIB	Device Settings MIB, RFC1213, RFC1317
Time Management	SNTP
Serial Interface	
No. of Ports	1
Serial Standards	TTL
Operation Modes	Real COM mode, TCP Server mode, TCP Client mode, UDP mode, RFC2217 mode, Disabled
Baudrate	50 bps to 921.6 kbps (supports non-standard baudrates)
Data Bits	7, 8
Stop Bits	1, 2
Parity	None, Even, Odd
Flow Control	None, RTS/CTS, XON/XOFF
Serial Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
WLAN Interface	
Antenna	External, 2 dBi
Spread Spectrum	DSSS, OFDM
Transmission Rate	802.11b: 11 Mbps 802.11g: 54 Mbps
Receiver Sensitivity for 802.11g (measured at 2.437 GHz)	Typ. -71 dBm @ 54 Mbps
Transmitter Power for 802.11b	16±1.5 dBm @ 11 Mbps
Transmitter Power for 802.11g	14±1.5 dBm @ 54 Mbps
WLAN Modes	Ad-hoc Mode, Infrastructure mode
WLAN Module	
Module Antenna Connectors	1 I-PEX connectors
Antenna Characteristics	
Antenna Type	Omni-directional
Power Parameters	
Input Current	400 mA @ 3.3 VDC
Input Voltage	3.3 to 5 VDC
Reliability	
Automatic Reboot Trigger	Built-in WDT

Physical Characteristics

Form Factor Type	Drop-in modules
Dimensions	44.4 x 44.4 x 9.7 mm (1.75 x 1.75 x 0.38 in)
Weight	15.35 g (0.03 lb)

Environmental Limits

Operating Temperature	MiiNePort W1/W1-ST: 0 to 55°C (32 to 131°F) MiiNePort W1-T: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 60°C (-40 to 140°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 1 kV IEC 61000-4-6 CS: 150 kHz to 8 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF IEC 61000-4-11
Environmental Testing	IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3
Radio Frequency	EN 300 328, EN 301 489
Safety	EN 60950-1, UL 60950-1
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6

Declaration

Green Product	RoHS, CRoHS, WEEE
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MTBF

Time	441,378 hrs
Standards	Telcordia SR332

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

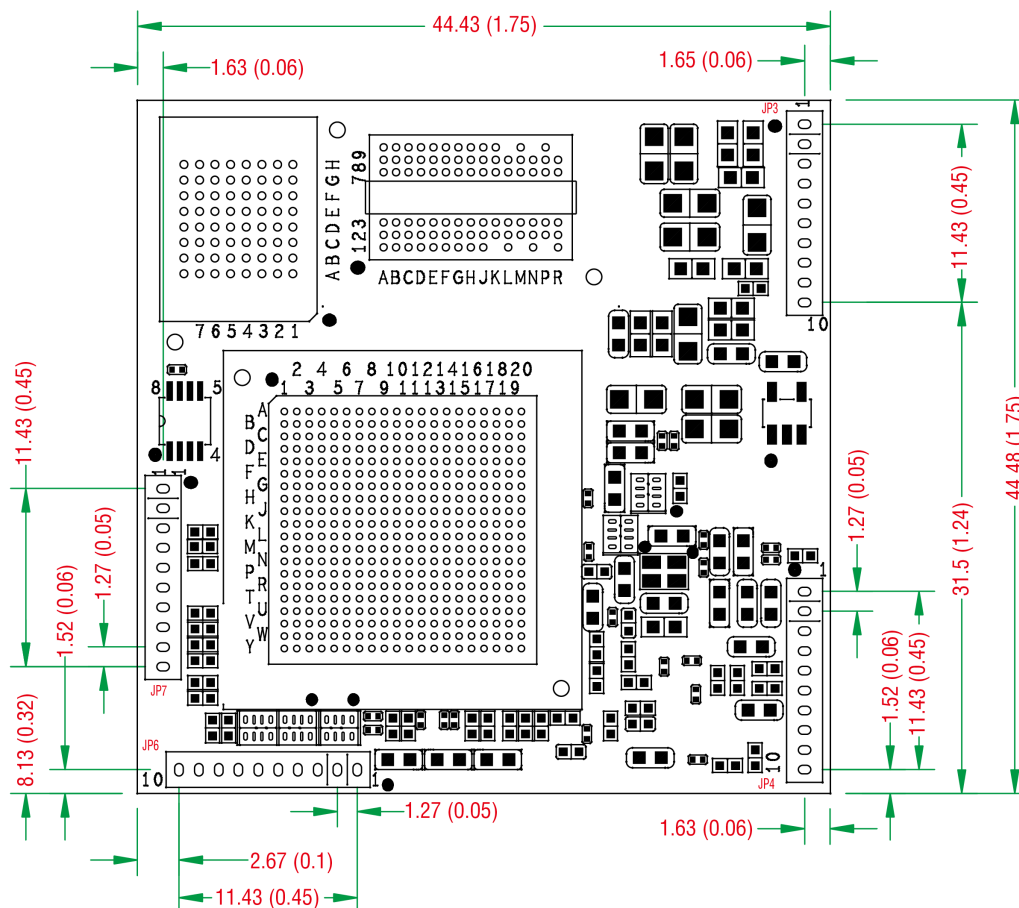
Package Contents

Device	1 x MiiNePort W1 Series device server 1 x evaluation board (MiiNePort W1-ST)
Cable	1 x Ethernet crossover cable (MiiNePort W1-ST) 1 x null modem serial cable (MiiNePort W1-ST)
Antenna	1 x 2.4/5 GHz (MiiNePort W1-ST)

Power Supply	1 x power adapter, universal (MiiNePort W1-ST) 1 x power cord, EU type (MiiNePort W1-ST) 1 x power cord, US type (MiiNePort W1-ST)
Documentation	1 x document and software CD 1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	No. of Serial Ports	Supported Baudrates	Operating Temp.	With MiiNePort W1	With Evaluation Board
MiiNePort W1	1	50 bps to 921.6 kbps	0 to 55°C	✓	-
MiiNePort W1-T	1	50 bps to 921.6 kbps	-40 to 75°C	✓	-
MiiNePort W1-ST	1	50 bps to 921.6 kbps	0 to 55°C	✓	✓

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