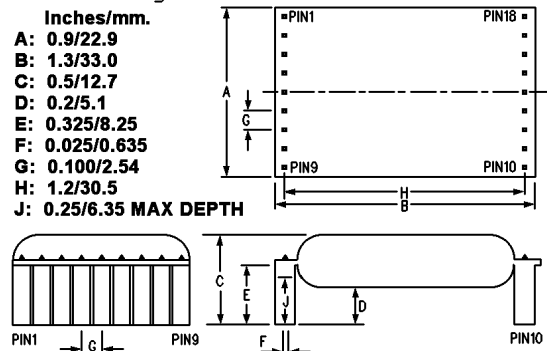


SitePlayer™ SP1 Embedded Ethernet Web Server Coprocessor Module

Revised December 2000 © NetMedia, Inc.

- Complete Ethernet Web Server in Approximately One Square Inch
- Real-time changing graphics for displays, bar graphs, buttons, switches knobs
- Standalone mode allows up to eight relays, four 8 bit PWMs, switch inputs, or event counters without any device processor
- Data can be input through forms, buttons, or links and received by device processor
- Standard 10BaseT Ethernet with automatic polarity correction hardware
- 48K bytes of Flash Web Pages, Ethernet Downloadable
- Flash Firmware, Ethernet Upgradeable
- ARP, ICMP, IP, UDP, TCP, DHCP Protocols
- Plug-in module for web upgrades/retrofits
- Static IP address or Dynamic IP Address obtained through DHCP server
- Serial Port for Processor Interface Baud Rates from 300 – 115,200 bits/sec
- Less than 100 bytes of code interface SitePlayer to most devices
- JAVA, C, C++, and Visual Basic programs can monitor and control SitePlayer remotely
- 768 Bytes of SiteObjects™ which can be bit, byte, integer, long, string, and graphical.
- Web Pages Created Using Standard HTML Authoring Tools
- Connects directly to 10BaseT filter or RJ45 with internal magnetics

SitePlayer Dual Inline Module



SitePlayer Dimensions for PCB Mounting
Graphic above is Approximately Life Size

Description

The NetMedia SitePlayer SP1 Coprocessor is the first product in a family of embedded web servers designed to enable any microprocessor-based device to become web enabled easily and inexpensively. In slightly over one square inch, SitePlayer includes a web server, 10baseT Ethernet controller, flash web page memory, graphical object processor, and a serial device interface.

SitePlayer handles web protocols and Ethernet packets independently of the device processor. Web traffic does not effect the device processor, which also adds a measure of security. Communications between SitePlayer and the device is accomplished through objects sent through a standard two wire serial port. No TCP/IP or network code is required. For standalone applications, SitePlayer can perform simple I/O directly.

Flash memory firmware allows SitePlayer to remain fresh as Internet protocols change and features are added. Flash memory web pages allow products to be upgraded before, during or after shipment. Support for multiple languages, colors, feature sets, and parameters are a "flash."

SitePlayer contains a powerful object system called SiteObjects™ which allow graphical images, text, music, links, radio buttons or checkboxes to change based on live data from the device processor. No need for CGI scripts or Java programming. A web page can contain a graphical knob rotated to a position, a switch can be toggled up or down, or a link can change based on a variable in the device processor. SitePlayer can also be monitored and controlled remotely by Java, C, C++, Visual Basic or other TCP/IP applications.

NOTE: For availability, warranty, and use in critical applications please see www.siteplayer.com/notices

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Functional Block Diagram

Serial Device Interface UART	SiteObjects Processor Interfaces with the device UART to provide object interface	SitePlayer Web Server Hosts web pages and provides for changeable graphics and data based on SiteObjects Also processes input from browsers	Ethernet Protocol Processor Interfaces with Ethernet to provide TCP/IP and other protocol support	10BaseT Ethernet Interface
	SiteObjects RAM storage 768 Bytes Contains live data for manipulating web pages and data input	FLASH Web Pages 48K bytes Web page storage Configuration information	Hardware Port 8 pins for Relays, Four 8 bit PWMs, Inputs, Switches	

Pin Description

Pin Name	Description
1 Link LED	Pin low when link has been established, typically resistor to LED to VCC
2 RX+	10BaseT receive + typically connects to filter/transformer
3 RX-	10BaseT receive - typically connects to filter/transformer
4 TX-	10BaseT transmit - typically connects to filter/transformer
5 TX+	10BaseT transmit + typically connects to filter/transformer
6 VSS	Ground
7 RXD	Receive Data to UART Can direct connect to device UART TXD
8 TXD	Transmit Data to UART Can direct connect to device UART RXD
9 VCC	+5 Volts, typically 75Ma
10 Reset	High - Reset, Ground or No Connect - Run
11 through 18	Hardware I/O port

Typical Application

