Product Information

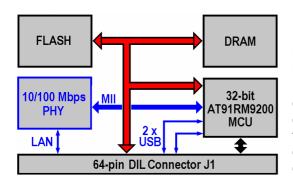
DIL/NetPC DNP/9200

Embedded Linux Module with Ethernet, USB Host and Device Interface



Description

The DIL/NetPC DNP/9200 provides a very compact Atmel AT91RM9200 ARM9-based embedded controller with preinstalled U-Boot boot loader, Linux O/S, full-featured TCP/IP stack, Web (HTTP) server, Telnet and (T)FTP support, USB Host and Device port for embedded networking applications with Ethernet and USB connectivity.



Block diagram DNP/9200: The DIL/NetPC DNP/9200 comes with a 10/100 Ethernet LAN interface, 20-bit GPIO, 1 x SPI, 2 x UARTs, 1 x USB Host port and 1 x USB Device port. The 8-bit bus interface (available over the DIL-64 connector) supports the connection to external chips and devices. The main application area of the DNP/9200 is the field of Ethernet-to-USB gateways for modern industrial and laboratory environments.

The DNP/9200 is build around the Atmel 32-bit AT91RM9200 ARM9 microcontroller unit (MCU) running with 180 MHz. The external main components for the AT91RM9200 MCU are one Flash memory chip with 16 Mbytes, one 32 MByte SDRAM memory chip, and one PHY chip for the 10/100 Mbps Ethernet LAN interface.

The DNP/9200 offers the footprint of a standard 64-pin DIL socket with 2.54mm centers and all the hardware and software features necessary to add high-speed Ethernet and USB host and device connectivity capabilities to any product design. The DNP/9200 is developed specifically for products that need to be connected to 10/100 Mbps Ethernet-based TCP/IP networks on one side and USB devices on the other side.

The DNP/9200 USB host and device interface ports supports 12 Mbps full-speed as well as 1.5 Mbps low-speed transactions in compliance with the USB 2.0 specifications.

Technical Data DNP/9200

Basic

CPU 32-bit Atmel ARM9 MCU AT91RM9200

Speed 180 MHz

RAM 32 MByte SDRAM

Flash 16 MByte

I/O Functions

Parallel (PIO) 20-bit GPIO

Serial I/Os 1 x SPI, 2 x UARTs,

USB Interfaces 1 x USB Device Port, 1 x USB Host Port (compliance with USB 2.0 full-

speed and low-speed specification)

Bus Interface 8-bit for external expansion

Special Functions

RTC 1 x Real Time Clock with external battery-backup

Watchdogs 1 x timer watchdog, 1 x power supervisor Chip Select Outputs 4 x CS output lines for external expansion

Interrupts 1 x INT interrupt input line for external devices

Other

Mechanical 64-pin DIL form factor Size 28mm x 82mm

Power 3.3 VDC

Current (depends on version) 300 mA typical

Delivery

DNP/9200 with pre-installed embedded Linux O/S

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