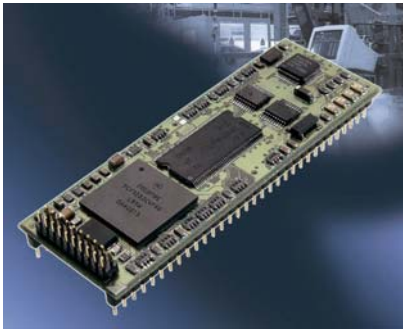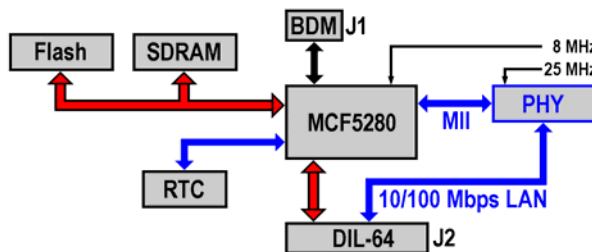Product Information

DIL/NetPC DNP/5280

Embedded Linux Module with a rich set of I/O Functions

Description

The DIL/NetPC DNP/5280 provides a very compact ColdFire-based low power embedded controller (Motorola/Freescale 32-bit MCF5280) with pre-installed Linux or eCos O/S, full-featured TCP/IP stack, and Web server for Ethernet-based embedded networking applications.

Block diagram DNP/5280: The DNP/5280 comes with one 10/100 Ethernet LAN interface an on-board PHY chip. One of the main application areas of the DNP/5280 is e.g. Ethernet-to-CAN gateways. A rich set of parallel and serial interface features and the 8-bit bus inter-face supports the connection to external components.

The DNP/5280 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 networking capabilities to any product design. The DNP/5280 is developed specifically for products that need to be connected to 10 or 100 Mbps Ethernet-based TCP/IP networks with minimum development costs.

The DNP/5280 is build around Motorola's (Freescale) 32-bit MCF5282 microcontroller unit (MCU) running with 66 MHz. The external main components around the ColdFire are one Flash memory chip with 8 Mbytes and one 16 MByte SDRAM memory chip.

Technical Data

Basic

CPU	32-bit Motorola Coldfire 66 MHz
RAM	16 MByte SDRAM
Flash	8 MByte

I/O Functions

Parallel (PIO)	20-bit GPIO
Serial I/Os	1 x SPI, 1x I2C, 1x CAN, 2 x UARTs
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	5 x INT interrupt input line for external devices

Other

Mechanical	64-pin DIL form factor
Size	28mm x 82mm
Power	3.3 VDC
Current	350 mA typical

Delivery

DNP/5280L	DNP/5280 with pre-installed embedded Linux O/S
DNP/5280E	DNP/5280 with pre-installed eCos O/S

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