



OpenNetCom 423

4 ports programmable serial device server



KEY FEATURES

- ARM9 166MHz
- 16MB SDRAM, 2MB Flash
- 4x Serial Ports UART 16C950 (128Byte FIFO, max 3.6Mbps)
- 10/100 Auto-MDI(X) Ethernet Interface
- IEEE 802.11b/g Wireless LAN (WEP/WPA)
- Very small, fanless, low Power
- μ CLinux Distribution with gcc-toolchain
- FTP upload of applications
- RedBoot Boot-Partition
- DIN RAIL mountable

Overview

A new solution for remote data collection and processing within a very compact machine. This platform is equipped with ARM9 RISC-Processor, and provides Ethernet/WLAN connection plus four serial ports with high speed UART 16C950 (128Byte FIFO).

As operating system the GPL Linux distribution μ CLinux offers a broad range of freeware tools and total control to the experienced customer and the freedom of software development as for any other Linux-PC.

With gcc-toolchain users can develop their application from remote, upload by FTP and debug subsequently. Recovering factory configuration is ensured by write-protected RedBoot partition.



Specifications

Hardware	
Processor	ARM 9 166 MHz
Memory	16MB SDRAM, 2MB Flash
UART Controller	16C950C (128Byte FIFO) or compatible
Connector type	SMA-Reverse for WLAN antenna, RJ45 for Ethernet, DSUB 9 male for serial Port
Interface	
Ethernet	10baseT/100baseTX Autodetect and Auto-MDI(X)
Wireless	IEEE 802.11b/g RaLink card (RT2560) with WEP and WPA protection
Serial interface	RS232/422/485
No. of port	4, Speed up to 1.843 Mbps
Available Modes	RS232 full duplex RS422 full duplex RS485 4 wire, full duplex RS485 2 wire, half duplex, with echo RS485 2 wire, half duplex, without echo
Signals	RS232 TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND RS422 Tx+/-, Rx+/-, GND RS485 2 wire Data+/-, GND RS485 4 wire Tx+/-, Rx+/-, GND
RS485 Data control	Controlled by ART (Automatic Receive Transmit control) or RTS
Speed	RS232: up to 921.6 kbps; RS422/485: up to 3.6 Mbps
Digital I/O	3 internal signals @ 3.3V level

Specifications

Power and Environment	
Power requirements	9 - 30V DC input, 500mA @ 12V
Power supply Adapter	12V, 1000mA, connected by Terminal block
Dimensions	167 x 99 x 29 mm (W×L×H); 189 x 102 x 30 mm with DB9 connector & DIN rail mounting kit
Operating Temp	0°C - 60°C
Storage Temp	-20°C - 85°C
Case	SECC sheet metal
Weight	0.4kg
Special Features	
RS485 Direction	ART (Automatic Receive Transmit control) for RS485
User Settings	4 x Dip Switch can be read by Application
WLAN Security	
WEP	64/128 bit encryption
WPA	WPA-PSK/TKIP
Software Configuration	
Bootloader	RedBoot™ Bootloader resides in write-protected partition. Work directly with RedBoot, using a Service-Board with console port
Filesystem	CramFS (Compressed ROM File System) for applications and libraries JFFS2 (Journalling Flash File System Ver2) for configuration and data storage
Operating System	GPL Linux Distribution µClinux with Kernel 2.4 Includes many very small applications that satisfy most of user tasks
Daemons	FTP- and Telnet-daemon
Development	Application and Kernel compilation is done with cross-compiler (gnu-compiler toolchain on CD-ROM)
Tools	There are several example programs
Approvals	
EMC	FCC Class A, CE Class A
Environment	RoHS

Ordering Information

Art. No	694
Product Name	OpenNetCom 423
Packing List	OpenNetCom 423, WLAN antenna; Power supply adapter 12V, 1000mA; CD-ROM: images, sources, tools; English documentation
Optional Accessory	DK 35A - DIN-Rail mounting kit; Service Board - Console Port, Diagnostic LEDs, 20pin JTAG Connector

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