



# Embedded 486/586 PC with Built-in UDP/IP Stack Netsock/435

## Features



- ✓ Ready-to-run embedded PC
- ✓ 10Base-T Ethernet port with onboard Embedded Netsock™ UDP/IP stack
- ✓ Small PC104 format
- ✓ 486/586 CPU, 133MHz
- ✓ DiskOnChip®
- ✓ COM1, COM2, KBD, mouse, speaker
- ✓ PC/104 expansion
- ✓ -40°C to +85°C operation available

Netsock/435 provides a turnkey, network-oriented platform on which to build embedded systems. Based on the Micro/sys SBC1491 embedded PC and its built-in 10BASE-T Ethernet port, Netsock/435 is a powerful 486/586 computer that offers high performance, and that can significantly reduce development time.

In addition to the SBC1491's 486/586 CPU, large memory capacity, VGA output, and pre-loaded operating system, Netsock/435 also includes the innovative embedded Netsock UDP/IP stack. Upon power-up, a subset of the popular Winsock functions is immediately available for powerful networking operations.

With networking software pre-integrated, bringing up multi-station embedded systems is much easier than in the past. And there are no royalties for any of the included software when production volumes begin.

Netsock/435 is completely turnkey. It displays a sign-on message when 5V is applied. Clip in a standard network cable, and it communicates with a network. Cables, documentation, and example programs are all supplied with the free development kit.

### Software Support

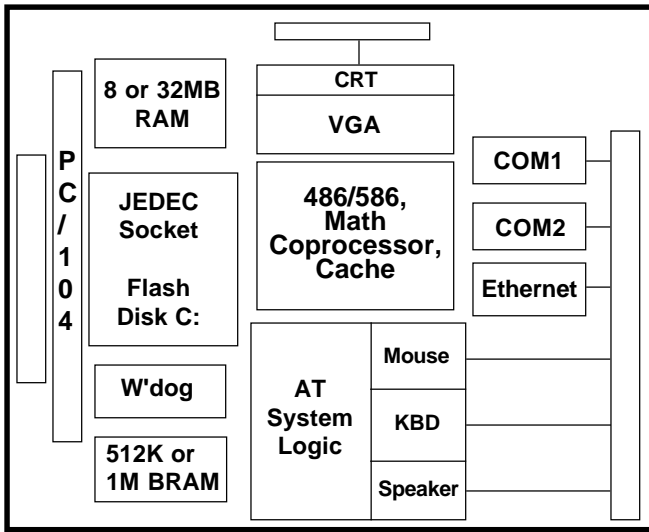
*DOS emulation,  
MSDOS 6.22, Linux,  
VxWorks®, 32-bit RTOS,  
Windows 98/NT/CE,  
TurboDebugger™  
Comm library, CommBLOK™  
PID loop library, PidBLOK™,  
C, compilers  
[Items above in Section 6]*

### Compatible Hardware

*PC/104 expansion cards  
[Items above in Section 4]  
RS232/RS485 devices  
Custom*

### Mounting/Packaging

*Standoffs, STDOFF01  
[Items above in Section 5]  
ENC104-2  
ENC104-4  
[Items above in Section 3]  
Custom*



- Winsock API Subset**
- socket ( )
  - closesocket ( )
  - setsockopt ( )
  - getsockopt ( )
  - recvfrom ( )
  - sendto ( )
  - bind ( )
  - ioctlsocket ( )
  - inet\_addr ( )
  - inet\_ntoa ( )
  - WSAStartup ( )
  - WSACleanup ( )
  - WSAGetLastError ( )

**Specifications:**

**Embedded PC Features:**

- PC/104 format
- 486/586 CPU at 133MHz
- 64MB RAM
- DiskOnChip® support
- VGA, COM1, COM2, KBD, mouse
- See SBC1491 data sheet for complete details

**Free On-board Network Software:**

- Flash SetUp™ configuration utility
  - UDP/IP driver stack preloaded into flash
  - Implements subset of Winsock functions [see chart above]
  - IP, UDP, ARP, DHCP, ICMP protocols
  - Dynamically linked with application program
- Version available without UDP/IP stack. Call factory for information.

**Ordering Information:**

**Single Board Computer:**

Netsock/435      SBC1491, Ethernet & Embedded Netsock™

Netsock/435-ET      Extended Temperature Version

DK435N

No charge development kit with first order

1491OPT3

512KB battery-backed RAM

1491OPT4

1MB battery-backed RAM

1491OPT20

10BASE-T Ethernet

1491OPT25

MSDOS in bootable flash ROMdisk A:

1491OPT50

Linux startup kernel installed in flash

Netsock/430-ATL

Call factory for ordering information on Netsock/430-ATL. Drop-in replacement for Netsock/430

DC32 through DC1G

32MB through 1GB DiskOnChip®

ENC104-2

Subfloor

ENC104-4

Enclosure

*Add -ET to option for extended temp operation*

RUN.EXE, Flash Setup, Embedded Netsock trademark Micro/sys, Inc.  
CommBLOK, PidBLOK, OptoBLOK trademark Drumlin  
Turbo Debugger trademark Borland International  
VxWorks trademark Wind River