Embedded 486DX PC with Built-in UDP/IP Stack Netsock/430

Features

✓ Ready-to-run embedded PC

✓ 10Base-T Ethernet port with onboard Embedded Netsock™ UDP/IP stack

✓ Small PC104 format

✓ 486DX CPU, 66MHz

✓ DiskOnChip®, up to 32MB RAM

✓ COM1, COM2, KBD, mouse, speaker

✓ PC/104 expansion

✓ -40°C to +85°C operation available

Netsock/430 provides a turnkey, network-oriented platform on which to build embedded systems. Based on the Micro/sys SBC1490 embedded PC and its built-in 10BASE-T Ethernet port, Netsock/430 is a powerful 486DX computer that offers high performance, and that can significantly reduce development time.

In addition to the SBC1490's 486DX CPU, large memory capacity, VGA output, and pre-loaded operating system, Netsock/430 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/430 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.
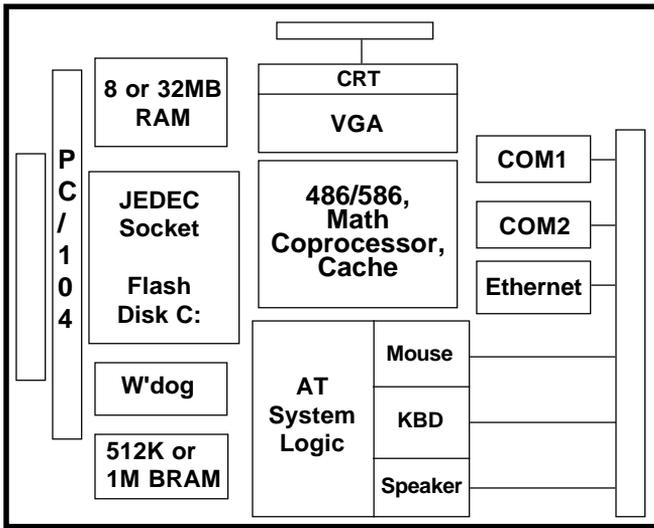
Software Support

DOS emulation, MSDOS 5.0, 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]
Custom

Winsock API Subset

socket ( )
closesocket ( )
setsockopt ( )
getsockopt ( )
recvfrom ( )
sendto ( )
bind ( )
ioctlsocket ( )
inet_addr ( )
inet_ntoa ( )
WSAStartup ( )
WSACleanup ( )
WSAGetLastError ( )

Diagram blocks:
PC/104
8 or 32MB RAM
JEDEC Socket / Flash Disk C:
W'dog
512K or 1M BRAM
CRT
VGA
486/586, Math Coprocessor, Cache
COM1
COM2
Ethernet
AT System Logic
Mouse
KBD
Speaker

Specifications:

Embedded PC Features:
- ❑ PC/104 format
- ❑ 486DX CPU at 66MHz
- ❑ 8MB RAM, expandable to 32MB
- ❑ DiskOnChip® support, 1M flash, expandable to 144MB
- ❑ VGA, COM1, COM2, KBD, mouse
- ❑ See SBC1490 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/430	SBC1490, Ethernet & Embedded Netsock™
Netsock/430-ET	Extended Temperature Version
DK430N	No charge development kit, available with first order only
1490OPT1	32MB RAM Total
1490OPT3	512KB battery-backed RAM
1490OPT4	1MB battery-backed RAM
1490OPT25	MSDOS in bootable flash ROMdisk A:
1490OPT30-8	8MB Flash Disk C:
1490OPT30-24	24MB Flash Disk C:
1490OPT30-48	48MB Flash Disk C:
1490OPT30-64	64MB Flash Disk C:
1490OPT50	Linux startup kernel installed in flash

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