



Micro/sys SBC1390 Wireless Package

Data communication is a need for many embedded systems. In the past, this could mean that extensive field wiring would have to be installed. However, now the increased popularity of the Wi-Fi™ (IEEE 802.11b) standard means that components are widely available to put together an extensive network with little or no field wiring. This wireless LAN technology runs in the unlicensed 2.4 GHz range in the U.S. and has a maximum throughput of 11 Mbps over distances of less than about 100 m. The maximum range is about 550 m. The SBC1390 provides an ideal platform for Wi-Fi because of its small size and powerful 386EX processor.

Here are some of the Micro/sys Wireless SBC1390 features:

- Wi-Fi compatibility means it will work with a wide variety of wireless networks.
- Wi-Fi drivers are supplied for DOS and Linux
- 386EX processor at 25MHz (33MHz optional)
- CompactFlash connector
- Four PC-compatible serial ports
- Watchdog timer resets board in case of software failure
- Battery-backed real-time clock
- Comes with DOS-compatible operating system

SBC1390 DOS Wireless Package:

Item	Part No.	Description	Price
1	SBC1390	386EX Computer, 1M Flash,	\$315
2	1390OPT23	PC Card slot	\$45
3	PCC-WIFI11B	802.11b Wireless PCMCIA Card	\$75
4	DK1390	Cables, sample software, user manuals	n/c
Total:			\$435

- Notes:
- 1) This system does not support VGA user console applications as a single board. Add the MPC204 VGA card (\$190) and CA4030 cable to DB15 (\$35) for VGA.
 - 2) Price shown is for the 25MHz 386EX. A 33MHz version is also available.
 - 3) This is a PC/104 standard (3.55" x 3.775") single board solution
 - 4) The first DK1390 is no charge. Additional DK1390 kits can be purchased.

In most cases, a wireless network will have to connect to a wired network. An access point (AP) is a device that serves as a communications hub for wireless clients. Besides having the ability to communicate wirelessly, the Micro/sys wireless access point has a 10/100BASE-T Ethernet port that connects to a wired LAN. All client wireless communications can either go through the AP (infrastructure mode) or clients can communicate directly with each other in addition to the AP (ad-hoc mode). An AP can double the range of wireless clients as well as providing enhanced security.

Here are some of the Micro/sys Wireless Access Point features:

- Two CardBus slots for radio NICs
- Supports 2.4GHz with the capability of migrating to 5GHz with the addition of another PC Card
- IEEE 802.1x security authenticates the client and distributes the WEP key automatically
- 64-bit WEP and 128-bit RC4 encryption
- MAC address control table
- Web-based, full SNMP management

Wireless Access Point Package:

Item	Part No.	Description	Price
1	AP-WIFI11	Agere Orinoco AP-2000	\$695
2	PCC-WIFI11B	802.11b Wireless PCMCIA Card	\$75
3		Cables, sample software, user manuals	n/c
Total:			\$770

Notes: 1) For additional bandwidth, a second PCMCIA Card can be added