

PCTEL

advancing connectivity & telecommunications



Broadband - DSL

Provisioning broadband to the consumer market in an easy, cost efficient manner is answered with PCTEL's PCT1888 solution.

The PCT1888 is a single-chip PCI DSL/V.90 combo modem controller that can operate as an ADSL digital modem and V.90 56Kbps analog modem. It supports PCTEL Host Signal Processing (HSP), leveraging the host CPU's processor power to eliminate the need for an expensive DSP-based solution. The PCT1888 supports the latest standards in ADSL ensuring widespread interoperability with all major ADSL central office equipment. It also provides consumers with downstream transfer rates of up to 1.5Mbps and upstream rates of up to 512Kbps.

The PCT1888's unique design allows for software download without hardware upgrades to ensure future protocol and equipment support. It is the most compact, power saving and cost-effective solution for addressing the emerging high-speed Internet access market.



PCT1888

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FEATURES



ASIC PCT1888

- ◆ Integrated 32 bit 33MHz PCI version 2.2
- ◆ Compliant with PCI bus power management
- ◆ Supports Plug-n-Play with external EEPROM interface
- ◆ Interface directly with PCT1303N and PCT1303W Silicon DAA chip set for V.90 functionality
- ◆ Software upgradeable
- ◆ Programmable G.lite and V.90 Tx and Rx buffers
- ◆ Low power standby
- ◆ Power-down modem for AFE and/or core logic
- ◆ Low power consumption:
50mA @ 12V +/- 5%
500mA @ 3.3V +/- 5%
- ◆ Supports Windows 98SE, Windows ME and Windows 2000
- ◆ PQFP 128 pin 14 x 20 x 2.8mm

Consumer DSL

The PCT1888 communication solution provides a PCI plug-and-play internal modem solution. Designed to conform to ITU 992.2, T1.413 and V.90 standards, this fully integrated ATM/ADSL/V90 solution is the most cost effective solution available for your DSL communications requirements. The user-friendly graphical user interface (GUI) is designed for easy control of modem functions and status monitoring. The PCT1888 supports concurrent DSL / V.90 operation, the latest standards in ADSL and is interoperable with all major PTT's Central Office Equipment.

A PCT1888 evaluation unit, user manual and schematic is available upon request to qualified customers.

- Discrete Multi-tone modulation
 - Auto sensing ITU 992.1(G.DMT), ITU 992.2 (G.lite) and T1.413 protocols supported by DSLAM
 - Scalable data rate up to 1.5 Mbps downstream and 512 Kbps upstream
 - Supported line distance up to 18,000 ft.
 - Support ITU 992.2 fast retrain
 - Adjustable CPU utilization and data rate throughput
 - Fully integrated ATM/ADSL/V.90 PCI ATU-R internal modem design
 - Integrateable with Home Phone Network Alliance via PCI bridge
 - Integrateable with Home RF, Bluetooth & 802.11
- Support for multiple data encapsulation formats:
- RFC 1483 Bridged Ethernet over ATM
 - RFC 1483 Routed IP over ATM
 - RFC 2364 PPP over ATM
 - RFC 1577 Classical IP over ATM

Specifications

- **Data Modulation Standards**
ANSI T1.413 issue 2 interoperable
G.992.1 (G.DMT), G.992.2 (G.lite)
ITU-T V.90, V.34, V.32bis, V.32, V.22bis, V.23, V.22, V.21,
Bell 212A, Bell 103

Data Compression ITU-T V.42bis, MNP Class 5
Error Correction ITU-T V.42 LAPM and MNP 2-4
- **System Requirements**
Intel PIII CPU (500 MHz+), AMD K7 CPU (500 MHz+) and Pentium class CPU (500 MHz+)
64MB RAM/256K L2 cache with PCI bus expansion slot

US Headquarters
1331 California Circle
Milpitas, CA 95035 USA
Tel: 408-965-2100 Fax: 408-895-0178

Taiwan Office – Asian Pacific Operations
2nd Fl., No. 512, Sec 2, Cheung-Kung Rd.,
Taipei, 114, Taiwan, R. O. C.
Tel: +886-2-2793-9908 Fax: +886-2-2791-6543

Japan Office - Sales
Yoshida Bldg. 501
1-31, Kudankita 4-chome
Chiyoda-ku, Tokyo 102-0073, Japan
Tel: +81-3-3288-2410 Fax: +81-3-3288-2375

Korea Office - Sales
135-090, 18th Fl, Kyoung Am Bldg
157-27 Samsung-Dong, Kangnam-ku
Seoul, Korea
Tel: +82-2-565-6624 Fax: +82-2-555-5779

European Office – Sales & Operations
Miniparc du Verger-Bat. G
1 rue de Terre Neuve
91940 Les Ulis, France
Tel: +33-1-6918-9070 Fax: +33-1-6907-4080