PCtel

# PCT1789W


## ASIC Features 789T-A

- V.90 (56K) D/F/V/Spkr Phn
- 55mW operating @ 3.3V
- Designed to meet worldwide PTT requirements
- PCI Interface complies with PCI v2.2
- Supports Windows 98, Windows NT and Linux operating systems
- On chip PnP logic
- PC 97/ 98 compliant – Unimodem/V compliant
- PC 99 compatible
- PCT789T comes in 100-pin TQFP package
- TQFP 100 pin 14 x 14 x 1.4mm



## Codec/DAA Features PCT303DW

- 86dB dynamic range TX/RX paths
- 2-4 –wire hybrid
- Integrated ring detector
- 4000V Isolation
- Integrated modem CODEC
- Compliant with FCC Part 68, CTR21, and JATE
- Low power standby
- Low profile SOIC package
- ( 2 ) SOIC 16 pins 10x3x1.55mm

# HSP56 World MicroModem™

The HSP56 World MicroModem chip set provides a highly integrated modem solution consisting of three chips. PC-TEL has integrated over half of the discrete DAA into a digital silicon two-chip solution. Coupled with the HSP56 Modem PCI solution it dramatically reduces the number of discrete components. It also provides a programmable, multi-country compliant modem solution. This high level of integration of the HSP56 World MicroModem chip set and the reduction in circuit board size makes the HSP56 World MicroModem the most compact, power saving ( 55mW total solution @3.3V ), and cost-effective solution for 56Kbps internal modems available for the desktop, notebook and sub-notebook market.

The PCT789 ASIC provides the interface and buffering between the PCI bus and the integrated modem CODEC serial interface, input/output port, interrupt control, and auto-power down management. This device was designed to work efficiently with PC-TEL's advanced *Host Signal Processing* (HSP) Modem software and the integrated modem CODEC/DAA to perform data/fax/voice functions. Figure 1 shows the 1789-hardware block diagram using the PCT789 ASIC, coupled with the PCT303DW chip set. This solution also provides ACPI compliance as well as support for Wake on Ring.

Software modem technology allows for upgrades of value-added features for standards such as V.34 high-speed fax. Upgrades are a simple download of software via a file download from a web site.

The HSP Modem reference design, evaluation units, user's manual, schematics and Gerber files will be provided on request to qualified customers.

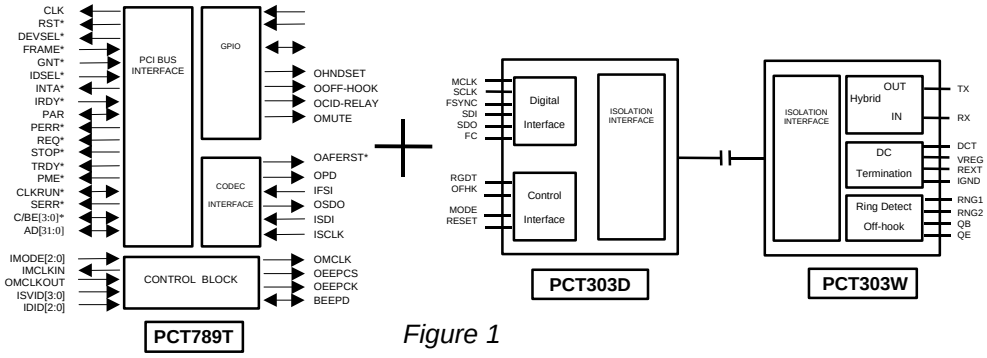


*Figure 1*

## Specifications

- **Data Modulation Standards**
  ITU-T V.90/K56Flex, V.34, V.32bis, V.32, V.23, V.22bis, V.22A/B, V.21
  Bell 212A and 103

  Data Compression V.42bis, MNP Class 5
  Error Correction V.42 LAPM and MNP 2-4

- **Fax Modulation or Protocol Standards**
  V.17, V.29, V.27ter, V.21 Channel 2
  Group 3 and EIA Class 1

- **Video Conferencing**
  V.80
  H.324 interface support (200MHz MMX, external camera, video application required)

- **System Requirements**

  Pentium class CPU (166 MHz+), 200 MHz+ Cyrix 6x86MX Processor
  16MB RAM/256K L2 cache with PCI bus expansion slot

## Telecom Approvals

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|---|---|---|---|---|
| Australia* | Denmark | Ireland | Netherlands | Spain |
| Austria | Finland | Israel* | New Zealand* | Sweden |
| Belgium | France | Italy | Norway | Switzerland |
| Bulgaria* | Germany | Japan | Portugal | United Kingdom |
| Canada | Greece* | Luxembourg* | Singapore* | USA |
| Cyprus* | Iceland* | Malta* | South Africa* | |

*Approvals pending in countries marked with **