

V.92/V.90 Modem Chipsets for PCI and MiniPCI

SmartPCI561™

Smart Link's **SmartPCI561™** is a V.92/V.90 modem chipset optimized for the PCI (Peripheral Component Interconnect) bus specification.

This innovative solution is based on proven Smart Link modem technology already found in millions of modems worldwide.

Smart Link's modem technology moves the modem, fax, and telephony functions previously performed by a DSP to the computer's own host processor. This approach offers the end user the lowest cost with maximum flexibility through software upgrades.

SmartPCI561™ chipsets offer V.92/V.90 modem, fax and telephony features in a 3 chip design made of an extremely compact (PQFP100 18x20mm) PCI modem Controller (SL1800) and a leading edge Silicon DAA (Data Access Arrangement) in two SOIC16 packages (10x3mm). The complete solution, using a single board layout, can be certified in multiple countries worldwide.

SmartPCI561™ is a cost effective and reliable solution for high volume PCI modem shipments.



TECHNICAL DETAILS

Hardware

The SmartPCI561™ reference design supports:

- US and International Applications
- Optional Call Progress Buzzer
- Optional Call Progress Header to connect to sound card TAM connector Software
- PCI 2.2 compliant
- Support for PnP ID

Software

SmartPCI561™ drivers conforms to:

- TAPI
- Multimedia API
- AT command set standard
- WHQL logo certification

Chipset

SL1800 PCI Modem Controller

- PCI 2.2 compliant
- 3.3V Power Supply
- Package LQFB80 (12 x 12 x 1.4 mm)
- Temperature Range 0-70°C
- DAA (HAMR5603 - Si3012/Si3014)
- -84 dB Dynamic Range TX/RX paths
- 3.3V and 5V Power supply
- 4000 Volts Isolation
- Two 16 pins SOIC packages (10 x 3 x 1.55 mm)
- 2 to 4 wires hybrid

SmartPCI561™ Manufacturing Kit

- Reference card with Drivers
- Schematics, Gerber Files, BOM
- PTT Wizard - Homologation Tool
- SL Custom - Customization Tool
- SL Record - Line recording Tool

System Requirements

- Pentium class PC (233 MHz and above)
- Windows (95, 98, 98SE, ME, 2000, XP, NT4) and Linux
- PCI Slot
- 8 Mbytes RAM

KEY FEATURES

Modem

- V.92 (up to 56 Kbps download, 48 Kbps upload)
- V.90 (up to 56 Kbps download, 33 Kbps upload)
- V.34 (4.8 Kbps to 33.6 Kbps)
- V.32 bis (4.8 Kbps to 14.4 Kbps)
- V.23 (75 bps to 1.2 Kbps)
- V.22 bis (50 bps to 2.4 Kbps)
- V.21, Bell 103 / Bell 212
- Automode
- V.44/V.42 bis/MNP 5 data compression
- V.42/MNP 2-4 error correction
- Hayes AT Command set
- TIES escape code
- Quick Connect (V.92)

Fax

- Group 3, Class 1
- V.17
- V.29
- V.27 ter

Voice Features

- ADPCM voice compression
- Digital Answering Machine

Telephony Services

- Wake Up on Ring
- Ring detection
- On/Off hook control
- Call progress monitor
- DTMF detection and generation
- Voice/fax/modem distinction
- Caller ID (optional)
- Modem on Hold (V.92)

Video Conferencing

- V.80/H.324 interface support

International Approvals

- Single board layout for multiple country certification: FCC, CTR21, JATE and others

Operating System Support

- Windows (95, 98, 98SE, ME, 2000, XP, NT4), Linux

Diagnostic Tool

- Modem Helper™

Disclaimers

- Proper use of our chipsets and drivers are clearly described. Smart Link does not guarantee product performance or accept any liability due to the improper usage of its drivers or chipsets.
- This information and any specification is subject to change without notice: (i) Modem is capable of receiving data up to 56Kbps. Actual send and receive speeds may vary depending upon factors, such as connecting modem and phone line connections. (ii) Modem must use the appropriate US or International chipset version for the country to which it is shipped. (iii) Modem must use the appropriate driver version for the operating system in which it is being installed.
- All trademarks are property of their respective owners.

Ordering Information

Chip Set #	Contents	Description
SmartPCI561-USJ	SL1800, HAMR5603, Si3012	North America/Japan
SmartPCI561-INT	SL1800, HAMR5603, Si3014	Worldwide

For More Information
www.smlink.com
sales@smlink.com

AMERICAS

Smart Link Technologies, Inc.
 57 Bedford Street
 Suite 101
 Lexington, MA 02420, USA
 Tel: +1-781-653-2000
 Fax: +1-781-863-1899

EUROPE

Smart Link Ltd.
 Cedar Gables, Chapel Street
 Basingstoke, Hants
 RG25 2BZ UK
 Tel: +44-1256-398597
 Fax: +44-1256-398688

ASIA

Smart Link Ltd.
 Area E, 8F
 167 Tunhua N. Road
 Taipei, Taiwan R.O.C.
 Tel: +886-2-2546-1577
 Fax: +886-2-2546-9305

HEADQUARTERS

Smart Link Ltd.
 7 Giborei Israel Street
 New Industrial Zone
 Netanya, 42504 Israel
 Tel: +972-9-863-8000
 Fax: +972-9-865-6552