

Product Brief

ALIS V3

PSB 4595

PSB 4596

Analog Line Interface Solution



The ALIS V3 chipset is a complete, international modem front-end, that integrates a fully programmable Data Access Arrangement (DAA) together with a high quality codec.

The analog IC "ALIS-A" (PSB 4595) contains the two-wire interface and the codec. The digital device "ALIS-D" (PSB 4596) incorporates programmable digital filter structures and a flexible data interface. Capacitors across the digital connection between the PSB 4595 and the PSB 4596 provide line isolation.

The resulting advantages are:

- Significant cost savings
- International compliance
- System interface compatibility
- Best modem performance
- Shorter system development and approval cycles
- Optimized solution for portable and battery fed equipment
- PC 98 conformance
- PC-Card compliant form factor

Applications

- International Modems and Fax
- Host-based Modems
- PC-Card Modems
- Palmtop Computers
- Modem on Motherboard
- Embedded Modems (e.g. Set-Top-Box)

Outstanding Features

- Reduced system cost
- Integrated two-wire line interface, hybrid, codec, filters, ring detector, dialer, caller-ID decoder and storage
- No transformer; few discrete components. Reduced bill of materials (BOM)
- Smaller PCB, faster assembly
- No need for country specific designs and optimization
- No stuffing options required
- Reference approvals for fast, successful homologations
- Acoustic line monitoring
- Voice codec interface

World-Wide Compliance

- Programmable, international line characteristics: FCC Part 68, TBR-21, B-11 23A, BAPT 223 ZV5, JATE, TS002
- Safety: IEC 950, EN 60 950
- Caller-ID: Bell 202, CCITT V.23
- PC 98: PC wake up on incoming call, caller ID storage

Superior Performance

- Transformerless DAA with excellent linearity

- 16-Bit linear codec with programmable sample rates
- Excellent S/N ratio and transmission quality over the full frequency range
- Best performance for V.90 and V.34 modems

Faster Time-to-Market

- Streamlined global HW design
- Excellent development tool support: Reference system, international coefficients, SW utility

Small form Factor

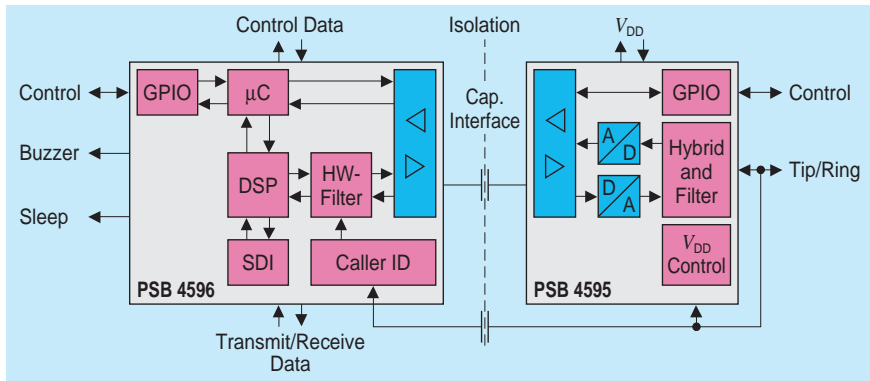
- Small, PC-Card compliant packages (TSSOP 24/28)
- Few discrete components, no transformer

Low Power Consumption

- Line current feeds ALIS-A
- Minimal stand-by current required for ALIS-D
- Wake-up signal and caller-ID storage for PC 98 power management functions

Innovation

- Domestic versions available
- xDSL road map

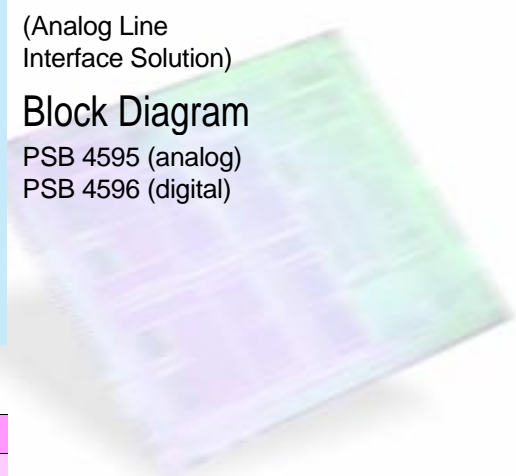


ALIS

(Analog Line Interface Solution)

Block Diagram

PSB 4595 (analog)
PSB 4596 (digital)



Documentation

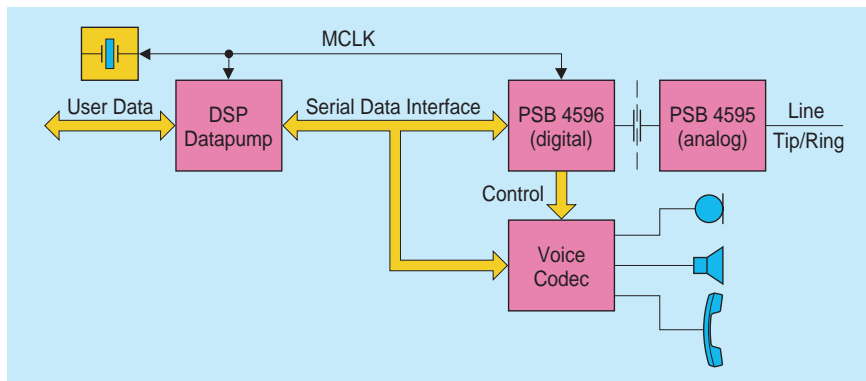
ALIS V3 PSB 4595/4596	Date of Issue / Version
Product Brief	07/98 / V3.1
Product Overview	06/98 / V3.1
Preliminary Data Sheet	10/98 / V3.1

Development and Support Tools

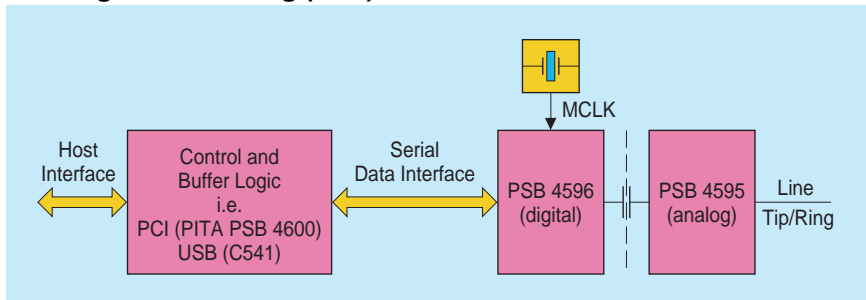
	Ordering Code	Date of Issue / Version
ALIS V3 Evaluation Board	SIPB 45033P	4Q/98 / V3.1
ALIS V3 Demonstration Board	SIPB 45053P	4Q/98 / V1.1
Software Modem Development Hardware Platform	SIPB 46045P	10/98 / V1.1
	Ordering Code	Date of issue / version

Application Examples

DSP-Based Modem Solution



Host Signal Processing (HSP) Modem



- (A) Wien**
☎ (+43) 1-1707-356 11
- (AUS) Richmond (Melbourne), Vic. 3121**
☎ (+61) 3-9420 71 11
- (B) Brussel/Bruxelles**
☎ (+32) 2-536 23 48
- (BR) São Paulo-SP**
☎ (+55) 11-836 23 77/ 26 84
- (CDN) Mississauga, Ontario L5T 1P2**
☎ (+1) 905-819 80 00
- (CH) Zürich**
☎ (+41) 1-495 30 65
- (D) Düsseldorf**
☎ (+49) 211-399 15 51
Laatzten (Hannover)
☎ (+49) 511-877 27 06
München
☎ (+49) 89-9221 40 86
Nürnberg
☎ (+49) 911-654 76 22
Stuttgart
☎ (+49) 711-137 33 14
- (DK) Ballerup**
☎ (+45) 4477-44 77
- (E) Tres Cantos-Madrid**
☎ (+34) 91-514 80 00
- (F) Saint-Denis CEDEX 2**
☎ (+33) 1-4922 31 00
- (FIN) Espoo (Helsinki)**
☎ (+35) 9-5105 1
- (GB) Berkshire RG 12 8FZ**
☎ (+44) 1344-39 60 00
- (GR) Amaroussio/Athen**
☎ (+30) 1-686 41 11
- (HK) Hong Kong**
☎ (+852) 2832 05 00
- (I) Milano**
☎ (+39) 02-6676-1
- (IND) New Delhi 110 014**
☎ (+91) 11-461 74 47
- (IRL) Dublin 4**
☎ (+353) 1-603 23 42
- (J) Tokyo 141-0022**
☎ (+81) 3-5449 64 11
- (N) Oslo 5**
☎ (+47) 22-63 30 00
- (NL) Den Haag**
☎ (+31) 70-333 24 29
- (P) Amadora**
☎ (+35) 1-417 00 11
- (PL) Warszawa**
☎ (+48) 2-670 91 51
- (RC) Taipei**
☎ (+886) 2-2773 66 06
- (ROK) Seoul 135-080**
☎ (+82) 2-527 77 00
- (RUS) Moskva**
☎ (+7) 095-237-64 76, -69 11
- (S) Kista**
☎ (+46) 8-703 35 00
- (SGP) Singapore 349 253**
☎ (+65) 840 06 10
- (TR) Findikli (Istanbul)**
☎ (+90) 212-251 09 00
- (USA) Cupertino, CA 95014**
☎ (+1) 408-777 45 00
- (ZA) Halfway House 1685**
☎ (+27) 11-652-20 00, -27 00

How to reach us:
<http://www.siemens.de/semiconductor>

© Siemens AG 1998.
All Rights Reserved.
Please note that any information contained in this publication may be subject to change. Siemens reserves the right to make changes to or to discontinue any product or service identified in this publication without notice.
Please contact our regional offices to receive the latest version of the relevant information to verify, before placing orders, that the information being relied upon is current.
All brand or product names, hardware or software names are trademarks of their respective companies or organizations.