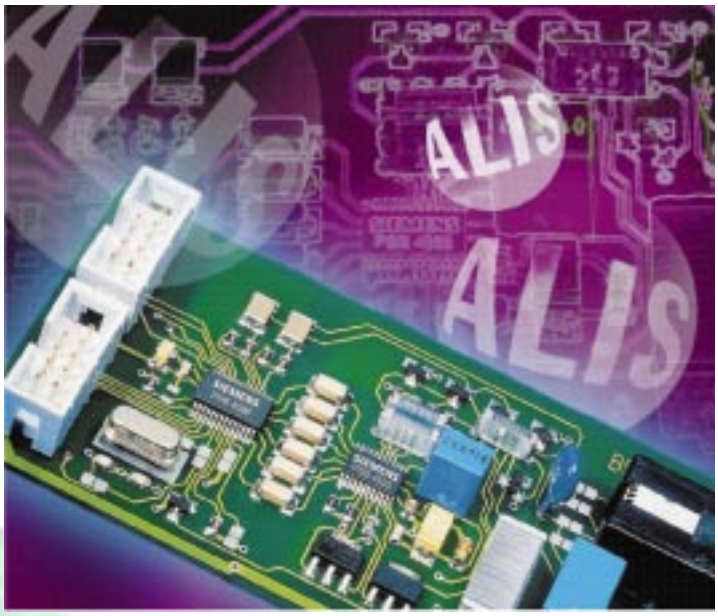
SIEMENS

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
- Modems on Motherboards
- Embedded Modems (e.g. Set-Top-Box)
- Analog Trunk Interfaces

Outstanding features:

Reduced system cost

- Integrated two-wire line interface, hybrid, codec, filters, ring detector, dialer, caller-ID decoder and storage
- No transformer and 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: IEC950, EN 60 950
- Caller-ID: Bell 202, CCITT V.23
- PC 98: PC wake up on incoming calls, 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

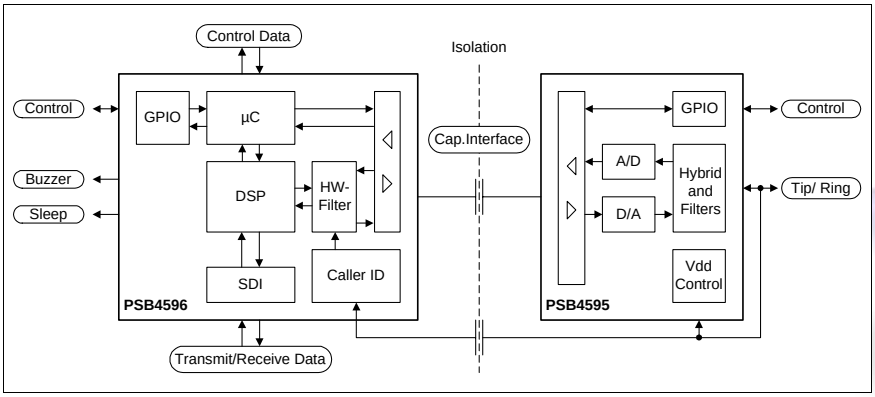
- Small, PC-Card compliant packages (TSSOP24 / 28)
- Few discrete components, no transformer

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

PSB4595 (analog)
PSB4596 (digital)

Documentation

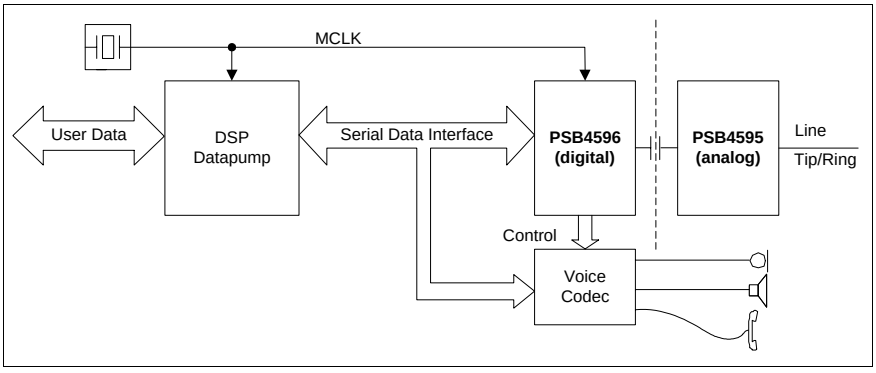
ALIS V3 PSB 4595/4596	Date of issue / version
Product Brief	07/98 / V3.1
Product Overview	06/98 / V3.1
Preliminary Data Sheet	08/98 / V3.1

Development and Support Tools

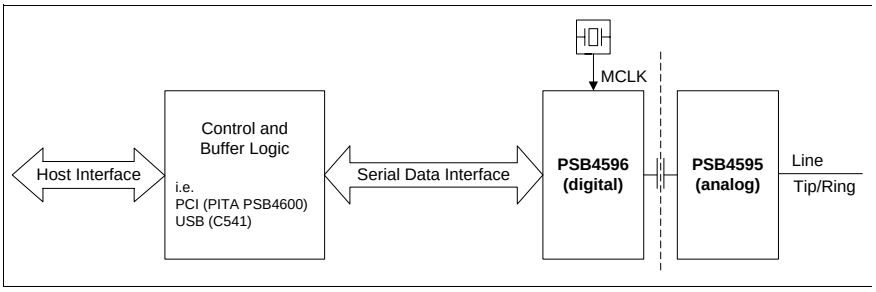
	Ordering Code	Date of issue / version
ALIS V3 Evaluation Board	SIPB 45033P	4Q/98 / V3.1
ALIS V3 Demonstration Board	SIPB 45053P	4Q/98 / V1.1
HSP Modem Development Hardware Platform	SIPB 46045P	09/98 / V1.1

Application Examples

DSP-based Modem Solution



Host Signal Processing (HSP) Modem



(A) Wien
1-1707-356 11

(AUS) Richmond (Melbourne)
Vic. 3121
3-94 20 71 11

(B) Brussel/Bruxelles
2- 536 23 48

(BR) São Paulo-SP
11-836-23 77

(CND) Mississauga, Ontario
L5T 1P2
905-819 80 00

(CH) Zürich
1-495-30 65

(D) Düsseldorf
211-399-15 51
Laatzen (Hannover)
511-877-27 06
München
89-92 21-40 86
Nürnberg
911-654-76 22
Stuttgart
711-137-33 14

(DK) Ballerup
44 77 44 77

(E) Tres Cantos-Madrid
91-514 80 00

(F) Saint-Denis CEDEX 2
1-49 22 31 00

(GB) Berkshire RG12 8FZ
1344-39 60 00

(GR) Amaroussio/Athen
1-686 41 11

(HK) Hong Kong
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(IND) New Delhi
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1-603 23 42

(J) Tokyo
3-54 49 64 11

(N) Oslo
22-63 30 00

(NL) Den Haag
70-333 24 29

(P) Amadora
1-417 00 11

(PL) Warszawa
2- 670-91-51

(RC) Taipei
2-2773 66 06

(ROK) Korea
2-527-77-00

(RUS) Moskva
095- 237-64 76, -6911

(S) Kista
8-703 35 00

(SGP) Singapore
84 0 06 10

(TR) Findikli
212-251 09 00

(USA) Cupertino
408-777-45 00

(ZA) Halway House
11- 652-20 00, -27 00

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

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