

## 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

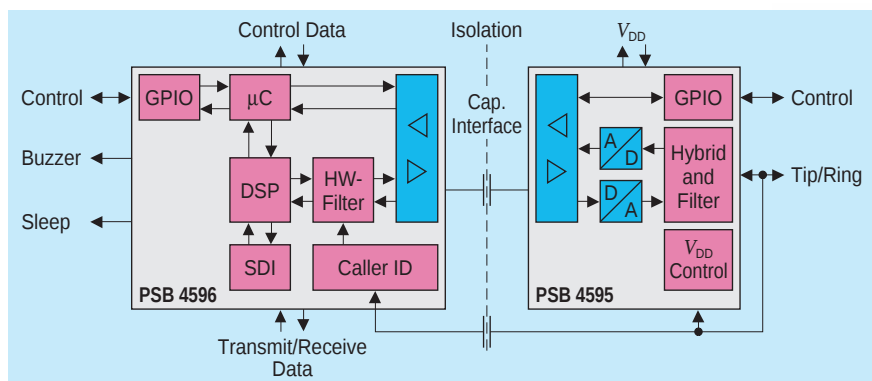
#### Low Power Consumption

- 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

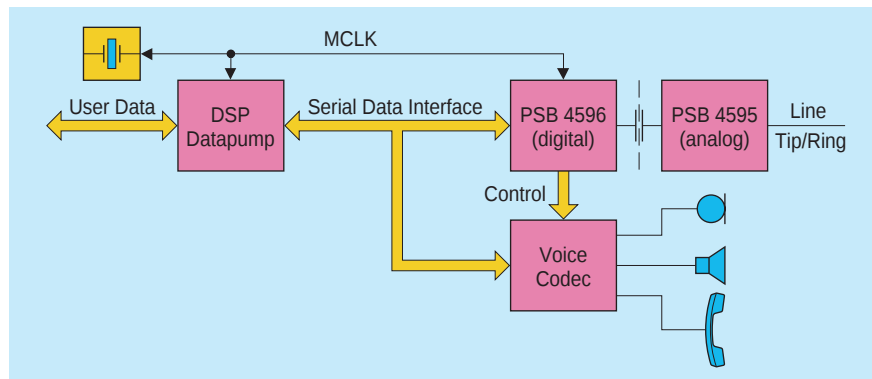
| ALIS V3 PSB 4595/4596  | Date of Issue / Version |
|------------------------|-------------------------|
| Product Brief          | 07/98 / V3.1            |
| Product Overview       | 06/98 / V3.1            |
| Preliminary Data Sheet | 10/98 / V3.1            |

## Development and Support Tools

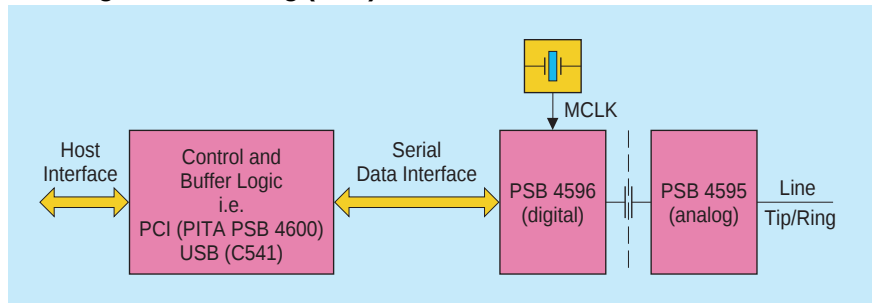
|                                              | Ordering Code | Date of Issue / Version |
|----------------------------------------------|---------------|-------------------------|
| ALIS V3 Evaluation Board                     | SIPB 45033P   | 4Q/98 / V3.1            |
| ALIS V3 Demonstration Board                  | 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



|                                                                                                                                                                                                             |                                                              |
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