

Acoustic Echo Canceller PSB 2170

The PSB 2170 Acoustic Echo Canceller (ACE) provides acoustic echo cancellation for analog and digital featurephones. The chip supports two IOM[®]-2 compatible channels and a dedicated interface to the PSB 4851 (dual codec). It is programmed by a simple four wire serial interface. The PSB 2170 also supports a power down mode and provides anterface pins to +5 V levels.

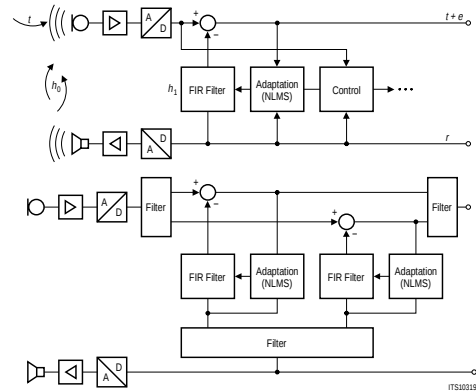
1. Potential application

- Analog feature phones
- Mobile Phones in cars (handsfree operation)
- Video telephony
- PBX-Phones
- ISDN-Phones

Future versions will include Voice Recognition and Noise Cancellation techniques. The PSB 4860 SAM features the full-band algorithm of the ACE and performs voice compression for digital answering machines as well.

2. Features:

- Two Modes of acoustic echo cancellation
fullband: -20 db ERLE @ 60 ms, <1 ms delay, fullband
subband: -30 db ERLE @ > 175 ms, 43 ms delay
- Fast adaptation without learning tone
- Line echo cancellation
- DMTF tone generation and detection
- Flexible ringing generation
- Programmable side gain
- Transducer correction filters
- Call progress tone detector
- Caller ID decoder (Bellcore and BT Sin 227, 242)
- General purpose parallel port (16 bits)
- Independent gain adjustable for all channels



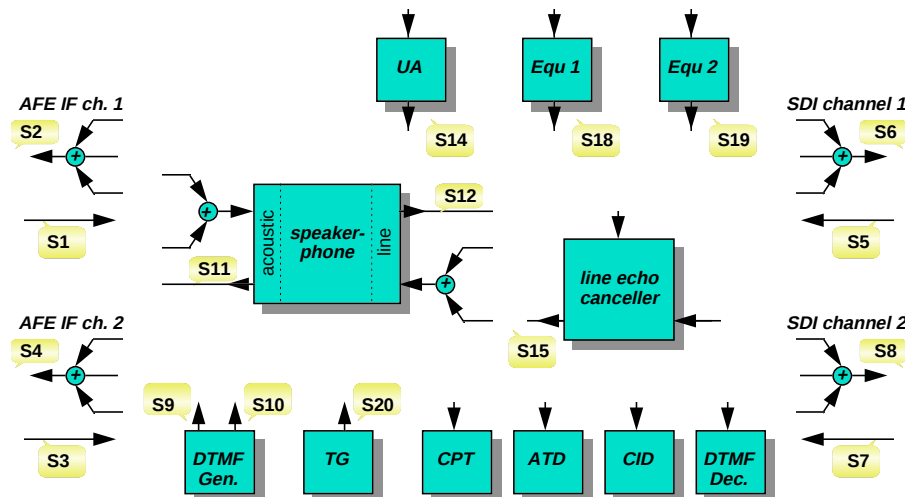
3. Packaging

Type	Ordering Code	Package
PSB 2170 V1.1	Q67223-H1005	P-MQFP-80

4. Product status

Product	Step	Status	Changes
PSB 2170	V1.0	ES available	--
PSB 2170	V1.1	ES 1/98 Prod 5/98	

5. Diagram (independent building blocks facilitate modular designs)



6. Documentation (Please contact our sales office for details)

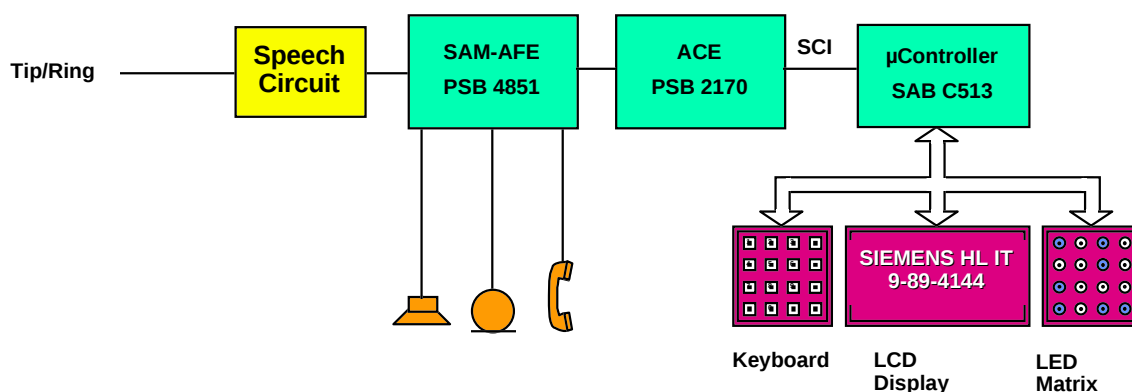
	<u>Date of issue/version</u>	<u>Type of material</u>
Prel. Data Sheet V1.1	10/97	Copy
Errata Sheet V1.0	7/97	Copy
App.Note: "ACE Setup..."	8/97	Copy

7. Development and support tools

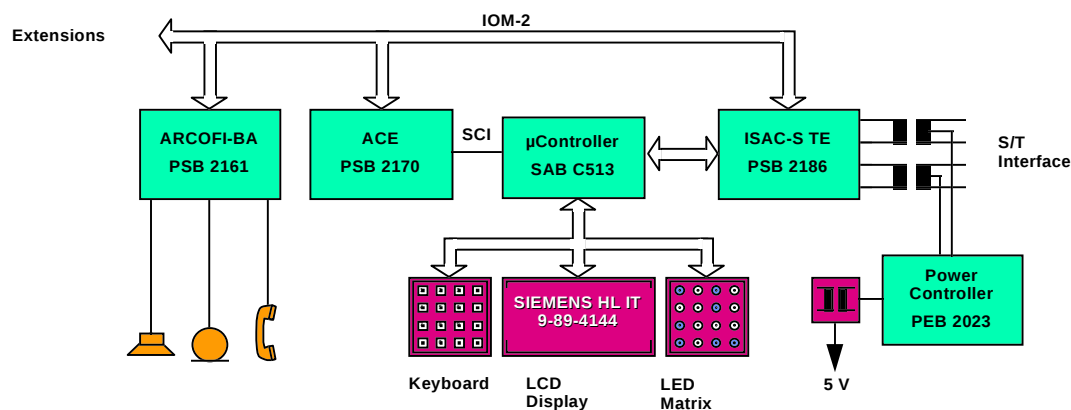
	<u>Availability</u>	<u>Ordering number</u>
SAM evaluation board SIPB 4850	available	Q67220-H1012

8. Applications

- Analog feature phone with Full Duplex Echo Cancelling



- ISDN phone with Full Duplex Echo Cancelling



- Car Kit for GSM mobil sets featuring Full Duplex Echo Cancelling

