



## ESPICO

Specialists in Speech and Audio Software Development

### ETSI HR

The ETSI Standard HR (Half Rate) speech codec uses a form of the VSELP (Vector sum excited linear prediction) algorithm. HR operates at 5.6 kbps. The codec operates on speech frames of 20ms (160 samples).

The ESPICO implementations are highly optimised, realising low memory and MHz requirements. Contact ESPICO for specific resource requirements.



#### Features

- ◆ Encodes and decodes GSM-HR bit-streams compliant with ETSI GSM 06.20
- ◆ Supports Voice Activity Detection (VAD)
- ◆ Supports Discontinuous Transmission (DTX)
- ◆ Supports Comfort Noise Generation (CNG)
- ◆ Supports substitution and muting of lost frames

#### Availability

ESPICO's optimised solution can be ported to any platform. Available solutions include:

- ◆ ZSP Cores including ZSP400, ZSP500, ZSP800 families
- ◆ ARM including Cortex and Neon™
- ◆ MIPS32 74K™
- ◆ Ceva DSP Cores

#### Applications

- ◆ Digital cellular telecommunications

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