



ESPICO

Specialists in Speech and Audio Software Development

ETSI EFR

The ETSI standard EFR (Enhanced Full Rate) speech codec belongs to the ACELP family of speech coders and operates with a bit-rate of 12.2 kbit/s. The codec operates on speech frames of 20ms (160 samples) with a 5ms look-ahead. This standard includes DTX functionality which comprises Voice Activity Detection (VAD) and comfort noise generation (CNG). EFR provides wireline quality in any noise free and background noise conditions.

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



Features

- ◆ Encodes and decodes GSM-EFR bit-streams compliant with ETSI GSM 06.60
- ◆ Fully integrated with ESPICO's AMR narrow band speech codec
- ◆ 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
- ◆ VoIP
- ◆ Wireless communications
- ◆ IP-PBX

Contact ESPICO Ltd

ESPICO Ltd
Beaufort House
Devauden, Monmouthshire NP16 6PE
United Kingdom

Phone: +44(0) 1291 650426
Fax: +44(0) 1291 650426
E-mail: enquiries@espico.com
www.espico.com