

CMX683

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Call Progress and Voice Detector

The CMX683 is a call progress tone detector for use in monitoring the progress of calls in Public Switched Telephone System (PSTN) applications. With supply requirements between 2.7V and 5.5V and a low current consumption, it can easily integrate into a range of telecom equipment.

Dial Tone, Ringing, Busy and Not Available states can be distinguished using the host μ C to qualify the cadence of the CP DETECT output. The CMX683 uses advanced digital techniques to characterise valid Call Progress tones, unwanted tones, line noise and voice or music signals. In contrast to Call Progress detection devices, based on simple filtering techniques, the CMX683 offers excellent sensitivity coupled with low false detection rates.

In particular the 'stuttered dial tone' of voice mail messaging systems is supported. The use of statistical processing techniques enables the CMX683 to distinguish voice or music activity from DTMF or Call Progress signals.

Features

- Detects single and dual call progress tones
- Worldwide call progress tone compatibility
- 'Voice' detect outputs (fast and slow)
- Wide dynamic range
- Low falsing
- Low-power operation (600μA at 3.0V)

Applications

- Worldwide payphone systems
- Telephone redialling systems
- Dialling modems
- Banking and billing systems
- Telecom test equipment
- Telecom security systems

Supply Requirement

• 2.7 to 5.5V

Separate outputs integrate "voice" activity over shorter and longer periods, enabling payphone and other billing systems to commence charging when a line connection has been established.

A 3.58MHz crystal ensures accurate and repeatable performance.

The CMX683 has a similar pinout to all commonly used call progress detectors and is available in DIP, TSSOP and SOIC packages.

WHAT TO DO NEXT

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