



# Speakers-on-a-Chip with Wideband Full Duplex Mono Speakerphone SoC

## CX20662-EVK Evaluation Kit

Conexant's portfolio includes a comprehensive suite of semiconductor solutions for communications and consumer applications.

Conexant's CX20662-EVK evaluation kit contains everything to design hands-free products for high-quality voice applications.

The single-chip solution features a wideband acoustic echo cancellation Digital Signal Processor (DSP) and Line Echo Suppression. It provides superior full duplex, echo free voice performance.

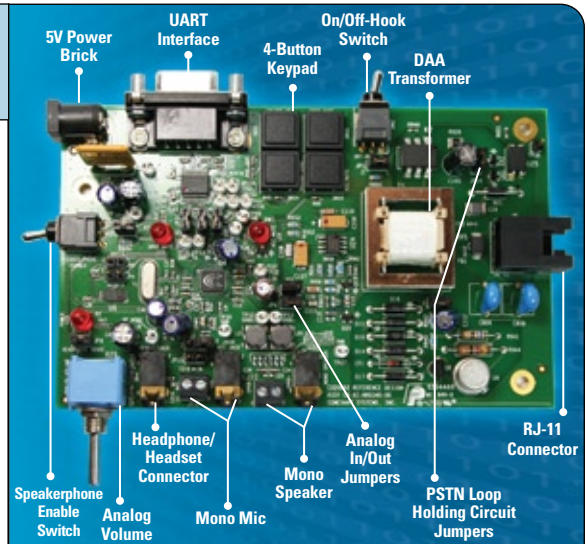
The CX20662 has the highest level of Bill of Materials (BOM) integration of Class-D amplifier, headphone driver, and full duplex DSP.

### Distinguishing Features

- Wideband Acoustic Echo Cancellation DSP engine exceeding TIA 920 requirement
- Line Echo Suppression
- Integrated 600mW Class-D amplifier, filterless output with selectable gains
- Acoustic Echo Cancellation DSP tuning parameters
- Voice activity detection
- Speech-trained acoustic echo cancellation
- Microphone noise reduction filter
- UART MCU interface
- On-board hybrid circuit for intercom applications
- Jumper setting for selecting either hybrid connection or line-out

### Applications

- Intercom systems
- Telepresence Webcam with speakerphone
- Full duplex hands-free telephony



### Evaluation Kit and Software CD Content

- Reference Board - CX-9Z-NR0340-00
- Datasheet - DSH-20157
- Schematic - SCH-NR0340-00, BOM-NR0340-00
- Layout - G600Z-NR0340
- External Class-D Amplifier Schematic - CX-9Z-NR0340-EXTAMP
- AEC Turning Document - APP-NOTE5
- Electromagnetic Interference (EMI) Filtering Recommendation APP-NOTE2
- Modifying Registers via UART - APP-NOTE4
- Layout Guidelines - APP-NOTE1
- Firmware Upgrade Instructions - APP-NOTE3

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**Part Number** CX20662-EVK

**Description** Speakers-on-a-Chip with Wideband Full Duplex Mono Speakerphone SoC