Voice Communication Package (VCP)

- VCP is a universal software package of digital signal processing technologies for voice applications enabling high quality, full duplex, noise free communication from various environments.
- VCP reduces different types of noises, enhancing speech, canceling acoustic echoes and dynamically equalizing signal volume and spectrum according to current acoustic conditions.
- Users of mobile phones, hands-free automotive, Bluetooth headsets and wearables, industrial intercoms and other types of voice terminals will all benefit from VCP quality.
- VCP includes configuration and tuning tools for efficient and rapid product development.
- VCP is ported to all major DSP and MCU cores with attention to efficient resources optimization.
- VCP optional add-ons further enhance the end-customer experience.

**VCP Performance**

- **Echo canceller**
  - Fast convergence (< 300ms) with no initial echo
  - Convergence in double talk and high noise
  - Long echo tail (up to 1000ms)
  - Residual echo level < -65dB

- **Noise suppression**
  - Noise suppression with high frequency resolution
  - Up to 30dB noise reduction with low distortions
  - Fast noise adaptation (as low as 100ms for transient noises)

- **Low processing delay**

- **EasyListen™** increases the intelligibility by dynamically slowing down incoming speech in real time by up to 40%

- **Supported sampling rates:** 8kHz, 16kHz, 24kHz, 32kHz

- **Fully compliant with ITU automotive specifications**