



Digital Speech Processor - SED 081510

An industry-leading programmable audio digital signal processing platform that couples state-of-the-art acoustic algorithms to ensure high-fidelity digital sound quality.

The adaptive noise reduction preserves perceived speech levels without causing distortion.

The IC monitors noise levels independently in 128 individual bands to eliminate audible noise and reduce the amount of perceptible artifacts introduced by the noise reduction process.

Advanced Features

- Factory programmed
- Soft acoustic fade between program changes
- 4 user selectable programs available
- High fidelity audio CODEC
- 20-bit audio precision
- 93dB input dynamic range
- 4 channel WDRC compression
- 8 band dual graphic EQ, input and output
- 8 biquadratic filters, input and output
- Drives zero-bias 2-terminal receivers
- 3 analog inputs
- 4 fully configurable memories
- audible memory change
 indicator

- · 2 memory select pads
- Internal or external volume control with programmable range
- AGC with variable threshold, time constants, and optional adaptive release
- 16kHz or 8kHz bandwidth high fidelity audio
- 1.09mA current draw
- 1.1mA current draw all features enabled
- 1.5V supply voltage
- 15 Ohms BTL output (To drive a speaker directly)
- AGC peak limiter
- Adaptive noise reduction 12dB
- 16 pin standard ceramic DIP package

018510-100HYB	1 or 2 Compression Channels, AGC-O output limiting, single mic input (no directional system) 8 or 16kHz audio bandwidth, in-channel squelch (1:2 expansion ration), ability to contol with potentiometers.
018510-103	Same performance as above, but slightly larger in size.
018510-102	1, 2 or 4 Compression Channels, 12 band graphic equalizer, 2 mic inputs with fixed directional capability (fixed polar plot), 8 or 16 kHz audio bandwidth, in-channel squelch (1:2 or 1:3 expansion ratio), adaptive feedback canceller.
018510-101BGA	1,2 or 4 Compression Channels, 8 band graphic equalizer, 2 mic inputs with fixed directional capability (fixed polar plot), 8 or 16kHz audio bandwidth, in-channel squelch (1:2 or 1:3 expansion ratio), 128 band 12dB Noise Reduction, adaptive feedback canceller.
018510-101DIP	Same performance as above but mounted to a 16 pin DIP package.
018510-104	1, 2 or 4 Compression Channels, 8 band graphic equalizer, 2 mic inputs with fully adaptive system (automatic null steering polar plot), 8 or 16kHz audio bandwidth, in-channel squelch (1:2 or 1:3 expansion ratio), 128 band Noise Reduction, adaptive feedback canceller.

SED will provide customer specific noise cancellation. Please contact us for details.