**Symetrix**

Acoustic Echo Cancellation Coprocessor

Adding a Radius NX AEC Coprocessor to Radius NX 4×4 or Radius NX 12×8 systems promotes the highest possible levels of clarity and intelligibility in AV conferencing and distance learning applications. System programmers optimize design performance and resource utilization by matching the number of AEC channels, number of references, and tail length to their specific requirements.
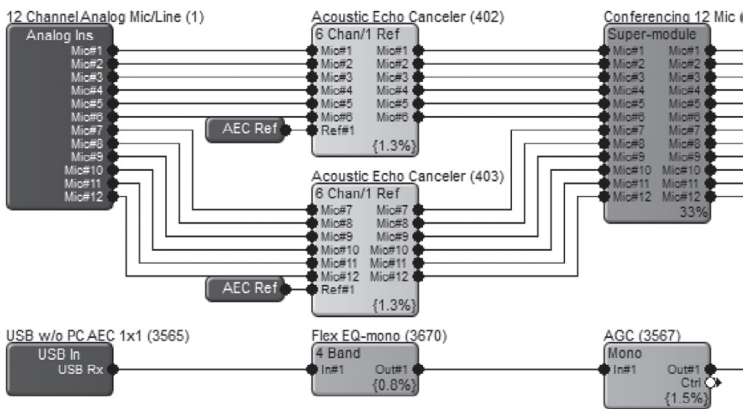
The coprocessor is available in single- and dual-core versions. Each core corresponds to a single AEC module in Composer providing up to eight channels with a single reference or up to four channels with independent references for each channel.

FEATURES

- **Wideband AEC:**
  Optimizes far-end intelligibility

- **Up to 400 ms tail length:**
  Enhanced performance in large, reverberant spaces

- **Adjustable background noise reduction:**
  Optimizes far-end intelligibility in noisy spaces

- **Virtual, assignable, routable channels:**
  AEC can be applied to any sources within a system and routed to any destinations

- **Ultra-fast convergence rate:**
  Enhanced performance at onset of conversations and when roving microphones are in use

- **Highly stable adaptive filtering:**
  No divergence during long periods of double-talk

- **Frequency domain NLP:**
  Lowers far-end distortion by only removing offending spectral content

- **Comfort noise:**
  Adaptively matched to natural room tone giving participants an indication that the communications channel is still active during periods of silence
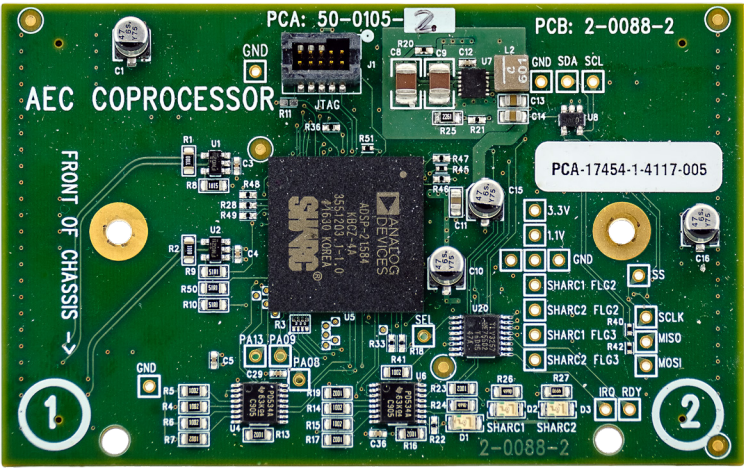
SPECIFICATIONS

Sample Rate	48 kHz
Bandwidth (Frequency Response)	20-20 kHz
Latency	16 mS
Tail Length	400 ms, maximum
Convergence Rate	Typically > 90 dB/sec
Single Talk Total Cancellation	80 dB, typical
Double Talk Total Cancellation	40 dB, typical
NR (Background Noise Reduction)	User adjustable, up to 25 dB
Standards Compliance	ITU G.167, ITU G.340, VDA Category 1
AEC Channels per Core	User selectable, up to 8
Reference Inputs per Core	User selectable, up to 4

AEC can be applied to any sources within a system and routed to any destinations