

PRECISION MDSD DIGITAL PROCESSOR

DC-500



Accuphase Laboratory, Inc.

Dimensions and weight

- Slim and Compact



Internal view



Power supply

- Equipped with two dedicated transformers for analog and digital
- Custom capacitors totaling 120000 μF



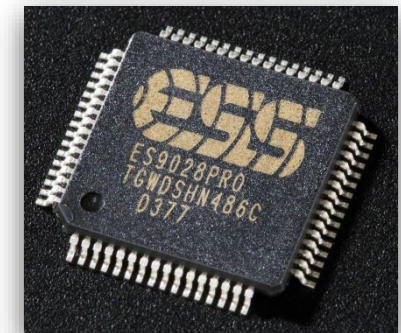
Power Transformer



Custom made Filter Capacitors

D/A converter

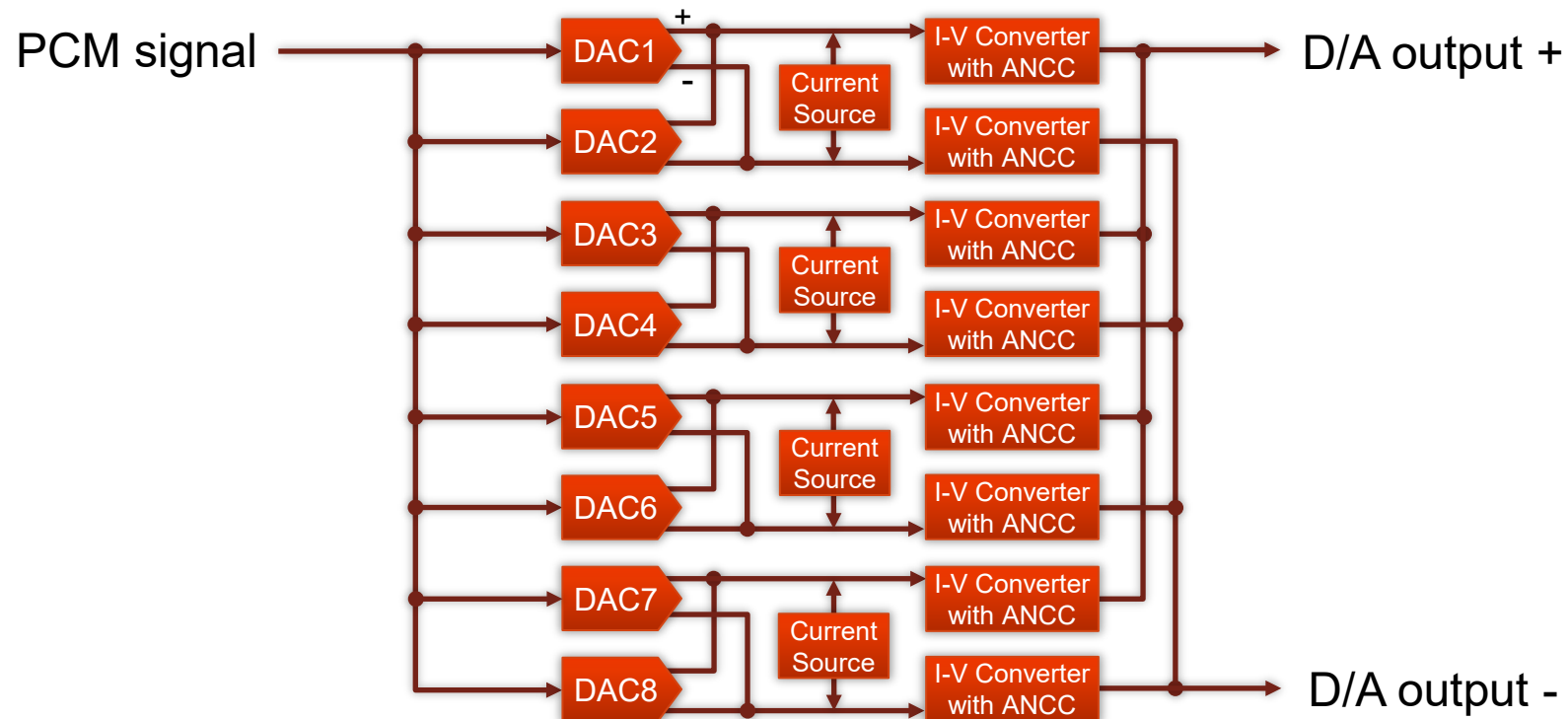
- 8 parallel D/A converters per channel
 - ES9028PRO 32bit HyperStream DAC, 1 chip per channel
 - Multiple Delta-Sigma++ for PCM signal
 - Multiple Double Speed DSD for DSD signal



SABRE
ES9028PRO

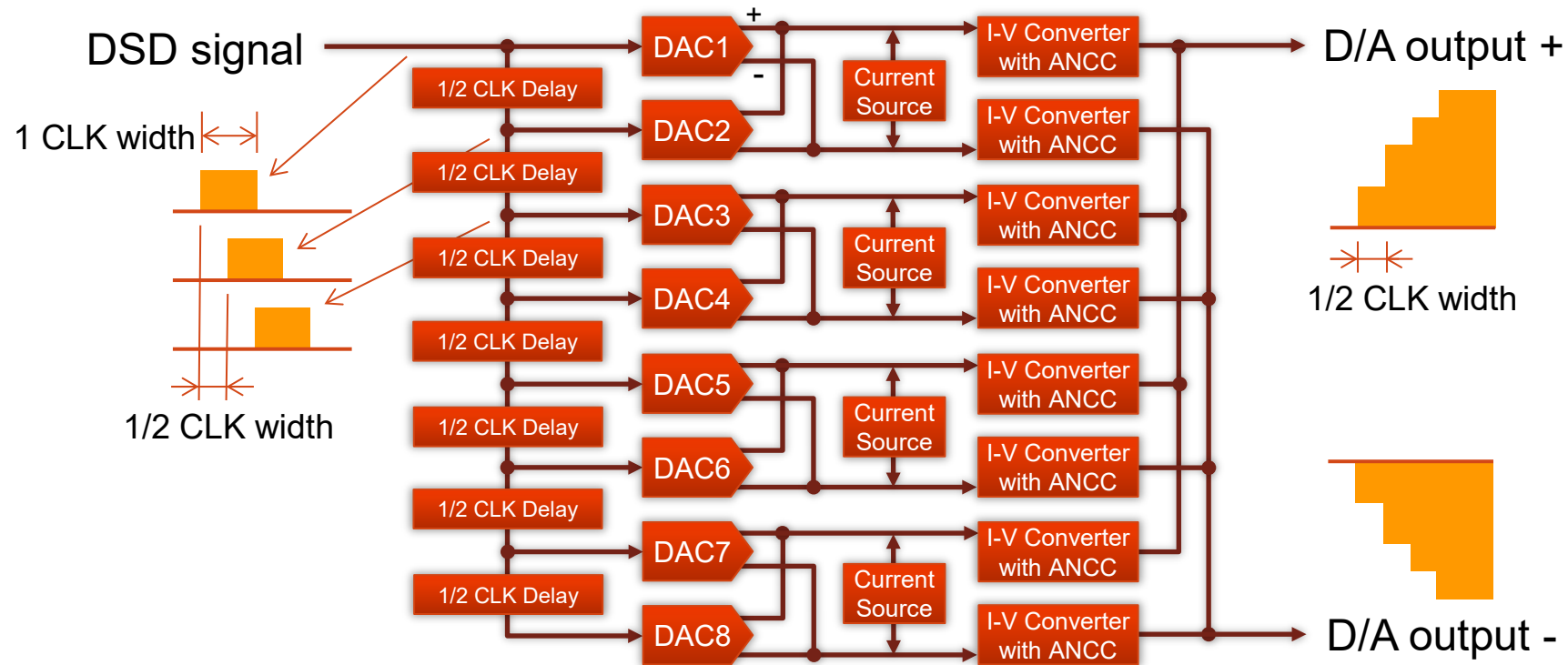
Multiple Delta-Sigma++

- Technique to make DAC parallel
- Performances improved by a factor of 2.8



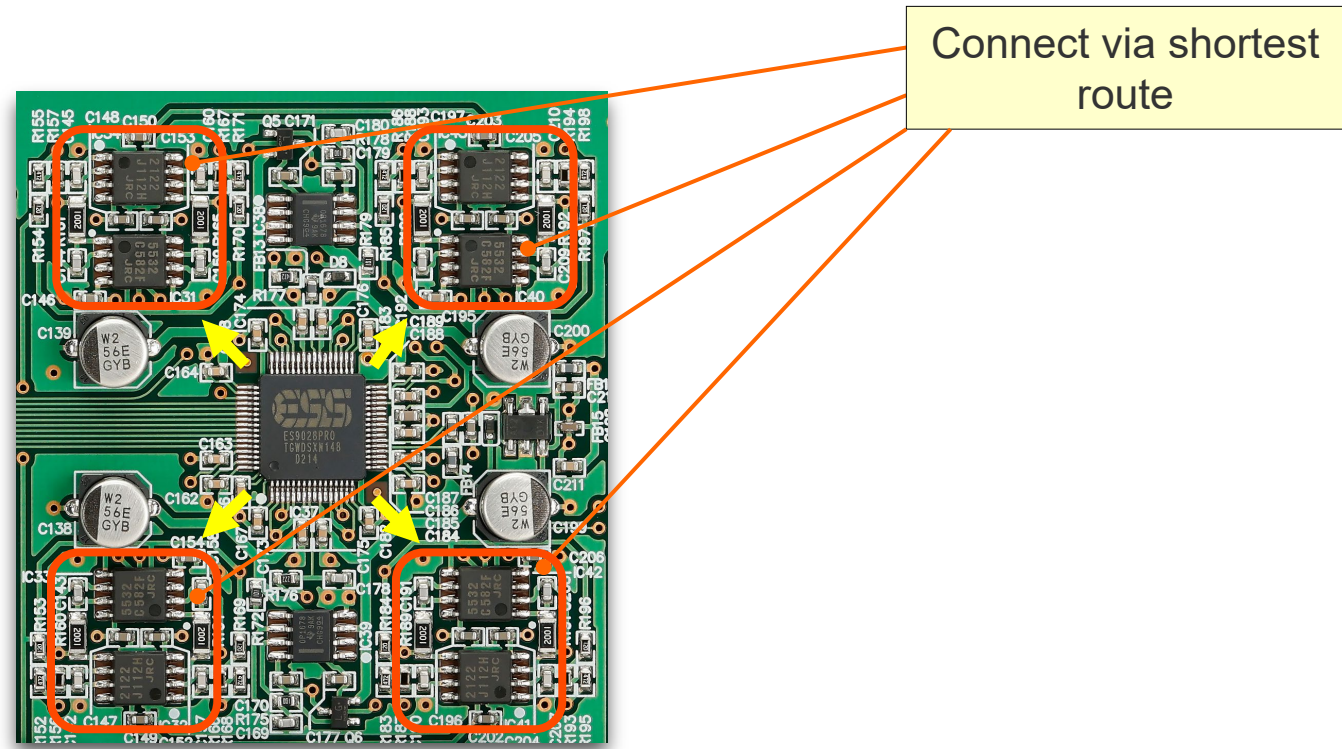
Multiple Double Speed DSD

- In the high frequency works as a low pass filter, in the low frequency works as MDS++ principle



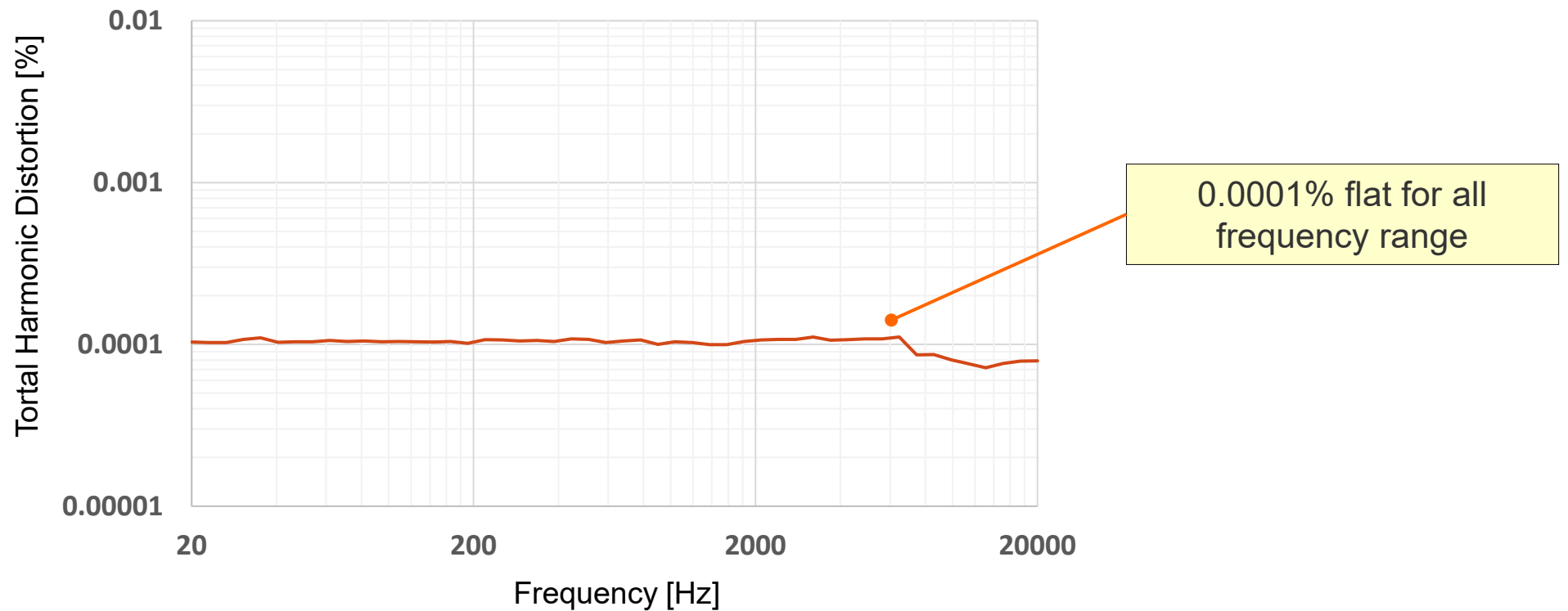
High Performance D/A converter

- Optimized wiring through ideal component layout
- Improved performance through left-right channel separation



Ultra low THD+Noise

- Total Harmonic Distortion + Noise vs Frequency



Total Harmonic Distortion +Noise vs Frequency

Inputs / Outputs

Inputs

- HS-LINK

Version1: 192kHz/24bit, 2.8224MHz/1bit

Version2: 384kHz/32bit, 5.6448MHz/1bit

- Optical: 96kHz/24bit

- USB2.0: 384kHz/32bit, 11.2896MHz/1bit

Outputs

- LINE OUT

- BALANCED OUT



Appendix “ANCC”

- ANCC: Accuphase Noise and distortion Canceling Circuit
 - Detecting the noise and distortion with Sub-amp, and cancelling them by Main-amp output.

