Features
- Floating point Digital Processor
- Flexible configurations
- Extreme Low power

Hardware
- Analog Devices Sharc ADSP21369
- 32bit Floating point processing
- Stereo digital inputs (AES-EBU/ SPDIF/Optical)
- Stereo digital output (AES-EBU/ SPDIF/Optical)
- ASRC for 20 to 216kHz input
- Front panel volume control
- IR control with learning feature

Software Control
- Real time live control over USB2.0
- Win & Mac compatible
- Firmware upgradeable for future

Power
- Single external 5VDC supply
- Extreme low power (3W)

Applications
- Room correction using FIR filters
- Advanced filtering applications
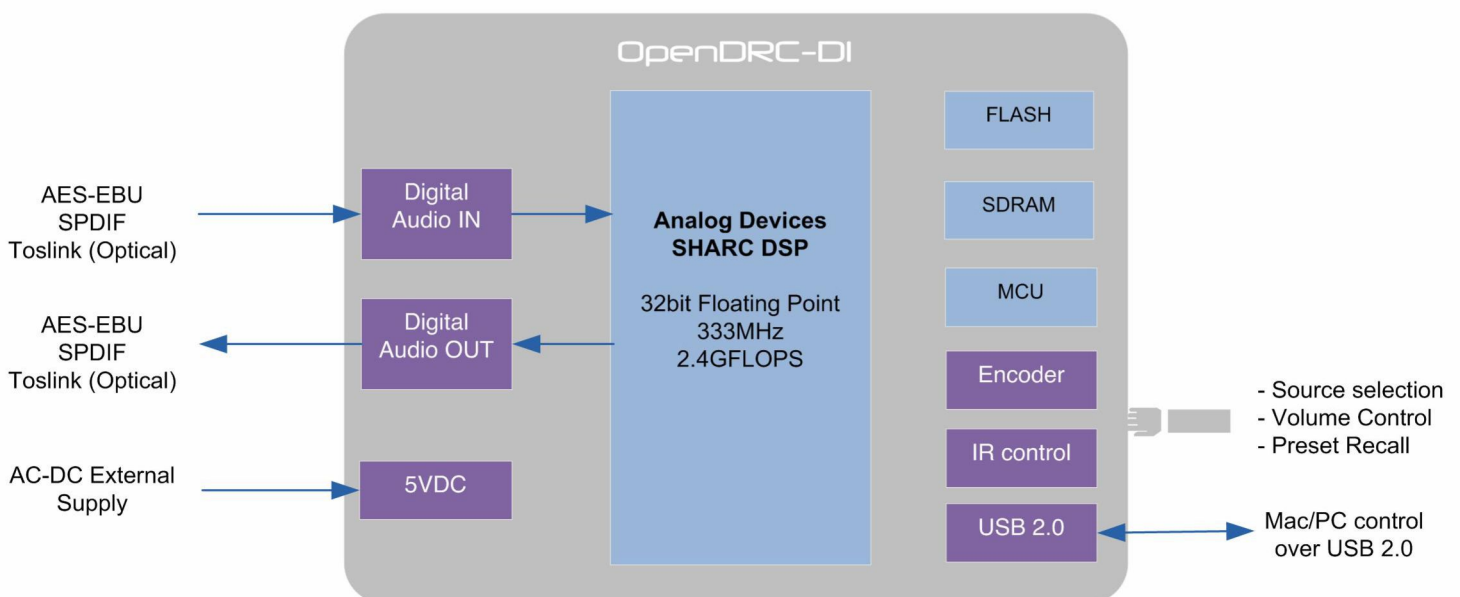- System equalization
- Mobile Audio

Introducing the OpenDRC platform, a new range of digital audio processor with floating point capabilities. Powered by Analog Devices ADSP21369 Sharc DSP, the OpenDRC engine easily handles complex audio filtering processing such as room correction, FIR crossover filtering, reverb engines… Flexibility, high performance and low cost are the obvious hallmarks of the OpenDRC series.

As an all digital solution, the OpenDRC-DI (DI for Digital) carries the most common stereo digital audio formats (AES-EBU, SPDIF and Toslink) to match your existing equipment. Combined with an high quality Asynchronous Sample Rate Converter, the processor also easily adapts to any sample rate. The IR learning remote feature and/or rotary encoder will allow control of your source, active preset or master volume without the need of any PC once the unit configured.

Last but not least, the OpenDRC-DI follows the footstep of our proven miniDSP concept: "One hardware, many plug-ins". An easy to use platform that received praised for its simplicity of use. By setting some strategic partnership with 3rd party software developers, the OpenDRC takes it one step further. From advanced room correction to full featured linear phase crossover, miniDSP products provide an exciting range of audio processing solutions!

SYSTEM DIAGRAM

OpenDRC-DI

AES-EBU
SPDIF
Toslink (Optical) → Digital Audio IN → Analog Devices SHARC DSP — 32bit Floating Point 333MHz 2.4GFLOPS

FLASH
SDRAM
MCU
Encoder
IR control
USB 2.0

AES-EBU
SPDIF
Toslink (Optical) ← Digital Audio OUT

AC-DC External Supply → 5VDC

- Source selection
- Volume Control
- Preset Recall

Mac/PC control over USB 2.0

HARDWARE SPECIFICATIONS

Item	Description
Digital Signal Processor	32bit Floating point Analog Devices SHARC ADSP21369 / 333MHz
Control	Driverless USB 2.0 control interface for Windows/Mac OS x environments A computer is only required for the initial configuration.
Digital Audio inputs	Digital audio source selectable from IR remote or Front panel: - AES-EBU on Neutrik 3pin female XLR / Isolated with digital audio transformer - SPDIF on RCA connector / Isolated with digital audio transformer - Toslink on Optical connector The input signal is processed by a high quality onboard Asynchronous Sample Rate Converter for compatibility with most common sample rate (20-216kHz)
Digital Audio outputs	Processed digital audio output from the DSP is available in all 3 formats: - AES-EBU on Neutrik 3pin male XLR / Isolated with digital audio transformer - SPDIF on RCA connector / Isolated with digital audio transformer - Toslink on Optical connector
Sample rate / Resolution	Resolution: 32bit Sample rate: Depends on selected plug-in. Please consult plug-in datasheet for more information on the operating sample rate of the DSP
Template FIR filter capabilities (Important note: FIR capabilities are controlled by the plug-in used and not the hardware itself).	Mono signal: FIR filter with up to 12228 taps @48kHz, 6144 @ 96kHz Stereo signal: FIR filter with up to 6144 taps/ch @48kHz Please consult the plug-in specs for more info.
FIR filter storage	FIR taps coefficients & DSP configuration automatically loaded at bootup
USB port	USB port type B for real time control and firmware upgrade
Power supply	5VDC single supply / 600mA @ 5V - 2.1 round plug
Dimensions (H x W x D) mm	52 x 180 x 200mm

MECHANICAL SPECIFICATIONS