Introducing the OpenDRC platform, a range of cost effective digital audio processor with floating point capabilities. Powered by Analog Devices Sharc processors, the OpenDRC engine handles complex audio filtering such as room correction, FIR crossover filtering, reverb engines... Thanks to the flexibility of the platform and its high performance, OpenDRC supports a wide variety of applications.

The OpenDRC-DA (Digital to Analog) carries the most common stereo digital audio formats (AES-EBU, SPDIF and Toslink) on the input side. With its onboard Asynchronous Sample Rate Converter (ASRC), digital audio is converted to the proper rate. On the output side, the praised ES9023 DAC from ESS Tech provides outstanding analog audio performance. The 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 is configured.

Last but not least, the OpenDRC-DA follows the footstep of our proven miniDSP concept: "One hardware, many plug-ins". An easy to use platform that received praises for its simplicity of use. By setting some strategic partnership with 3rd party software developers, the OpenDRC takes it one step further in harnessing DSP powers in audio applications. From advanced room correction to full featured linear phase crossover, the OpenDRC opens up a

---

**SYSTEM DIAGRAM**

---

**Features**
- Floating point Digital Processor
- Flexible configurations
- Low power & small form factor
- Large FIR & IIR filter banks

**Hardware**
- Analog Devices ADSP21369
- ESS 9023 DAC
- 32bit Floating point processing
- Stereo digital inputs (AES-EBU/SPDIF/Optical)
- Stereo balanced analog output (XLR connector)
- ASRC for 20 to 216kHz input
- Front panel volume control
- IR control with learning feature

**Software Control**
- Real time live control
- Win & Mac compatible
- Firmware upgradeable
- 4 preset memory

**Power**
- Single external 5VDC supply
- Low power (3W)

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

---

**OpenDRC-DA**

---

**AES-EBU, SPDIF, Toslink (Optical)**

**Balanced Analog Audio outputs, XLR connectivity**

**AC-DC External Supply**

---

**Digital Audio IN**

**DAC ES9023**

---

**Analogue Devices SHARC DSP**

- 32bit Floating Point 333MHz 2.4GFLOPS

---

**FLASH**

**SDRAM**

**MCU**

**Encoder**

**IR control**

**USB 2.0**

---

- Source selection
- Volume Control
- Preset Recall

---

**Mac/PC control over USB 2.0**

---

Features and specifications are subject to change without prior notice

---

www.minidsp.com
### HARDWARE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Signal Processor</td>
<td>32bit Floating point Analog Devices SHARC ADSP21369 / 333MHz</td>
</tr>
<tr>
<td>Control</td>
<td>Driverless USB 2.0 control interface for Windows/Mac OS x environments A computer is only required for the initial configuration.</td>
</tr>
<tr>
<td>Digital Audio inputs</td>
<td>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</td>
</tr>
<tr>
<td>Analog Audio outputs</td>
<td>- Fully balanced audio on Balanced Neutrik XLR connector - ESS DAC 9023 with 112dB SNR - Max output: 2Vrms</td>
</tr>
<tr>
<td>Sample rate / Resolution</td>
<td>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</td>
</tr>
<tr>
<td>Template FIR filter capabilities</td>
<td>(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.</td>
</tr>
<tr>
<td>FIR filter storage</td>
<td>FIR taps coefficients &amp; DSP configuration automatically loaded at bootup</td>
</tr>
<tr>
<td>USB port</td>
<td>USB port type B for real time control and firmware upgrade</td>
</tr>
<tr>
<td>Power supply</td>
<td>SVDC single supply / 600mA @ 5V - 2.1 round plug</td>
</tr>
<tr>
<td>Dimensions (H x W x D) mm</td>
<td>52 x 180 x 200mm</td>
</tr>
</tbody>
</table>

### MECHANICAL SPECIFICATIONS

- **Rotary/Push Encoder**
- **Selected Source Indicator**
- **Selected Preset Indicator**
- **Digital Source**
  - OPTICAL
  - AES-EBU
  - SPDIF
  - SYNC
- **Filter Set**
  - 1
  - 2
  - 3
  - 4
- **Digital Inputs**
- **Analog Outputs**
- **PC Control**
- **USB 2.0**
- **Power Input**

Features and specifications are subject to change without prior notice.