The NDAC-2 is an Audio Video Bridging (AVB) endpoint combining network audio streaming, DAC and Digital Signal Processor (DSP) in a pocket size box. A single CAT5/6 network cable provides power, low latency audio and control for a true Plug&Play experience. The system consists of three key elements:

- The Audio Video Bridging (AVB) technology powered by a 500MHz XMOS processor which provides low latency, uncompressed and tightly synchronized streams to each speaker over standard networks. Fully compliant with IEEE 1722.1, it is plug&play with 3rd party AVB devices.
- An on-board 400MHz Analog Devices SHARC processor also enables substantial signal processing for true high-resolution audio capability and equalization, crossover, and room correction capabilities. All to be accessed and programmed with miniDSP’s easy-to-use interface software.
- Finally, a stereo DAC powered by ESS Technology ES9018K2M outputs balanced out on phoenix terminal blocks.

With its Power Over Ethernet (POE) capability or external +12VDC supply, the NDAC-2 is easily installed in a matter of minutes with limited knowledge.
### HARDWARE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tr>
<td>Digital Signal Processor</td>
<td>32-bit Floating point Analog Devices SHARC ADSP21489 / 400 MHz</td>
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</table>
| USB / AVB Processor         | XMOS XCore200 for digital audio streaming  
  - Asynchronous USB audio UAC2.0, Driverless for Mac OS X, ASIO driver for Windows platforms  
  - Audio Video Bridging (AVB) streaming - Gigabit Ethernet  |
| Digital audio input         | TOSLINK optical input. The input signal is processed by a high quality onboard Asynchronous Sample Rate Converter for compatibility with most common sample rates (20-216kHz)  |
| Analog outputs              | Dual balanced output, 6v rms out, ES9018K2M DAC  
  Dynamic range 118dB, A weighted  |
| DSP capabilities            | FIR filtering with number of taps assignable to each output channel. FIR filters are designed by third-party programs. FIR file format: IEEE 754 single-precision binary floating-point. IIR EQ, gain, level, delay. Configured by real time GUI.  |
| Filter storage              | Four on-board presets, selectable by IP control                                                                                           |
| USB port                    | USB port type Mini-B for audio streaming (USB audio firmware)  
  Real time control and firmware upgrade  |
| Power supply                | 12 VDC single supply (optional if PoE powered)  
  PoE/PoE+ powered  |
| Dimensions [H x W x D] mm    | 55 x 100 x 77mm / 0.4kg                                                                                                                   |
| Mounting                    | Metal bracket, see drawings below for details.                                                                                             |
| Enclosure / Finish          | Metal enclosure, black textured paint                                                                                                     |

### MECHANICAL SPECIFICATIONS

```
Dimensions (mm):
- Height: 77.2
- Width: 100.0
- Depth: 55.0

Mounting holes:
- 5 holes, 14.5 mm apart
- 2 holes, 77.25 mm apart
```

Features and specifications are subject to change without prior notice.