

DUSE - 4 and **DUDE - 4** Dante Ultimo boards are ready-to-use solutions for high performance digital audio networking equipments, that meets the quality requirements of today professional audio systems.

They are based on the Dante Ultimo™ microcontroller and support up to 4 low-latency bi-directional audio channels at up to 96kHz sampling rate.

DUSE - 4 and **DUDE - 4** differ in Ethernet configuration:

- **DUSE - 4**: It is a Single Ethernet type Dante Ultimo board, for a cost effective Dante networking solution using a 100Mbps ethernet interface
- **DUDE - 4**: It is a Dual Ethernet type Dante Ultimo board, using a fast 1Gbps ethernet switch with two ethernet ports, that allows daisy-chaining audio devices while preserving low latency requirements for live audio systems.

The boards integrate a set of high-quality sample rate converters, that allow to connect audio systems running at different sampling rates. Moreover, an high-quality low-jitter clock generation circuit provides a sample accurate synchronization between networked devices.



DUSE - 4



DUDE - 4

Specifications

- ULT-01-002 and ULT-01-004 Dante MCU support
- **DUSE - 4**: Up to 2 in / 2 out @44.1kHz, 48kHz, 88.2kHz and 96kHz
- **DUDE - 4**: Up to 4 in / 4 out @44.1kHz and 48kHz
- Sample rate pullup/down (+/-4%)
- Async sample rate conversion from 8kHz to 192kHz with -130dB THD+N / 140dB DR
- 16, 24, 32-bit audio sample resolution
- I2S digital audio format
- Latency from 1ms
- Sample accurate time alignment between networked devices
- Standard 100Mbps or dual 1Gbps ethernet interface
- Hardware time-stamping
- UART control interface
- Firmware upgradable via ethernet interface

Connection & Control

Both **DUSE - 4** and **DUDE - 4** can be controlled by a PC software that allows to:

- View all Dante-enabled audio devices and their channels on the network.
- View and edit device clock and network settings.
- Route audio streams between devices, and view the state of existing audio routes
- Rename devices and channels using your own friendly names
- Customize the receive latency (latency before playout)
- Save and reapply audio routing presets
- Edit presets offline, and apply as configurations for new network deployments
- Change sample rates and clock settings
- View multicast bandwidth across the network
- View transmit and receive bandwidth for each device
- View device performance information, including latency stats, clock stability stats and packet errors
- View comprehensive, configurable event logs