



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: MX2M-AUX-DANTE-32CH

FUNCTIONAL OVERVIEW

MX2M-AUX-DANTE-32CH is a hot-swappable auxiliary board for MX2M frames that provides Dante®/AES67 Audio-over-Ethernet connectivity between the matrix Audio layer and external Dante networks. It enables reception of audio from a Dante network into the matrix Audio layer and transmission of matrix audio to Dante networks, supporting redundant network configuration. Signal routing inside the matrix is handled via the MX2M Audio layer crosspoint, while external Dante routing is performed using Dante Controller. The board supports specified PCM formats and sample rates as documented.

AUDIO CAPABILITIES

- Network audio interfaces: Dante® or AES67 (selectable/configurable via Dante Controller)
- Ports: 4× RJ45 connectors for Dante network audio
- Channel capacity:
 - Transmission of 2 × 16 uncompressed mono audio channels from the Audio layer to a Dante network
 - Reception of 2 × 16 mono audio channels from a Dante network to the Audio layer
- Redundancy / topology features:
 - Redundant configuration for the Dante network
 - Independent transmission of the same audio content to two separate Dante networks
- Supported audio formats:
 - PCM 16: supported on input ports; not supported on output ports
 - PCM 24: supported on input and output ports
 - Compressed DTS/Dolby: not supported
- Supported sample rates: 44.1, 48, 88.2, 96 kHz

- Routing notes:
 - Dante/AES67 signals can be routed to other matrix interface types (e.g., embedded into HDMI output or converted to analog audio, depending on other installed boards)
 - Multichannel or encoded audio format cannot be de-embedded to Dante; in that case no audio is sent to the Dante network
- Network requirements note: correct switch QoS configuration is essential (DSCP priorities)
- Maximum copper run (CATx): connection between auxiliary board and network switch up to 100 m (CAT5e/CAT7e)

POWERING

- Powered through the MX2M matrix frame when installed in an AUX (low-speed) slot
- Hot-swappable design (board can be exchanged without powering off the matrix frame)

CONTROL

- Within the matrix (internal audio routing):
 - Lightware Device Controller (LDC) / built-in web interface: Audio layer crosspoint routing and board/port properties
 - LW3 protocol control (routing, channel label settings, and related audio properties)
- Dante network (external routing/configuration):
 - Dante Controller software is used for routing between Dante devices on the network

GENERAL

- Form factor / installation:
 - Auxiliary (AUX / low-speed) board intended to be installed into AUX board slots of the MX2M frame (low-speed board slots)
 - Hot-swappable board
- Dimensions / construction (board):
 - Dimensions: 194.5 W × 208.5 D × 35.5 H mm
 - Enclosure material: 1.5 mm steel
 - Weight: 275 g (0.6 lbs)



- Cooling: Passive
- Compliance / LVD-related safety:
 - Compliance: CE, UKCA
 - Electrical safety standard: EN 62368-1:2020
 - RoHS: EN 63000:2018
 - EMC: EN 55032:2015+A1:2020 (emission), EN 55035:2017+A11:2020 (immunity)
- Warranty period: 3 years

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
Rev. 1.0	2026-06-22	Initial version	Tamas Forgacs