

DATA SHEET

TESIRAFORTÉ® AVB VT4 FIXED I/O DSP



TesiraFORTÉ® AVB VT4 is a fixed I/O DSP with 4 analog inputs, 4 channels of Acoustic Echo Cancellation (AEC) technology, and 4 analog outputs. It also includes up to 8 channels of configurable USB audio, a 2-channel VoIP interface and a standard FXO telephone interface. USB audio allows TesiraFORTÉ to interface directly with USB audio hosts, as well as to take full advantage of today's most sophisticated conferencing solutions. TesiraFORTÉ AVB VT4 utilizes Audio Video Bridging (AVB) for digital audio networking, and can be used as a standalone device or combined with other TesiraFORTÉ AVB devices and Tesira DSPs, expanders, and controllers. TesiraFORTÉ AVB VT4 also provides extensive audio processing, including but not limited to: AEC technology, signal routing and mixing, equalization, filtering, dynamics, and delay; as well as control, monitoring, and diagnostic tools; all configured through the Tesira configuration software. TesiraFORTÉ AVB VT4 is best-suited for smaller rooms that require high-quality audio solutions using VoIP, voice lift, mix-minus, and AEC, such as conference rooms or distance learning environments.

FEATURES

- 128 x 128 channels of AVB
- 4 mic/line level inputs with AEC, 4 mic/line level outputs
- Gigabit Ethernet port
- Up to 8 channels of configurable USB audio
- RS-232 serial port
- 4-pin GPIO
- Rack mountable (1RU)
- Fully compatible with Tesira AVB DSPs, amplifiers, expanders, and controllers
- Supports port authentication via IEEE 802.1X
- Internal universal power supply
- SIP VoIP interface via a RJ-45 connector
- Standard FXO telephone interface via RJ-11 connector
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, delay and much more
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

Biamp, Tesira, and TesiraFORTÉ are either trademarks or registered trademarks of Biamp Systems, LLC in the United States and other countries. ASIO is a registered trademark of Steinberg Media Technologies GmbH, used with permission. Other product names referenced may be trademarks or registered marks of their respective owners and Biamp Systems is not affiliated with or sponsored by these companies.



A: 9300 S.W. Gemini Drive Beaverton, OR 97008 USA

T: +1 503.641.7287

W: www.biamp.com

ARCHITECTS & ENGINEERS SPECIFICATION

The fixed I/O DSP shall be designed exclusively for use with Tesira® systems. The fixed I/O DSP shall support Audio Video Bridging (AVB) digital audio networking that shall allow up to 128 x 128 channels. The AVB networking connection shall be implemented on a RJ-45 connector. The fixed I/O DSP shall support Ethernet connection for programming and control on a RJ-45 connector. The fixed I/O DSP shall have internal DSP processing. The fixed I/O DSP shall include 4 channels of General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. The programming of the GPIO ports shall be software configurable. The fixed I/O DSP shall include a RS-232 connection for control data transmission into or out of the fixed I/O DSP and such operation shall be software programmable. The fixed I/O DSP shall include a Universal Serial Bus (USB) connection on a standard USB-B type connector. The fixed I/O DSP shall be software configurable to stream up to 8 channels of digital USB Class 1 Audio transmission either into or out of the fixed I/O DSP or simultaneous input and output. The fixed I/O DSP shall support port authentication via IEEE 802.1X. The fixed I/O DSP shall provide 4 balanced input connections for receiving of microphone or line level analog audio signals on screw-down, removable connectors. The input connections shall include Acoustic Echo Cancellation (AEC) hardware and firmware, the parameters, routing and operation of which shall be software programmable. The fixed I/O DSP shall provide 4 balanced output channels for the transmission of microphone or line level analog audio signals on screw-down, removable connectors. Each individual channel shall have its own dedicated connection. The fixed I/O DSP shall integrate to Voice Over Internet Protocol (VoIP) systems on a RJ-45 connector for two lines of VoIP communication and shall support Session Initiation Protocol (SIP) v2.0 or later. The fixed I/O DSP shall integrate to standard telephony communications on a RJ-11 connector for a single line of telephone communication. The fixed I/O DSP shall provide front panel OLED identification of device power, status, alarm, and activity as well as system-wide alarm. The fixed I/O DSP shall be rack mountable (1RU) and feature software-configurable signal processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The fixed I/O DSP shall control and proxy all Tesira expander-class devices and Tesira control devices. The fixed I/O DSP shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The fixed I/O DSP shall be TesiraFORTÉ® AVB VT4.

TESIRAFORTÉ AVB VT4 SPECIFICATIONS

Frequency Response: 20Hz to 20kHz, +4dBu output:	+0.25 dB/-0.5 dB	Crosstalk, channel to channel, 1 kHz: 0dB gain, +4dBu input:	< -85dB
THD+N (22Hz to 22kHz): 0dB gain, +4dBu input:	< 0.006%	54dB gain, -50dBu input:	< -75dB
54dB gain, -50dBu input:	< 0.040%	Sampling Rate:	48kHz
EIN (no weighting, 22Hz to 22kHz):	< -125dBu	A/D - D/A Converters:	24-bit
Dynamic Range (in presence of signal) 22Hz to 22kHz, 0dB gain:	> 108dB	Power Consumption: 100-240VAC 50/60Hz:	< 35W
Input Impedance (balanced):	8kΩ	USB: Bit Depth:	16- or 24-bit
Output Impedance (balanced):	207Ω	Number of Channels:	up to 8
Maximum Input:	+24dBu	Sample Rate:	48kHz
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu, 0dBu, -31dBu	Environment: Ambient Operating Temperature Range:	32-104° F (0-40° C)
Input Gain Range (6dB steps):	0-66dB	Humidity:	0-98%, non-condensing
Overall Dimensions: Height:	1.75 inches (44 mm)	Altitude:	0-6,600 feet (0-2000 Meters) MSL
Width:	19.0 inches (483 mm)	Compliance:	FCC Part 15B (USA)
Depth:	10.5 inches (267 mm)		FCC Part 68 (USA)
Weight:	8 lbs (3.63 kg)		Industry Canada CS-03 (Canada)
Phantom Power:	+48VDC (7mA/input)		CE marked (Europe)
			UL und C-UL listed (USA and Canada)
			RCM (Australia)
			RoHS Directive (Europe)

TESIRAFORTÉ AVB VT4 BACK PANEL

