DATA SHEET
TESIRA® SERVER CONFIGURABLE I/O DSP

Tesira® SERVER is a configurable I/O digital signal processor for use with the Tesira digital audio networking platform. It is factory configured with one DSP card and capable of handling up to seven additional DSP cards. It is also factory configured with one AVB-1 Audio Video Bridging digital audio networking card. A second card slot can be populated with an additional AVB card, an SCM-1 CobraNet® network card, or a DAN-1 Dante™ network card. In cases where local I/O is advantageous, a Tesira standard I/O card may be installed. The configurable I/O DSP features Biamp SpeechSense™ technology, which enhances speech processing by more accurately distinguishing between human speech and noise. The DSP also provides extensive audio processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay as well as control, monitoring and diagnostic tools; all configured through the Tesira software. Two Tesira SERVERs can also be designed as a redundant pair (if they carry identical processing and I/O card configurations). The secondary SERVER stays 'live' with the primary, updating runtime parameters. If the primary SERVER should need maintenance, the secondary takes over with no loss of continuity or downtime.

FEATURES

- Supports up to 8 DSP cards
- Up to 420 x 420 channels of digital I/O over AVB
- Supports optional 64 x 64 Dante audio networking
- Supports optional 32 x 32 CobraNet audio networking
- System configuration and control via Ethernet or serial connection
- Front panel OLED display for device and system information
- Processing algorithm: SpeechSense

- Supports port authentication via IEEE 802.1X
- Supports redundancy for continuous uptime
- Signal processing via intuitive software allows configuration and control for: signal routing and mixing, equalization, filtering, dynamics, delay and much more
- Rack mountable (3RU)
- CE marked, UL listed and RoHS compliant
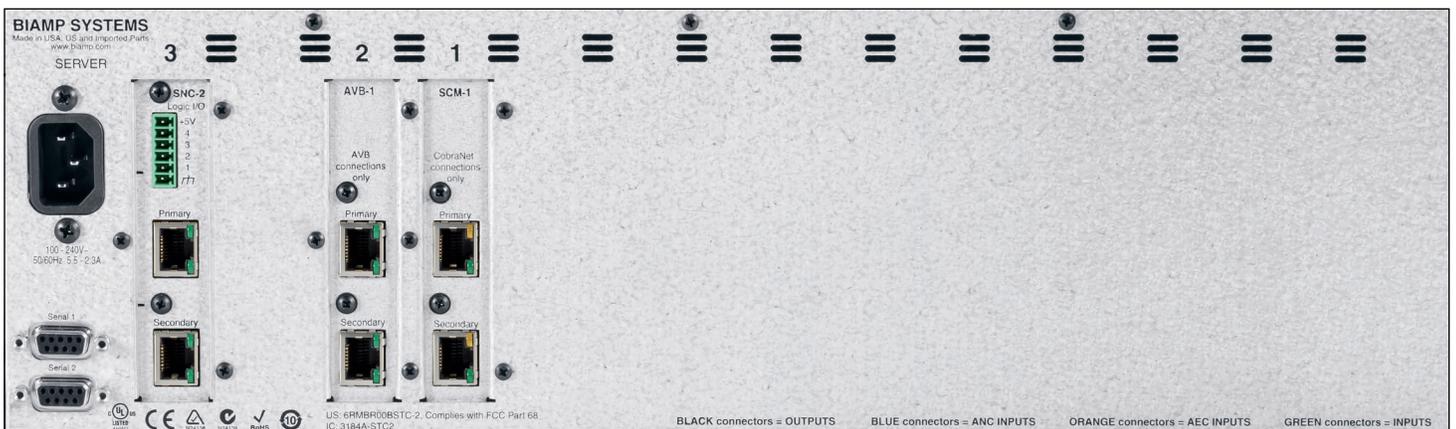- Covered by Biamp Systems' 5-year warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The configurable I/O DSP shall be designed exclusively for use with Tesira® systems. The configurable I/O DSP shall support AVB digital audio and control networking by means of a factory configured 420 x 420 modular card. The configurable I/O DSP shall also support an additional 420 x 420 channel AVB networking card, one 32 x 32 channel CobraNet® networking card, one 64 x 64 channel Dante™ networking card, or one standard analog I/O card. The configurable I/O DSP shall be factory configured with one DSP card and shall be capable of supporting a total of eight cards. The configurable I/O DSP shall provide dual Ethernet ports for configuration and control connection. The configurable I/O DSP shall support redundancy if both the primary secondary units are identically configured. The configurable I/O DSP shall support port authentication via IEEE 802.1X. The configurable I/O DSP shall provide front panel LED identification of device power, status, alarm, and activity as well as system-wide alarm. The configurable I/O DSP shall provide front panel OLED display for device and system information. The configurable I/O DSP shall be rack mountable (3RU) 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 configurable I/O DSP shall be CE marked, UL listed and shall be compliant with the RoHS directive. Warranty shall be 5 years. The configurable I/O DSP shall be Tesira SERVER.

TESIRA SERVER SPECIFICATIONS (AUDIO SPECIFICATIONS GIVEN REFLECT USE OF SIC-4 AND SOC-4)

Frequency Response (20Hz~20kHz @ +4dBu):	+0/-0.25dB
THD+N (20Hz~20kHz):	
@ 0dB Gain, +4dBu In:	< 0.006%
@ 54dB Gain, -50dBu In:	< 0.040%
EIN (20Hz~20kHz, 66dB Gain, 150Ω):	< -125dBu
Dynamic Range (20Hz~20kHz, 0dB):	> 108dB
Input Impedance (balanced):	8kΩ
Maximum Input:	+24dBu
Input Gain Range (6dB Steps):	0 - 66dB
Output Impedance (balanced):	200Ω
Maximum Output:	+24dBu
Power Consumption (100~240VAC 50/60Hz):	< 150W
Phantom Power:	+48 VDC (7mA/input)

Cross Talk (channel to channel @ 1kHz):	
@ 0dB Gain, +4dBu In:	< -85dB
@ 54dB Gain, -50dBu In:	< -75dB
Overall Dimensions:	
Height:	5.25 inches (133 mm)
Width:	19.0 inches (483 mm)
Depth:	17.0 inches (432 mm)
Weight:	18 lbs (8.2 kg)
Sampling Rate:	48kHz
A/D Converters:	24-bit
Compliance:	
	FCC Part 15B (USA)
	FCC Part 68 (USA)
	Industry Canada CS-03 (Canada)
	CE marked (Europe)
	UL and C-UL listed (USA & Canada)
	RCM (Australia)
	EAC (Eurasian Customs Union)
	RoHS Directive (Europe)

TESIRA SERVER BACK PANEL (OPTIONAL CARD SHOWN IN SLOT 1)