Mediant™ 1000 VoIP Media Gateway

The **Mediant™ 1000** is AudioCodes' cost-effective, converged wireline and wireless VoIP media gateway utilizing cutting edge technology. Intelligently packaged in a stackable 1U chassis, it is designed to interface between TDM & IP networks in enterprises or small-scale carrier locations. Incorporating AudioCodes' innovative Voice over Packet technology, the Mediant 1000 enables rapid time-to-market and reliable cost-effective deployment of next-generation networks.

The Mediant 1000 is based on VoIPerfect™, AudioCodes underlying, best-of-breed, media gateway core technology for all of its products. The Mediant 1000 provides superior voice-technology for connecting legacy telephone and PBX systems to IP networks, as well as seamless connection of the IP-PBX to the PSTN. In addition to operating as a pure media gateway, the Mediant 1000 can also host partner applications and serve as an IP-PBX platform. The Mediant 1000 is fully interoperable with multiple vendor gateways, softswitches, gatekeepers, proxy servers, IP phones, session border controllers and firewalls.

Scale Up As Your Business Grows

The Mediant 1000 matches the density requirements for smaller locations while meeting service providers' demands for scalability. The compact Mediant 1000 Modular Gateway is extremely scalable and supports multiples of 1, 2, or 4 E1/T1/J1 spans, or 1 to 24 analog ports in various FXO/FXS configurations. The Mediant 1000 will also support mixed digital/analog configurations.

The Mediant 1000 can support a variety of telephony interfaces. It contains up to 4 digital or up to 6 analog interface modules with 4 ports. The digital module can be configured as regular E1/T1/J1 interfaces, with up 1 or 2 paired spans acting as life-line interfaces for switching to the PSTN in case of power failure or network problems. The analog module is available as regular FXS or FXO interfaces, where 1 FXS line can be used as a life-line interface for switching to the PSTN.

- Digital – connecting the PSTN or PBX to the IP-network
- Analog FXS – connecting analog phones and fax machines to the IP-network
- Analog FXO – connecting analog lines from the Central Office (CO) or PBX to the IP network

Seamless Interface with Legacy Enterprise Networks

The Mediant 1000 has enhanced hardware and software capabilities to ease its installation and to help maintain voice quality. If the measured voice quality falls beneath a pre-configured value, or the path to the destination is disconnected, the Mediant 1000 can assure voice connectivity by falling back to the PSTN. In the event of network problems, calls can be routed back to the PSTN without requiring routing modifications in the PBX. Further reliability is provided by dual Ethernet ports and optional dual AC power supply.

Flexible Platform for Partner Applications

The Mediant 1000 extends the flexibility of the Media Gateway family with additional deployment options. The open platform on the Mediant 1000 offers partners the option to host their own applications (e.g., IP-PBX or call center application) using a powerful, low-power processor and hard disks to provide a complete solution within the Mediant 1000 chassis.

- **Employs AudioCodes VoIPerfect™ technology for outstanding voice quality**
- **Scalable "pay-as-you-grow" modular architecture**
- **Rich offering of digital (E1/T1/J1) and analog (FXS/FXO) interfaces**
- **Cost-efficient for low density gateways**
- **Life-line fallback to PSTN in case of power failure or network degradation**
- **PSTN fallback for assured connectivity**
- **Ideal platform for OEM VoIP applications**

AudioCodes

Mediant™ 1000

SPECIFICATIONS

Interfaces

Modularity and Capacity	6 slots for analog or 4 slots for digital modules
	Up to maximum of 24 analog ports or 4 digital spans
Digital Modules	1,2 or 4 E1/T1/J1 spans using RJ-48c connectors per module
	Up to 4 digital modules (maximum 4 spans per gateway)
	Optional 1+1 or 2+2 fallback spans
Analog FXO and FXS Modules	2 or 4 ports using RJ-11 connectors per module; up to 6 modules per gateway
	One life-line port per FXS module (in case of power failure or network problems)
I/O	MOH (Music On Hold), NB (Night Bell)
Ethernet	Dual Redundant 10/100 Base-TX Ethernet ports via 2 RJ-45 connectors
RS-232	Debugging

Media Processing

Voice Coders	G.711, G.726, G.723.1, G.729A, EVRC[1], AMR[1] and GSM-FR
	Independent dynamic vocoder selection per channel
Echo Cancellation	G.165 and G.168-2002, with 32, 64 or 128[2] tail length
Quality Enhancement	Dynamic programmable jitter buffer, VAD, CNG, 802.1p/Q VLAN tagging, DiffServ, voice quality monitoring, G.729B
DTMF/MF Transport	Packet side or PSTN side detection and generation, RFC 2833 compliant DTMF relay Call Progress tones Detection and Generation
IP Transport	VoIP (RTP/RTCP) per IETF RFC 3550 and 3551
Fax and Modem Transport	T.38 compliant (real time fax), Automatic bypass to PCM or ADPCM

Partner Application Platform

Single Chassis Integration	Embedded, Celeron™ based platform for third party hosted applications
CPU	Intel™ Celeron™ 600 Mhz
Memory	One SODIMM slot
Storage	Single/Dual hard disk drives
Interfaces	10/100 Base-TX, USB, RS-232, NB relay, MOH

Signaling

Digital –PSTN Protocols	CAS: MF-R1: T1 CAS (E&M, Loop, Start, Feature Group-D, E911CAMA),
	E1 CAS (R2 MFC) numerous protocol and country variants
	ISDN PRI: ETSI/EURO ISDN, ANSI NI2 and other variants (DMS100, 5ESS) QSIG (basic call), IUA (SIGTRAN)
Analog Signaling	FXS; Caller ID; polarity reversal; metering tones, distinctive ringing, visual message waiting indication

Control & Management

Control Protocols	SIP, H.323, MGCP (MEGACO – for digital trunks only)[3]
Operations & Management	AudioCodes Element Management System
	Embedded HTTP Web Server, Telnet
	Remote configuration and software download via TFTP, HTTP, HTTPS, DHCP and BootP, RADIUS, Syslog (for events, alarms and CDRs)

Security

	IPSEC, HTTPS, TLS (SIPS), SSL, Web access list. RADIUS login[4]

Hardware Specifications

Power Supply	Single universal 90-260 V AC, redundant power supply
Physical	1U high, 19-inch wide

Regulatory Compliance

Telecommunication Standards	TIA/EIA-IS-968, TBR-4, TBR-13, and TBR-21
Safety and EMC Standards	UL60950-1; FCC 47 CFR part 15 Class B,
	CE Mark (EN55022 Class B, EN60950-1, EN55024, EN300 386, EN61000-3-2/3-3)
Environmental Specifications	ETS 300019-2-1 Storage T1.2, ETS 300019-2-2 Transportation T2.3, ETS 300019-2-3 Operating T3.2

1 EVRC & AMR cellular vocoders may reduce capacity in digital configuration only
2 128 msec may reduce capacity
3 Some PSTN variants may not be supported with all control protocols
4 May reduce density
* Contact your AudioCodes sales rep or distributor for availability of mixed analog and digital trunks

APPLICATIONS

- PBX Networking
- IP-Centrex/Hosted IP-PBX
- Partner Applications (e.g., IP-PBX, Call Center)
- Remote Office Applications

ABOUT AUDIOCODES

AudioCodes Ltd. (NASDAQ: AUDC) enables the new voice infrastructure by providing innovative, reliable and cost-effective Voice over Packet technology and Voice Network products to OEMs, network equipment providers and system integrators. AudioCodes provides its customers and partners with a diverse range of flexible, comprehensive media gateway and media processing technologies, based on VoIPerfect™ – AudioCodes' underlying, best-of-breed, core media gateway architecture. The company is a market leader in voice compression technology and is a key originator of the ITU G.723.1 standard for the emerging Voice over IP market. AudioCodes voice network products feature media gateway and media server platforms for packet-based applications in the converged, wireline, wireless, broadband access, and enhanced voice services markets. AudioCodes enabling technology products include VoIP and CTI communication boards, VoIP media gateway processors and modules, and CPE devices. AudioCodes' headquarters and R&D facilities are located in Israel with an R&D extension in the U.S. Other AudioCodes' offices are located in Europe, the Far East, and Latin America.

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