VOICE
TRANSCODING

D-Series: Transcoding

D150 Voice Transcoding Series

The latest offering from our transcoding cards family adds more deployment options for the embedded markets, where host-based processing is restricted and the small form-factor of appliances limits the addition of PCI cards. It can also be deployed as a stand-alone rack-mountable boxed enclosure with an external power supply.

Most IP telephony applications require the use of multiple types of voice codecs, which are used to digitally compress voice signals, to save on bandwidth requirements. While voice signals from the Public Switched Telephone Network (PSTN) always come in the form of the G.711 codec, the VoIP terminal equipment and networks support a variety of different voice codecs including such as G.729, G.726, AMR, G.722, iLBC, etc. VoIP infrastructure most often needs to include the capability to mediate between endpoints supporting different codecs, yet this functionality often requires digital signal processing tasks that are often costly, resource-intensive and can affect the quality of the voice signals if it introduces too much latency and delay.

The D150 card allows to convert numerous simultaneous channels of transcoding from one type of codec (e.g. G.711) to another (e.g. G.729), without affecting latency or using up precious host CPU resources. The card allows running up to 30, 60, 120, 240 or 400 channels of any-to-any voice codec conversion, with unmatched quality. All codecs are fully indemnified; no additional licensing is required for their use.

HIGHLIGHTS

- 30 to 400 Transcoding Sessions
- Integrates in Asterisk® and FreeSWITCH®
- Compact 2U Form-Factor, Stand-Alone Boxed Enclosure or PCI Mezzanine Card Option
- RJ45 Ethernet Interface

CODEC SUPPORT

- G.711
- G.722
- G.722.1 (HD Voice)
- G.726
- G.729AB
- GSM-FR
- GMS-EFR
- AMR
- AMR-WB (G.722.2)
- iLBC

SAMPLE APPLICATIONS

- Call Centers and Remote Agent Pools
- Hosted iPBX/IP Centrex
- Distributed PBX
- IP Network Peering
- SIP Trunking
- VoIP Gateways

The D150 is available in 3 form factors:

D150-ETH	D150-BOX	D150-PMC
100 Mbps Ethernet port for installation inside computer servers. Does not require PCI bus interface from motherboard. Acquires power from power supply with included molex cable.	The boxed enclosure is an Ethernet card with a metal enclosure and an external power supply. These enclosures can be stacked up to 14 instances on a single 19-inch rack mount.	The Mezzanine Card allows hardware manufacturers to integrate the D150 transcoding solution via the PMC standard (IEEE 1386).

[1] Total port counts performance varies from codec to codec use and on the traffic mix at any given time.

TECHNICAL SPECIFICATIONS

Software

- Support for Asterisk and FreeSWITCH
- Transcoding API in C
- Media flows in and out of Ethernet port

Dimensions

- D150-ETH: 133.3mm x 58.4mm
  - *Compact factor for use in restricted chassis*
  - *Includes low profile bracket for installation in 2U chassis*
- D150-BOX: 139mm x 70mm x 29mm
- D150-PMC: 149mm x 74mm

Operating Systems

- Linux
- Windows®

Certifications

- Emissions: FCC Part 15 Class A, CISPR 22, CISPR 24, EN 55022 (pending)

Power Requirements

- D150-ETH: 2A @ 5V (10W) via molex cable
- D150-BOX: 2A @ 5V (10W) via external power supply
- D150-PMC: 2A @ 5V (10W) via PCI interface

Operating Temperature Range

- Temperature range: 0 – 50 °C

Network Interfaces

- Ethernet Port: 100 Mbps

Production Quality

- ISO 9002

Warranty

- D-Series hardware comes with a standard 5-year warranty with product registration when purchased through an authorized Empowered by Sangoma representative
- 30-day "no questions asked" return policy

ORDERING INFORMATION

	Ethernet Card	Ethernet Card with Boxed Enclosure	PCI Mezzanine Card
Up to 30 transcoding sessions	D150-ETH-030	D150-BOX-030	D150-PMC-030
Up to 60 transcoding sessions	D150-ETH-060	D150-BOX-060	D150-PMC-060
Up to 120 transcoding sessions	D150-ETH-120	D150-BOX-120	D150-PMC-120
Up to 240 transcoding sessions	D150-ETH-240	D150-BOX-240	D150-PMC-240
Up to 400 transcoding sessions	D150-ETH-400	D150-BOX-400	D150-PMC-400

	Accessories
1U Bracket to hold up to 6 D150-BOX	SPEC-D150-BOX-1U06
2U Bracket to hold up to 14 D150-BOX	SPEC-D150-BOX-2U14

For more information on how to order, call toll free in North America at **1 800 388 2475**, direct at **+1 905 474 1990** or email **sales@sangoma.com**.

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Look for the Empowered by Sangoma Logo.