

# Voice Transcoding Cards



## The Most Flexible Transcoding Cards on the Market

Transcoding is a reality in VoIP Networks. Whether your telecom application requires compression codecs—to save bandwidth or to improve voice quality—don't settle for host-based software licenses that unnecessarily increase CPU load. Instead, choose Sangoma's D100, D150 or D500 card, the most flexible transcoding cards today.

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, G.722, iLBC, etc.

VoIP infrastructure most often needs to include the capability to mediate between endpoints supporting different codecs, but this functionality often requires digital signal processing tasks that are costly, resource intensive and can affect the quality of the voice signals if it introduces too much latency and delay.

### Use Cases

- » Call centers and remote agent pools
- » Hosted PBX / hosted VoIP
- » IP network peering
- » SIP trunking

**"The best hardware transcoding option for Asterisk, FreeSWITCH and/or proprietary API solutions."**

### Quick Facts

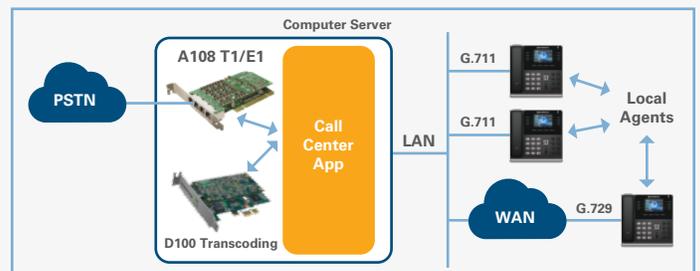
- » Supports 30-2000 Calls
- » Supports G.729, G.726, G.722, iLBC
- » Compact 2U Form-Factor, Stand-Alone Boxed Option
- » Field Upgradeable Session Expansion
- » Session-based Licensing - No Hidden Fees
- » Enterprise Inter-site Networking & SIP Trunking
- » Simple API for Application Integration
- » Reduce Host CPU Load

### TRANSCODING CARDS

#### \*D100

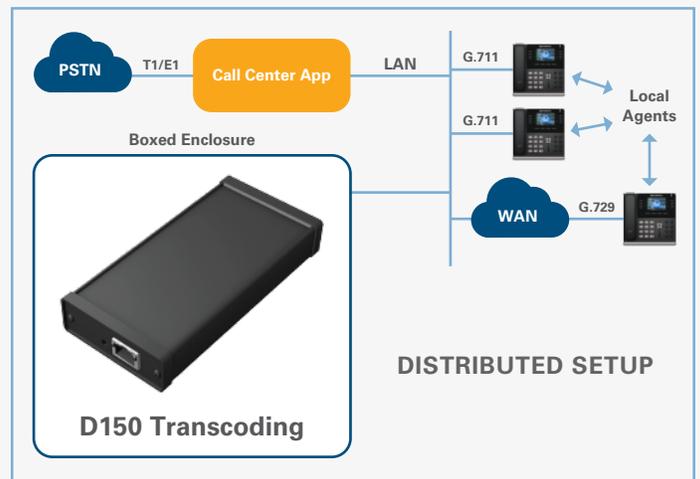
The D100 offers 30 to 400 transcoding sessions.

#### INTEGRATED TRANSCODING



#### D150

The D150 offers 30 to 400 transcoding sessions.



#### D500

The D500 offers 400 to 2,000 transcoding sessions.



## TECHNICAL SPECIFICATIONS

### Interfaces

#### PCI Interfaces:

- » D100 / D500
  - > PCI Express
- » Compatible with most commercially available motherboards
- » PCIe
  - > 1x bus width, V1.1

#### Network Interfaces:

- » D150
  - > 1x 100Mbps Ethernet port
- » D500
  - > 2x Gigabit Ethernet ports

#### Codecs:

- » Wire-line applications
  - > G.711 ( $\mu$ -law, A-law)
  - > G.722
  - > G.722.1
  - > G.726
  - > G.729AB
  - > iLBC
  - > L16 (Linear 16K)
- » Wireless applications
  - > GSM-EFR
  - > GSM-FR

### Features

#### PBX Support:

- » Asterisk and FreeSWITCH

#### Operating System Support:

- » Linux (All versions, releases and distributions from 1.0 up)

#### Server and Motherboard Support:

- » Compatible with most commercially available servers and motherboards

### Hardware

#### Certification:

- » D100 / D150
  - > Emissions: FCC Part 15 Class A, CISPR 22, CISPR 24, EN 55022 (pending)
- » Compatible with all commercially available motherboards
  - > Emissions: FCC Part 15 Class B, CISPR 22/EN55022 Class B
  - > Immunity: CISPR 24/EN55024
  - > IEC/EN 60950 safety (pending)

#### Production Quality:

- » ISO 9002

#### Environmental:

- » Temperature range: 0 – 50 °C

#### Dimensions:

- » D100
  - > 94mm x 63.5mm
- » D150
  - > D150-ETH: 133.3mm x 58.4mm
  - > D150-BOX: 139mm x 70mm x 29mm
  - > D150-PMC: 149mm x 74mm
- » D500
  - > 245mm x 106mm

#### Mounting:

- » Includes both standard and short half-height compatible mounting clips for installation in 2U rack-mount servers
- » Compatible with all commercially available motherboards
- » Production Quality

#### Power Supply:

- » D100
  - > 1.35 A @ 3.3 V (4.5 W)
- » D150
  - > 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
- » D500
  - > 24W (1.6A @ 12V; 1.5A @ 3.3V)