NETINT VIDEO TRANSCODING SERVER

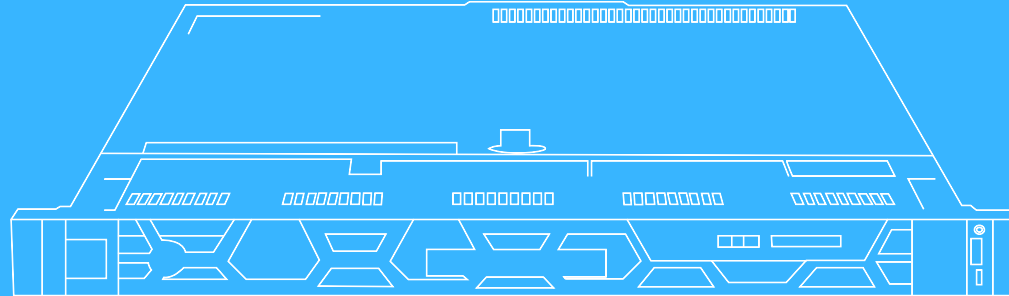**LOW LATENCY. HIGH DENSITY. REAL-TIME VIDEO TRANSCODER.**

NETINT

POWERED BY
DELL Technologies

Introduction

With the evolution of video streaming from file-based to real-time one-to-one, software-based video encoding can no longer meet the density, performance, and TCO benchmarks required.

The NETINT Video Transcoding Server powers real-time video applications and experiences with higher resolution and framerates at a TCO that is ten times less than CPU-based software video encoding.

40 Broadcast Quality 1080p60 Live Streams in 1RU

WW NETINT

Codensity

Designed by
WW NETINT

T408 Video Transcoder

10 NETINT Codensity™ T408
2.5" U.2 Video Transcoder's

+

Dell PowerEdge R640 Server

- High throughput, low latency, multi-stream transcoding server.

- Simple setup using industry standard hardware and open source software tools.

- Typical workloads include live streaming, real-time interactive video applications, cloud gaming, and more.

The NETINT Video Transcoding Server provides low-latency, high-quality, scalable transcoding to meet the requirements of hyperscale cloud platforms and video services.

The NETINT Video Transcoding Server is built on the Dell PowerEdge R640 and features advanced encoding capability enabled by ten NETINT Codensity T408 Video Transcoders. The Codensity T408 is an ASIC-based NVMe video transcoder module that supports H.264 AVC and H.265 HEVC video encoding at up to 8K resolution and with 10-bit HDR.

The high throughput of the NETINT Video Transcoding Server supports ultra low latency encoding of 40 broadcast quality 1080p60 streams in a compact 1RU form factor.

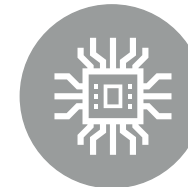|				
Cloud Gaming	AR / VR	Security	OTT / IPTV	Conferencing
Home Monitoring	AI Acceleration	Live Streaming	Social Mobile Video	

Benefits

Ultra High Density
Ten times increase in video encoding density as compared to software.

8K/4K/UHDTV/HDTV and HDR
Supports a wide variety of streaming applications.

Low Latency
Enables Interactive video applications including Cloud Mobile Gaming, AR and VR.

H.264 AVC and H.265 HEVC
Multi-format Transcoding, Encoding, and Decoding.

Real-Time Encoding
Optimized for live streaming and interactive video applications.

Scalable
High capacity encoding throughput for rapid deployment of additional channels.
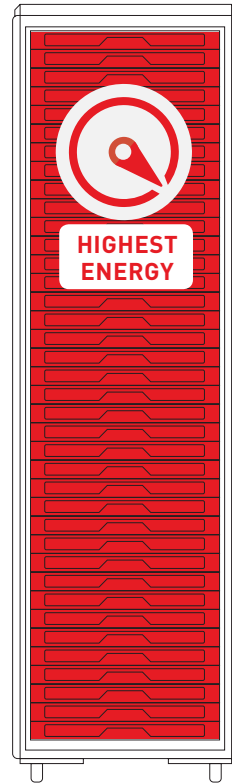
NETINT

Total Cost of Ownership

The NETINT Video Transcoding Server enables a reduction in TCO for hyperscale cloud platforms and video service providers.

NETINT's Codensity technology uses a purpose built ASIC to increase encoding density compared to software-based solutions. This increase in encoding density expands the number of channels that can be encoded without increasing the rack footprint. Reduced power and HVAC cost means a lower TCO and higher density can be achieved without sacrificing video quality or latency.
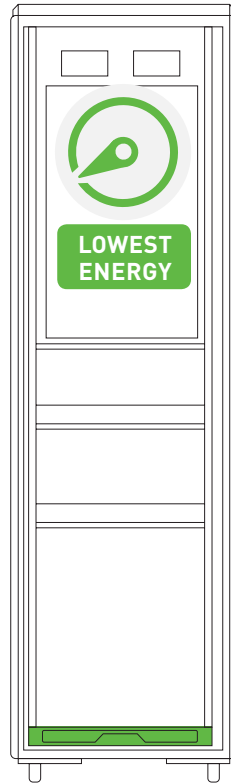
Video Encoding with Lowest TCO and Highest Density

58W Total Server Power Per Stream

3W Total Server Power Per Stream

HIGHEST ENERGY

LOWEST ENERGY

$525,000 operational cost savings per year based on 1,000 live streams.

NETINT Video Transcoding Servers use one-tenth the rack space for the same number of streams as compared with CPU-based video encoders.

NETINT Codensity video transcoders use 20X less energy than CPU powered video transcoding systems.

$580,535
Software on CPU*

$52,403
NETINT Video Transcoder*

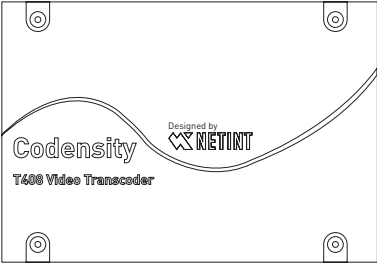*Total Annual Operating Cost Per 1,000 Streams
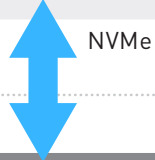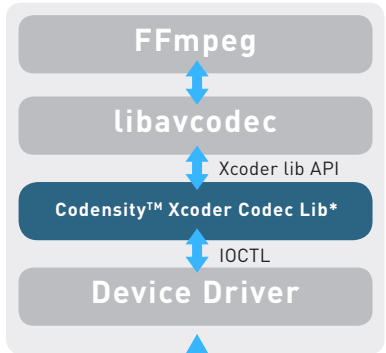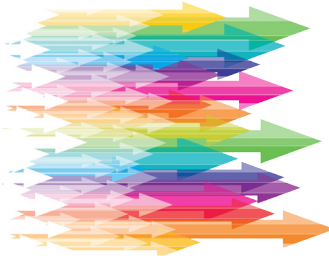
Simple Integration

Leveraging FFmpeg, the NETINT Video Transcoding Server provides an open-source suite of video processing tools. Video operators can easily and quickly integrate the NETINT Video Transcoding Server into their existing encoding infrastructure.
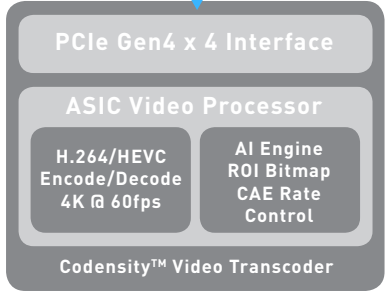
H.264 + H.265 Inputs
(File or Real-Time)

H.264 + H.265 Outputs

FFmpeg

libavcodec

Xcoder lib API

Codensity™ Xcoder Codec Lib*

IOCTL

Device Driver

NVMe

PCIe Gen4 x 4 Interface

ASIC Video Processor

H.264/HEVC Encode/Decode 4K @ 60fps

AI Engine ROI Bitmap CAE Rate Control

Codensity™ Video Transcoder

Codensity
Designed by NETINT
T408 Video Transcoder

2.5" U.2 Plug-In Module installed in NVMe Bay

For more information on the NETINT VIDEO TRANSCODING SERVER Contact us at:

+1 604 628 8177

sales@netint.ca

NETINT