



Surveillance Video Processing

Smart VPU | ASIC Video Processing Unit, powered by AI

Finally, profitable video processing for your NDVR

All you need on one platform

- **80% reduction in storage and network traffic**
- **Realize the full potential of existing infrastructure**
- **Increase capacity by 10x with AI-filtering**

Our ASIC-powered VPU (video processing unit) enables surveillance providers to increase profits and customer value by reducing the OPEX and CAPEX costs associated with CPU and GPU-only architectures.

This profitable transformation is made possible with our NETINT Quadra VPUs, powered by the Codensity™ G5 ASIC. Quadra is perfectly suited for network digital video recording (NDVR) transcoding functions required by modern video surveillance systems.

Quadra is optimized for enterprise video surveillance applications and is capable of processing up to 8Kp60 while delivering high-quality, low bitrate video for large storage arrays or streaming. The built-in Deep Neural Network (DNN) engine for object detection, classification and segmentation is the secret to your 10X operational advantage.



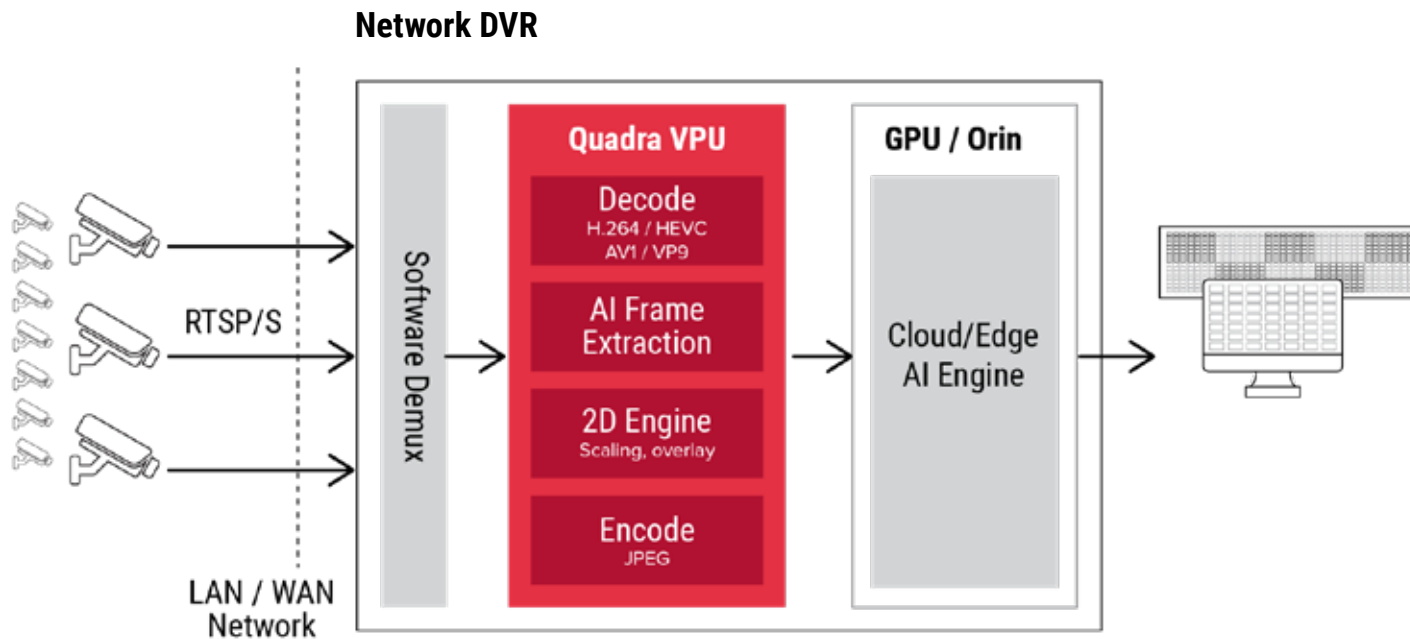


Application:

Ultra dense decoding powered by AI

Surveillance monitoring for video walls

Video surveillance clients place immense value on large scale decoding as it's imperative to their workflow. NETINT's Smart VPUs can simultaneously decode 48 1080p30 video streams which is triple the throughput of a main stream GPU. NETINT's Quadra with AI capacity maximizes the throughput and quadruples your video analysis capability so you can process more video in less time. That's profit worthy.





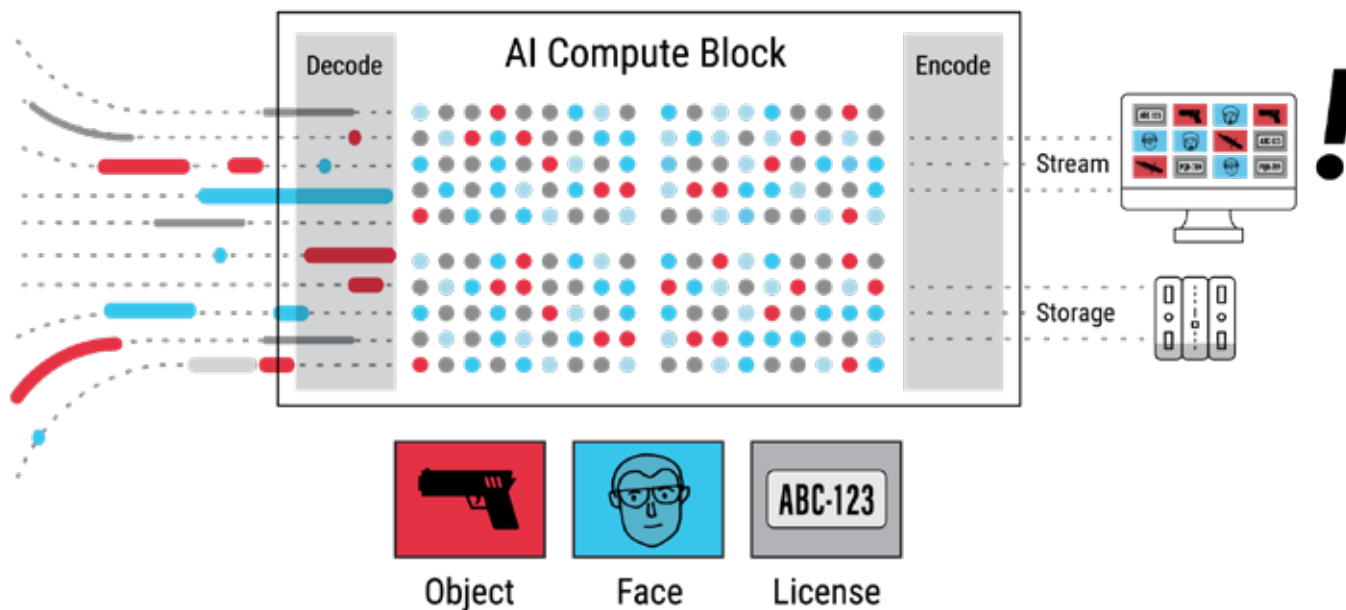
Application:

Never miss a warning with AI alerts

Key frame detection flags priorities

Increase your capacity by 10x by filtering out 90% of the noise. Smart VPUs streamline video analysis and eliminates bottleneck with high-efficiency prescreening security models. The key frame detection spot analyzes every 10th decoded frame, searching to identify key objects triggering escalated alerts for agent analysis or intervention. The Quadra is rated 18 TOPs of AI capability.

Key Frame Detection: Scans every 10th frame





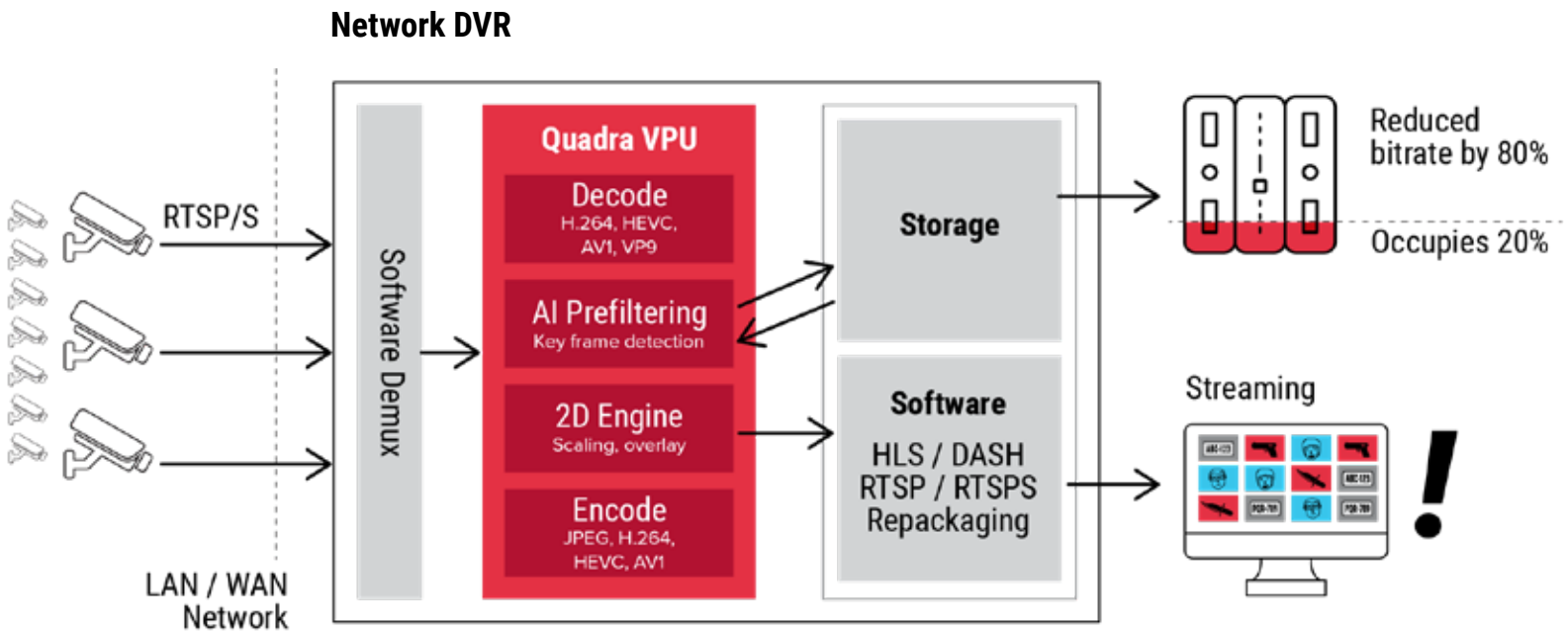
Application:

Lossless compression means 80% more space

Intelligent compression powered by AI

Typically, the storage capacity of a video surveillance system is directly correlated to the CAPEX and OPEX investment; the more you spend, the more you get. That's not the case here. Smart VPUs use AI powered video compression and processing capability enabling nDVR storage to occupy only 20% the volume.





This is significant. It's the equivalent of adding four additional nDVR's for every one nDVR in the system, without adding a penny to your capital investment or operating budget.



Specifications

Smart VPUs



	Quadra T1U	Quadra T1A	Quadra T2A
Form Factor	U.2	AIC	AIC
ASIC	1x 	1x 	2x  
Power	17 Watts	20 Watts	40 Watts
Codecs	Encoder: H.264, HEVC, AV1, JPG, AVIF Decoder: H.264, HEVC, VP9 Audio: MP3, AAC-LC, HE-AAC		
Decoding Throughput		Up to 48x 1080p30	Up to 96x 1080p30
Encoding Throughput		Up to 32x 1080p30	Up to 64x 1080p30
AI Capacity		18 TOPs	36 TOPs



NETINT is a proud member of the Security Industry Association.
For more information about what NETINT can do for you,
email: sales@netint.ca

