



Socionext Media Cloud Solution

The Democratization of Media Transformation

Macro Trends

Video accounted for 73% global IP traffic in 2016

- It will account for 82% of global IP traffic in 2021.¹

4K is now mainstream

- Over 50% of the 38M TVs sold in the US so far in 2017 feature 4K UHD

HEVC will be key to 4K content delivery

- Apple joined Netflix, VUDU, Fandango Now, and Amazon supporting HEVC encoded content.²

¹ [Cisco VNI Global Fixed and Mobile Internet Traffic Forecasts](#)

² [Why Apple's HEVC Announcement Is A Big Step Forward For The Streaming Media Industry](#)

A new venture created in 2015

FUJITSU + **Panasonic**



socionext™

socionext™

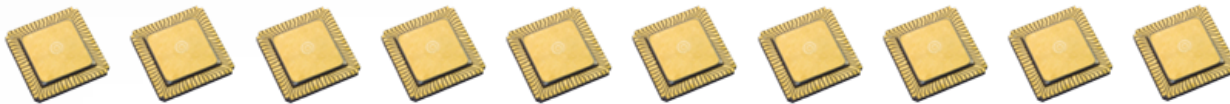
Socionext provides industry-leading networking and imaging solutions, including broadcast encoders, camera SoCs, TV/STB decoders and more.



Rethinking the Video Server

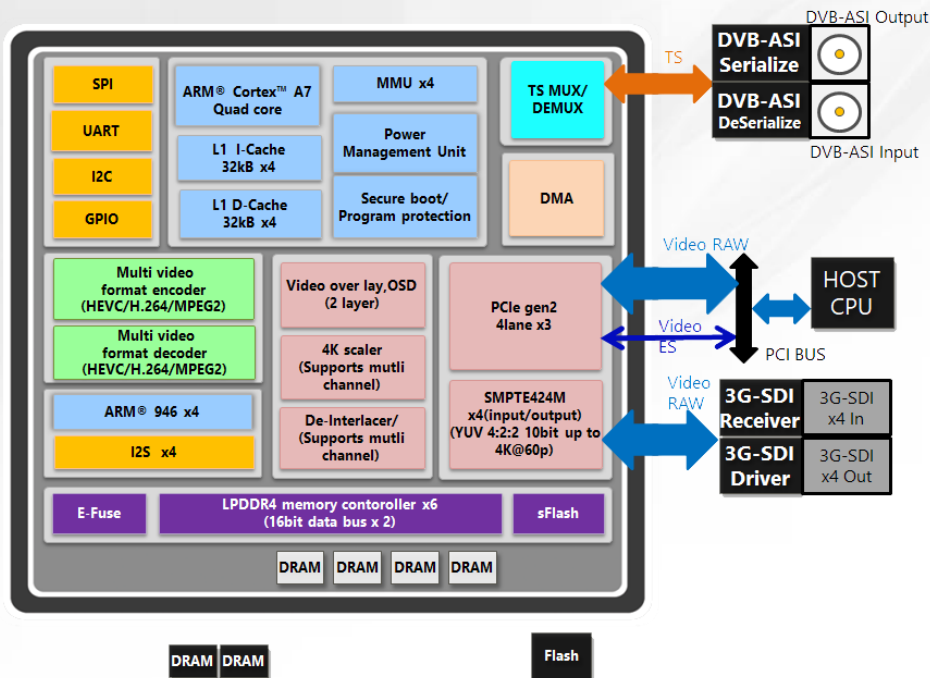


The Hybrid Engine — A Sea of Transcoders



MB86M30

4K60p Real-time Multi Format Codec IC



- AVC / HEVC Transcode
- 4KP60 Capacity
- Multi-stream
- IDR Sync

**Equal capacity for
AVC & HEVC**

The Dense Transcode Server

Full HD Bundles (AVC/HEVC)	128
720P Bundles	256
Live 4K Channels	32
1RU Power	< 750 W
Power per bundle	< 5W
Cost per ABR	<< \$250

32x **AVC/HEVC** Transcoders



Socionext vs. Competition

		Socionext Dense Server	Hardware Accelerated CPU	High Performance Data Center CPU
AVC	720P ABR Density / 1RU	256	72	12
	Power / ABR Channel	2.5W	7.6W	62.5W
	Cost / ABR Channel	X	2X	4X
HEVC	720P ABR Density / 1RU	256	36	2
	Power / ABR Channel	2.5W	15W	375W
	Cost / ABR Channel	1.25X	4X	24X

Socionext Dense Server Features

- x86 Server
- Adaptive Bit Rate
- 256 Input Streams
- 640 Output Streams
- 1RU / 750W

Media Cloud Applications



Individual as a Broadcaster



Video Streaming / User-Generated Content



Storage Optimization (HEVC)



Video Calling

Collaboration with Partners

Socionext teamed up with partners **Advantech** and **Softiron** to create a powerful and cost-effective dense transcode server platform.



ADVANTECH

Headquarters

- Taipei, Taiwan (1983)
- About 8,000 employees
- Global Presence (95 cities, 23 countries)

Revenue

USD \$1,293M (2016)

Market Position

No. 1 (32%) in Industrial PCs



ADVANTECH

Video Solutions Division

- Over 100 dedicated engineers
- Broad video product portfolio
- COTS to ODM business model
- Worked with Socionext since their incorporation

www.video-acceleration.com



High Density Video Transcoding Server for the Data Center

ADVANTECH

VEGA-7302

Application-ready pre-integrated platform



OTT Video Density in 1RU / 700-800W

UHD/4Kp60 HEVC ABR bundles	32
FullHD/1080p60 HEVC ABR bundles	128
HD/720p HEVC ABR bundles	256

Scalable & High Performance:

- 1U Intel® Xeon® Scalable Processor based server
- 16 to 56 Cores
- Up to 12 DDR4 Memory Channels
- Up to 32 x ultra-low-power Socionext M86M30

Agile & Flexible

- Designed for virtual and software-defined architectures
- Comprehensive software development tools supporting open standards
- Hardware and software customization options

Cost & Space Efficient:

- Up to 20x power and space reduction over software only



Acceleration Board Offerings for Alternative Architectures

ADVANTECH

VEGA-3318



Go large.

- GPU length
- Double slot, x16, 65W
- 8 UHD or 32 Full HD ABR Bundles
- **Made for the data center.** compatible with IT class servers and industry-standard virtualization and cloud schemes
- **Made for performance and quality.** Socionext MB86M30 embedded acceleration for up to 8-ch 4Kp60 or 32-ch 1080p60 HEVC/AVC 10-bit transcoding in one single board
- **Made for greener and more efficient deployments.** 8W per UHD channel and 2W per FullHD channel. Lower development risks and time to market



HyperDrive

STORAGE



HyperCast

STREAMING



Hyper...

ADDITIONAL PRODUCTS

SoftIron's "designed, not assembled"
solutions are specifically architected and
optimized for the data center.

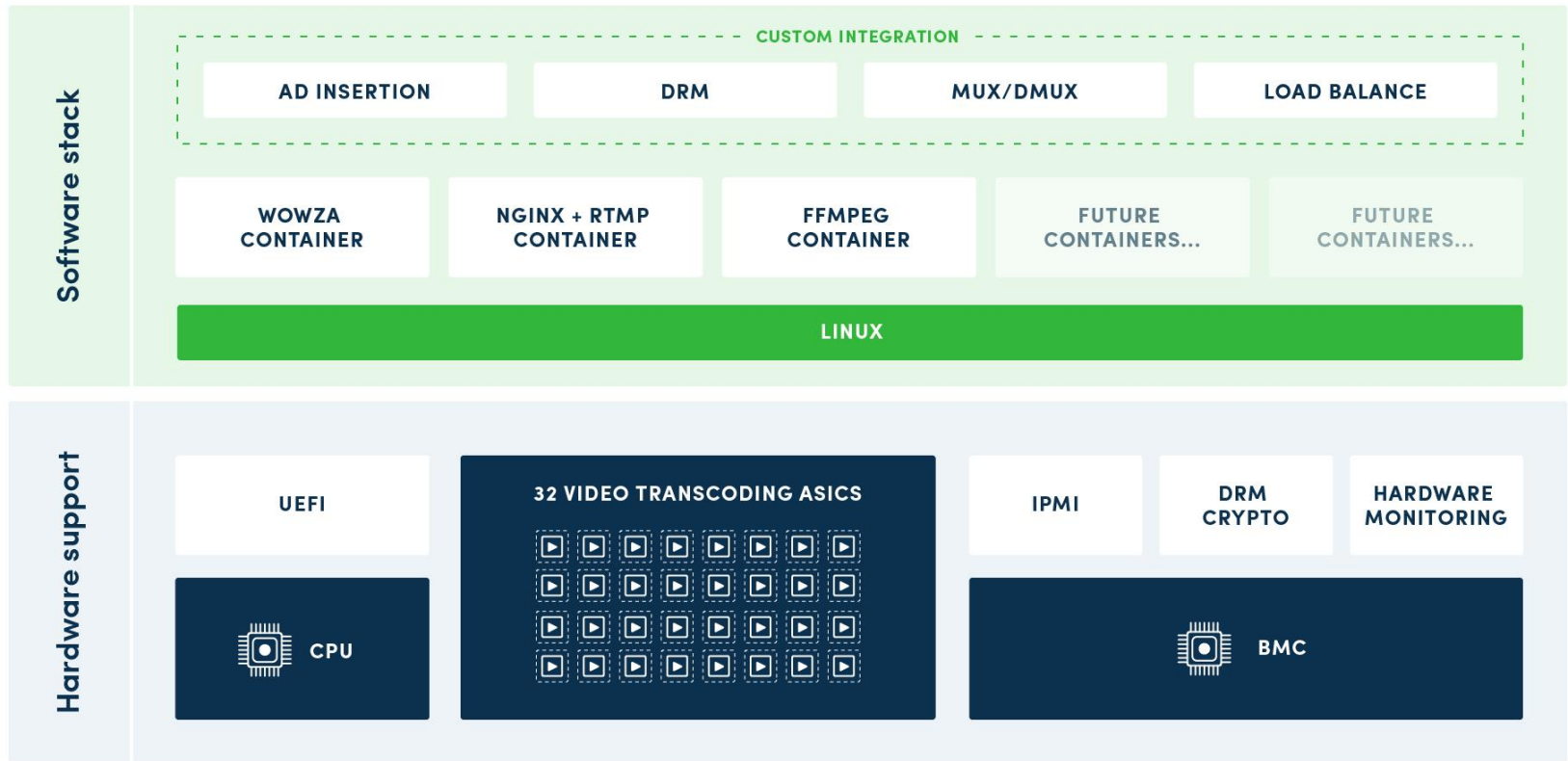


HyperCast Hardware Platform

- ✓ Wire speed performance
- ✓ Flexible dual networking
 - › 10/25/40/50/100 GbE
- ✓ Dual resilient power supplies
- ✓ 32 x video transcoding ASICs
- ✓ Direct connect to every ASIC
 - › No bridging or switching
 - › Lowest possible latency



SOFTIRON HyperCast Software Stack



Learn More

Contact us for more information about
the **Socionext Media Cloud Solution**.

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SOCIONEXT™

for better quality of experience