

Telecom COTS World is a Global Publication of e2mos

Telecom IT - HPC - A.I. Infrastructures - SDN - NFV Cloud - Data Centers - Storage Video Networks - Broadcast Internet of Things

Sep-Oct 2017

Delivering Carrier Grade Open Compute Technologies to Telco Data Centers « CG-OpenRack-19 » based on NVIDIA<sup>®</sup> Tesla<sup>®</sup> P4

CG-OpenRack-19 is a New Multi-Vendor Standard Specification providing Second Sources



Products & Technology from Silicon to Application-ready Platforms

## **Headlines**

• COVER STORY: Artesyn Accelerates Carrier-Grade Open Compute Applications with NVIDIA Tesla P4-Enabled Sled for CG-**OpenRack-19** 

 IDT to Demonstrate High Density 4K 10-bit Encoding Solution at IBC 2017 Real-time, Software-based Solution Delivers Broadcast quality 10-bit HEVC Video Utilizing Intel Xeon E3 Processor



To see a demonstration of IDT's latest HEVC Intel Xeon E3 implementation, in partnership with Hewlett Packard Enterprise (HPE), please visit Intel's stand B65 in Hall 5 at IBC 2017, September 14-18 in Amsterdam.

 ADLINK Launches Industrial-grade Intelligent Video Management Server for 4K, H.265 Video Processing Applications With an integrated GPU, the MCS-2080 2U high-density platform offers improved graphics and video processing performance for surveillance, broadcasting and conferencing

 World Communication Awards confirms its flagship telecoms industry position Organiser **Total Telecom** 

Record year for London awards night as 65 shortlisted global companies battle it out over 21 categories



15 September 2017 10:30 - 19 September 2017 16:00

Daniel Dierickx CEO & co-Founder at e2mos Acting Chief Editor

#### Dear Reader,

Here is your free copy of Telecom COTS World, one of our five emagazines published by e2mos.

Our aim is to provide you with relevant information directly in relation with your activity.

Those magazines are part of the e2mos « Go-to-Market Platform »

This GLOBAL Platform is a UNIQUE Set of Services for Telecom ICT, Video Broadcast, Embedded Computing, IoT and AI Vendors from Multicore Chips to Application-ready Systems & Rack Space Servers.

Our WORLDWIDE Services include:

- Business Discovery
- Customer Meeting Setup
- Telemarketing
- Call Campaigns
- e-mailings Worldwide

 and our 5 e-magazines, each magazines has its own Website (see below).

It is all based on:

 30+ Years Customer Relationship and Market & Technology Expertise • our PREMIER Database started in 1980 and maintained EVERY DAY using many sources and research.

Thank you, Daniel Dierickx

#### Editor/Publisher:

e2mos www.e2mos.com Contact mgt@e2mos.com

#### FREE just Click on the LOGO



### Artesyn Accelerates Carrier-Grade Open Compute Applications with NVIDIA Tesla P4-Enabled Sled for CG-OpenRack-19



Tempe, Ariz. - Artesyn Embedded Technologies is announcing a new hyperscale media acceleration server sled based on the CG-OpenRack-19 architecture, which is inspired by rack-scale architectures. Artesyn's new platform, named the CG19-GPU sled, will be used by carriers to add NVIDIA® Tesla® P4 processing to their network infrastructure systems. Optimized support for GPU and media processing workloads enables carriers to enhance their networks with improved video streaming and services that use video, such as digital advertising and augmented reality. Carriers also benefit from dramatically increased performance density and the ability to deploy new applications such as advanced analytics.



CG-OpenRack-19 is an open-source specification for scalable carrier-grade rack-level systems that integrate highperformance compute, storage and networking in a standard rack. It is designed to enable revenue-generating applications to be deployed very quickly on off-the-shelf servers and storage systems. The specification offers technical benefits related to power and physical footprint, scalability and maintenance. The specification, adopted and deployed in tier one carrier networks, has a growing ecosystem of vendors developing components for CG-OpenRack-19 systems. Artesyn has a long history of serving the telecom industry and understands the importance of open specifications as the carrier business and deployment model changes.

Linsey Miller, vice president of marketing for Artesyn Embedded Technologies, said: "Carrier networks need to rapidly deploy new applications on datacenter infrastructure, and open source hardware standards such as CG-OpenRack-19 are critical to this network transformation. We are bringing our deep knowledge of how to apply off-the-shelf technology along with our breadth of product and third-party ecosystem to solve today's application deployment challenges, so that service providers can buy with confidence."

Leveraging the power of GPU computing inherent in the NVIDIA P4 hyperscale accelerator, Artesyn's CG19-GPU sled provides key functionality within the growing multi-vendor ecosystem of carrier-grade open compute products. This ecosystem aims to lower the cost of keeping up with network and processor technology by reducing forklift upgrades and enable carriers to bring new capabilities to their networks more quickly and easily.

"NVIDIA lets companies like Artesyn, and its telecom customers, deploy a GPU computing platform that powers AI applications capable of creating additional growth opportunities," said Craig Weinstein, vice president of the America's Partner Organization at NVIDIA. "The Tesla P4 hyperscale GPU enables superior carrier services including, virtual reality, augmented reality and improved video streaming."

#### About Artesyn Embedded Technologies

Artesyn Embedded Technologies is a global leader in the design and manufacture of highly reliable power conversion and embedded computing solutions for a wide range of industries including communications, computing, medical, military, aerospace and industrial. For more than 40 years, customers have trusted Artesyn to help them accelerate time-to-market and reduce risk with cost-effective advanced network computing and power conversion solutions. Artesyn has over 20,000 employees worldwide across ten engineering centers of excellence, four world-class manufacturing facilities, and global sales and support offices. <u>https://www.artesyn.com/</u>

### IDT to Demonstrate High Density 4K 10-bit Encoding Solution at IBC 2017

## Real-time, Software-based Solution Delivers Broadcastquality 10-bit HEVC Video Utilizing Intel Xeon E3 Processor

SAN JOSE, Calif., September 6, 2017 – Integrated Device Technology, Inc. (IDT) (NASDAQ: IDTI) today announced the latest version of its R22 HEVC 10-bit software encoder. Offering high video guality, high density and low operating expense (OPEX), IDT's proprietary technology runs on the power-efficient Intel® Xeon® Processor E3 v5 family with integrated Intel Iris<sup>™</sup> Pro graphics, to provide real-time, software-based video encoding of HEVC 10-bit HDR up to 4Kp60.

"To meet the technical challenges brought on by today's new content creation, delivery, and distribution models, media and entertainment firms find themselves virtualizing nearly every function and service within their network. These virtualized video workloads can reduce time to market, cost of ownership, and delivery risk, while unlocking new revenue opportunities powered by analytics and service orchestration (automated service delivery). Hewlett Packard Enterprise provides the right technology to enable hybrid cloud infrastructure, empower the intelligent edge, and leverage services and solutions from best of breed partners, like IDT, to simplify the transformation of our customers' video services delivery," said Dan Lakey, Media and Entertainment Domain Executive, Hewlett Packard Enterprise.

"We are excited to be highlighting our latest software-based encoding solution at the upcoming IBC show in Amsterdam in partnership with Intel and HPE," said David Ko, Sr. Product Marketing Manager of Video Products at IDT, Inc. "The industry-leading density of our latest software encoding solution, in combination with our own HEVC algorithm, allows video service providers to deliver the broadcast-guality video that they need to remain competitive in a rapidly changing environment."

Utilizing Intel Xeon E3 processor, IDT's latest HEVC compression solution addresses many of the problems operators and vendors face when trying to support HEVC. With high algorithmic complexity, HEVC requires high processing power for encoding or transcoding, increasing both the cost of equipment capable of supporting this technology, as well as the cost of deployment and operation compared to previous compression technologies due to higher power and space requirements. The advanced Intel Xeon E3 technology, in combination with IDT's own proprietary HEVC algorithm, addresses these issues through lower power consumption and lower cost. IDT's algorithm takes advantage of GPU optimization to offer the highest video quality.

To see a demonstration of IDT's latest HEVC Intel Xeon E3 implementation, in partnership with Hewlett Packard Enterprise (HPE), please visit Intel's stand B65 in Hall 5 at IBC 2017, September 14-18 in Amsterdam. To schedule a meeting with IDT executives at the show, please contact Ian.Jefferson@idt.com.

#### **About IDT**

Integrated Device Technology, Inc. develops system-level solutions that optimize its customers' applications. IDT's market-leading products in RF, high performance timing, memory interface, real-time interconnect, optical interconnect, wireless power and smart sensors are among the company's broad array of complete mixed-signal solutions for the communications, computing, consumer, automotive and industrial segments. Headquartered in San Jose, Calif., IDT has design, manufacturing, sales facilities and distribution partners throughout the world. IDT stock is traded on the NASDAQ Global Select Stock Market® under the symbol "IDTI." Additional information about IDT can be found at www.IDT.com. Follow IDT on Facebook, LinkedIn, Twitter, and YouTube.







### ADLINK Launches Industrial-grade Intelligent Video Management Server for 4K, H.265 Video Processing Applications

With an integrated GPU, the MCS-2080 2U high-density platform offers improved graphics and video processing performance for surveillance, broadcasting and conferencing

TAIPEI, Taiwan, July 17th, 2017 – ADLINK Technology, a global provider of leading edge computing solutions that drive data-to-decision applications across industries, today introduced the MCS-2080 Intelligent Video Management Server, a dedicated, high-density platform featuring up to sixteen Intel® Xeon® processors E3-1500 v5. ADLINK's MCS-2080 is an application-ready intelligent platform offering a high-performance and high availability design to meet the critical challenges for 4k & H.265 video applications in surveillance with video analytics, broadcasting, and video conferencing used in remote education and healthcare environments.





In the age of video, cloud-based service providers are required to perform extensive data processing. In surveillance, IP cameras record large-volume video files with high quality up to 4K; in broadcasting, high-performance hardware transcoding capability saves time and cost for video editors; in video conferencing, real-time and high-resolution video streaming consumes computing power. Previously, these applications used less efficient off-the-shelf commercial servers or digital signal processing (DSP), which requires a long development cycle. ADLINK's MCS-2080, with high density and computing performance, meets the challenge of cloud-based data processing with an improved cost-per-channel solution by adapting commercial-off-the-shelf (COTS) platforms based on Intel x86 processors.

"MCS-2080 offers a cloud-friendly architecture and an application-ready intelligent platform to solution providers for video services" said Yong Lo, general manager of ADLINK's Networking, Communication and Public Business Unit. "The MCS series with Intel® Xeon® processor E3-1585 provides the best cost per channel by using an integrated Intel® GT4e GPU and Intel® Media Server Studio middleware to improve video processing performance without the need for an extra GPU card. Instead, the integrated GPU handles video processing tasks, making the CPU available to process analytics."

The MCS-2080's 2U, 19" industrial-grade design provides high availability with redundant and hot-swappable modules. With sixteen systems, solution providers can arrange several different functions into one platform. For example, in surveillance, VMS, CMS and IVS can be allocated together in one MCS-2080 server, easing management requirements and saving space in the server room.

ADLINK's MCS-2080 is especially designed to support medium- to large-scale intelligent video management applications. The MCS-2080 integrates Intel® Quick Sync Video (GT4e GPU) and a middleware layer with the Intel Media Server Studio (MSS) to implement hardware-assisted HEVC/H.265 video processing. The platform offers dual-redundant switches with sixteen 1G internal links and four 10G uplinks, as well as dual-redundant power supplies to meet industrial-grade design needs. Eight PCIe x8 slots offer scalable extension needs. The MCS\_2080 also supports the Intelligent Platform Management Interface (IPMI) 2.0 with Serial over LAN (SOL) redirection and web-based management and offers adaptive fan speed and intelligent power supply monitoring. Onboard storage of 2x mSATA slots supports SSD modules up to 512GB.

For more information about ADLINK MCS-2080 Intelligent Video Management Server, please visit here.

#### **About ADLINK**

ADLINK Technology is leading edge computing with solutions that drive data-to-decision applications across industries. ADLINK offers a variety of building blocks and both generic and domain-specific Industrial Internet of Things (IIoT) platforms to serve the automation, communications, medical, transportation, and defense/government markets. Our products include motherboards, blades, chassis, modules, gateways, systems, and end-to-end solutions based on industry standard form factors, as well as an extensive line of test & measurement products and smart touch computers, displays, and handhelds that support the global transition to always connected systems. Many products are Extreme Rugged<sup>™</sup>, supporting extended temperature ranges, shock and vibration.

ADLINK is a Premier Member of the Intel® Internet of Things Solutions Alliance and is active in several standards organizations and interoperability initiatives, including PCI Industrial Computer Manufacturers Group (PICMG), PXI Systems Alliance (PXISA), Standardization Group for Embedded Technologies (SGeT), European Telecommunications Standards Institute (ETSI), and Open Compute Project (OCP).

ADLINK is a global company with a local touch. Headquartered in Taiwan, ADLINK offers manufacturing in Taiwan and China; R&D and integration in the US, Germany, Taiwan and China; an extensive network of worldwide sales and support offices; and a continually expanding partner ecosystem. ADLINK is ISO-9001, ISO-14001, ISO-13485 and TL9000 certified and is publicly traded on the TAIEX Taiwan Stock Exchange (stock code: 6166).

# World Communication Awards confirms its flagship telecoms industry position

Record year for London awards night as 65 shortlisted global companies battle it out over 21 categories

The 19th annual World Communication Awards at Supernova on the Embankment in London on **28-Nov-2017** is set to be the largest ever, with 65 companies and organisations shortlisted across more than 20 categories, including new awards around NFV Innovation, 5G and Digital Lifestyle.

The awards are so competitive that organiser **Total Telecom** has extended the independent judging panel to 30 highly qualified experts across the world. Assessing the hundreds of applications has taken several weeks, with a shortlist ranging from the very largest operators and vendors to small and innovative start-ups.

"Since the very beginning, a cornerstone of the success of the WCAs has been a strict and rigid policy that judging must at all times be totally independent and impartial," said Chair of Judges and CEO of Plum Consulting, Tony Lavender.

"That has always been my brief, and as the industry has moved forward and widened its scope to new developments like NFV, IoT and 5G, we have also widened the expertise of our judging group so that companies entering for these awards can know and respect the calibre of the people assessing their submissions.

"We know how much effort, toil and sweat goes into every single entry, and when the category winners are announced on the 28th those companies and individuals can feel very proud of their achievements."

Launched in 1999, the World Communication Awards have shown themselves to be the undisputed blue chip mark of success in the telecom industry and once again guests are expected to attend the dinner on the 28th from all over the world.

See the shortlists and categories in the tables page 6, 7 & 8

	Best Brand
	Orange - Orange Sponsors You
	Smart Communications - Welcome Change
65	Viettel Group BITEL - 4G coverage campaign
)	Best Enterprise Service
ds	CITIC Telecom CPC - TrustCSI ATP
	NTT Communications Corporation - SD-WAN Service Portfolio
	Singtel - Software-Defined Hybrid Network
	Telstra Broadcast Services
	Best Customer Care
	Telekom Research & Development
of	Telia Carrier
	Telstra
	Turkcell
	The Social Contribution Award
	Cable & Wireless - Identity Scoring
	Indosat Ooredoo - INSPERA
ıe	Mahindra Comviva - Idea Cellular's Private Recharge powered by PreTUPS
d	Ooredoo Myanmar - Site Pyo
d	Smart Communications - SHINE OS+
u	Telin - Kartu As2in1
	Turkcell - No Barriers
	Viettel Group - Operation Healthy Heart
,	Best Connectivity Solution
to	Telekom Research & Development - iSSEF Prime
	Turkcell - Automatic Rotating Antenna
	Most Innovative IoT Solution
na	Cisco Jasper Control Center
ng	Huawei - Oceanconnect IoT Platform
e	iBasis - Global IoT Solution
	Indosat Ooredoo - IoT Connect
	ZTE Corporation - Smart Parking Product
e	Industrial IoT Award
	NTT Communications - IoT Platform
- 6	Orange - Pops by Orange
of	Smart Cities Award
	Greenwave Systems - AXON Platform
	Indosat Ooredoo - Kota Digital
	Intersec - GeoInsights
	Magnet Networks - Smart City, Wembley Park
	The Moving Pictures Award
n	Huawei - Envision mobile video service
1.	MEQ - 4K Experience
s	Ooredoo Qatar to next page
-	PCCW Global - Virtual Reality (VR) Broadcast Solution

PCCW Global - Virtual Reality (VR) Broadcast Solution

# World Communication Awards confirms its flagshiptelecoms industry position... from previous page

		1
Digital Lifestyle Award		
Indosat Ooredoo		
Orange		
PLDT - Smart Home		
5G Trailblazer		
Mimosa Networks		
Ooredoo Qatar		
Telstra Corporation		
NFV Innovation Award		
Accedian SkyLIGHT Platform		
Huawei NFV Integration Solution		
Iskratel - vIMS		
Mavenir - Multi-ID solution		
Netcracker Technology - Netcracker 12		
Vmware - vCloud NFV 2.0		
The Innovation Award: Vendor		
Content Guru - Patient Relationship Manager (PRM)		
Invia - Bill on Behalf		
Mahindra Comviva - Ecocash Diaspora		
Metaswitch - 100% Cloud Native VoLTE Solution		
ZTE - Innovative Combo PON Solution		
The Innovation Award: Operator		
Colt Technology Services - Colt On Demand		
Fareastone Telecommunications Co iTracer		
Singapore Telecommunications Limited - One Singtel Sales Experience		
Telekom Research & Development - Multi Service Wireless Access Netwo	ork	
Telkomtelstra - Delivery Robots (Dbots)		
The Cloud Infrastructure Award		
CITIC Telecom CPC - SmartCLOUD		
Epsilon Telecommunications - Infiny		
Huawei - China Mobile Zhejing Province Telco Cloud		
Interoute - Enterprise Digital Platform		
Network Transformation Initiative		
Reliance Jio and Accedian - 4G Customer Experience Assurance		
Tata Communications Transformation Services - Lab as a Service		
Telecom Argentina and Huawei - core network cloud transformation		
Telstra Corporation - Programmable Network		
Vodafone Carrier Services		
The Users' Choice Award		
AT&T		
BT		
NTT Communications		
Orange Business Services		
Singtel		
Tata Communications		
Telefonica	-	
Verizon	to I	next pag
Vodafone		
		1

## World Communication Awards confirms its flagshiptelecoms industry position... from previous page

en	net
G١	obeNet
Or	otus Wholesale
Te	lin
Be	est Wholesale Operator
De	eutsche Telekom International Carrier Sales & Solutions (ICSS)
Int	teroute Communications
NT	IT Communications Corporation
PC	CCW Global
Te	lia Carrier
Vc	odafone Carrier Services
СТ	O of the Year
Al	exandre Fonseca - Altice / PT
Br	yn Jones - Three UK
Da	ato' Rafaai Samsi - Telekom Malaysia Berhad
Ha	atem Bamatraf -Etisalat
Na	anang Hendarno - Telin
Ra	ijiv Datta - COLT
Sa	scha Zabransky - Telekom Austria Group
Yo	gesh Malik - Veon
CE	O of the Year
Ah	nmad Hanandeh - Zain Jordan
Ala	an Masarek - Vonage
Da	ana Tobak - Hyperoptic
Eri	nst L Cu - Globe Telecom
Rio	ck Calder - GTT Communications
Th	ne Broadband Pioneer Award
Es	sex County Council - Superfast Essex
Hu	Jawei - Europe's First Docsis 3.1 Based GigaSpeed Network
	/peroptic - Full fibre
	predoo Qatar - Supernet
-	DT - Home Fibr
•	ark New Zealand - Nationwide - Home Wireless Broadband rollout
	est Operator in an Emerging Market
	quid Telecom
	oredoo Myanmar
	nart Communications
	lin
	Ikomsel
	est Global Operator
	IT Communications Corporation
	oredoo Group
-	Istra Corporation

#### About Total Telecom

Total Telecom provides insightful knowledge in the form of interviews, event coverage, breaking news and case studies to a global audience of telecom professionals. It meets the information and research needs of the Global Communications industry, from breaking news to expert analysis. It is the leading communications link between end users and the vendors, carriers and resellers of telecommunications technology and services.

#### For further information please contact: Rob Chambers, Managing Director, Total Telecom rob.chambers@totaltele.com +44 (0) 20 7608 7076