RTOS
For ZYNQ
UltraScale+
MPSoC
in Complex Systems
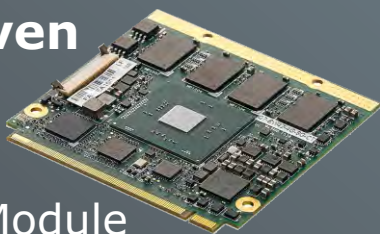
Qseven

SFF Module
Winning More Designs

Surpassing Expectations for Conventional Industrial PCs
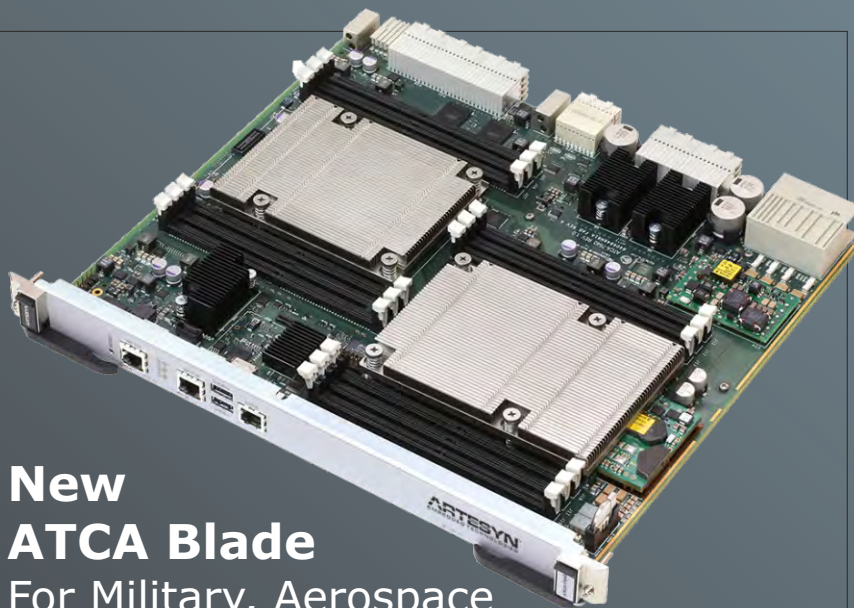
VMEbus
Excellent
First 9 Months 2017
New MIL Large Contracts
10 Vendors offer New CPU

Top 100 Board Vendors Standard Architecture

New ATCA Blade
For Military, Aerospace
and Government Networked Systems

Advantech re-discovers the PC/104 Business

Headlines

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• VMEbus - Excellent First 9 Months 2017

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• New York City Transit is Qualifying CSiT's TRANSIS-Train On-Board Communications System Powered by: Kontron TRACe™ Transportation Computers

• VadaTech New Virtex UltraScale FPGA AMC Carrier

• Too many Market Reports and Presentations contain Wrong Information by e2mos

• U.S. Army bans use of Chinese-made drones due to 'cyber vulnerabilities'

• Kontron selected by Safran Electronics & Defense for Small Form Factor certifiable rugged mission computers

• Curtiss-Wright Among First Aerospace COTS Vendors to Meet New AS9100 rev D Aerospace Supplier Standard

ADLINK Introduces MVP-6010/6020 Series of Expandable Fanless Embedded Computers with Four Expansion Slots

Offering 65W CPUs in a fanless chassis and the robust construction of all ADLINK MXC/MXE products, at a new value price point

TAIPEI, Taiwan, August 8, 2017 – ADLINK Technology, Inc., a global provider of leading edge computing solutions that drive data-to-decision applications across industries, has introduced its MVP-6010/6020 Series, a new addition to its MVP family of value-priced fanless embedded computing platforms. The MVP-6010/6020 Series, with four expansion slots, not only surpasses expectations for conventional industrial PCs, but also provides a perfect balance between features and performance in a compact size, all at an exceptionally cost effective price point. In addition, 6th generation Intel® Core™ processors allow the MVP-6010/ 6020 Series to deliver superior computing performance, increased up to 30% over the previous generation of Intel® Core™ processors. With ADLINK's proven fanless construction, the MVP-6010/6020 Series can sustain 65W TDP, overcoming the challenges of harsh environments and delivering invaluable benefits to any industrial automation operation.

"With four PCI/PCIe expansion slots to better serve industrial automation applications, our MVP-6010/6020 Series maximizes computing power in a fanless compact structure and offers 65W TDP for smart factory automation," said Zane Tsai, director of ADLINK's Platform Product Center at the Embedded Platform & Module Business Unit. "The MVP-6010/6020 easily replaces rackmount and tower IPCs in harsh factory environments, with single-side I/O access and reliable operation, eliminating unneeded capacity to improve cost efficiency. We believe the scalable MVP-6010/6020 Series is highly competitive in terms of computing performance, reliability, size, and price."

The MVP-6010/6020 Series provides a wealth of choices, delivering a perfect balance of features and performance in a compact package, without sacrificing any of the benefits of fanless construction, all at a significantly competitive price while still guaranteeing a level of performance not available in any other IPC in this class

The MVP-6010/6020 Series offers one PCIe x16 and three PCI, or two PCIe x16 and two PCI expansion slots, allowing buildup of application-specific capabilities for motion control and machine vision applications and many others. In addition, the MVP-6010/6020 Series is compatible with ADLINK's complete range of fully pre-verified motion, vision and I/O cards, providing single-source convenience.

The MVP-6010/6020 Series provides built-in dual-channel DDR4 SO-DIMM sockets for up to 32 GB of memory, and the Intel® HD Graphics 530 supercharges graphics performance. Dual independent displays are fully supported, with one VGA, one DVI and two DisplayPort, two software-programmable RS-232/422/485 + two RS-232 ports, three Intel® GbE ports with teaming function, six external USB ports (four USB 3.0 + two USB 2.0), and 8CH DI and 8CH DO. Rigorous testing for operational verification assures the series' reliability and ruggedness, for complete functionality when facing the rigors of demanding industrial application environments. Along with a versatile I/O array and flexible expansion capacity, the MVP-6010/6020 Series fully satisfies all the needs of industrial automation with the performance demanded by vision inspection and motion control applications.

For more on ADLINK's fanless embedded computer products, please visit our website

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™, 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).

Enea Adds Support for Xilinx Zynq UltraScale+ MPSoC Devices

Bringing Computing Power, Reliability and Scalability to Extremely Demanding Applications

STOCKHOLM, Sweden, May 9, 2017 – Enea® (NASDAQ OMX Nordic:ENEA) today announced a new board support package (BSP) for Xilinx® Zynq® UltraScale+™ multiprocessor system-on-chip (MPSoC) devices in Enea's multicore operating system Enea® OSE. The new BSP supports the popular Zynq UltraScale+ ZCU102 board, offering streamlined software application development.

Xilinx Zynq UltraScale+ MPSoC is a family of high performance all programmable system-on-chip devices featuring multicore ARM® processors together with programmable logic and optional graphics and video codec units for offloading critical applications. The UltraScale+ MPSoC family of devices targets applications in wired and wireless communication, automotive, and aerospace and defense, among other industries with compute intensive processing applications.

Enea OSE provides linear multicore scalability for a single image. With extremely low latency and jitter, and minimal processing overhead, it enables the full performance of the Xilinx Zynq UltraScale+ MPSoC devices to user space applications.

"Xilinx Zynq UltraScale+ MPSoC is the world's foremost all programmable MPSoC, providing unrivaled performance and flexibility. The multicore performance and scalability of Enea OSE matches the performance of the Zynq UltraScale+ MPSoC devices. Together they provide a computing platform for applications that are extremely demanding in terms of computing power, reliability, and scalability", said Simon George, Director, Product Marketing – Embedded Software, Xilinx.

Further reading

The Enea OSE web page http://www.enea.com/ose/

The Xilinx Zynq UltraScale+ web page https://www.xilinx.com/zynq-ultrascale-mpsoc.html

About Enea

Enea is a global supplier of network software platforms and world class services, with a vision of helping customers develop amazing functions in a connected society. We are committed to working together with customers and leading hardware vendors as a key contributor in the open source community, developing and hardening optimal software solutions. Every day, more than three billion people around the globe rely on our technologies in a wide range of applications in multiple verticals – from Telecom and Automotive, to Medical and Avionics. We have offices in Europe, North America and Asia, and are listed on Nasdaq Stockholm. Discover more at www.enea.com and start a conversation at info@enea.com.

There's life in the old dog yet - PC/104 Single Board Computer
Source: Advantech 22-Jul-2017

One of the oldest genuine standards for industrial computers is still in good health. Numerous applications have been implemented on the basis of **PC-compatible, pluggable PC/104 modules**. Many are based on the ISA bus proven over decades. The demand for compact computing systems with a robust interface is therefore unwavering. With a footprint of 90 x 96 mm as a rule, PC/104 is still one of the most compact form factors for Single Board Computers (SBC) with a Small Form Factor (SFF). **And one of the most flexible: Up to five extension boards can be inserted on or under the central SBC circuit board to save space and fixed by means of screw connection.** PC/104-CPU modules are therefore particularly robust when dealing with mechanical and thermal loads. The revision-free compatibility of the bus systems employed over the years is what distinguishes the technology. The flexible design and modules with long-term availability continue to make PC/104-CPU modules attractive. These solutions can therefore still be found in many vertical market segments today. In particular, in areas with a high requirement for **long-term availability and robustness** – for example, in medical and measurement technology, in transportation and traffic or in automation technology. Increasingly, new areas such as robotics or on-board vehicle control are being added. Here the question of extensive customisation of the product is also often paramount, for instance, in terms of unusual inputs and outputs, COM interfaces and digital I/Os.

Current PC/104-CPU module with ISA support
Many companies which have been using PC/104 systems for a long time have developed their own ISA-BUS I/O modules for often individual, proprietary applications at considerable expense. In many cases, they also wish to continue using these. But what happens if the CPU module used until now needs replacing, for example, because of a fault? Moreover, even in the most durable product ranges from renowned suppliers there are item changes – for instance, because certain components are no longer available. Finding PC/104-CPU modules with current processors, chipsets and ISA compatibility is not that easy. On the other hand, it is frequently not an option for users to redesign the circuit developed as an ISA bus-based I/O module for a current interface.In this case, it helps if manufacturers provide their customers with sound, transparent End of Life (EOL) management in good time: in this way they can evaluate replacements for discontinued products in good time.

The example of Advantech: In the case of an embedded specialist, the Intel Bay Trail Board PCM-3365 replaces the discontinued PCM-3362 with Intel Luna Pier platform. The new CPU module is based on the PC/104-Plus standard and can be optionally equipped with an entire ISA and/or PCI extension bus (PC/104 or PCI-104 respectively). The processors of the Bay Trail series (Intel® Atom™ E3825/E3845 or Intel® Celeron® N2930) are used as engines. Although the new ISA and PCI processor generations do not provide native support, both bus systems can be implemented on the PC/104 CPU module. The LPC bus, a serialised ISA bus with limited DMA access, is used for the ISA bus. **The PCI bus, on the other hand, is implemented via a PCIe/PCI bridge chip.**

For users of the new solution, it is important that the performance of the PC/104 bus is at least at the same level as the predecessor. Advantech was able to verify this with internal performance tests. The old PC/104 CPU module can therefore be simply replaced by the new model without having to make any compromises in terms of performance. The shock and vibration-resistant solution is based on selected industrial components and is available long-term. Of particular importance for use in harsh application environments: All components including the E3800 CPU family are designed for an extended temperature range. This means that trouble-free operation is guaranteed from -40 to +85 degrees Celsius. Memory-hungry applications have a maximum of 8GB of memory at their disposal. In addition, Advantech provides the option of customising the module – for example, variants with 16, 32 or 64GB onboard flash, adapted cables or heatspreader are feasible. **The heatspreader takes heat straight from the processor to the housing (conduction cooling) and thus enables optimum convective heat transport.**

The Story of PC/104
The original PC/104 standard is based on **PC Industrial Standard Architecture (ISA)**. Developed at the end of 1980s, the PC/104 consortium – the name comes from "Personal Computer" and the number of connector pins of the ISA modular plug – already adopted the first version of the standard in 1992. This sets out both the size of the module, the position of possible extension connections and the PIN-out of the ISA-compatible PC/104 connector. Nothing about the form factor has been changed to the present day. Modules with a printed circuit board of 90 mm × 96 mm (3.550" × 3.775") can be inserted directly on top of each other, rendering a backplane superfluous. Likewise, PC/104-CPU modules can be attached to mounting boards. As a rule, x86 CPUs are used as processors. Over the years, ever more powerful PC components have come onto the market. Furthermore, the demand for greater and more varied connectivity increased. The PC/104 was therefore continuously adjusted and, for example, equipped with a faster bus system. Thus, in 1997 the PCI bus found its way into the standard as PC/104-Plus. A 120-pin socket for the PCI bus consequently supported the 104-pin ISA bus connector. In 2003, PCI-104 followed. Full article Click Here

Editor 's Note
● Good to see Advantech re-discovering the PC/104

● In addtition to the applications mentioned above, the PC/104 is used in volume in Military Land Vehicles and even in Fighters using Extreme Rugged version to MIL-STD, shock & vibration, -40°C to +85°C and long-term reliability.

● Today there are over 30 PC/104 Vendors including: Adlink, RTD, Kontron, Curtiss-Wright, Abaco (formerly GE IP), ...

New ATCA Server Blade brings Latest Processors to <u>Military</u>, <u>Aerospace</u> and <u>Government Networked Systems</u>

Designed to meet the long life cycle needs of COTS contractors

Tempe, Ariz. [19 July, 2017] — Artesyn Embedded Technologies today launched a powerful new packet processing and high performance server blade, the ATCA-7540, based on dual Intel® Xeon® Scalable processors (codename Skylake), which were recently announced.

The ATCA-7540 provides a migration path and future-proof platform for defense applications in air/shipborne data centers, ground control stations, network data analytics, ad-hoc mobile networks and other C4ISR tasks. The selected processor family combined with Artesyn's engineering and supply chain expertise provides a performance and longevity-of-supply improvement over existing server blades. Artesyn expects its selected processors to have a 15-year life cycle.

Designed for compute-intensive tasks such as deep packet inspection (DPI), firewalls, intrusion prevention and data encryption/decryption, the ATCA-7540 server blade targets high performance network requirements in commercial, government and defense communications networks.

Built around commercial off-the-shelf (COTS) technologies, the AdvancedTCA® (ATCA) bladed architecture follows the U.S. Department of Defense (DoD) modular open systems approach (MOSA). With scalable performance, ease of maintenance, reduced cabling and multivendor interoperability, Artesyn's ATCA technology has been selected for multiple applications in military deployments. Several DoD branches, prime contractors and system integrators have adopted the ATCA architecture for a range of centralized compute systems on board ships, aircraft or in transit cases for command and control tents.

Software

The CentOS operating system will be available for the Artesyn ATCA-7540 and the blade is designed to support other open source and commercial operating systems thanks to pre-installed BIOS, IPMC firmware and Artesyn's Basic Blade Services (BBS) software.

The blade will also support **RedHawk Linux RTOS, an industry-standard real-time operating system selected by the U.S. Navy** as its open architecture operating system for a long list of programs.

The ATCA-7540 can be configured for virtualization using Linux KVM or VMware ESXi, and is designed to operate with the Intel® Data Plane Development Kit (DPDK).

Technical Details

- The blade design has been optimized for unmatched computational performance, featuring two new Intel Xeon Gold or Intel Xeon Silver processors, allowing for scalable performance.
- Data paths to main memory and I/O are highly optimized by the use of six memory channels per processor which support DDR4 memory.
- Fast network performance, which optimizes 48 high speed PCIe Gen 3 lanes per processor.
- Memory capacity can scale up to 384 GB using 12 VLP DIMM sockets, allowing for cost optimized configurations as well as for applications with demanding memory requirements as needed in routing decisions or pattern matching.
- The blade can be combined with optional hardware accelerators directly connected to the CPUs. The accelerators are optimized for assisting encryption/decryption algorithms and can greatly enhance throughput of encrypted data in security applications.
- A dual-star 40G Ethernet fabric interface enables high-speed data transfer.
- The blade supports up to two on-board M.2 non-volatile sold state memory disks (up to 1TB total capacity)
- Artesyn offers a wide range of compatible rear transition modules (RTMs) to expand I/O and storage options to meet customer application needs.

White Paper

Since 2012, a number of large military programs have adopted ATCA technology. This paper addresses the forces driving the requirements of high performance embedded computing (HPEC) for military and aerospace applications, including the modular open system approach (MOSA), commercial off-the-shelf (COTS), and reduced size, weight, power and cost (SWaP-C) as it applies to ATCA.

MORE: <u>Click Here</u>

ARTESYN™
EMBEDDED TECHNOLOGIES

Qseven Modules for
Stationary and Mobile Applications
are gaining more Designs

The Qseven® is a versatile Small Form Factor (SFF) computer module standard targeting applications that require ultra-low power, low cost and high performance. Qseven® modules are used as building blocks for portable and stationary embedded systems. Qseven® modules can also be used in conjunction with carrier boards that implement application specific features such as audio codecs, touch controllers, wireless devices, etc. This modular approach allows scalability, faster time to market and performance diversification while maintaining lower costs, low power and small physical size.

Featured product example: Q7-BT
Qseven Module with 4th Generation Intel® Atom™
Processor E3800 Series System-on-Chip
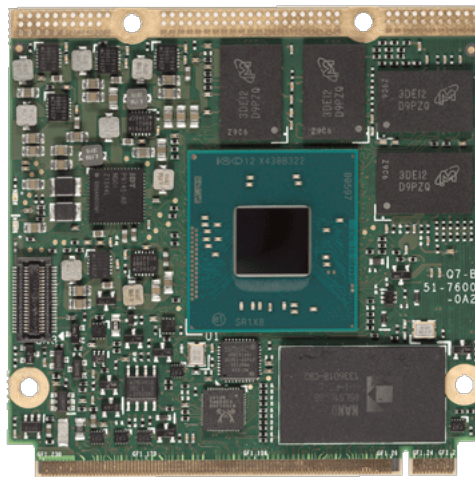
- Single, dual or quad core 4th Generation Intel® Atom™ Processor E3800 Series System-on-Chip
- Up to 4 GB DDR3L at 1066/1333 MHz
- HDMI 1.4b and dual channel LVDS
- GbE, MIPI CSI camera interface
- 2x SATA 3Gb/s or 1x SATA and 1x SATA-SSD
- Extreme Rugged™ -40°C to +85°C or commercial temp. 0°C to +60°C
- Supports Smart Embedded Management Agent (SEMA) functions 2.5 or 3.0

Qseven is a Computer-on-Module (COM) standard for small sized and highly integrated systems adopted by SGET.

The Qseven concept is an off-the-shelf, multi-vendor, Computer-on-Module that integrates all the core components of a common PC and is mounted onto an application specific carrier board. Qseven modules have a standardized form factor of 70 mm x 70 mm or 40 mm x 70 mm and have specified pinouts based on the high-speed MXM connector, regardless of the vendor. The Qseven module provides the functional requirements for an embedded application, which include, but are not limited to, graphics, audio, mass storage, network and multiple USB ports. A single ruggedized 230 pin MXM connector provides the carrier board interface to carry all the I/O signals to and from the Qseven module. This MXM connector is a well-known and proven high-speed signal interface connector that is commonly used for PCI Express graphics cards in notebooks.

The Qseven footprint is smaller than that of COM Express, ETX or XTX, responding to system designers" needs for minimal space. Qseven"s power consumption envelope is below a 12 watts target, whereas SMARC"s target is below 6 watts and COM Express can be well above 20 watts. Therefore, Qseven designs provide mid-range power values between those of SMARC and COM Express.

The Qseven pincount is 230 compared to 314 and 440 for SMARC and COM Express (Type 2), respectively. Thus, it is optimized for designs with lower board-to-board pin requirements.

White Paper Click Here

Top 100 Board Vendors
Standard Architecture Embedded Computing

Source: e2mos www.e2mos.com

We perform ongoing updates of Embedded Computing Board Vendors for the last 30 (thirty) years.

Number of Vendors by Format out of the Top 100
We have about 20 board format categories, here is a simplified table of the most popular formats as of today.

SFF - Small Form Factor

COM Express	30
SMARC	8
Qseven	13
PC/104	30
NUC	Few
Mini-ITX	15
Others	NA

3U - 6U Format

VME - VXS	28
cPCI - cPCI Serial	32
VPX - OpenVPX	22
PMC - XMC - FMC	31
VNX	10

AdvancedTCA

ATCA	15
AMC	21

Others Popular

PCI & PCIE	50+
ATX Embedded	Many
PXI	14

VMEbus
Excellent First 9 Months 2017

BUSINESS

The first 9 months of 2017 have been excellent in terms of New Large Contracts especially in the US Military Market.

NEW PRODUCTS

Leading vendors have introduced New High Performance CPU Boards, based on:
ARM - Freescale (now NXP) QorIQ and Intel XEON.

Vendors involved include: Artesyn, MEN, Kontron, Curtiss-Wright, Extreme Engineering Solutions (X-ES), Mercury Systems, Abaco Systems (formerly GE-IP)
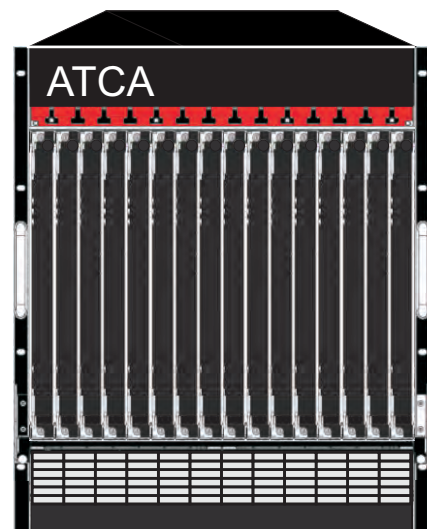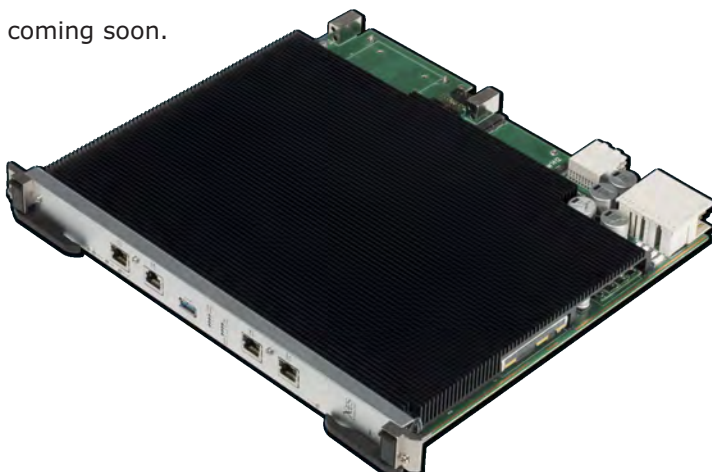
ATCA - Advanced Telecom Computing Architecture
Winning Large Designs

ATCA getting strong in Military Networks in the US, Security and Chip Manufacturing Equipment Worldwide, and preferred to standard servers.

More coming soon.

New York City Transit is Qualifying CSiT's TRANSIS-Train On-Board Communications System Powered by: Kontron TRACe™ Transportation Computers

"Loan Agreement" Trial of the CSiT Multi-Modal Communications System is in revenue operation in the NYC Subway System

Montreal, Canada, August 10, 2017 – Kontron, a leading global provider of Embedded Computing Technology (ECT), and CSiT, a transit industry leader in supplying integrated communication and security solutions worldwide, today announced that CSiT's TRANSIS-Train communications system that is powered by Kontron TRACe™ transportation computing products is in a qualification trial with New York City Transit (NYCT). The "Loan Agreement" trial is designed to test and validate in an operational setting the multi-modal integrated communications capabilities of TRANSIS-Train that include Public-Address and Intercom, Passenger Infotainment with media/advertising capabilities on LCD displays, Passenger Information on LED displays, Train Operator user interface on Train Operator Displays and CCTV. TRANSIS-Train is installed on a four-car train from NYCT's R68 fleet that is running in the NYC Subway System over the next year. The advanced communications capabilities provided by CSiT and Kontron have never been available on NYCT trains before, and are part of the smart cities evolution that is being implemented by municipalities and transit agencies.

The advanced TRANSIS-Train communication system provides the ability to network and integrate information across an entire fleet and operational network that connects information from multiple data sources into a single information reference. TRACe platforms are completely compatible with CSiT's system solutions helping to make the "connected train" for Smart Cities a reality. Kontron's TRACe products deliver the commercial-off-the- shelf (COTS) open architecture computing technologies that give CSiT the modular building blocks allowing them to offer maximum scalability and ease of upgradeability to their transit agency customers. For the NYCT trial, TRANSIS-Train is running on Kontron's TRACe B304-TR and TRACe V304-TR EN50155-certified fanless transportation computers and two TRACe HMI D104 driver consoles that have been fully validated.

"CSiT is excited that TRANSIS-Train is installed and in revenue operation on the NYCT R68 train. The key to deploying effective and reliable communications is interoperability between disparate sub-systems, which would not be possible without proven standards-based technologies. Kontron TRACe matches our needs exactly by providing the COTS feature-rich hardware that not only simplifies development but also allows us to focus on our uniquely differentiated intelligent software solutions and powerful integrated systems. This R68 installation of TRANSIS-Train follows the TRANSIS-Kiosk implementation onto a portion of NYCT's On-The-Go (OTG) kiosk interactive information network providing integrated multi-modal real-time information within 26 NYC Subway stations," said Denis Poliquin, President of CSiT.

"At Kontron, we are thrilled to be able to demonstrate in the NYCT Loan Agreement how our TRACe transportation computers are helping to drive the data revolution benefits of the connected train. **Because they are modular COM Express and Internet of Things (IoT)-enabled platforms, TRACe products are inherently scalable allowing CSiT to futureproof their design investments.** All that is needed is to switch out the carrier board if a customer wants to upgrade to the latest high-performance Intel processor all while maintaining capability with existing installed rail systems," said Kontron Transportation Business Development Manager, Valentin Scinteie.

Kontron's TRACe transportation: www.kontron.com/industries/transportation
CSiT's Smart City solutions for transit and the company: www.csit.co

VadaTech New Virtex UltraScale FPGA AMC Carrier

Henderson, Nevada, USA
VadaTech, a leading manufacturer of integrated systems, embedded boards, enabling software and application-ready platforms, announces the AMC596, an FPGA module based on the Virtex UltraScale™ XCVU440 FPGA. This is the largest of the UltraScale™ FPGAs, here supported by 8GB of 64-bit wide DDR4 and an on board Power PC P2040. The additional connectivity provided by PinoutPlusTM, over 250 Gbps between neighboring modules, makes the product ideal for ASIC emulation and demanding sensor processing applications.
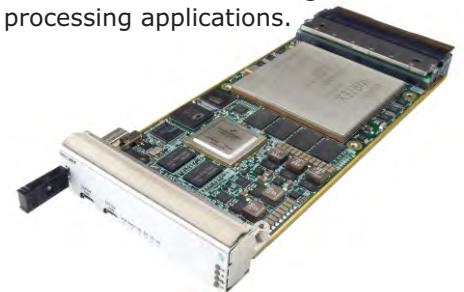
The AMC596 extends a rich product line of Virtex-7 and UltraScale™ products covering PCIe edge, VPX and AMC form factors. With common architecture and supporting VHDL, users can easily port applications from one form factor to another to meet different environmental and market requirements.

About VadaTech

VadaTech provides innovative embedded computing solutions from board-level products, chassis-level platforms, to configurable application-ready systems. With a focus on AdvancedTCA, MicroTCA, VPX and PCIe solutions, the company offers unmatched product selection and expertise. A unique combination of electrical, mechanical, software, and system-level expertise, enables VadaTech to provide customized commercial or rugged computing solutions to meet the most complex customer requirements.

WARNING !

Too many Market Reports and Presentations
contain Wrong Information
while Important Items are missing.
Also White Papers are not that White!

It is the first time that we publish this kind of information, as it is not our style, but it is going too far and we believe it is our duty to inform properly our readers and customers.

Here are some examples, we will not publish the names but we have all evidence on hand and in some cases we may indicate those examples on a one-to-one base if really needed:

#1 - <u>Report: Operating Systems used in IoT Applications</u>
Microsoft, a leader in this field, was simply missing as well as ENEA Linux Yocto & OSE Multicore.
We informed the source they said thank you but no time to correct!

2 - <u>Report: Ranking Standard Architecture Board Vendors</u>
A leader was missing and ranking was quite wrong.
We contacted the source, they agree and they should correct it, we did not see the correction.

3 - <u>Analyst Presentation at the Convention Center in Santa Clara, USA</u>
The presentation was about Standard Boards and Systems (COTS) for Telecom & Networking, there was a vendor's ranking presented, the N° 1 on the list was not making that product for more than a year, an executive of that vendor made the remark in the room. I was also in the room.

4 - <u>Embedded Computing Conference in London</u>
An Application Engineer from a very large vendor presented a product that was on EOL (End-of-Life) for a year. I was in the room.

5 - <u>Embedded World Nuremberg - Same mistakes two years in a row</u>
Special early morning presentations about Chips and Operating Systems, key vendors and key products were missing. I was in the room each time.

6 - <u>White Papers & Webinars</u>
Not reflecting the reality, pushing products and keeping others in the dark.

Conclusion: select your sources and double check.
If you need help always welcome.
Good luck - Daniel Dierickx, CEO e2mos & Acting Editor-in-Chief.

U.S. Army bans use of Chinese-made drones due to 'cyber vulnerabilities'

By Daniel Uria, UPI | Aug. 5, 2017

The DJI Phantom 3 Professional drone flies at the at the 2016 International CES, a trade show of consumer electronics, in Las Vegas, Nevada, January 7, 2016. A U.S. Army memo ordered that personnel cease use of DJI products due to "increased awareness of cyber vulnerabilities" in the products.Photo by Molly Riley/UPI

A U.S. Army memo, obtained by sUAS News and published online, ordered Army personnel to cease all use of Dajiang Innovation products, uninstall all DJI applications, remove all batteries/storage media from devices, and secure equipment for follow on direction. "Due to increased awareness of cyber vulnerabilities associated with DJI products, it is directed that the U.S. Army halt use of all DJI products," the memo stated. "This guidance applies to all DJI UAS and any system that employs DJI electrical components or software including, but not limited to, flight computers, cameras, radios, batteries, speed controllers, GPS units, handheld control stations, or devices with DJI software applications installed."

The memo stated that DJI Unmanned Aircraft Systems are the "most widely used non-program of record commercial off-the-shelf UAS" used by the Army.

"There are U.S. special operators in Syria using DJI products," former Army intelligence soldier Brett Velicovich told Defense One. "So I get it. I'm glad [the Army is] finally doing something about this."

A spokesman for DJI said the company was willing to work with the U.S. military and other organizations to assess the security issues.

"We are surprised and disappointed to read reports of the U.S. Army's unprompted restriction on DJI drones as we were not consulted during their decision. We are happy to work directly with any organization, including the U.S. Army, that has concerns about our management of cyber issues," he said. "We'll be reaching out to the U.S. Army to confirm the memo and to understand what is specifically meant by 'cyber vulnerabilities.'"

A U.S. Army spokesperson confirmed the ban had been requested, but said it was still under review.

"We can confirm that guidance was issued; however, we are currently reviewing the guidance and cannot comment further at this time," the spokesperson said.

See also ESW May-Jun 2017 Page 6 Click Here

Kontron selected by Safran Electronics & Defense for SFF (Small Form Factor) certifiable rugged mission computers

Toulon, France, June 21, 2017

Kontron, a leading provider of Embedded Computing Technology (ECT), today announced it has been selected by Safran Electronics & Defense to supply COBALT mission computers for the Patroller Unmanned Aerial Vehicle (UAV).

Kontron's team in Toulon, France, will perform the adaptation of the COBALT platform to suit the needs of the drone. "Kontron is very proud to support Safran in this major drone program" said Philippe Vincent, General Manager of Kontron France, "Our field-proven COBALT platforms are resulting from decades of experience in satisfying computational, sensor and bandwidth system demands in harsh environments".

Kontron will showcase its full line of rugged computing platforms at the International Paris Air Show in Paris.

The MIL-STD COBALT series provides a small, fully sealed IP67 enclosure and Intel multi-core processing performance, which make it an optimal solution for sensor control and various processing needs on unmanned vehicles. Kontron's solutions are designed to meet requirements for modularity, safety-critical interoperability and optimized size, weight, power and cost (SWaP-C).

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Curtiss-Wright Among First Aerospace COTS Vendors to Meet New AS9100 rev D Aerospace Supplier Standard

July 27, 2017 | BY: John Wranovics
Advanced processes and procedures already in place enable Curtiss-Wright Defense Solutions facilities in Ashburn, Va., Letchworth, UK, and Ottawa, Canada to be among first companies to earn certification for latest international aerospace quality standard

ASHBURN, Va. – July 27, 2017 – Curtiss-Wright's Defense Solutions division announced today that its facilities located in Ashburn, Va., Letchworth UK, and Ottawa, Canada have been certified to the new AS9100 rev D industry-recognized international aerospace standard of quality management. Curtiss-Wright is one of the first commercial-off-the-shelf (COTS) vendors to receive this stringent certification essential to operating in the highly regulated Aviation, Space and Defense (ASD) sector. Of the 19,000 companies registered to AS9100 rev C, Curtiss-Wright was one of the first 20 companies to be audited for the more stringent and demanding rev D certification. AS9100 rev D certification ensures Curtiss-Wright customers that the Company is better able to satisfy higher level, more demanding program requirements. It also reflects the strong relationships that Company has established and maintains between its suppliers and supplier management.

To achieve this coveted certification, Curtiss-Wright successfully underwent an audit and qualification process to demonstrate conformity to requirements concerning quality, safety, continuous improvement, risk management, project management and other key performance metrics. The AS9100 rev D certification provides Curtiss-Wright customers with confidence in the Company's processes and procedures and the quality of the products that it designs and manufactures. In addition, this accomplishment ensures customers of Curtiss-Wright's ability to rapidly adapt to emerging industry changes.

"Thanks to the strong processes that we already had in place, especially in the areas of risk-based thinking, counterfeit avoidance, longevity of supply and leadership knowledge, Curtiss-Wright is among the very first companies to receive certification to the new AS9100 rev D aerospace supplier quality standard," said Lynn Bamford, Senior Vice President & General Manager, Curtiss-Wright Defense Solutions division. "This successful audit affirms our strong AS5553 process including procurement and component approval processes and counterfeit mitigation disciplines and ensures our aviation, space and defense customers that we meet the world's highest quality standards."

About the AS9100 Standard

AS9100, overseen by the International Aerospace Quality Group, standardizes quality management system requirements and delivers quality assurance in design, development, production, installation and servicing. The standard also drives cost reductions throughout the aerospace industry supply chain. The AS9100 audit was performed by TUV.

AS9100 and Curtiss-Wright

Meeting AS9100 has become an increasingly important milestone for international suppliers of aerospace systems and components in order to be approved suppliers to industry leading partners such as Boeing, Airbus, Pilatus, Saab, Northrop Grumman and Lockheed Martin. The benefits of AS9100 certification for Curtiss-Wright include expanded market access as a result of a standardized process system recognized across the aerospace industry. Meeting AS9100 criteria also ensures Curtiss-Wright's customers of its commitment to quality and builds upon their trust and confidence. In addition, AS9100 drives ongoing improvements in products and processes, reduces errors and customer returns, and increases customer satisfaction, resulting in reduced transaction costs.

Curtiss-Wright's Commitment to Quality

Curtiss Wright Defense Solutions is committed to leveraging its technology leadership to deliver products and services that meet or exceed customer requirements. Quality objectives and supporting actions are established in the Annual Operating Plan for customer satisfaction, employee development, operational excellence and financial performance to improve the Company's competitive position. These objectives are monitored regularly to ensure continual improvement of the effectiveness of the Quality Management System.
For more information about Curtiss-Wright's Defense Solutions division, please visit www.curtisswrightds.com.

About Curtiss-Wright Corporation

Curtiss-Wright Corporation is a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships. The company employs approximately 8,000 people worldwide.
For more information, visit www.curtisswright.com.