



MEN Rugged COM Express Module with AMD Ryzen™ SoC



Energy monitor can find electrical failures before they happen



Air Liquide & STMicroelectronics on Digital Transformation



SYSGO & Kontron develop Secure Platform for Railway



Russia pitches Turkey the Su-57 fighter jet if F-35 deal with US collapses

In this Edition:

- Platinum Equity To Sell Artesyn Embedded Power Business To Advanced Energy

- Revolutionizing Professional Service Robotics with Open Source ROS 2.0 Development Platform

ADLINK and IEEE to jointly host Taiwan's first large-scale ROS 2.0 International Industrial Summit

- Air Liquide and STMicroelectronics to collaborate on digital transformation

- Rugged COM Express Module with AMD Ryzen™ Embedded V1000/R1000 SoC from MEN

- ADLINK Announces New Rugged, Fanless, Real-time Video/Graphics Analytics AIoT (AI & IoT) Platform for Railway

Bringing advanced AI and IoT technologies to drive safer, smarter and more reliable rail operations

- MIT - Energy monitor can find electrical failures before they happen

- ADLINK - Embedded Computing Boards Overview



- Russia pitches Turkey the Su-57 fighter jet if F-35 deal with US collapses

- Rohde & Schwarz acquires security scanner business of Camero-Tech Ltd. Israel.

- Honda Confirms UK Plant Closure

The car factory employs 3,500 people

- SYSGO and Kontron intensify Cooperation and develop fully integrated Secure Platform for safety-critical Railway Applications

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



Over 3 Decades
Semiconductors & Computer
Systems Market Expertise

Dear Reader,

Here is your free copy of
Embedded Systems World
one of our six e-magazines

Your benefits:

- Selected subjects
- Easy reading
- Many direct links for more
- Efficient and time saving
- FREE Worldwide

FREE Subscription

Click on the logos below

Semi Update World

aiworld

IoT World

Embedded Systems World

Telecom COTS World
Broadband Broadcast IoT AI Convergence

ATCA World

Editor/Publisher: e2mos

WEB: www.e2mos.com

Contact: mgt@e2mos.com

**Advanced Business
Development SERVICES
Worldwide from e2mos**

- New Customers Discovery and Meeting Setup
- Massive Global Market Reach with our PREMIER Database and 6 eZines
- Coaching - Filling the gaps Database Upgrade
www.e2mos.com

Platinum Equity To Sell Artesyn Embedded Power Business To Advanced Energy

Partial Divestiture Separates Artesyn's Embedded Power, Embedded Computing and Consumer Products Businesses

LOS ANGELES (May 15, 2019) – Platinum Equity announced today the signing of a definitive agreement to sell the Embedded Power business of portfolio company Artesyn Embedded Technologies, Inc., to Advanced Energy Industries, Inc. (Nasdaq: AEIS), in a transaction valued at approximately \$400 million. The transaction is expected to close during the second half of 2019, subject to regulatory approval and other customary closing conditions.

Artesyn Embedded Technologies has been a portfolio company of Platinum Equity since 2013.

Artesyn's Embedded Power business is a leading global supplier and manufacturer of highly engineered power conversion products, including AC-DC power supplies, DC input devices and board mounted DC-DC modules.

"The Embedded Power business and Advanced Energy are a great strategic fit with complementary strengths," said Platinum Equity Partner Jacob Kotzubei. "We are pleased to have found a combination that makes great sense for both companies and their customers."

The transaction announced today only involves Artesyn's Embedded Power business, which includes the Artesyn and Astec brands. Artesyn's Embedded Computing and Consumer products businesses are not part of the sale and remain part of Platinum Equity's portfolio.

Mr. Kotzubei said separating the three businesses makes the most long-term sense.

"Artesyn serves three very different markets, each with its own customer base and unique dynamics," explained Mr. Kotzubei. "Separating them into standalone operations opens up more opportunities with greater potential."

Artesyn's Embedded Power business is one of the world's largest providers of highly engineered, application-specific power supplies for demanding applications. As a trusted technology partner to original equipment manufacturers, it serves multiple attractive growth markets, including hyperscale data centers, telecom infrastructure in next generation 5G networks, embedded industrial power applications and medical power for diagnostic and treatment applications.

JP Morgan is serving as primary financial advisor to Artesyn on the sale of the Embedded Power business. Morgan Stanley is also providing financial advisory services to the company. Morgan, Lewis & Bockius LLP and Baker & McKenzie LLP are serving as Artesyn's legal counsel on the transaction.

About Platinum Equity

Founded in 1995 by Tom Gores, Platinum Equity is a global investment firm with approximately \$13 billion of assets under management and a portfolio of approximately 40 operating companies that serve customers around the world. The firm is currently investing from Platinum Equity Capital Partners IV, a \$6.5 billion global buyout fund, and Platinum Equity Small Cap Fund, a \$1.5 billion buyout fund focused on investment opportunities in the lower middle market. Platinum Equity specializes in mergers, acquisitions and operations – a trademarked strategy it calls M&A&O® – acquiring and operating companies in a broad range of business markets, including manufacturing, distribution, transportation and logistics, equipment rental, metals services, media and entertainment, technology, telecommunications and other industries. Over the past 23 years Platinum Equity has completed more than 250 acquisitions. More www.platinumequity.com.

About Artesyn's Embedded Power business

Artesyn's Embedded Power business is one of the world's largest and most successful power supply companies. The company's extensive standard AC-DC product portfolio covers a power range of 3 watts to 24 kilowatts and includes a wide range of configurations and customizable solutions. Widely acknowledged as an industry leader in distributed power applications, Artesyn produces an exceptionally wide range of DC-DC power conversion products. Headquartered in Tempe, Arizona, Artesyn's Embedded Power business has approximately 9,500 employees across multiple engineering design centers, manufacturing facilities, and global sales and support offices worldwide. For more information, visit www.artesyn.com/power.

About Advanced Energy

Advanced Energy (Nasdaq: AEIS) is a global leader in the design and manufacturing of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. AE's power solutions enable customer innovation in complex semiconductor and industrial manufacturing applications. With engineering know-how and responsive service and support around the globe, the company builds collaborative partnerships to meet technology advances, propel growth for its customers and innovate the future of power. Advanced Energy has devoted more than three decades to perfecting power for its global customers and is headquartered in Fort Collins, Colorado, USA. For more information, visit www.advancedenergy.com.

Editor Note (from Embedded Systems World and e2mos _Daniel Dierickx)

As stated in the PR above « Platinum Equity To Sell Artesyn Embedded **Power Business** To Advanced Energy » , not the **Embedded Computer BU**, that may come soon?

Revolutionizing Professional Service Robotics with Open Source ROS 2.0 Development Platform



ADLINK and IEEE to jointly host Taiwan's first large-scale ROS 2.0 International Industrial Summit

San Jose, California | 30-Apr-2019

ADLINK Technology, Inc., a global provider of leading Edge Computing, has co-hosted the 2019 IEEE International Industrial Summit on Robot Operation System 2.0, Taiwan's first ever large-scale ROS 2 event, on May 6, 2019 at the Fuhua Hotel in Taiwan. Keynote speakers include Brian Gerkey, CEO of the **Open Source Robotics Foundation** and many other well-known industry experts representing interests such as **Intel, Microsoft, AWS, NVIDIA**, and many others. Together, they will illustrate the abundant opportunities provided by ROS 2 to revolutionize the new era of global industry.



ROS 2.0's operational design structure improves on the previous ROS generation by integrating DDS (Data Distribution Service), as established by the Open Source Robotics Foundation (OSRF) in the US as an open-source operational framework for robotics. As new technologies and concepts are evolved, ROS 2.0 continues to revolutionize robotic operations and improve overall performance.

ROS 2.0 emphasizes an open-source development platform with universal structure, enabling robotics to navigate, manipulate, perceive, identify, and react accordingly. Developers can interconnect applications via ROS 2.0 based on industry standard DDS middleware. Integration of DDS capabilities into ROS 2.0 introduces true peer-to-peer communication among independent robotic system elements. DDS delivers enhanced stability and singular immediacy, ensuring inter-robotic communications where none were possible previously.

In the last decade, the development and application of intelligent robotics has attracted the attention of numerous developers, and with the onset of AI capability and Industry 4.0, AMRs, AMIRs, autonomous cars, service robots, and countless other embodiments of robotic function continue to thrive in manufacturing and logistics environments.

The 2019 IEEE International Industrial Summit on Robot Operation System 2.0 brings together internationally renowned experts and prominent academic figures. Delivering the keynote address on ROS 2.0, "What's next for ROS?" is Brian Gerkey, CEO and Co-founder of Open Robotics. "Cageless Cobots: The new wave in Robotics" will be presented by Dr. Giby Raphael, Director of Supply Chain and Manufacturing Optimization Segment for the Intel Internet of Things Group, Prof. Dr.-Ing. Ren C. Luo, Editor-in Chief, IEEE Transactions on Industrial Electronics will discuss "Exemplary ROS2 Best Practices –AI Based Image Caption and Semantic Mapping for Intelligent Service Robotics" as well as many other presenters.

With decades of experience in leading edge computing and industrial IoT solutions, ADLINK has developed a comprehensive hardware and software solution based on ROS 2.0 to assist developers and enterprises in the robotics field to accelerate integration of R&D, production and application industry chain to master the limitless business opportunities presented by intelligent robotics.

ADLINK GLOBAL CONTACT LOCATIONS <https://www.adlinktech.com/en/contactus.aspx>

Air Liquide and STMicroelectronics to collaborate on digital transformation

Paris and Geneva / 06 May 2019

Air Liquide and STMicroelectronics intend to engage in a collaborative initiative to accelerate the development of digital solutions for industrial applications. Through this initiative, ST anticipates supporting Air Liquide in its digital transformation, providing guidance and solutions while Air Liquide anticipates working with ST in developing technologies and solutions for industrial applications. This cooperation will extend the long-standing business relationship established over the past decades between both companies.

The parties anticipate collaborating to identify cases where ST's technologies would best fit industrial and logistics needs, and then prototype the selected digital solutions and test them in Air Liquide's operating environments. By creating a fertile ground of exchange among experts and adopting a collaborative approach, Air Liquide and ST intend to accelerate digital innovation of industrial use-cases. The parties have already identified a selection of projects and ideas in domains such as asset tracking and management, predictive maintenance and the cybersecurity of industrial assets.

This cooperation will extend the trusted and long-standing business relationship established over the past decades between Air Liquide and ST. Air Liquide supplies gas, materials and equipment to ST's manufacturing sites located in France, Italy, Malta, Morocco, the Philippines and Singapore.

Joël Hartmann, Executive Vice President for Digital & Smart Power Technology and Digital Front-End Manufacturing of STMicroelectronics, said: "Building on the strong and mutually beneficial relationship established over many years, ST and Air Liquide are moving to further enrich this expedition. Our goal is to support the digital transformation of Air Liquide, one of our major and strategic suppliers, by providing state of the art solutions leveraging our products and technologies portfolio to successfully accelerate their program in this domain."

Guy Salzgeber, Executive Vice-President and member of the Air Liquide group's Executive Committee supervising industrial activities in Europe, said: "We are confident that this additional cooperation with ST, a long-time strategic customer of the Group, will enable a further acceleration of our digital transformation while helping ST in better addressing the technological needs in the field of Industrial Internet of Things. This initiative is a further illustration of our open-innovation strategy partnering with customers, academics, suppliers and start-ups."

About Air Liquide

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 66,000 employees and serves more than 3.6 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.

Air Liquide's ambition is to be a leader in its industry, deliver long term performance and contribute to sustainability. The company's customer-centric transformation strategy aims at profitable growth over the long term. It relies on operational excellence, selective investments, open innovation and a network organization implemented by the Group worldwide. Through the commitment and inventiveness of its people, Air Liquide leverages energy and environment transition, changes in healthcare and digitization, and delivers greater value to all its stakeholders.

Air Liquide's revenue amounted to 21 billion euros in 2018 and its solutions that protect life and the environment represented more than 40% of sales. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, EURO STOXX 50 and FTSE4Good indexes. **More:** <https://www.airliquide.com/>.

About STMicroelectronics

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. ST's products are found everywhere today, and together with our customers, we are enabling smarter driving and smarter factories, cities and homes, along with the next generation of mobile and Internet of Things devices. By getting more from technology to get more from life, ST stands for life.augmented.

In 2018, the Company's net revenues were \$9.66 billion, serving more than 100,000 customers worldwide. Further information can be found at www.st.com.

Futuristic Success Story Air Liquide and e2mos founder produced two decades ago

Prior founding e2mos the Management of e2mos was a Member of the Management Team of Arrow Electronics in Europe, it was a great time for Design-wins. One of those Design-wins was an application for Air Liquide of a bar code system (readers from HP) for field traceability of high-pressure cylinders (bottles) used in the international distribution of liquid gas mixtures _Daniel Dierickx www.e2mos.com

Rugged COM Express Module with AMD Ryzen™ Embedded V1000/R1000 SoC

Nuremberg, Germany – April 16, 2019. The CB71C is an ultra-rugged COM Express module for rail, public transportation and industry applications, e.g. data acquisition, infotainment, transcoding and live 3D. It is 100% compatible with COM Express Type 6 Pin-Out and conforms to the VITA 59 standard, which specifies robust mechanics to ensure reliable operation even under the harshest environmental conditions.



FEATURES:

- AMD Ryzen™ Embedded V1000/R1000 series
- Up to 32 GB DDR4 RAM with ECC
- Up to 4 Digital Display Interfaces (DP, eDP, HDMI, DVI)
- Hardware memory encryption
- Safety-relevant supervision functions
- Virtualization
- The Ryzen Embedded V1000 powered products support up to -40°C to +85°C Tcase, conduction cooling
- VITA 59 in process, compliant with COM Express Basic, type 6
- PICMG COM.0 COM Express version also available

Extremely Robust, Powerful Graphics and High Performance

The CB71C Rugged COM Express Module is based on the AMD Ryzen Embedded family and can now be equipped with the new Ryzen™ Embedded R1000 SoC in addition to the Ryzen Embedded V1000 SoC. The new AMD Ryzen Embedded R1000 SoC features a Radeon™ Vega graphics engine with three compute units and support for up to three displays with a resolution of up to 4k without additional graphics hardware. With up to four powerful "Zen" processor cores, when using the AMD Ryzen Embedded V1000 SoC, the CB71C is also suitable for virtualization.

With the AMD Ryzen Embedded family, the COM module gains valuable flexibility: The design can be based on either a Ryzen Embedded R1000 dual-core SoC or a Ryzen Embedded V1000 quad-core SoC. The strength of the new AMD Ryzen Embedded R1000 SoC lies in its low power consumption combined with its high single-thread performance and high clock with dual core and quad thread performance.

The modules with AMD Ryzen Embedded V1000 provide passive cooling and a temperature range from -40°C to +85°C are possible with the low-power versions. The CB71C can be equipped with up to 32 GB directly soldered DDR4 main memory and a 16 GB eMMC. PCI Express 3.0, DDI (DP, eDP, HDMI), SATA 3.0, Gigabit Ethernet and USB 3.0 are available as high-speed interfaces.

The COM module has a board management controller with monitoring functions and a trusted platform module. The module also uses the Secure Memory Encryption capability in the AMD Ryzen Embedded R1000 SoC – an essential feature for security-critical applications such as payment and ticketing terminals, fleet management or monitoring.

AMD welcomes MEN's decision to implement the new product family with AMD Ryzen Embedded:

"We are excited to continue our work with MEN and see them develop fantastic devices and modules that take advantage of the features in the AMD Ryzen Embedded family," said Stephen Turnbull, director of product management and business development, Embedded Solutions, AMD. "MEN develops systems with the highest demands on robustness and safety and the AMD Ryzen Embedded R1000 and AMD Ryzen Embedded V1000 help make those features a reality for MEN's customers." **MORE:** <https://www.menmicro.com/>

ADLINK Announces New Rugged, Fanless, Real-time Video/Graphics Analytics AIoT (AI & IoT) Platform for Railway



Bringing advanced AI and IoT technologies to drive safer, smarter and more reliable rail operations

San Jose |20-May-2019 -- ADLINK Technology, Inc., a global provider of advanced Edge Computing products, today released its latest rugged, fanless NVIDIA Quadro embedded AIoT (AI and IoT) platform, the PIS-5500, designed for real-time video/graphics analytics applications in the rail industry.

Artificial Intelligence (AI) technologies are being adopted globally by all industries to drive efficiency, improve productivity and reduce costs. The rail industry is no exception. Fueled by intelligence from AI-driven systems and applications, railway operations are becoming safer, smarter and more reliable, significantly enhancing passenger travel experience and freight logistics services. These AI-driven applications only function with proper data input that is collected by massive numbers of Internet of Things (IoT) devices installed in stations, on trains, and along tracks. A successful implementation of such rail applications requires a seamless integration of AI and IoT technologies. By leveraging more than 20 years of expertise in developing highly reliable and available embedded computing systems, ADLINK brings advanced AIoT solutions to rail transportation, enabling customers in developing a variety of applications that can deliver true value and performance.

Powered by an Intel® Core™ i7 processor and integrated **NVIDIA Quadro GPGPU module**, ADLINK's **EN50155 certified PIS-5500 AIoT Platform** is not only ruggedized for both wayside and onboard deployment with its wide range DC input and isolated I/O design, but also provides an ideal edge solution for real-time video/graphic analysis applications that are vital to today's increasingly complex railroad operations.

The target applications include:

- Passenger Information Systems
- Railroad Intrusion Detection
- Train Station Surveillance
- Onboard Video Security
- Railroad Hazard Detection



ADLINK's PIS-5500 is being tested and deployed commercially by leading rail system integrators worldwide. In one application, the intelligent platform is installed on special rail inspection trains to process captured images of key wayside equipment in real-time. With a sophisticated algorithm driven by parallel computing and deep learning, the application can effectively identify potential equipment faults at a train speed of 120km/h, and raise the alarm to notify maintenance crews. In another application, the PIS-5500 is used in a train station control office to analyze the real-time video stream received from the platform. The application is able to not only detect suspicious behaviors and trigger alerts, but also conduct post-event analysis.

To meet varying application requirements, the PIS-5500 is also available in variants featuring an additional two USB 2.0 via M12 connectors and two 2.5" SATA 6Gb/s drive bays, as well as a version supporting +12VDC power only.

"As a premier supplier to the rail market, ADLINK is committed to helping customers gain competitive advantages by allowing them to focus their development efforts on differentiating their end applications. We're leveraging our industry-leading expertise in AI, IoT and edge computing to significantly expand our already extensive rail product portfolio with new products based on these disruptive technologies," said Crystal Tseng, ADLINK senior product manager. "The addition of the PIS-5500 delivers an advanced AIoT solution that further strengthens our ability to serve our customers with products that provide superior reliability and versatility. For rail transportation, AI brings enormous opportunities to suppliers like us. We believe that AI can transform traditional rail operations by driving improvements including fast and convenient ticket-free check-in, accurate arrival-time predictions, personalized infotainment and onboard services, real-time track health diagnostics, and rapid response in an emergency."

ADLINK offers not only a field-proven, cost-effective and extensive commercial-off-the-shelf (COTS) portfolio enabling both wayside and onboard applications, but also a variety of fast time-to-market custom solutions with best-in-class ODM capabilities. ADLINK's long-held support of COTS technology and open standard systems enables flexible platforms that are modular, scalable & rugged enough for extended deployment in both brown & green-field projects.

By leveraging its long-standing strategic partnerships with major hardware component and software vendors, ADLINK ensures best practices in product obsolescence and lifecycle management to deliver supply longevity required by the industry. In addition, ADLINK offers design services in every major geographic region, benefiting customers with increased responsiveness, short delivery lead-time and ease of doing business. ADLINK focuses on continued development to build an even more comprehensive and cost-effective product portfolio to help customers effectively mitigate budget constraints while smoothly and seamlessly taking on technology migration and product integration.

More about ADLINK's PIS-5500 and other rail solutions, please visit the [product](#) and [solution](#) webpage.

Energy monitor can find electrical failures before they happen

Sensor can monitor wiring in a building or ship, and signal when repairs are needed.

David L. Chandler | MIT News Office | March 21, 2019

A new system devised by researchers at MIT can monitor the behavior of all electric devices within a building, ship, or factory, determining which ones are in use at any given time and whether any are showing signs of an imminent failure. When tested on a Coast Guard cutter, the system pinpointed a motor with burnt-out wiring that could have led to a serious onboard fire.

The new sensor, whose readings can be monitored on an easy-to-use graphic display called a NILM (non-intrusive load monitoring) dashboard, is described in the March issue of IEEE Transactions on Industrial Informatics, in a paper by MIT professor of electrical engineering Steven Leeb, recent graduate Andre Abouljian MS '18, and seven others at MIT, the U.S. Coast Guard, and the U.S. Naval Academy. A second paper will appear in the April issue of Marine Technology, the publication of the Society of Naval Architects and Marine Engineers.

The system uses a sensor that simply is attached to the outside of an electrical wire at a single point, without requiring any cutting or splicing of wires. From that single point, it can sense the flow of current in the adjacent wire, and detect the distinctive “signatures” of each motor, pump, or piece of equipment in the circuit by analyzing tiny, unique fluctuations in the voltage and current whenever a device switches on or off. The system can also be used to monitor energy usage, to identify possible efficiency improvements and determine when and where devices are in use or sitting idle.

The technology is especially well-suited for relatively small, contained electrical systems such as those serving a small ship, building, or factory with a limited number of devices to monitor. In a series of tests on a Coast Guard cutter based in Boston, the system provided a dramatic demonstration last year.

About 20 different motors and devices were being tracked by a single dashboard, connected to two different sensors, on the cutter USCGC Spencer. The sensors, which in this case had a hard-wired connection, showed that an anomalous amount of power was being drawn by a component of the ship's main diesel engines called a jacket water heater. At that point, Leeb says, crew members were skeptical about the reading but went to check it anyway. The heaters are hidden under protective metal covers, but as soon as the cover was removed from the suspect device, smoke came pouring out, and severe corrosion and broken insulation were clearly revealed.

“The ship is complicated,” Leeb says. “It's magnificently run and maintained, but nobody is going to be able to spot everything.”

Lt. Com. Nicholas Galati, engineer officer on the cutter, says “the advance warning from NILM enabled Spencer to procure and replace these heaters during our in-port maintenance period, and deploy with a fully mission-capable jacket water system. Furthermore, NILM detected a serious shock hazard and may have prevented a class Charlie [electrical] fire in our engine room.”

The system is designed to be easy to use with little training. The computer dashboard features dials for each device being monitored, with needles that will stay in the green zone when things are normal, but swing into the yellow or red zone when a problem is spotted.

Detecting anomalies before they become serious hazards is the dashboard's primary task, but Leeb points out that it can also perform other useful functions. By constantly monitoring which devices are being used at what times, it could enable energy audits to find devices that were turned on unnecessarily when nobody was using them, or spot less-efficient motors that are drawing more current than their similar counterparts. It could also help ensure that proper maintenance and inspection procedures are being followed, by showing whether or not a device has been activated as scheduled for a given test.

“It's a three-legged stool,” Leeb says. The system allows for “energy score keeping, activity tracking, and condition-based monitoring.” But it's that last capability that could be crucial, “especially for people with mission-critical systems,” he says. In addition to the Coast Guard and the Navy, he says, that includes companies such as oil producers or chemical manufacturers, who need to monitor factories and field sites that include flammable and hazardous materials and thus require wide safety margins in their operation.

One important characteristic of the system that is attractive for both military and industrial applications, Leeb says, is that all of its computation and analysis can be done locally, within the system itself, and does not require an internet connection at all, so the system can be physically and electronically isolated and thus highly resistant to any outside tampering or data theft.

Although for testing purposes the team has installed both hard-wired and non contact versions of the monitoring system — both types were installed in different parts of the Coast Guard cutter — the tests have shown that the non contact version could likely produce sufficient information, making the installation process much simpler. While the anomaly they found on that cutter came from the wired version, Leeb says, “if the non contact version was installed” in that part of the ship, “we would see almost the same thing.”

MORE and Source: <http://news.mit.edu/2019/energy-monitor-find-electrical-failures-0322>

Embedded Computing Boards Overview

[Direct Link Click on the Pictures](#)



Qseven



Intel-based: several CPU 's
Standard Size (70 mm x 70 mm)

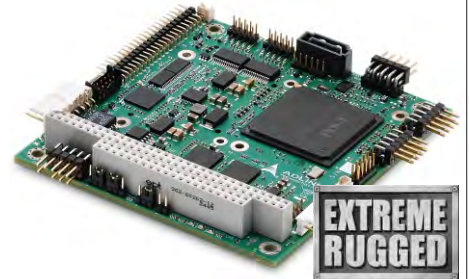
SMARC

Smart **M**obility **AR**chitecture



Intel-based: several CPU 's
Short Size (82 mm x 50 mm)
Full Size (82 mm x 80 mm)

PC/104 PCI/104 Express



Intel-based: several CPU 's
PCI/104-Express (V3.0)
Size (117.4 mm x 96 mm)

COM Express



Intel-based: several CPU 's

Type 6

Basic Size (125 x 95 mm)
Compact (95 x 95 mm)

Type 7 - Intel Xeon-based

Basic Size (125 x 95 mm)

Type 10

Mini Size (84 x 55 mm)

Type 2

Basic Size (125 x 95 mm)
Compact (95 x 95 mm)

3U-6U VPX Conduction & Air-cooled



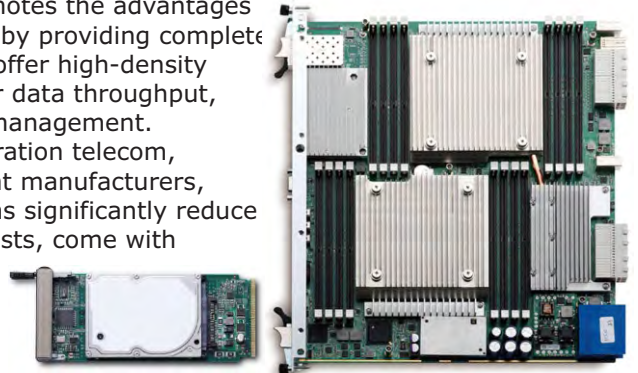
3U-6U CompacPCI, Plus & Serial



Conduction & Air-cooled

AdvancedTCA - ATCA -AMC - MicroTCA

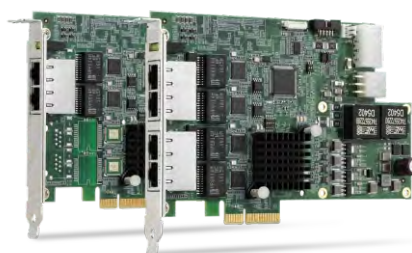
ADLINK vigorously promotes the advantages of the ATCA technology by providing complete platform solutions that offer high-density processing power, faster data throughput, and intelligent system management. Designed for next-generation telecom, datacom, and equipment manufacturers, ADLINK's ATCA platforms significantly reduce over-all development costs, come with extended operating lifecycles, and speed up critical time-to-market.



Ind. Motherboards Mini-ITX



PCIe



Frame Grabbers
Video Capture Cards

PXI - PXIe



Russia pitches Turkey the Su-57 fighter jet if F-35 deal with US collapses

By: [Burak Ege Bekdil](#) | DefenseNews | USA May 06, 2019



ANKARA, Turkey — Russia is “ready to cooperate” with Turkey to sell its new-generation Su-57 fighter jet in case the Ankara government and Turkish companies are expelled from the U.S.-led F-35 program, according to a senior Russian defense official.

“These fifth-generation Russian fighter jets [Su-57] have outstanding qualities, and show promise for export,” said Sergei Chemezov, head of Russia’s state-owned Rostec Corporation, in an interview with Ankara-based international news agency Anadolu.

Chemezov’s statement came in confirmation of an Apr. 19 Defense News story that said if U.S. officials were to expel Turkey from the multinational group that builds the F-35, Turkish defense officials likely would pursue Russian fighter jet technology.

“We cannot afford to leave the F-35 not substituted,” a senior Turkish military officer told Defense news. He declined to comment on the replacement options, as this would require “technological, economical and political deliberations.”

But a defense procurement official said a “geostrategic assessment” would make Russian options emerge as the natural choice. “Russian fighter technology would be the first best choice if our American allies behaved in an un-allied way and questioned Turkey’s membership in the Joint Strike Fighter program,” the official said.

Washington has threatened to expel Ankara from the multinational program if Turkey deploys the Russian-made S-400 surface-to-air missile system on its soil.

If Turkey accepts the S-400, “no F-35s will ever reach Turkish soil. And Turkish participation in the F-35 program, including manufacturing parts, repairing and servicing the fighters, will be terminated, taking Turkish companies out of the manufacturing and supply chain for the program,” wrote a group of bipartisan lawmakers from the Senate Armed Services Committee and Senate Foreign Relations Committee.

Editor Note (from Embedded Systems World _Daniel Dierickx)

If this happens US may declare another embargo about the supply of COTS to Turkey and will impact severely current business. Some of the vendors are well aware. _Daniel Dierickx
www.e2mos.com

Rohde & Schwarz acquires security scanner business of Camero-Tech Ltd.Israel.



Rohde & Schwarz has acquired the body scanning technology unit of the company Camero-Tech Ltd. With this acquisition, Rohde & Schwarz is enlarging its product portfolio and will strengthen its position on the security market.



Munich 27-Mar-2019 -- Rohde & Schwarz has acquired the complete security scanner business unit of Camero-Tech and founded a new research & development company which is named "SeemPulse Ltd.". With this acquisition, Rohde & Schwarz further expands its portfolio to complement its existing security scanner product lines.

Christian Evers, Vice President Microwave Imaging Rohde & Schwarz, explains: "With this strategic investment we are enlarging our product range for security checks in sensitive areas with new and cutting edge solutions, including non-aviation and civil infrastructure applications. This is especially important for areas and venues that are highly frequented."

Amir Beeri, founder and CEO of Camero-Tech, adds, "We are very excited to be part of Rohde & Schwarz and pleased that our innovative security scanner technology has been recognized for its ability to address a wide range of applications requiring very high throughput."

Rohde & Schwarz

The Rohde & Schwarz technology group develops, produces and markets innovative communications, information and security products for professional users. The group's test and measurement, broadcast and media, aerospace | defense | security, networks and cybersecurity business fields address many different industry and government-sector market segments. On June 30, 2018, Rohde & Schwarz had approximately 11,500 employees. The independent group achieved a net revenue of approximately EUR 2 billion in the 2017/2018 fiscal year (July to June). The company has its headquarters in Munich, Germany. Internationally, it has subsidiaries in more than 70 countries, with regional hubs in Asia and America. MORE: https://www.rohde-schwarz.com/nl/home_48230.html

Additional information provided by Nick Flaherty, eeNews <https://www.eenewstest.com/>

Camero-Tech is part of the SK Group and also develops ultrawide band (UWB) technologies for seeing through walls. The SK group also includes Israeli Weapon Industries (IWI), the maker of the Uzi machine gun, laser maker Meprolight and Israel Shipyards.

Honda Confirms UK Plant Closure The car factory employs 3,500 people.



Source: [IEN](#) | contributors Associated Press

13-May-2019 | LONDON (AP) — Honda has confirmed its western England car factory, which employs 3,500 people, will close in 2021.

The Japanese carmaker announced Monday that the Swindon plant will shut in two years, "at the end of the current model's production life cycle."

Honda makes its popular Civic model at the factory, 70 miles (115 kms) west of London.

Reports of the closure first emerged in February, **heightening concerns about the impact of Brexit-related uncertainty on the U.K. economy.**

Honda said the closure is not Brexit-driven but "is part of Honda's broader global strategy in response to changes to the automotive industry."

It said it had spoken to the British government and union consultants, but "no viable alternatives to the proposed closure of the Swindon plant have been identified."

SYSGO and Kontron intensify Cooperation and develop fully integrated Secure Platform for safety-critical Railway Applications

Augsburg/Klein-Winternheim, Germany, April 17, 2019 – Kontron, a leading global provider of IoT/Embedded Computer Technology (ECT), and SYSGO have jointly started the development of an integrated platform for safety-critical railway solutions based on Kontron's SAFe-VX hardware. The aim is to provide customers with a solid and flexible basis for certifiable applications in trains and signaling. Kontron brings to the cooperation its proven COTS (Commercial-Off-The-Shelf) hardware, which is already used in many railway systems and has been certified up to SIL-4, the highest level of the IEC 61508 standard for functional safety of electronic systems. The SAFe-VX Kontron hardware platform will run under SYSGO's real-time operating system PikeOS®, which is already used in EN 50128/SIL-4 certified systems, on both single and multi-core architectures. Additionally, PikeOS® is the only real-time operating system with separation kernel certified to EAL 3+ Common Criteria security standard to fulfil functional safety as well as security requirements on the same system.



Several railway application developers are already using PikeOS® on the robust and proven Kontron hardware. "With our cooperation and the joint development of an integrated platform, we want to enable our customers to accelerate the development of their systems and significantly reduce the effort for certification," comments Robert Negre, VP of business development at Kontron for the railway market segment. Both Kontron and SYSGO offer certification kits with detailed product documentation.

Kontron and SYSGO have already identified several opportunities for autonomous train driving and rail signaling applications, where SAFe-VX vital processing platform is a perfect match. "Both Kontron and SYSGO have extensive experience with safety-critical and certifiable systems for the railway market," says Markus Jastroch, Director Marketing Communication at SYSGO. "With our common platform, we offer developers the basis that meets the most stringent functional safety and embedded security requirements."

About SYSGO

SYSGO is the leading European manufacturer of embedded operating systems, supporting safety and security critical applications in the aerospace, automotive, railway and IIoT industries for more than 25 years. The company develops and maintains PikeOS®, the world's first SIL 4 certified real-time operating system and hypervisor on multi-core. SYSGO works closely with customers throughout the product life cycle and supports clients such as Samsung, Airbus, Thales, Continental, etc. in the formal certification of software according to international standards for functional safety and IT security.

Further information can be found at <https://www.sysgo.com/>

About Kontron – Member of the S&T Group

Kontron is a global leader in IoT/embedded computing technology (ECT). As a part of technology group S&T, Kontron offers a combined portfolio of secure hardware, middleware and services for Internet of Things (IoT) and Industry 4.0 applications. With its standard products and tailor-made solutions based on highly reliable state-of-the-art embedded technologies, Kontron provides secure and innovative applications for a variety of industries. As a result, customers benefit from accelerated time-to-market, reduced total cost of ownership, product longevity and the best fully integrated applications overall.

For more information, please visit: www.kontron.com