Embedded <mark>Systems</mark> World

Automation - IoT - Communication - Energy Transportation - Medical - Video - Mil/Aero

Covering all Embedded App's

Modular Open Systems - Boards - Platforms Chips - Software - Tools - T&M

Embedded Systems World is a Global Publication of e2mos

www.emb-sys-world.com

July 2016

- Breaking
 - Analog Devices buys Linear Technology for \$14.8 billion, \$5 billion combined annual sales • Seven Top-20 1Q16 Semiconductor Suppliers Show Double-Digit Declines • Top 10 Analog IC Suppliers • ARM is now SoftBank a TELCO Service Provider Japan • Aldebaran becomes SoftBank Robotics Record-breaking \$65 Billion Global Defense Trade in 2015
 F-35 Ready for Combat Kontron: Dramatic changes in Board of Directors, CEO dismissed
 Midea China Big Investment in KUKA • ASML President Martin van den Brink to Receive Semiconductor Industry's Top Honor from SIA • BMW Group, Intel and Mobileye Team Up to Bring Fully Autonomous Driving to Streets by 2021
 - Tesla Gigafactory, Biggest Battery Factory in the World
 - Adlink to Market with COM Express Intel Xeon-based
 Artesyn AdvancedTCA Highest Performance Blade



Ecrin Systems 40 Years 400 Customers 4000 Design-wins 40000 Embedded Computers deployed around the WORLD

... on its way to become the Largest Ruggedized Embedded **Computers Manufacturer** in Europe





Thin Design Mini-ITX Embedded Board with Rich I/O Perfect Fit for Space-constrained App's

with Intel Atom, Pentium & Celeron



ATCA®, AdvancedTCA®, xTCA®, AdvancedMC™, MicroTCA®, CompactPCl®, COM Express® are Trademarks of PICMG www.picmg.org /PX, VPX REDI, OpenVPX & VMEbus are Trademarks of VITA www.vita.com

Ecrin Systems 40 Years of Expertise in Embedded Systems

... on its way to become the Largest Ruggedized Embedded Computers Manufacturer in Europe

40000 Embedded Computers in Service Worldwide
4000 Design-wins
400 Customers
40 Years

Products & Services Today « 4 Service Levels »

• Manufacturer of own products: COTS & Modified COTS

- ONYX: Mission Computer for Extreme Environments
- OPALE V2: SMART and Trusted Industrial PC
- CRYSTAL: Command & Control Navy Console
- **Subcontractor** of complex projects for Military Tiers 1 Customers: THALES, SAFRAN, AIRBUS, ZODIAC...
- System Integrator based on standard form factor (VPX/VME, mTCA, cPCI, PCIe, COMe...) & ODM Services
- Value Added Retailer of Global Leading Manufacturers like ADLINK, VADATECH, TRENTON

Markets served:

- Military & Aerospace (50% of revenues): Mission Computers for Helicopters, UAVs, Ground Vehicles, Navy
- Transportation
- Industrial Automation
- Data Communication

Discover it all in 3 Videos of 2 minutes each:



Ecrin Systems Corporate including the interview of ZODIAC an historical customer **VIDEO** <u>CLICK HERE</u>



ONYX - Small Form Factor Ruggedized Mission Computer Intel and COM Express-based **VIDEO** <u>CLICK HERE</u>







VIDEO CLICK HERE

OPAL V2 - Intelligent Industrial PC

ECRIN Systems -- France <u>sales@ecrin.com</u> Crolles (Grenoble) +33 4 7692 2001 -- Massy (Paris) +33 1 6907 1884 Daniel Dierickx CEO & co-Founder at e2mos Acting Chief Editor



Dear Reader,

Here is your free copy of Embedded Systems World, one of our four magazines published by e2mos.

Our aim is to provide you with relevant information 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 and IoT Vendors from Multicore Chips to Application-ready Systems & Rack Servers.

Our WORLDWIDE Services include:

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

• and our 4 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 with many sources « Anything less will not do » More <u>www.e2mos.com</u>

Thank you.

Editor/Publisher:

e2mos<u>www.e2mos.com</u> Contact <u>mgt@e2mos.com</u>

FREE just Click on the LOGO



Embedded Systems World - July 2016 -- Page 2

Thin Design Mini-ITX Embedded Board with Intel Atom, Intel Pentium N3710 and Celeron N3160/N3060/N3710 Processors (codename: Braswell)

Features of the AmITX-BW-I

- Intel Atom X5 E8000, Pentium N3710 and Celeron N3160/N3060/N3710 Processors (codename: Braswell)
- 1x HDMI, 2x DP, LVDS and eDP (opt.)
- Up to 8 GB non-ECC dual channel DDRL3 at 1600/1333 MHz
- 3 independent high resolution graphic displays
- 2x GbE
- 4x USB 3.0 (Rear IO), 2x USB 2.0 (Header), 2x USB 2.0 (Front panel)
- 1x PCIe x16, 1x Mini PCIe, 1x mSATA, 1x SPI header for external BIOS



- The AmITX-BW-I is a low-profile Thin Mini-ITX embedded board supporting an Intel® Pentium®/Celeron® processor N3000 family and Intel Atom[™] processor x5-E8000 system-on-chip (SoC). The AmITX-BW-I is specifically designed for customers who need significant graphics performancewith low power consumption in a long product life solution. The Intel® Pentium®/Celeron® processor N3000 family and Intel Atom[™] processor x5-E8000 SoC (formerly "Braswell") are built on 14nm technology and support non-ECC type DDR3L dual-channel memory at 1600/1333 MHz to provide excellent overall performance. **Integrated Intel® Gen 8 Graphics includes features such as OpenGL 4.2, DirectX 12, OpenCL 1.2 and support for H.265/HEVC @ level 5, H.264 @ level 5.1, MPEG2, MVC, VC-1, VP8, WMV9, JPEG, VP8 hardware video decode and H.264 @ level 5.1, MVC, JPEG hardware video encode.**
- The AmITX-BW-I supports dual stacked SODIMM sockets for up to 8 GB non-ECC type DDR3L memory, and graphics outputs include DisplayPort, HDMI, and optional eDP and optional dual-channel 18/24-bit LVDS. I/O features include HD Audio, dual Gigabit Ethernet port, 4x USB 3.0 ports and 4x USB 2.0 ports, 6x COM ports, PCIe x1 slot, Mini PCIe slot, mSATA slot, and 2x SATA 6 Gb/s ports.
- A feature connector provides 10 GPIO, SMBus, and I2C, and optional SIM card slot and microSD card slot are available. The AmITX-BW-I is equipped with SPI AMI EFI BIOS, supporting embedded features such as hardware monitor and watchdog timer.
- The ADLINK AmITX-BW-I with built-in SEMA Cloud functionality is ready-made for Internet of Things (IoT) applications. AmITX-BW-I is able to connect legacy industrial devices and other IoT systems to the cloud, extract raw data from these devices, determine which data to save locally and which to send to the cloud for further analysis. The results these analyses can provide valuable information for policy decision making and generate innovative business opportunities.

MORE: please CLICK HERE



SoftBank to buy UK chip designer ARM in \$32 billion cash

Japan's SoftBank (<u>9984.T</u>) will buy Britain's most valuable technology company ARM (<u>ARM.L</u>) for \$32 billion in cash, an audacious attempt to lead the next wave of digital innovation with a chip designer that powers the global mobile phone industry. See REUTERS News Mon Jul 18, 2016 <u>CLICK HERE</u>

ARM Holdings plc (ARM) is a company engaged in designing a range of inter-related intellectual property (IP), including microprocessors, Physical IP, and supporting software and tools. Its product offering includes 16/32/64-bit reduced instruction set computing (RISC) microprocessors, data engines, graphics processors, digital libraries, embedded memories, peripherals, software and development tools, as well as analog functions and high-speed connectivity products. The Company licenses and sells its technology and products to international electronics companies, which in turn manufacture, market and sell microprocessors, application-specific integrated circuits (ASICs), application-specific standard processors (ASSPs) and microcontrollers (MCUs) based on ARM's technology to systems companies for incorporation into a range of end products. Its principal geographic markets are Europe, the United States and Asia Pacific.

SoftBank Group Corp., formerly SoftBank Corp., incorporated on September 3, 1981, is a holding company. The Company is engaged in various businesses in the information industry. The Company's segments are the Domestic Telecommunications segment, the Sprint segment, the Yahoo Japan segment and the Distribution segment.

The Domestic Telecommunications segment is engaged in the provision of mobile communications services in Japan; sale of mobile devices in Japan; provision of broadband services to retail customers in Japan, and provision of telecom services to corporate customers in Japan, such as data communications and fixed-line telephone services. The Domestic Telecommunications segment comprises the subsidiaries that operate domestic telecommunications businesses, such as SoftBank Corp. and Wireless City Planning Inc. SoftBank Corp. provides mobile communications services under the SoftBank and Y!mobile brands; broadband services for retail customers, and fixed-line telephone services. Wireless City Planning Inc. provides broadband wireless access (BWA) services using approximately 2.5 gigahertz (GHz) band.

The Sprint segment is engaged in the provision of mobile communications services in the United States; the sale and lease of mobile devices, and sale of accessories in the United States, and the provision of fixed-line telecommunications services in the United States. The Yahoo Japan segment is engaged in Internet advertising; e-commerce business, and membership services. The Distribution segment is engaged in the distribution of mobile devices overseas, and sale of personal compute

Aldebaran becomes SoftBank Robotics (SoftBank Japan)

Tokyo, Thursday, May 19th, SoftBank Robotics Holdings Corp. today announced the change of the "Aldebaran" brand name to "SoftBank Robotics" in view of increased global brand awareness and business scale in the future.

On changing the brand name, Aldebaran Robotics has been renamed to SoftBank Robotics Europe. As part of the effort to build one large company group, to unify different entities and to better collaborate with existing and future international clients and partners, related subsidiaries have been renamed as the follows:

Before May 19After May 19Aldebaran (France)SoftBank Robotics EuropeAldebaran (U.S.)SoftBank Robotics AmericaAldebaran (China)SoftBank Robotics China Trading

The SoftBank Robotics brand name regroups teams based in Paris, Boston, Shanghai, Tokyo, and a new regional headquarter in the U.S., based in San Francisco, California.

About SoftBank Robotics Holdings



Headquartered in Tokyo, SoftBank Robotics Holding Corp. is the SoftBank Group's intermediate holding company responsible for its robotics businesses. SoftBank Robotics Holdings Corp. has offices in Japan, France, U.S. and China. Guided by the SoftBank Group's corporate philosophy, "Information revolution - happiness for everyone," companies under the SoftBank Robotics Holdings umbrella develop humanoid robots and are dedicated to continued research in the field of robotics and related products and services.

About the SoftBank Robotics brand name

SoftBank Robotics is driving technology forward by becoming a worldwide leader brand in robotics. The SoftBank Robotics brand name regroups more than 500 employees working in Paris, Tokyo, San Francisco, Boston and Shanghai. Robots under the SoftBank Robotics brand, Pepper, NAO and Romeo, are used in more than 70 countries worldwide and offer innovative applications relevant for the fields of research, education, retail, healthcare, tourism, hospitality and entertainment. For more information: www.ald.softbankrobotics.com

Record-breaking \$65 Billion Global Defence Trade in 2015 Fueled by Middle East and Southeast Asia, IHS Jane's Says

Monday, June 13, 2016 5:07 am EDT -- Global defence market will jump to \$69 billion in 2016; France revives defence industry and will overtake Russia in 2018 for number two exporter position

Top Defence Importers (in millions USD)

	2015
Saudi Arabia	9,325
India	4,331
Australia	2,306
Egypt	2,268
South Korea	2,181
Iraq	2,141
Unknown	2,080
United Arab Emirates	2,075
United Kingdom	1,831
Algeria	1,674
Taiwan	1,513

Top Defence Exporters (in millions USD)

	2015
United States	22,961
Russian Federation	7,447
Germany	4,779
France	4,774
United Kingdom	3,896
Canada	3,114
Italy	2,140
Israel	2,113
China	1,736
Spain	1,323

South China Sea Imports (in millions USD)

2009	2015
517	1,513
1,004	1,460
1,061	1,259
789	257
434	1,117
115	401
	2009 517 1,004 1,061 789 434 115

Fastest-growing over the past year

Romania
Angola
Lithuania
Philippines
Austria
Estonia
Latvia
Poland
Vietnam
Bangladesh

Top global import over the coming decade

Saudi Arabia	\$36bn
India	\$25bn
United Arab Emirates	\$14bn
Indonesia	\$13bn
Vietnam	\$10bn

	2016
Saudi Arabia	10,056
India	3,953
United Arab Emirates	3,085
South Korea	2,503
Iraq	2,283
Australia	2,063
Egypt	2,032
Taiwan	2,012
Unknown	1,867
Algeria	1,754
Qatar	1,692

	2016
United States	24,407
Russian Federation	7,682
France	6,033
Germany	4,781
United Kingdom	4,380
Canada	4,312
Israel	3,011
Italy	2,488
Spain	1,802
China	1,623

WARNING: all figures are in US format, e.g. 9,325 is 9.325 in Europe

LONDON--(BUSINESS WIRE)

Global defence trade reached a record-breaking \$65 billion in 2015, according to the annual Global Defence Trade Report released today by IHS Inc. (NYSE: IHS), the leading global source of critical information and insight.

The report examines trends in the global defence market across 65 countries and is based upon 40,000 programmes from the <u>IHS Aerospace, Defence &</u> <u>Security's Markets Forecast</u> <u>database</u>.

"The global defence trade market has never seen an increase as large as the one we saw between 2014 and 2015," said Ben Moores, senior analyst at IHS. "2015 was a record-breaking year." Markets rose \$6.6 billion, bringing the value of the global defence market in 2015 to \$65 billion. IHS forecasts that the market will increase further to \$69 billion in 2016.

Key findings from the IHS Global Defence Trade Report:

The Middle East was the largest importing region, with \$21.6 billion in deliveries of defence equipment;

Total defence spending accelerated in Asia-Pacific as states bordering the South China Sea boosted defence spending;

France has doubled its backlog of orders from \$36 billion in 2014 to \$55 billion, meaning that \$55 billion worth of defence equipment has yet to be exported. This increase means that France will overtake Russia as the second-largest global defence equipment exporter.

Germany moved from fifth- to third- largest exporter and the UK dropped from fourth to fifth;

The largest global exporter, the United States, saw another 10 percent increase in exports over the past year, bringing the total to \$23 billion (35 percent of the global total);

South Korea saw exports climb again to \$871 million;

There was significant change in the top five importing countries, with Taiwan, China and Indonesia all dropping out of the top five and Australia, Egypt and South Korea replacing them.

More & Full Press Release CLICK HERE

Seven Top-20 1Q16 Semiconductor Suppliers Show Double-Digit Declines

Qualcomm, Micron, and SK Hynix registered ≥25% drops, with total top-20 sales off by 6%

(arr, including found ites)						
1Q16 Rank	1Q15 Rank	Company	Headquarters	1Q15 Tot Semi	1Q16 Tot Semi	1Q16/1Q15 % Change
1	1	Intel*	U.S.	12,067	13,115	9%
2	2	Samsung	South Korea	9,336	9,340	0%
3	3	TSMC (1)	Taiwan	6,995	6,122	-12%
4	7	Broadcom Ltd. (2)*	Singapore	3,679	3,550	-4%
5	4	Qualcomm (2)	U.S.	4,434	3,337	-25%
6	5	SK Hynix	South Korea	4,380	3,063	-30%
7	6	Micron	U.S.	4,061	2,930	-28%
8	8	TI	U.S.	2,940	2,804	-5%
9	10	Toshiba	Japan	2,619	2,446	-7%
10	9	NXP*	Europe	2,636	2,224	-16%
11	12	Infineon	Europe	1,666	1,776	7%
12	13	MediaTek (2)	Taiwan	1,506	1,691	12%
13	11	ST	Europe	1,700	1,601	-6%
14	14	Renesas	Japan	1,470	1,415	-4%
15	17	Apple (2)**	U.S.	1,260	1,390	10%
16	15	GlobalFoundries (1)*	U.S.	1,436	1,360	-5%
17	20	Nvidia (2)	U.S.	1,118	1,285	15%
18	16	Sony	Japan	1,272	1,125	-12%
19	18	UMC (1)	Taiwan	1,140	1,034	-9%
20	21	AMD (2)	U.S.	1,030	832	-19%
—	-	Top 20 Total	—	66,745	62,440	-6%

1Q16 Top 20 Semiconductor Sales Leaders (\$M, including Foundries)

(1) Pure-play foundry

(2) Fabless supplier

* Includes Intel/Altera, Avago/Broadcom, NXP/Freescale, and Global Foundries/IBM sales for 1Q15 and 1Q16.

** Custom processors for internal use made by TSMC and Samsung foundry services

Source: Companies, IC Insights Strategic Reviews Database See the full report <u>CLICK HERE</u>

Analog Devices buys Linear Technology for \$14.8 billion, \$5 billion combined annual sales

Global High-Performance Analog Industry Leader:

Combination expected to create a global high-performance analog industry leader across data converters, power management, amplifiers, interface, and RF and microwave products

Highly Complementary Businesses:

Highly complementary product portfolios create the industry's most comprehensive suite of high-performance analog offerings and expand Analog Devices' total addressable market to \$14 billion from \$8 billion

Leading Analog IC Suppliers (\$M)

2	2015 Rank	Company	2014	2015	%	%
F					Change	Marketshare
	1	Texas Instruments	8,104	8,340	3%	18%
	2	Infineon	2,770	2,885	4%	6%
	3	Skyworks Solutions	2,570	2,700	5%	6%
	4	Analog Devices	2,615	2,665	2%	6%
	5	ST	2,836	2,465	-13%	5%
	6	Maxim	2,035	1,960	-4%	4%
	7	NXP	1,730	1,905	10%	4%
	8	Linear Technology	1,437	1,440	0%	3%
	9	ON Semi	1,291	1,155	-11%	2%
	10	Renesas	910	805	-12%	2%

Source: IC Insights company reports

ADLINK Plays Key Role in Update of PICMG's COM Express® Standard and Associated Type 7 Pinout

New pinout design leverages low power, high performance processing and adds **10 GbE capabilities** to industry-leading small form factor specification

New Type 7 pinout brings **server grade performance** to industry's leading module standard for high performance applications such as data communication

The **Intel® Xeon® SoCs** featured in ADLINK's **Express-BD7** support up to **16 CPU processor cores**, 32 PCIe lanes, and multiple 10GbE ports.

ADLINK's **Express-BD7** targets customers building space-constrained systems in industrial automation and data







communication, such as virtualization, edge computing or other numerical applications, that require high density CPU cores balanced by reasonable power consumption

San Jose, CA, July 28, 2016 – ADLINK Technology, Inc., a leading provider of embedded building blocks and Application-ready Intelligent Platforms (ARIPs) for the Industrial Internet of Things (IoT) and an Executive Member of PCI Industrial Computer Manufacturers Group (PICMG®), announced release of the new Type 7 pinout that is included in PICMG's COM Express® standard update to version 3.0. The new Type 7 pinout was defined to leverage contemporary low power, server-grade silicon and introduce 10 Gigabit Ethernet (GbE) capabilities to the computer-on-module (COM) form factor. Customer applications benefitting from the Type 7 pinout include space-constrained systems in industrial automation and data communication, such as virtualization and edge computing, that require high density CPU cores balanced by reasonable power consumption.

ADLINK has played a leading role in the PICMG subcommittee that is currently defining the new COM Express 3.0 specification. The committee, which started its work in late 2015, is chaired by ADLINK's Jeff Munch, CTO of Americas, and benefitted from the considerable efforts of ADLINK's team of technical contributors. The preview of the Type 7 pinout definition allows module manufacturers and customers to start designs before the full COM Express 3.0 specification is published, which is expected to be the end of Q3 2016.

"ADLINK has worked closely with fellow PICMG members to develop this latest module specification and pinout definitions to further extend the reach and usefulness of COM Express for evolving communications and automation applications," said Alex Wang, ADLINK Product Manager. "The Type 7 pinout offers one more option to designers who are tasked with developing server-grade solutions that are easily upgradable and scalable and fit into compact spaces."

The COM Express standard's new Type 7 pinout, as compared to the Type 6 pinout, does away with all graphics support and replaces it with up to four 10GbE ports and an additional eight PCI Express (PCIe) ports, bringing the total PCIe support to up to 32 PCIe lanes. The Type 7 pinout has been specifically tailored to leverage all the functions of low power, headless server-grade System-on-Chips (SoCs) with a TDP below 65 Watts. In addition, the Type 7 pinout brings out 10GBase-KR signals, meaning the carrier board designer can choose between KR-to-KR, KR-to-optical fiber or KR-to-copper. A Network Controller Sideband Interface (NC-SI) bus is also supported, allowing for Intelligent Platform Management Interface (IPMI) Board Management Controller (BMC) support on the carrier board.

"On-going updates are critical to enable full-featured designs using any open specification, particularly one as accepted in the embedded vendor community as COM Express," said Joe Pavlat, president and chairman of the PICMG consortium. "We greatly appreciate the active participation of members like ADLINK to lead these efforts."

The preview of PICMG's COM Express 3.0 Type 7 pinout definition is available for download to PICMG members on the PICMG website at https://www.picmg.org/

For more information COM Express 3.0 Type 7, please visit <u>http://www.adlinktech.com/Technology-Standards/Type-7</u>

Tesla Gigafactory



Tesla's mission is to accelerate the world's transition to sustainable energy. To achieve that goal, we must produce electric vehicles in sufficient volume to force change in the automobile industry. With a planned production rate of 500,000 cars per year in the latter half of this decade, Tesla alone will require today's entire worldwide production of lithium ion batteries. The Tesla Gigafactory was born of necessity and will supply enough batteries to support our projected vehicle demand.

Tesla broke ground on the Gigafactory in June 2014 outside Sparks, Nevada, and we expect to begin cell production in 2017. By 2020, the Gigafactory will reach full capacity and produce more lithium ion batteries annually than were produced worldwide in 2013.

In cooperation with Panasonic and other strategic partners, the Gigafactory will produce batteries for significantly less cost using economies of scale, innovative manufacturing, reduction of waste, and the simple optimization of locating most manufacturing process under one roof. We expect to drive down the per kilowatt hour (kWh) cost of our battery pack by more than 30 percent. The Gigafactory will also be powered by renewable energy sources, with the goal of achieving net zero energy.

The name Gigafactory comes from the factory's planned annual battery production capacity of 35 gigawatt-hours (GWh). "Giga" is a unit of measurement that represents "billions". One GWh is the equivalent of generating (or consuming) one billion watts for one hour—one million times that of one kWh.

Jobs We are currently accepting applications for engineering, manufacturing, and facilities positions CLICK HERE

F-35A achieves IOC; U.S. Air Force declares F-35A military aircraft combat ready

JOINT BASE LANGLEY-EUSTIS, Va., 2 Aug. 2016. U.S. Air Force General Herbert J. "Hawk" Carlisle, commander of Air Combat Command (ACC) at Langley Field, Joint Base Langley–Eustis, Virginia, has declared the F-35A Lightning II fifth-generation fighter jet to be combat ready.

See the full article of Mrs Courtney E. Howard Chief Editor, Intelligent Aerospace <u>CLICK HERE</u>



The F-35 Takes to the Skies at Farnborough

LOCKHEED MARTIN's F-35B showcased both speed and maneuverability during a display at the Farnborough International Airshow, bolting across the skies before hovering above the crowd and **doing a 360-degree rotation**.

See the VIDEO of Defense & Military Multimedia Sightline Media Group by Lars Schwetje/Staff CLICK HERE

Kontron AG: Dismissal Management Board Members

Augsburg, July 25, 2016 – Following Kontron AG's Supervisory Board's decision on July 25, 2016, Rolf Schwirz has been dismissed from his position as CEO and Andreas Plikat has been dismissed from the Management Board of Kontron AG.

Sten Daugaard is standing down as a Supervisory Board member and is taking over the position of CEO effective on 25 July 2016. He will be advised by a taskforce consisting of Supervisory Board members Martin Bertinchamp, Dr. Dieter Düsedau and Harald Joachim Joos. Meanwhile, Dr. Thomas Riegler, interim CFO, has been appointed as Member of the Management Board. Kontron will continue to pursue the strategic reorientation announced in May 2015.

Kontron first to offer embedded hardware security solution product line providing full protection capabilities off-theshelf

Augsburg, Germany, July 21, 2016– Kontron, a leading global provider of Embedded Computing Technology (ECT), today announced the company's new embedded hardware security solution product line. Kontron is the first embedded computing supplier to offer full security protection embedded in its Computer-on-Module (COM) and motherboard offerings. The first product in its Security Solution line is the Kontron Approtect, a hardware and software solution that includes an embedded hardware security module and a software framework that provides full protection features.

Beginning with the 6th generation Intel® Core[™] processor, all Kontron products will be equipped with hardware-based embedded security as a "Kontron Standard". This is only the first insertion point to an extensive product roadmap where customers can benefit from a comprehensive range of protection capabilities that include IP and integrity protection, license creation, management and tracking, license model implementation as well as the assignment of privileges and access levels. IP and copy protection are the first features available on the Kontron Approtect.

"Integrating security increases the overall value we can bring to our customers so we are pleased to roll these beneficial features out on all our 6th generation Intel® Core™ processor-based products," said Kontron CTO Jens Wiegand. "We know that security is of the utmost importance in providing user and operational confidence in both existing applications and especially in new Internet of Things (IoT) designs. Offering an out of the box security solution makes the implementation process much easier, more efficient and our customer designs more futureproof. And, the unique benefit of Kontron's Approtect is that applications can be secured, even post deployment."

The first Kontron product with the Kontron Security Solution is the COMe-cSL6, which is available now. Additional products to follow include the COM Express® basic form factor and all of Kontron's motherboard products.

Additional information about the new Kontron Security Solution is available here: <u>http://www.kontron.com/products/solutions/security</u>

kontron



Kontron announces partner agreement with Connect Tech expanding access to a wider range of COMe based solutions

Augsburg, Germany June 6, 2016 – Kontron, a global market leader for embedded computing technology (ECT), today announced it has signed a partner agreement with **Connect Tech, Inc. Canada** to extend complementary Computer-on-Module products into each company's respective portfolio offering.

As a full service hardware design company that specializes in rugged, small form factor solutions, Connect Tech specializes in both COTS and customization of carrier boards for many industry standards. The agreement gives embedded systems OEMs more options in the availability of module-based solutions and modification services, enabling them to more quickly develop, scale and deploy a broader range of small form factor applications.



KUKA (Industrial Automation & Robots) Germany and Midea China Sign Investment Agreement

Below the official Press Release published on the Web of Midea China on 28-Jun-2016

« QUOTE »

KUKA to remain an independent company

Strong commitment to KUKA sites and its workforce



Guangdong, China, 28 June 2016 – Midea (Midea Group Co Ltd, SZSE 000333), one of the world's leading industrial groups in consumer appliances and Heating, Ventilation and Air-Conditioning (HVAC) systems, announced today that it has entered into a binding Investment Agreement with KUKA AG (KUKA), a leading global supplier of intelligent automation solutions. The Investment Agreement outlines Midea's commitments to KUKA following the launch of the voluntary public tender offer for all KUKA shares, which was announced on 18 May 2016 and formally launched on 16 June 2016. Both parties agreed the Investment Agreement will have a fixed term of seven and a half years.

Paul Fang, Chairman and CEO of Midea, commented: "With this Investment Agreement KUKA and Midea have agreed to the details of our strategic partnership and our wide ranging commitments to KUKA, its employees, shareholders and customers. Our investment in KUKA is clearly predicated on creating long-term value for both companies. We also welcome a broadly diversified shareholder base, as we believe that the continued commitment of all shareholders will benefit the KUKA Group as a whole. We noted and welcome the positive assessment of our offer by the management board and supervisory board of KUKA and look forward to working with all stakeholders to help KUKA further expand its leading position in the sectors of robotics, automation and logistics, particularly in the Chinese market, to deliver accelerated growth."

By signing the Investment Agreement, Midea has confirmed that it fully respects KUKA's brand and its intellectual property and undertakes to enter into a detailed ring-fencing arrangement in order to guarantee the confidential treatment of business secrets and customer data to preserve KUKA's relationships with its first-class customer and supplier base.

Midea also shows its full commitment with regard to KUKA's sites and workforce and has expressly undertaken not to cause any changes to the current global workforce, site closures, nor any relocations. Furthermore, Midea has reemphazised that it aims to maintain KUKA's independence. Midea does not aim to enter into a domination agreement or delist the company.

Andy Gu, Vice President of Midea Group, added: "KUKA's employees and their creativity are a key strength of the company and critical for its success. We want to build on this strength and provide greater opportunities through growth and investment."

Complete terms and conditions of the takeover offer can be found in the German offer document published on the website <u>www.partnershipinrobotics.com</u>. An English convenience translation of the German offer document is also available on the website. **« UNQUOTE »**

KUKA Press Releases can be found here:

https://www.kuka.com/en-de/press/news/2016/06/tender-offer-midea-group-investor-agreement https://www.kuka.com/en-de/press/news/2016/06/investor-agreement-midea

Complementary information:

from Daniel Dierickx, Acting Editor-in-Chief of Embedded Systems World

1 - SPS IPC DRIVES 2011, Nuremberg-Germany <u>https://www.mesago.de/en/SPS/home.htm</u> - ZVEI Press Conference 22-Nov-2011 <u>http://www.zvei.org/en/Pages/default.aspx</u>

I was at this press conference and met several Executives from Zvei and German large companies, if I remember well one of the speaker said that it was the first year that the import of production equipment in Germany was higher than the export and coming mainly from China.

2 - CeBIT 2016, Hannover-Germany <u>http://www.cebit.de/home</u> - Huawei Press Conferences (April 14 & 15) I was attending two Huawei Press Conferences, reason was the announcement of a new (special) Intel Xeon SoC for a New range of Huawei Servers for Industrial Applications. This was a series of presentations from 5 to 6 Huawei Presidents and Top Executives from KUKA Roboter GmbH, Intel, SUSE, SAP, Redhat and Deutsche Telekom. Surprise, nothing was said regarding the Xeon SoC nor details about the new servers; in fact all speakers pronounced many times Huawei. In addition a few Huawei Presidents and the CEO of KUKA sat down on a table on the stage with a big book called " The agreement" they all signed but nothing was said about the content.

I have a note in my Outlook April 21st for the next coming 8 years, just curious.



ASML President Martin van den Brink to Receive Semiconductor Industry's Top Honor

Van den Brink, pioneer in semiconductor manufacturing technology, selected as recipient of 2016 Robert N. Noyce Award for career achievements - By Dan Rosso SIA



WASHINGTON—June 29, 2016—The Semiconductor Industry Association (SIA), representing U.S. leadership in semiconductor manufacturing, design, and research, today announced Martin van den Brink, president and chief technology officer at ASML Holding and renowned pioneer in semiconductor manufacturing technology, has been named the 2016 recipient of SIA's highest honor, the Robert N. Noyce Award. SIA presents the Noyce Award annually in recognition of a leader who has made outstanding contributions to the semiconductor industry in technology or public policy. Van den Brink will accept the award at the annual SIA Award Dinner on Thursday, Nov. 10 in San Jose, an event that will commemorate the 25th anniversary of the Noyce Award.

Many past award recipients will be in attendance to celebrate the anniversary, including the following semiconductor industry leaders and founders: Dr. Craig Barrett, Dr. Morris Chang, John Daane, Dr. John E. Kelly III, Stanley Mazor, Jim Morgan, Jerry Sanders, George Scalise, Mike Splinter, Ray Stata, Rich Templeton, and Pat Weber.

"Throughout his distinguished career, Martin van den Brink has been a true semiconductor industry innovator, champion, and visionary, pioneering optical lithography methods that have given rise to the smaller, faster, more efficient chips that underpin modern technology," said John Neuffer, president and CEO, Semiconductor Industry Association. "Martin's myriad accomplishments last 30 years have strengthened our industry and fundamentally transformed semiconductor manufacturing. On behalf of the SIA board of directors, it is a pleasure to announce Martin's selection as the 2016 Robert N. Noyce Award recipient in recognition of his outstanding achievements."

During Van den Brink's three decades at ASML, he has led transformative advances in optical lithography procedures used to manufacture semiconductors. Optical lithography, a microfabrication process in which light-sensitive chemicals are used to transfer circuit patterns onto chip wafers, is the primary technology used for the production of semiconductors and has allowed for the continued miniaturization of chips. Thanks in large part to Van den Brink's technological leadership, ASML is now the world's largest supplier of optical lithography equipment for the global semiconductor industry.

Van den Brink was one of ASML's first employees, joining when the company was founded in 1984. He has held various engineering positions since that time, including Vice President, Technology and Executive Vice President, Marketing & Technology. He has served on ASML's Board of Management since 1999 and was appointed President and CTO on July 1, 2013. Van den Brink earned a degree in Electrical Engineering from HTS Arnhem, and a degree in Physics from the University of Twente, the Netherlands.

"I'm extremely gratified to accept this honor and enter the company of previous Noyce Award recipients, many of whom I'm proud to call friends, colleagues, and mentors," said Van den Brink. "Throughout my career, I have been privileged to work with some of the finest scientists, engineers, and researchers in the world, individuals who have helped strengthen the semiconductor industry, the tech sector, and the global economy. It is with them in mind that I thankfully accept this award and look forward to continuing to work alongside them to advance chip innovation."

The Noyce Award is named in honor of semiconductor industry pioneer Robert N. Noyce, co-founder of Fairchild Semiconductor and Intel.

"I'm also pleased that we will be joined at this event by so many of the past winners of the Noyce Award who have built this industry and driven its success over the years," Neuffer said. "This event will be a unique opportunity to celebrate the industry and the promise for the future." <u>www.semiconductors.org/</u> <u>www.asml.com/asml/en/s427</u>



New ATCA High Performance Packet and Server Processing Blade

The ATCA-7490 is based on the recently announced Intel® Xeon® processor E5-2600 v4 product family as well as the Intel® FM10840 high-performance Ethernet switch. MORE: please <u>CLICK HERE</u>



BMW Group, Intel and Mobileye Team Up to Bring Fully Autonomous Driving to Streets by 2021

Leaders from the Automotive, Technology and Computer Vision and Machine Learning Industries Collaborate to Bring Solutions for Automated Driving into Series Production by 2021







- Fleets of fully autonomous cars as basis for new mobility services in urban environments
- BMW Group, Intel and Mobileye are creating an open platform for the next generation of cars to create the safest autonomous platform, from door locks to the data center
- The three companies share a common vision and goal, to align the industry on a standards-based platform to quickly bring autonomous vehicles to market

Munich – July 1, 2016. BMW Group, Intel and Mobileye are joining forces to make self-driving vehicles and future mobility concepts become a reality. The three leaders from the automotive, technology and computer vision and machine learning industries are collaborating to bring solutions for highly and fully automated driving into series production by 2021.

The future of automated driving promises to change lives and societies for the better. But the path to get to a fully autonomous world is complex and will require end-to-end solutions that integrate intelligence across the network, from door locks to the data center. Transportation providers of the future must harness rapidly evolving technologies, collaborate with totally new partners, and prepare for disruptive opportunities.

Together with Intel and Mobileye, the BMW Group will develop the necessary solutions and innovative systems for highly and fully automated driving to bring these technologies into series production by 2021. The BMW iNEXT model will be the foundation for BMW Group's autonomous driving strategy and set the basis for fleets of fully autonomous vehicles, not only on highways but also in urban environments for the purpose of automated ridesharing solutions.

BMW Group, Intel and Mobileye are convinced that automated driving technologies will make travel safer and easier. The goal of the collaboration is to develop future-proofed solutions that enable the drivers to not only take their hands off the steering wheel, but reach the so called "eyes off" (level 3) and ultimately the "mind off" (level 4) level transforming the driver's in-car time into leisure or work time. This level of autonomy would enable the vehicle, on a technical level, to achieve the final stage of traveling "driver off" (level 5) without a human driver inside. This establishes the opportunity for self-driving fleets by 2021 and lays the foundation for entirely new business models in a connected, mobile world.



Intel CEO Brian Krzanich (from left), Chairman of the Board of Management of BMW AG Harald Krüger and Mobileye Co-Founder, Chairman and CTO Professor Amnon Shashua speak at a news conference in Munich, Germany, on Friday, July 1, 2016.

They are announcing a partnership among BMW Group, Intel and Mobileye to work together with the goal of bringing highly and fully automated driving into production by 2021. (Credit: BMW Group)

Full Press Release, more Pictures and Webcast CLICK HERE