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## Engine Drops Out of B-52 During Training at Minot Air Force Base



## Enea Announces Industry First: Qosmos Signatures for Third Party DPI Libraries



## congatec's Type 7 Server-on-Modules are now PICMG standard



## Two New VME Boards

- Adeco - Ethernet switches
- MEN - ARM Cortex-A15 CPU

# Enea Announces Industry First: Qosmos Signatures for Third Party Deep Packet Inspection Libraries

**Enriching product vendors existing DPI libraries with Qosmos signatures, to gain access to continuous protocol and application signature updates for faster development of networking and security solutions.**

STOCKHOLM, Sweden, February 2, 2017 – Enea® (NASDAQ OMX Nordic: ENEA) today announced the availability of Qosmos® Signatures for networking and security product vendors who wish to extend their Deep Packet Inspection (DPI) libraries with the most complete and widely used signature dataset on the market.

Product vendors with in-house DPI libraries face the costly challenge of constantly updating signatures for protocols which change regularly and without prior notice. While some basic protocols are easy to manage since they are relatively stable, a growing number of proprietary and fast-evolving protocols such as web sites, social networking, video streaming and gaming applications, require important internal resources for development, testing and validation to keep signatures up-to-date. This can slow down product cycles and detract product developers from the development of their core technology.

In order to keep their internal resources focused on their core business solutions and at the same time get access to regularly updated protocol and application signatures, networking and security product vendors can now extend their own signature coverage with Qosmos DPI signatures. Qosmos delivers signatures in a format that developers can easily embed into their products, as a complement to their existing signatures.

“Product vendors can expand their own signature coverage in an efficient way, getting regular updates of frequently changing signatures of key web and enterprise applications, while keeping their internal DPI competency and technology”, said Thibaut Bechetoille, President, Qosmos. “They can benefit from more than 2500 signatures with a worldwide coverage, to accelerate their development of solutions embedding network traffic and application visibility.”

Qosmos technology is established as a de facto industry-standard for IP classification and network intelligence based on DPI. Networking and security vendors use Qosmos software to gain application visibility, accelerate development and strengthen capabilities of new solutions for traffic optimization, service chaining, quality of service, analytics, cybersecurity and more.

**Qosmos is a division of Enea since December 2016.**

For more information on Qosmos Signatures:  
<http://www.qosmos.com/products/signatures/>

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It is all based on:

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Thank you, Daniel Dierickx

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# Siemens Closes \$4.5 Bln Acquisition Of Mentor Graphics

Plano, Texas, 2017-Mar-30

- Creates world's leading supplier of industrial software for the Digital Enterprise
- Siemens significantly expands its software business by entering the Integrated Circuit (IC) design and embedded software segments
- Emphasis placed on critical need for both Electronic Systems and IC development tools
- Siemens uniquely positioned to address complex development needs of today's smart products with convergence of PLM and EDA software

With the recent closing of its acquisition of electronic design automation (EDA) software leader, Mentor Graphics Corporation (Mentor), Siemens sets out to underscore the significant customer value it envisions for both Electronic Systems and Integrated Circuit (IC) design tools. Mentor is now part of Siemens' product lifecycle management (PLM) software business, making the combined organization the world's leading supplier of industrial software used for product design, simulation, verification, testing and manufacturing. As today's products – from smart phones and household appliances, to automobiles, aircraft and machinery – continue to increase the use of sophisticated embedded electronics, Siemens has uniquely positioned itself to provide a seamless and comprehensive software solution to the companies that develop these products.

"The entire suite of EDA offerings from Mentor are critically important to our vision of growing our customer base and delivering the world's most comprehensive portfolio of software solutions to build the Digital Enterprise," said Tony Hemmelgarn, President and CEO, Siemens PLM Software. "Software tools such as Electrical & Wire Harness Design and Electronic Systems Design, perfectly complement our existing solutions, while tools for IC Design, Verification, Test and Manufacturing expand our offerings and expertise into adjacent segments to bring value to a new set of clients.

"Siemens is now the leading company providing a complete set of integrated software solutions across the entire value chain. We are proud to welcome the outstanding Mentor team and all of their excellent technology into our organization."

With approximately \$10 billion in investments in multiple software companies since 2007, Siemens has made a significant push into the software space with acquisitions including UGS, LMS, Camstar, Polarion, and CD-adapco. Now, with the acquisition of Mentor, Siemens will continue its proven track record of effectively merging new organizations and technology into the industry's leading Digital Enterprise Suite. This comprehensive suite helps customers create the industry's most holistic and precise digital twins of their products and production lines.

"Joining the Siemens family presents tremendous opportunity, not only for the Mentor Graphics team, but also for existing, new and future customers," said Walden C. Rhines, CEO, Mentor Graphics. "Siemens' desire to leverage all of Mentor's technologies – from our IC offerings to our systems solutions – was an important part of this transaction. We are proud to become part of an organization with such an excellent reputation and successful track record over the years."

**Mentor Graphics Corporation**, a Siemens Business, is a world leader in electronic hardware and software design solutions, providing products, consulting services, and award-winning support for the world's most successful electronic, semiconductor, and systems companies. Headquarters are located at 8005 S.W. Boeckman Road, Wilsonville, Oregon 97070-7777. World Wide Web site: <http://www.mentor.com/>.

**Siemens PLM Software**, a business unit of the Siemens Digital Factory Division, is a leading global provider of product lifecycle management (PLM) and manufacturing operations management (MOM) software, systems and services with over 15 million licensed seats and more than 140,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software works collaboratively with its customers to provide industry software solutions that help companies everywhere achieve a sustainable competitive advantage by making real the innovations that matter. For more information on Siemens PLM Software products and services, visit [www.siemens.com/plm](http://www.siemens.com/plm).

**Siemens AG** (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 165 years. The company is active in more than 200 countries, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. The company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2016, which ended on September 30, 2016, Siemens generated revenue of €79.6 billion and net income of €5.6 billion. At the end of September 2016, the company had around 351,000 employees worldwide. Further information is available on the Internet at [www.siemens.com](http://www.siemens.com).

The Siemens logo consists of the word "SIEMENS" in a bold, teal, sans-serif font.The Mentor Graphics logo features the word "Mentor" in a red, serif font above the word "Graphics" in a red, sans-serif font. A registered trademark symbol (®) is located to the right of "Graphics".The Mentor logo is set within a blue rectangular box. The word "Mentor" is written in white, bold, sans-serif font. Below it, the phrase "A Siemens Business" is written in a smaller, white, sans-serif font.

# Engine Drops Out of B-52 During Training at Minot Air Force Base

By: Valerie Insinna and Aaron Mehta, January 4, 2017 (Photo Credit: US Air Force)

See full PR [Click Here](#)

MINOT AIR FORCE BASE, N.D. — An engine dropped out of a B-52 bomber during a training flight on Wednesday, the Air Force has confirmed following questions from Defense News.

Because the B-52 runs on eight Pratt & Whitney TF33-P-3/103 turbofan engines, pilots were able to land the aircraft safely without any injury to the five personnel on board. The Air Force has since dispatched a UH-1N Huey helicopter to recover engine debris, which was found located in an unpopulated area about 25 nautical miles northeast of Minot Air Force Base, an Air Force spokesman said in a statement.



There were no weapons onboard the B-52, which belongs to Minot Air Force Base's 5th Bomb Wing and was conducting a training mission, he said.

The service was not able to provide the root cause of the mishap, but the spokesman said an initial safety investigation has been initiated.

The incident could also ignite debate about whether and how to re-engine the service's B-52 inventory. The Boeing-manufactured bomber has been flying since 1952 and is expected to remain operating until around 2040, depending on when it is fully replaced by the Northrop Grumman's B-21.

## Ongoing Acquisitions of Independent Software Vendors and Especially RTOS Vendors

<b>Independent Software Vendor</b>	<b>Acquired by</b>	<b>Date</b>	<b>PR Link</b>
Mentor Graphics	Siemens	30-Mar-17	<a href="#">Click Here</a>
Qosmos	Enea	14-Dec-16	<a href="#">Click Here</a>
Micrium	SiliconLab	03-Oct-16	<a href="#">Click Here</a>
Sysgo	Thales	15-Nov-12	<a href="#">Click Here</a>
QNX	BlackBerry	09-Apr-10	<a href="#">Click Here</a>
MontaVista	Cavium	10-Nov-09	<a href="#">Click Here</a>
Wind River	Intel	04-Jun-09	<a href="#">Click Here</a>

# Latest VPX and cPCI Solutions with Server grade Intel Xeon Processor D for Data-to-Decision Applications in Military Battlefield



## VPX3010

### Rugged 3U VPX Intel® Xeon® Processor D-1500 Processor Blade

#### Features

- Intel® Xeon® Processor D-1500 SoC up to 12 cores (formerly "Broadwell-DE")
- DDR4-2133 soldered ECC SDRAM up to 16GB
- Dual 10G-KR, up to three 1G Ethernet ports
- Up to PCIe x16 Gen3 interface supporting non-transparent bridge
- One XMC expansion slot, PCIe x8 Gen3 with Rear I/O to P2
- Conduction or air cooled with conformal coating

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VPX3010



cPCI-6940

## cPCI-6940

### 6U CompactPCI® Intel® Xeon® Processor D-1500 Processor Blade with AMD Radeon™ E8860 GPU

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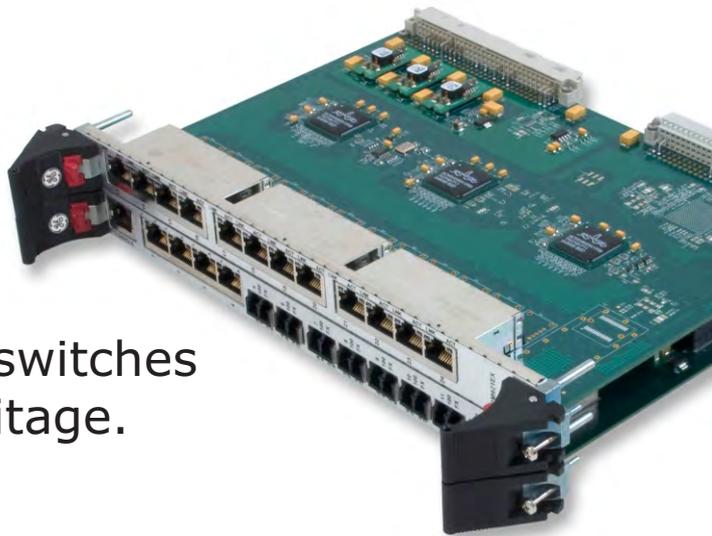
- 14nm multi-core Intel® Xeon® processor D-1500 family (formerly "Broadwell-DE")
- 16GB DDR4-2133 ECC soldered memory & up to 32GB DDR4-2133 ECC socket type memory, max. 48GB
- Integrated AMD Radeon™ E8860 GPU onboard supporting DirectX 11.1, Open GL 4.2, Open CL 1.2
- Dual 10G SFP+ ports on front panel (8HP versions)
- PCIe x16 to J4 UHM connector for rear expansion
- Extended temperature with Xeon® server grade processor

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# WHITE PAPER from Abaco

## Network Engineering for mission critical applications

The Abaco RM921NB is the latest in a line of Ethernet switches for VME that has a 20+ year heritage.



### Introduction:

With the introduction of VME Ethernet switches to the embedded computing market over 20 years ago, Abaco Systems has an extensive pedigree in developing and deploying networking products and in helping our customers solve the toughest networking problems. Even today, our RM921N VME Ethernet switch (introduced in 2007) is one of our biggest selling products.

Today, Abaco switches can be found in an enormous diversity of applications and environments, from the International Space Station to oil rig pipework on the ocean bed, and from aircraft and armored vehicles to ships and railroad locomotives.

At Abaco, it's not just about the hardware, or even our market-leading switch management software, OpenWare. Rather, it's about the extensive expertise and experience that lie behind them, exemplified by our Networking Center of Excellence, that our customers have come to rely on.

This paper describes Abaco's approach to solving networking problems, and some of those customer challenges to which we have risen.

Download your copy here <https://www.abaco.com/> or request a copy to [mgt@e2mos.com](mailto:mgt@e2mos.com).

## Low Power for VMEbus with TI Sitara ARM Cortex-A15 CPU



### *Versatile ARM Technology Now on VMEbus*

The VMEbus computer A23C is based on the Sitara dual-core ARM cortex-A15 AM5728 from Texas Instruments, running at 1.5 GHz. With integrated M4, GPU and DSP coprocessors, the Sitara A15 provides not only perfect building blocks for real-time behavior and digital image processing, but also the possibility for application partitioning.

The A23C comes with one USB port, two Gigabit Ethernet interfaces and one RS232 COM interface at the front. With 2 GB DDR3 SDRAM, Flash, FRAM and a microSD card and mSATA slot, it offers almost unlimited storage possibilities.

For even more modularity, two XMC/PMC slots are available, flexibly extending the standard I/O in the 6U board for example, with additional storage and Ethernet interfaces or graphic functions.

Whether in industrial automation or in the power and energy market – with its versatility, the A23C is perfectly suited as the heart of a multi-purpose industrial computer. Thanks to the extended temperature range, firmly soldered components and long-term availability of 10 years, it is also suited for applications with especially high demands for security, reliability or extreme environmental conditions.

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# congatec welcomes official release of the COM Express 3.0 specification

## congatec's Type 7 Server-on-Modules are now PICMG standard

Deggendorf, Germany, 13 April, 2017 \* \* \* congatec – a leading technology company for embedded computer modules, single board computers and embedded design and manufacturing services, and editor of various Computer-on-Module specifications – welcomes the PICMG release of the COM Express 3.0 specification. The revision 3.0 of the specification formally integrates the new Type 7 pinout type which is the basis for congatec's Server-on-Modules. The official release fires the starting shot for the race to a new generation of server designs based on standardized Server-on-Modules. These products enable the most cost efficient server designs and performance upgrades across all existing and upcoming generations of server class processors and sockets from any vendor. Modular server designs can be started instantly as modules, carrier boards, starter kits, design guides and circuit schematics are readily available.

"Server farms need constant upgrades to improve the performance and energy efficiency per rack. With the new Server-on-Modules, operators can execute these upgrades by simply exchanging standardized modules instead of complete and costly server boards or even rack systems," explains Christian Eder, editor of the PICMG COM Express 3.0 specification and director marketing at congatec, the benefits of Server-on-Modules for cloudlets, edge and fog servers as well as any kind of data center servers tasked with delivering constantly improved rack performance at lower prices.

Server-on-Modules are also an excellent fit for all the various embedded and IoT server designs in harsh industrial environments where space is restricted and dedicated high-bandwidth interfaces are essential to connect the various controls in the industry 4.0 fields. Here, Server-on-Modules can massively improve design efficiency. This is of major significance for embedded design engineers as recent studies report that they are facing the challenge to constantly manage more projects within a given or even shorter time frame, leading to massive time pressure for executing each project. Server-on-Modules can deliver the vital design efficiency improvements by providing an application ready server core instead of only a hand full of individual components.

COM Express Type 7 Server-on-Modules, carrier boards and starter kits can be requested by customers for the evaluation of the new generation of modules. congatec's recent Server-on-Module designs offer server-grade performance and functionality with their Intel® Xeon® D processors, 2x 10 GbE and 32 PCIe lanes.

The latter can be used for powerful intrasystem expansions such as GPGUs and NVMe based ultra-fast storage devices as well as multi-module configurations on one single carrier board for High Performance Computing designs.

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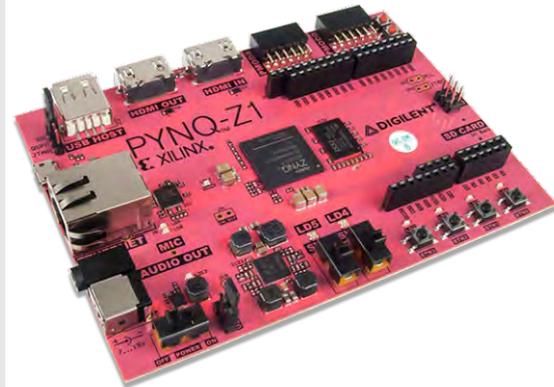
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# Zynq goes Pynq

By: Max Maxfield, Designline Editor



The PYNQ-Z1 allows you to create embedded systems using the Python language and associated libraries in conjunction with the Xilinx Zynq-7000 SoC FPGA

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# Application-Ready Machine Vision Platforms

Highly integrated precision and low power TCO



## Smart Camera - NEON-1040/1021/1020

Intel® Atom™ Quad-Core Processor E3845 1.91 GHz-based

ADLINK's x86 smart camera defines a new category of vision system that realizes high-performance, maximum integration, easy deployment, space efficiency and minimal total cost of ownership - all well beyond what conventional embedded vision systems and smart cameras can achieve.

### Features

- Global shutter CMOS sensors available
- 4Mp 60 fps (NEON-1040), 2Mp 120 fps (NEON-1020) & 2Mp 60 fps (NEON-1021) resolution
- Additional GigE Vision 1 slave camera support
- Multi-ROI function replaces multi-camera barcode reader solution
- FPGA-based image pre-processing
- Flexible software support with MVTec HALCON, MVTec MERLIC, COGNEX VisionPro, STEMMER Common Vision Blox, Teledyne Dalsa Sherlock, Adaptive Vision Studio, Euresys Open eVision, Matrox MIL and many others
- GeniCam, GenTL, and Open CV compatible with image acquisition
- Built-in PWM lighting control
- IP67-rated housing and M12 connectors
- EMVA1288 compliant
- Windows® 7, Embedded Standard 7



## Compact Vision System - EOS-1300

4CH GigE Vision Compact Vision System with 6th Generation Intel® Core™ i7/i5/i3 Processors

### Features

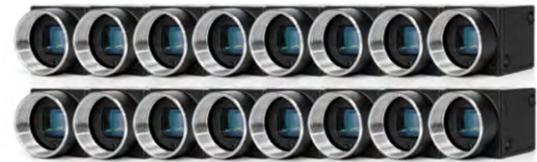
- 6th Generation Intel® Core™ i7/i5/i3 Processors
- Up to 4CH Gigabit PoE (Power over Ethernet),
- FPGA-implemented DI/O functions provide programmable de-bounce filter, and Trigger In/Out for precise and flexible control
- Configurable PNP/NPN DO type via external wiring
- Supports 12x isolated DI, 16x isolated DO, 2x encoder input, and 4x USB 3.0
- One-side I/O for easy maintenance



## 2/4-CH PCI Express® GigE Vision PoE+ Frame Grabbers - PCIe-GIE72/74 Cards

### Features

- PCI Express® x4 compliant
- Support for 2/4 independent Gigabit Ethernet ports
- IEEE 802.3at for PoE+ (Power over Ethernet Plus)
- PoE protection & automated power budget control for enhanced asset protection
- Easy-to-use utility and API provided for PoE power management
- Multiple cards, multiple cameras, in a single system
- Wide operating temperature range from 0°C to +70°C supporting non-drop frame capture in extreme environments
- Up to 20/60/120W PoE power from PCIe bus/4-pin/6-pin Molex connector



**PCIe-GIE72/74**

## Machine vision superiority with guaranteed non-drop frame grabs

Any number of PCIe-GIE7x series cards can be installed in a single system without occupying any BIOS I/O resources, enabling multi-card single-system non-drop machine vision frame grabs. range supports integration with fanless computer for IA applications in harsh environments.

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