



20<sup>th</sup> Real Time Conference  
5-10 June 2016 - Padova



# Exhibition Guide

# Hall Exhibitors

Exhibition will take place in the hall of Centro Congressi from June 6 to June 10

Booth #1 CAEN

Booth #2 CAEN ELS

Booth #3 PENTAIR

Booth #4 N.A.T.- DESY collaboration

Booth #5 IEEE

Booth #6 ELMA

Booth #7 W-IE-NE-R Plein

Booth #8 Struck Innovative Systeme GmbH

Booth #9 TechnoAP





Struck Innovative Systeme offers board-level electronics and data acquisition systems. The main focus is on VME, MTCA.4 and PCI Express designs. The product range spans digitizers, interface cards and digital I/O. More recent developments in the VME standard comprise the 16-channel 250 MSPS 14-bit and 125 MSPS 16-bit SIS3316 digitizer cards with custom and user firmware option and the SIS3153 USB3.0 and Ethernet to VME interface. Our SIS8300-L2 10-channel 16-bit 125 MSPS MTCA.4 digitizer and associated RF frontend RTMs (like the 10-channel downconverter DWC8300 and the 8-channel downconverter one channel vector modulator DWC8VM1) are being installed in the XFEL for low-level radio frequency (LLRF) and other applications. The 250 MSPS 16-bit SIS8325 is currently undergoing final qualification measurements.

Currently the Kintex Ultrascale based SIS8300-KU next generation SIS8300 family digitizer is under development. Beam loss monitor and other applications can be based on the SIS8800/SIS8980 multi-purpose MTCA.4 scaler/discriminator RTM combination.

In PCI Express we offer digitizer cards up to 3.2 GSPS and a resolution of 12-bit.



W-IE-NE-R Plein & Baus GmbH is providing a full line of electronics for detector read-out, experiment control and diagnostics. Combining superior designed mechanic chassis with high quality, microprocessor controlled, low noise power supplies and a high level of integrated diagnostic and monitoring W-IE-NE-R became a world leader for powered chassis in all standards as VME, VME64x, VXS, MTCA.

In a joint venture between W-IE-NE-R and ISEG we provide the new high density, multichannel low and high voltage power supply system MPOD. MPOD can house up to 480 independent high voltage, 80 low voltage channels or any mixture of low and high voltage. With MARATON in addition to laboratory style power supplies also a range of radiation hard and magnetic field tolerant units was developed. A family of high performance controllers for VME and CAMAC with USB2 interface, multifunctional VME and NIM modules as well as a new VME display and bus-analyzer completes our line of instrumentation.



Pentair Technical Solutions GmbH

Pentair Technical Solutions is a global leader of systems and solutions that safeguard industrial controls, electrical components, communications hardware, electronic devices, pipelines, processes and buildings. Its premier brands CADDY, ERICO, Hoffman, LENTON, Raychem, Schroff, and Tracer provide a comprehensive range of standard, modified and custom engineered solutions for energy, industrial, infrastructure, commercial, communications, medical, security and defense applications.

The Schroff brand offers a broad portfolio of products including accessories for protecting printed circuit board (PCB) – from card retainers, conduction cooled frames, front panels, and handles to subracks, cases, backplanes, power supplies, cabinets, and pre-assembled chassis for embedded computing systems as well as hardware management solutions. For further information please visit [www.pentairprotect.com](http://www.pentairprotect.com)

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A SUCCESSFUL WORLDWIDE LEADING COMPANY IN ELECTRONIC TOOLS FOR DISCOVERY

CAEN was established in 1979 and is today one of the most important industrial players in the nuclear physics research market. Its products are currently used in the most prestigious laboratories, research centers, and universities worldwide. Throughout the years CAEN has strengthened by inserting a "massive" number of young physicists in all of its business activities: today 10% of the total employees are physicists. CAEN operates in a highly specialized international market: the design, production and supply of electronic instrumentation for radiation and low light sensors. The company targets two main areas: nuclear physics research (both at high and medium-low energies) and its fall-out applications. CAEN is involved in several leading-edge R&D collaboration projects and has also been involved in R&D projects in the fields of security and environment.



CAEN ELS is a leading company in the design of power supplies and state-of-the-art complete electronic systems for the Physics research world, having its main focus on dedicated solutions for the particle accelerator community and high-end industrial applications.

The main product categories are:

- Power Supply Systems
  - Precision Current Measurements
  - Beamline Electronic Instrumentation
  - FMC & MTCA.4 – MicroTCA for Physics
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## N.A.T. - DESY Collaboration on High Performance Control Systems

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N.A.T., a privately owned company based in Germany, provides solutions based on common hardware standards for the communication, defense & aerospace, test & measurement and research markets.

DESY is one of the world's major accelerator centres and a leading developer of high performance control systems. As part of its mission as a public research organization, DESY collaborates with industry and business to promote new technologies that will benefit society and encourage innovations.

N.A.T. and DESY have joined forces to create board and system level products based on the MicroTCA standard and the AMC form factor. The main focus of this cooperation is the development of system components in preparation for the European XFEL, a next-generation free electron laser facility currently under construction at DESY. Besides the adaption of its MicroTCA Carrier Hub (MCH) for use in large scale physics research applications (intelligent switching incl. PCIE uplinks, system management features for) N.A.T. extended its portfolio of power modules by an RTM-PSC and added multi-core processing capabilities to accommodate custom hardware and software extensions, as well.

N.A.T.'s product range covers all standard form factors, including MicroTCA.1-4. DESY develops MicroTCA boards (both AMCs and RTMs) and makes these design available to industry through licensing. The newly founded MicroTCA.4 Technology Lab underlines the strategic partnership between N.A.T. and DESY and will soon provide a broad portfolio of support, consulting and training activities for the growing MicroTCA community.



# Techno AP

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Techno AP is specialized in development, manufacturing and sale in the radiation measurement field. All of our products are developing at ourselves. Our company is located in Ibaraki, Japan. The Ibaraki is located at northeast of Tokyo. In Ibaraki, there are many research facilities, such as KEK (High Energy Accelerator Research Organization), JAEA (Japan Atomic Energy Agency), J-PARC (Japan Proton Accelerator Complex) etc. and our company is located close to them. Additionally, we have supplied our products to them many times.

Our main products are as following;

We can customize the VME, NIM, and unit (chassis)-type.

[ DSP(TDC, QDC, PSA, WAVE for scintillator) ]

- APV8104-12(1GSPS, 4CH, 12Bit, GbEther)
- APV8516-8(500MSPS, 16CH, 8Bit, GbEther)
- APV8508-14(500MSPS, 8CH, 14Bit, GbEther)

[ DSP(Trapezoidal Filter for Ge, Si, SDD) ]

- APV8016(100MSPS, 16CH, 8kch)

[ Digitizer ]

- APV7108-8(1GSPS, 8CH, 8Bit, GbEther)
- APV7104-14(1GSPS, 4CH, 14Bit, GbEther)
- APV7516-8(500MSPS, 16CH, 8Bit, GbEther)
- APV7508-14(500MSPS, 8CH, 14Bit, GbEther)

[ Time Spectrometer ]

- APV7502(3GSPS, 2CH, 8Bit)

Furthermore, we can provide the scintillation detectors, such as LaBr<sub>3</sub>(Ce) and NaI(Tl) etc., and the high-speed preamp and the Handheld instruments etc. In addition, Techno AP can also develop the special specifications product.

Elmas embedded and electronics industry solutions serve a wide range of markets, including Scientific Research, Industrial, Transportation, Military, Aerospace, Medical, Telecommunications, Broadcast, and handheld Radio. Elmas modular approach allows fast, cost-effective, and proven performance from customized designs to standard platforms. The base products are centered around 19" and 23" Eurocard specifications, ATR, and Small Form Factor as well as custom designs. Elmas system platforms, backplanes, storage, and related embedded products employ creative design innovations based upon OpenVPX/VPX, MicroTCA, CompactPCI Serial and other architectures.

Supporting the electronics ecosystem, Elma also offers modular cabinet enclosures, cases, and front panels & handles for pluggable boards and power supplies.

The Enclosures & Components product line offers modular instrument cases, enclosures, and accessories for the electronics industry as well as subracks and components that support the Embedded market. The Rotary Switch product line is a technology leader in precision rotary and coded switches, mechanical and optical encoders and LED arrays, light-pipes, and light tubes. Customization is offered "in any quantity".

The Elma Group has its headquarters in Wetzikon, Switzerland. The Elma Group incorporates design and production facilities in Switzerland, Germany, China, United Kingdom, France, Israel and the USA as well as a production facility in Romania. Elma also has a company owned sales organization in Singapore. Since 1996, the Group has been listed on SIX Swiss stock exchange.