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CMSE Focuses On Optimizing Component Choice For Military & Space Applications

The 26th Annual Components for Military and Space Electronics (CMSE) live conference focuses on helping engineers make the best choice for components for military and space applications. The conference, which is being held April 25-27, 2023 at the Four Points by Sheraton (Marriott owned) (LAX) in Los Angeles, Calif., recognizes that the same performance capability and quality/reliability level does not fit all project needs for cost, performance, and schedule.

Organized by engineers for component, design, and quality assurance engineers and engineering and program management, this is the premier conference for military and space electronics issues. The CMSE conference specializes in the selection, application, reliability, testing and failure analysis of all types of military spec. and COTS electronic components, subsystems and circuit boards while also emphasizing new technology, processes, and design practices. Emphasis is placed on practical solutions, new techniques and how to assess the risks of COTS verses mil spec. components and make cost effective decisions which meet the mission requirements.

CMSE is a leading event for professionals in the microelectronic component industry, particularly those working in the field of avionics, aerospace, and military. It covers both terrestrial and space-based systems, and focuses on the design, reliability, and application of electronic components for a variety of purposes, including commercial, civilian, and military applications.

This live, face-to-face conference aims to provide high-quality technical talks, keynotes, and panel discussions to its attendees. Its program offers two keynote presentations, over 30 technical presentations, three seminars and tutorials, and student programs.

Keynotes

"CHIPS ACT"

Speaker: Christine Michienzi, chief technology officer for the assistant secretary of defense (ASD) for industrial base policy

"Striking A Balance Between Compliance And Risk"

Speaker: James W. Wade, engineering and mission assurance executive

Tutorials

Tutorial #1: "Microelectronic Component Engineering For the 2020s"

Instructors: Ron Demcko (Kyocera-AVX), Yuri Freeman (YAGEO/KEMET), Trevor Devaney (Hi-Rel Laboratories) and Thomas J Green (TJ Green Associates)

Tutorial #2: "Electronics Packaging: Fundamentals And Opportunities"

Instructors: Mark D. Poliks and Benson Chan, Center for Advanced Microelectronics Manufacturing (CAMM), Integrated Electronics and Engineering Center (IEEC), State University of New York at Binghamton

Tutorial #3: "JEDEC Road Show – COTS Components For Military And Space Applications"

Instructors: Lawrence Harzstark (Aerospace), Peter Majewicz (NASA Goddard), Sultan Lilani Integra Technologies Ron Demcko (KYOCERA AVX), Shri Agarwal (NASA Jet Propulsion Laboratory) and Benny Damron (Jacobs Engineering)

(Included at no additional cost for anyone who purchases a conference pass.)

See the full program schedule, which includes abstracts for the presentations, seminars and tutorials, on the conference website.

Exhibition

With over 30 hi-reliability manufacturers showcasing their products and services, the CMSE exhibition gives attendees the opportunity to interface with industry experts and gain knowledge needed to make the best choice for components in their critical systems components.

This year's exhibitors include:

- Kyocera-AVX
- Presidio Components
- Vanguard Electronics
- Vishay
- Advanced Test Equipment
- Quantic Electronics
- Exxelia
- Integra Techhnologies
- Kemet
- Payton Planar
- IR HiRel
- StratEdge
- Central Semiconductor
- Hi-Rel Laboratories
- Knowles
- Smart Microsystems
- TopLine
- ES Components
- Greenray Industries
- Comtech
- Oneida Research Services
- Samtec
- Linear Systems.

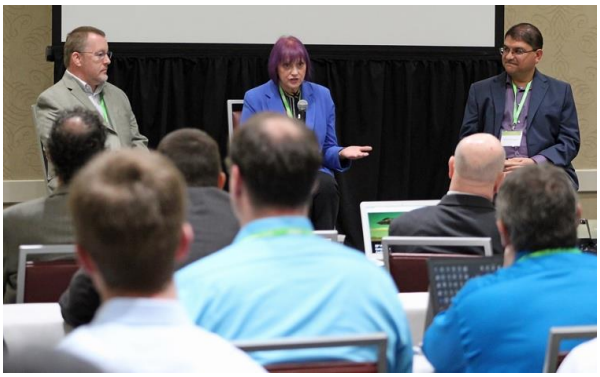
Click here for more about these exhibitors.

Scenes from the CMSE 2019 exhibition.

Check out this video recap from CMSE 2019

Tom Terlizzi, exhibits chair, and Tom Green, general chair, provide a recap of CMSE 2019 in this video.

The goal of the conference is to facilitate maximum participation and interaction among attendees, as well as to deepen our collective understanding of the technical challenges faced in the industry. Through these talks, discussions, and exhibitor interface, CMSE hopes to provide a valuable learning and networking experience for all attendees. A day is set up for tutorials and seminars and there are several sessions for new engineers or students to aid in training and provide an introduction to microelectronics and advanced packaging.



Scene from CMSE 2019 panel discussion: Mil/Aerospace Talent Gap… How to Attract and Retain Young Engineers.

Industry experts are requested to submit an abstract for a presentation (PowerPoint only required) reporting on actual experience, knowledge and data gained from the use of commercial and military components and COTS in military and space applications. Specific subjects to be discussed include:

- Alternate-grade parts for use in harsh environments

- Non-hermetic COTS utilization and implementation
- Long-term dormant storage (hermetic vs. non-hermetic)
- EEE parts engineering issues for small satellites
- Supercapacitors and high-CV for high-reliability applications
- PME/BME MLCCs for hi-reliability applications
- Tantalum polymer progression towards space and wear-out issues
- GaN and SiC for RF and power management
- SIP 2.5-3D and wafer-level packaging WLP
- Continuity of the electronics supply chain
- Alternate approval for PMP for space
- Counterfeits, trust, and security issues in supply chain management
- Digital engineering and model-based design
- High-temp electronics.

As of 2/3/2023 only a few speaker slots are left so please send in your abstract ASAP to Tom Green.

For information on the various registration options, click here. And for details on exhibiting at CMSE click here.