CMSE 2026
PROGRAM BOOK

29th Annual
Components for Military & Space Electronics
Conference & Exhibition

April 28 - April 30, 2026
Renaissance Hotel, LAX
9620 Airport Blvd.
Los Angeles, CA 90045

CMSE 2026
Message from the Chair

On behalf of the CMSE Program Committee I would like to personally welcome everyone to the 29 th annual CMSE Conference and Exhibition. Our mission is to provide a conference experience focused on high quality technical talks, keynotes, tutorials and discussions that foster maximum attendee participation/interaction and furthers our collective understanding of the technical challenges faced in our industry. We look to showcase the supplier base to the greatest extent possible and to educate the industry, especially young component engineers, to secure the future defense of our country.

This year we added a "Lunch and Learn" speaker on Wednesday to try and attract local engineers to stop by and visit the exhibits. We've also added two new tutorials on Tuesday. One focused on failure analysis and the other on next generation fan out wafer level packaging 2.3 D (FO-WLP).

Your feedback is welcome. I'd like to personally thank Brian Schieman at IMAPS for their support and all our sponsors and exhibitors for supporting CMSE. Enjoy CMSE 2026!

Pay attention, take the time to listen, ask good questions and don't hesitate to respectfully challenge each other's ideas and technical opinions.

Welcome to CMSE 2026!

Thomas Green
CMSE Program Chair

CMSE
"WHERE COMPONENT ENGINEERS MEET"

ORGANIZED BY: TJ Green Associates

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2026 KEYNOTE SPEAKERS

Devanand K. Shenoy, Ph.D.

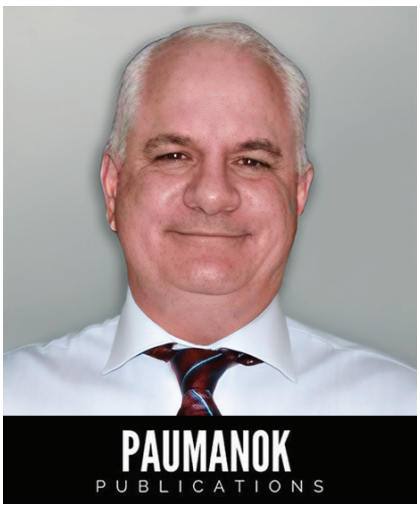
Strategic Advisor to IBM Semiconductors within IBM Research

Dr. Dev Shenoy is a Strategic Advisor to IBM Semiconductors within IBM Research and formerly served as Principal Director for Microelectronics at the Office of the Under Secretary of War for Research and Engineering (OUSW(R&E)), leading efforts to equip the Warfighter with advanced semiconductor capabilities.

He founded the CHIPS Act-funded Microelectronics Commons (ME Commons) program to strengthen U.S. Lab-to-Fab prototyping, onshore manufacturing, workforce development, and intellectual property protection, ensuring access to cutting-edge microelectronics for advanced weapons systems. He also built interagency collaborations with the National Science Foundation and Department of Commerce.

Dr. Shenoy oversaw initiatives including the Trusted and Assured Microelectronics Program, the Defense Microelectronics Cross-Functional Team, and the Strategic Radiation Hardened Electronics Council, while launching power electronics projects for hypersonics, directed energy, AI, and autonomy.

Previously, he held leadership roles at USC/ISI, DARPA, the Department of Energy, and within defense industrial base policy, creating public-private partnerships and driving innovation in microelectronics and photonics for defense and commercial applications.



Dennis M. Zogbi

Founder and CEO of Paumanok Publications, Inc.

Dennis M. Zogbi is the founder and CEO of Paumanok Publications, Inc. and a globally recognized authority on passive electronic components. With 37 years of continuous research (1988–2026) and more than 260 published reports, he is a trusted expert on capacitors, resistors, inductors, circuit protection devices and their supply chains.

He founded Paumanok in 1988 while attending university in New York, beginning with a study on the global varistor market. This work expanded into a comprehensive research model analyzing the full supply chain, from raw materials to end-use markets across industries like automotive, telecommunications, defense, and renewable energy.

Zogbi's long-term dataset enables deep trend analysis, forecasting, and insight into industry cycles. He also developed the Passive Component Raw Material Index to track key materials and market shifts.

He is the majority owner of Passive Component Industry Magazine and a regular contributor to TTI's MarketEYE, shaping global industry insight.

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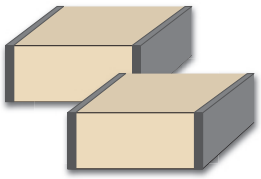

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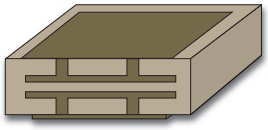
WIREBONDABLE SINGLE LAYER


ULTRA LOW LOSS NPQ & STABLE BX

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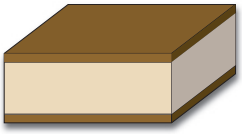
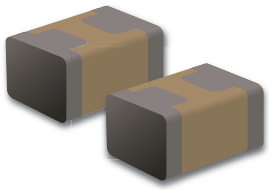
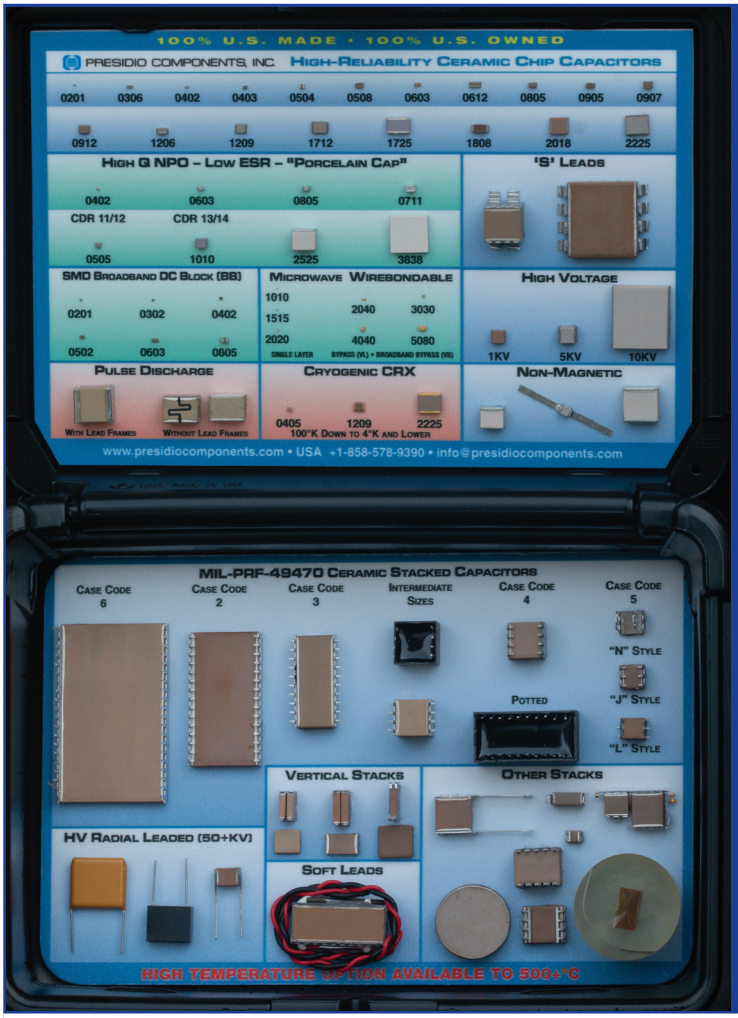
New Products Available for High Voltage GaN MMIC


WIREBONDABLE VL & VB

BROADBAND DC BLOCK


SMD BB SERIES



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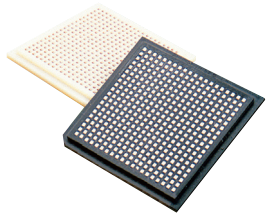
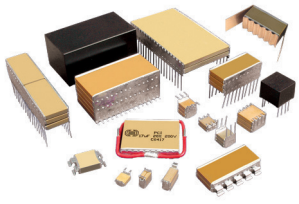
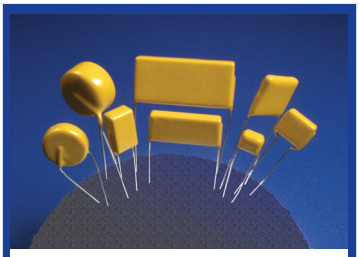


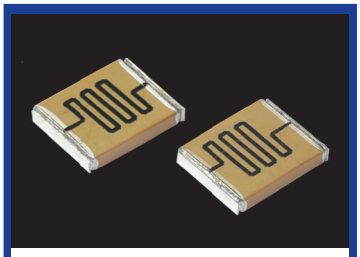
CERAMIC CHIPS
0201 to 2225



SMPS STACKS
MIL-PRF-49470



RADIAL LEADED
Up to 50 kV



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2026 TUTORIAL SCHEDULE

TUESDAY, APRIL 28

0700-0900	**Registration and Student Breakfast Sponsored by All Tech Electronics**	
TUTORIAL #1 LOCATION: Malibu Room		
0800-1600	**Advanced Microelectronic Component Engineering Principles and Practices**	**Instructors: Thomas J Green (TJ Green Associates) Ron Demcko (Kyocera AVX) Trevor Devaney (Hi-Rel Labs) Jerard Jose (Vishay)**
TUTORIAL #2 LOCATION: Venice Room		
0800-1200	**Introduction to Electronics Failure Analysis**	**Instructor: Ken Turner (Hi-Rel Laboratories)**
1200-1300	**STUDENT LUNCH: In Renaissance IV Sponsored by All Tech Electronics (For those attending tutorial classes only)**	
TUTORIAL #3 LOCATION: Venice Room		
1300-1700	**Introduction to and Advances in 2.3D Fan-Out Wafer Level Packaging (FO-WLP)**	**Instructor: Beth Keser (Volantis Semiconductor)**
TUTORIAL #4 LOCATION: International Ballroom		
1615-1745	**Understanding Military Standards and Update on JEDEC and New Spec Initiatives**	**Instructors: Ben Mendoza (Promex Industries) Shri Agarwal (NASA JPL) Adam Johnson (Integra Technologies)**

1800-1900 (Malibu Room)

STUDENT & PROFESSIONAL

Networking Reception

SPONSORED BY: HI-REL LABORATORIES

2026 PRESENTATION SCHEDULE

WEDNESDAY, APRIL 29

0700	REGISTRATION & COFFEE	
0800-0815	Welcome To CMSE 2026 Introduction by CMSE Chair	Thomas J Green TJ Green Associates
Session 1A	**Session Chair: Daniel West (Kyocera AVX)**	
0815-0900	KEYNOTE: Microelectronics: Critical Enabler for Innovation in Commercial and Military Systems	Devanand K. Shenoy, Ph.D. IBM
0900-0925	DLA Standards and Specifications Benefit the Military and Space Users' Community	Muhammad Akbar DLA
0925-0950	ESCC evolution: Enhanced Grade Component for improving the availability of strategic EEE component in Europe	Denis Lacombe ESA
0950-1020	COFFEE BREAK: Sponsored by Kyocera AVX	
1020-1045	Using AEC-Q Semiconductors in Military and Aerospace Applications	Kevin Parmenter Taiwan Semiconductor, US
1045-1110	MLCC Product Grades Explained: From Commercial to Space Applications	Tyler Lagnese Kyocera AVX
1115-1200	LUNCH & LEARN: High-throughput Additive Manufacturing of Microelectronics including Passive & Active Components for 3D HI, Legacy Electronics and Advanced Packaging	Ahmed Busnaina, Ph.D. Northeastern University
1200-1350	LUNCH BREAK: Sponsored by Kyocera AVX	
Session 1B	**Session Chair: Bill Ishii (Sumitomo)**	
1350-1415	COTS Integration: Success & Challenges in Mission Critical Systems	Aaron C. Dermarderosian Collins Aerospace
1415-1440	Sn/Pb Conversion and Up Screening of Surface Mount COTS Components and AEM, Inc. Lessons Learned	Jeff Montgomery AEM, Inc.
1440-1505	Reliability of CGA Solder Columns for Extreme Cold Applications	Martin Hart TopLine
1505-1530	BGA Reballing for Mission-Critical Applications	Minerva Cruz Six Sigma Microelectronics
1530-1600	COFFEE BREAK: Sponsored by Kyocera AVX	
1600-1625	Innovative Ceramic Sub-Mounts and Heat Spreaders	Chandra Gupta, Ph.D. Remtec Inc.
1625-1650	Critical Improvements in Thermal Materials and Characterization Tools for TIMs	David L. Saums DS&A LLC
1650-1715	Thermal Management at the Component and Board Level	Bruce Guldin Vishay
1715-1740	Selection, Metrology Controls and Reliability Performance of Thermal Interface Materials (TIM) in Advanced 3D Package Designs	Christo Bojkov Danche, LLC
1745-2000	Welcome Reception In Exhibits Area	

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THURSDAY, APRIL 30

0700	REGISTRATION & COFFEE	
Session 2A	**Session Chair: Jerard Jose (Vishay)**	
0800-0845	KEYNOTE: Ultra-Low Loss and Precision Passive Components for Quantum Computing: Market Opportunities and Technology Requirements 2025-2030	Dennis Zogbi Paumanok Publications
0845-0910	Limitations in Today's Passive Electrical Components	Dr. Eric Langlois BAE Systems | FASTLABS
0910-0935	Low Inductance Bulk Capacitors	Ron Demcko Kyocera AVX
0935-1000	New High Voltage Reconstituted Mica Capacitors to Pulse or Filter in One Small SMD Package	Mickael Dubois Exxelia
1000-1030	COFFEE BREAK: Sponsored by Presidio	
1030-1050	Eliminating Wirebonds in RF Modules: A New Class of Low-ESL Capacitors	Mark Simpson UTC & Eulex (Evans Group)
1050-1110	Why Capacitors Do What They Do	David Zawacki CalRamic Technologies
1110-1130	Predicting TVA Attenuation Across Temperature Using Measurement-Based Mathematical Models	Wes Laquerre IMS
1130-1150	Wire Bonding, Laser Welding, and Ultrasonic Smart Welding for Space Applications	Mike McKeown, Ph.D. Hesse Mechatronics
1150-1210	From Spaceflight to EUV Lithography: High Reliability Outgassing and RGA Testing	Jayeshkumar Das Oneida Research Services
1210-1330	LUNCH BREAK: Sponsored by Presidio	
Session 2B	**Session Chair: Larry Harzstark (Aerospace Corp)**	
1330-1350	IBM: Pioneering Emerging Compute	Julian Warchall IBM
1350-1410	Bridging the Reliability Chasm: Applying AI-Driven Predictive Forensics to Qualify Electronics for Military & Space Environments	Eisuke Tsuyuzaki Bayflex Solutions
1410-1430	Achieving High-Reliability Semiconductor Components Production in a Fully Outsourced Manufacturing Model	Don Larson ES Components
1430-1450	An Introduction to Laser Trimming A Measurement-Driven Process	Jim Greene Photonics Systems USA
1450-1505	COFFEE BREAK: Sponsored by Presidio	
1505-1525	Integrated Thin-Film Resistor Materials for High-Frequency Applications	John Andresakis Ohmega Ticer
1525-1545	Scaling National Security: The SCALE Program's Role in Growing the Nation's Skilled Microelectronics Workforce	Peggy E. Williams, Ph.D. NSWC Crane
1545-1605	Die Solutions for Space Constrained Hybrid Applications	Joe Beck Central Semiconductor
1605-1625	Design of Ultra Narrow-Band Amplifiers for High Sensitivity Receiver Front-Ends Using Negative Resistance Devices for ESM, ECM, ECCM, ELINT, Radar, Satellite & Telecommunication Applications	Dr. Ash (Ashok) Gorwara Gorwara & Associates International, Inc
1625-1645	A RadHard Logic Level MOSFET for Military and Space Applications	Joe Benedetto VPT Components
1645-1700	John R. Devaney Award for Best Presentation at CMSE $1,500 Cash Prize	

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2026 EXHIBIT FLOOR LAYOUT

EXHIBITOR LISTING
(ALPHABETICAL)

SPACE#	COMPANY
B3	AAA Engineering & Test Lab
B19	ADS Consulting Group, Inc.
B5	AEM-Central Semiconductor
B1	**ALL TECH ELECTRONICS**
T8	ALLIED HIGH TECH PRODUCTS, INC
B23	CalRamic Technologies LLC
T11	DATATRONICS ROMOLAND INC
B7	ES Components
B8	Evans Group (Evans, Paktron, UTC, Eulex)
B13	EXXELIA
B17	Golden Altos Corp
T1	**HI-REL LABORATORIES**
B22	International Manufacturing Services, Inc. (IMS)
B24	Johanson Technology/Johanson Dielectrics
B16	**KYOCERA AVX**
T14	Magnetika, Inc.
T12	Noble Metal Services
T16	Oneida Research Services, Inc.
B11	Payton America
T7	**PRESIDIO COMPONENTS INC.**
B14	QP TECHNOLOGIES
B4	Remtec
T15	Sales & Service, Inc. (SSI)
B20	SCALE Program (CRANE NAVY NSWC)
B15	Six Sigma Microelectronics
T9	Spang Engineered Solutions
B6	Spira
B10	StratEdge Corp.
T3	Taiwan Semiconductor
B12	TopLine Corporation
B21	ToPro Technology Co., Ltd.
T14A	Vanguard Electronics
T10	Vibrantz Corp
B2	Vishay Intertechnology

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