

PLATINUM SPONSORS





cādence

Joining DesignCon In 2021... Drive World+Embedded Sy

Drive World+Embedded Systems Conference (ESC)

August 16 – 18, 2021 / San Jose McEnery Convention Center

molex

Solutions for Testing & Technology

Tektronix[•]

CARLISLE

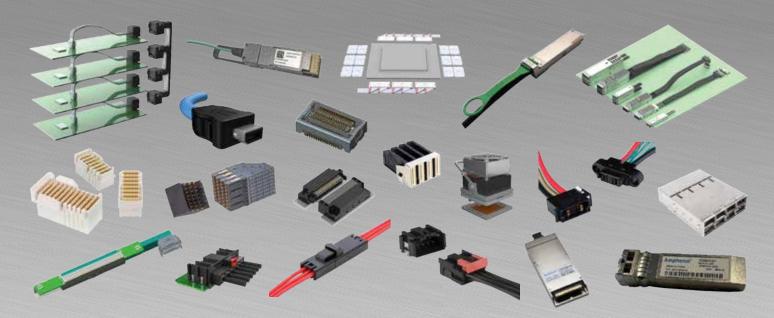




Register at DriveWorldExpo.com

Amphenol

Come visit us to discuss your Interconnect needs



Enabling the Electronics Revolution in your markets



Check out our live demonstrations **Booth #707**

SerDes & Memory Interfaces

A comprehensive suite of SerDes and memory interface IP for today's most challenging data center, edge, automotive and IoT applications.

Join us for a Rambus technical session

When: Tuesday, August 17 Where: Room 210G

Find out how our advanced technology can provide the solution for your design needs. Supported standards include: PCI Express 5.0 CXL 2.0 JESD / CPRI MIPI HBM2E GDDR6 LPDDR4 DDR4

R rambus.com/designcon

Rambus

WELCOME TO DESIGNCON

AN **UONS 2021**

THE BOARD

Welcome back. It's been a while and it's so good to say hello again.

The world has changed a lot since we last gathered at DesignCon in January 2020, but what hasn't changed is the need for education and sourcing to drive tomorrow's innovations today. And we're here for that.

Over the course of the in-person event, you'll find more than 150 sessions presented by 155 speakers, 3 visionary keynotes offering a look at what's coming next, 85 leading suppliers ready to help you design, and multiple networking opportunities to help you re-connect with your peers, customers, tech influencers, and friends.

This year at DesignCon we welcome Drive World+ESC (Embedded Systems Conference), adding more focus on topics that have been in high demand among our DesignCon community including, IoT, embedded hardware/software, and automotive electronics and intelligence. Conference pass holders will find Drive World+ESC sessions in the schedule and all pass holders can stop by the expo for live sensing demos on two advanced vehicles, presented by the expert engineers at VSI Labs.

Be it through demos, education, or sourcing, the week is all about helping you engineer. If there's an area you want to sharpen your design skills in, be sure to search DesignCon's full education schedule at DesignCon.com by theme. You'll find helpful breakouts on popular topics like 5G, consumer electronics, data centers, high-speed communications, and more. DesignCon's smart phone app also offers exhibitors sorted by categories like analog/ mixed signal, components, signal integrity, test and measurement equipment, and more to help you find the tech you need. And make some time to focus on your career, too, over the coming days. Check out the 2021 Career Zone on the expo floor for networking on topics like advancing emerging engineers, technical paper writing tips, and women and minorities in STEM. And be sure to take advantage of tools being offered in the space—including one-on-one salary negotiation advice and professional headshots—to help take your career to that next level.

Enjoy DesignCon 2021, partnered with Drive World+ESC, and be sure to take advantage of all we have to offer this week. Know that in all our planning, health and safety have been a top priority. Visit DesignCon.com for health and safety information and watch for reminders at the event throughout the week.

On behalf of DesignCon and Informa Markets – Engineering, thank you to all of our speakers, committee members, sponsors, exhibitors, attendees, and partners who help bring this week to engineers.

We look forward to re-connecting with you August 16-18, 2021.

See you at the San Jose McEnery Convention Center!

Suzanne Deffree

Suzanne Deffree Group Event Director, DesignCon and Drive World+ESC

informa markets Engineering

KEYSIGHT TECHNOLOGIES

Accelerate Your Fastest Digital Designs

EDUCATION FORUM

PCIe6, 400G/800G, Next-Gen Type-C, Power Integrity, Signal Integrity, Fronthaul Network

San Jose McEnery Convention Center, 210E

Tues. August 17, 8:30 am -12:45 pm Wed. August 18, 8:30 am - 12:45 pm

Visit Booth #807



FAMILY REUNION

Welcome Reception

Monday, August 16, 2021 6-8 pm | Outdoor Plaza at the Idea Tree

Sponsored by:





TPC MEMBERS

We would like to thank the volunteers who served on the Technical Program Committee (TPC) for DesignCon 2021. Their contributions as reviewers of the abstracts and papers have made it possible for us to maintain the DesignCon standard of excellence and deliver an outstanding program again this year.

Brice Achkir*, Distinguished Eng./Sr. Eng. Director, Cisco Systems

Joseph Aday*, Sr. Member of Technical Staff, Lockheed Martin Maria Agoston*, Principal Engineer, Tektronix

Ravinder Ajmani, Technologist, Electronic Design Engineering, Western Digital

John Andresakis, Technical Marketing Leader, DuPont Yianni Antoniades, Senior Electrical Engineer, Winchester Interconnect

Bruce Archambeault, Retired

Pervez Aziz*, Senior Principal Engineer, Nvidia **Seungyong (Brian) Baek**, SI Architect, Apple

Nitin Bhagwath, Principal Technical Product Manager,

Mentor Graphics, a Siemens Business

Rula Bakleh*, Principal SI/PI Engineer, Graphcore **Heidi Barnes***, SI/PI Applications Engineer, Keysight

Technologies

Josiah Bartlett, Principal Engineer in Asics and Technology Organization, Tektronix

Dale Becker, Distinguished Engineer, IBM

Wendem Beyene*, Principal Engineer/Manager, Programmable Hardware Engineering, Intel Luis Boluna, Sr. Application Engineer, Keysight Technologies

David Brunker, Technical Fellow, Molex Robert Carter*, Vice President of Technology and Business Development, Oak-Mitsui Technologies Chris Cheng*, Distinguished Technologist, HP Enterprise David Choe, Principal Applications Engineer, Cadence Antonio Ciccomancini Scogna*, Signal Integrity and EMC Technologist, Western Digital Tom Cohen, Principal Engineer, Amphenol

Davi Correia, Sr. Principal Application Engineer, Cadence Design Systems **O.J. Danzy**, Senior Application Engineer, Keysight Technologies Jan De Geest, Senior Staff R&D Signal Integrity Engineer, Amphenol Jay Diepenbrock, Consultant, SIRF Consultants Vladimir Dmitriev-Zdorov, Principal Engineer, Mentor Graphics, a Siemens Business Greg Edlund, Senior Engineer, IBM Jason Ellison*, Sr. Staff Signal Integrity Engineer, Amphenol Paul Franzon, Cirrus Logic Distinguished Professor, Director of Graduate Programs, NCSU Sanjeev Gupta*, R&D Manager, Intel Sunil Gupta, SIPI Technical Lead, Qualcomm Technologies Robert Haller*, Sr. Principal Hardware Engineer, Extreme Networks Gert Havermann, Signal Integrity Engineer, HARTING Allen F. Horn III*, Research Fellow, Rogers Rockwell Hsu, Technical Leader, Cisco Systems Seunghyun Hwang, Principal Engineer, Nvidia Namhoon Kim, Chip Package Design Architect, Google Beomtaek Lee, Sr. Principal Engineer, Intel Mike Li*, Fellow, Intel Zhe Li, Hardware Engineer, Google Cathy Liu*, Distinguished Engineer, Broadcom Chris Loberg*, Marketing Manager, Tektronix Om Mandhana, Staff Services AE, Cadence Design Systems Henri Maramis, President/CEO, TrackingTheWorld Marko Marin*, Technical Account Manager, ANSYS Jon Martens, Fellow, Anritsu

TPC MEMBERS

Mehdi Mechaik*, Sr. Signal Integrity Engineer, Amazon Lab126 Ted Mido, Principal R&D Engineer, Synopsys Martin Miller, Chief Scientist, Teledyne LeCroy Akshay Mohan, EM Technology Lead, Amazon Lab126 Jose Moreira*, Senior Staff Engineer, Advantest Zhen Mu*, Product Engineering Architect, Cadence Design Systems Riaz Naseer, Staff Signal Integrity Engineer, Ciena Alfred P. Neves*, Chief Technologist, Wild River Technology Istvan Novak*, Principal Signal and Power Integrity Engineer, Samtec Dan Oh, Vice President, Samsung Vishram Pandit*, Technology Lead (Signal/Power Integrity), Intel Jongbae Park, System SI Architect, Apple Pete Pupalaikis, VP, Technology Development, Teledyne LeCrov Kelvin Qiu, Senior Signal Integrity and Power Integrity Engineer, Google Fangyi Rao, Master Engineer, Keysight Technologies Lee Ritchey, President, Speeding Edge Gerardo Romo-Luevano*, Sr. Staff Engineer/Manager, Qualcomm Steve Sandler, Managing Director, Picotest Venkat Satagopan*, Sr. Staff Signal Integrity Engineer, Nvidia Yan Fen Shen, Analog Engineer, Intel Masashi Shimanouchi, Design Engineer, Intel Yuriy Shlepnev, President, Simberian Ben Silva, Analog Engineer, Intel Bert Simonovich, President, Lamsim Enterprises Chad Smutzer, Senior Engineer, Mayo Clinic Mike Steinberger, Lead Architect, Serial Channel Products, SiSoft Ransom Stephens*, Signal Integrity Sage, Ransom's Notes

Changyi Su, Staff Design Engineer, Xilinx Suresh Subramaniam, Principal Engineer/Architect, Xilinx Madhavan Swaminathan, John Pippin Chair Professor in Microsystems Packaging & Emag, Georgia Tech Donald Telian, Owner/Consultant, SiGuys Lars Thon*, Consultant, LT Engineering Thomas To*, Director, Xilinx Peter Tomaszewski, Sr Field Applications Engineer, Tektronix Ambrish Varma*, Sr. Principal Software Engineer, Cadence Design Systems Harald von Sosen, Principal Engineer, Mentor, A Siemens Business Juan Wang, Senior Staff Engineer, Xilinx Scott Wedge, Principal Engineer, Synopsys Todd Westerhoff*, Product Marketing Manager, Mentor, A Siemens Business Markus Witte, Systems Engineer, Grimme Randy Wolff, Principal Signal Integrity Engineer, Micron Technology Hsinho Wu*, Design Engineer, Intel Ken Wu, Hardware Engineering Manager, Google Chris Wyland*, Sr. Staff Engineer, Juniper Networks Kai Xiao, Principal Engineer, Intel Mobashar Yazdani*, Strategic Semiconductor Manager, Google Iliya Zamek, Architect, Technical Manager, HCL America Geoffrey Zhang, Distinguished Engineer and Supervisor, Xilinx Pavel Zivny, Domain Expert, Tektronix *2021 track co-chair

DESIGNOON® 2021 WHERE THE CHIP MEETS THE BOARD

EXHIBITOR ADVISORY COMMITTEE

A special thank you to the DesignCon 2021 Exhibitor Advisory Committee (EAC) who show dedication to DesignCon and assist with efforts to maximize the exhibiting experience for all participating suppliers.

Lorri Bupp, Marketing Specialist, Amphenol Jennifer Chausse, Field Marketing Manager, Mentor, A Siemens Business

Harry Christie, VP of Sales, Gigatest Labs

Deanne Deville, Events Manager, Socionext America **Verly Flores**, Field Marketing Manager, Cadence Design Systems

Thomas Hudak, Marketing Communications Manager, Tektronix

Hilary Lustig, Marketing Communications Manager, Teledyne LeCroy

Yuriy Shlepnev, President, Simberian Inc. Eriko Yamato, Marketing Manager, Oak-Mitsui Technologies

EMERGING ENGINEER COMMITTEE

Thank you to the members of the DesignCon 2021 Emerging Engineer Committee (EEC) who aim to ensure that tomorrow's engineering leaders have access to knowledge owned by the current generation of engineers, and that that knowledge is passed on, in part, through DesignCon today.

Sierra Catelani, Test Engineer, ChargePoint Hansel Dsilva, Signal Integrity Engineer, Achronix Semiconductor

Cathy George, System Engineer, Continental Automotive **Deepak Pai Hosadurga**, RF Defense Engineer, Amazon Lab126

Abishek Manian, Analog Design Engineer, Texas Instruments

Scott Neally, Signal Integrity Engineer, Graphcore **Jinsung Youn**, Research Scientist, Large-Scale Integrated Photonics, Hewlett Packard Labs

Tim Wang Lee, Signal Integrity Application Scientist, Keysight Technologies

Licheng (Joshua) Wu, Hardware Systems Engineer, NXP Semiconductors

DRIVE WORLD+ESC ADVISORY BOARD

We would like to thank the Drive World+ESC 2021 Advisory Board for their contributions as reviewers of all call-for-speaker submissions to develop a conference of the highest quality and industry relevance.

Mike Anderson, Embedded Systems Architect, The Aerospace Corporation Daniel Beeker, Senior Principal Engineer, NXP Semiconductors Jacob Beningo, President, Beningo Embedded Group Chuck Brokish, Director of Transportation Business Development, Green Hills Software Lindsay Craig, Entrepreneur/Engineer/Educator, QuestBotics John Edwards, DSP and Embedded Systems Consultant, Numerix-DSP Charles Fulks, Senior Engineer, Intuitive Research and Technology Dwight Howard, Consultant Eli Hughes, Co-Founder, Tzero Randy Leberknight, Senior Firmware Engineer, Embedded Systems Consulting Charles Lord, President, Blue Ridge Advanced Design and Automation Phil Magney, Founder & President, VSI Labs Gunnar Newquist, Product Manager, Hamilton Robotics Robert Oshana, VP Software Engineering Research & Development, Microcontroller Group, NXP Semiconductors Shawn Prestridge, US FAE Team Leader, IAR Systems Chris Shore, Director of Product Marketing, Arm Adam Taylor, Founder and Lead Consultant, Adiuvo Engineering & Training Willard Tu, Sr. Director - Automotive Business Unit, Xilinx Siva Uppalapati, Consultant, Asic Research Kenneth Wada, President, Aurium Technologies Brian Zahnstecher, Principal, PowerRox

Join us for a full day of education and live demos

Anritsu Test Talks

PAM4 BER and JTOL Test Solution for PCIe[®] 6.0 & Beyond

PCIe 5.0 Receiver LEQ Compliance Test

Automotive Test Solutions

And More!

August 18 D Room 210F



© 2021 Anritsu Company



GENERAL INFORMATION

DesignCon will take place August 16 -18, 2021, at the

Drive World + ESC (Embedded Systems Conference)

San Jose McEnery Convention Center in San Jose, CA.



Enjoy complimentary cocktails, picnic-themed foods, lawn games, and more at DesignCon's annual Welcome Reception, this year themed as a Family Reunion for engineers. Open to all pass types.

Sponsored by:



CONFERENCE HOURS

to the convention center in 2021.

DesignCon welcomes its partner conference

LOCATION & DATES

Monday, August 16, 2021: 8:00 am – 6:00 pm Tuesday, August 17, 2021: 8:00 am – 5:30 pm Wednesday, August 18, 2021: 8:00 am – 5:30 pm

EXHIBIT HOURS

Tuesday, August 17, 2021: 11:00 am – 6:00 pm Wednesday, August 18, 2021: 11:00 am – 6:00 pm

HEALTH & SAFETY

Health and safety are a top priority at this event. Visit DesignCon.com for up-to-date health and safety information and check the event app for any needed communications during the event.

REGISTRATION

All badges will be digital in 2021 and will be sent ahead of the event via email from DesignCon. Attendees, speakers, media, and exhibitors who need assistance with digital badging or who do not have a smartphone device that supports this feature can visit the event's registration area, located in room 220B. Please present a photo ID for assistance.

CHARGING STATIONS

Charging stations can be found at four locations throughout the event – the left and right sides of the expo floor, near Market Terrace and in the keynote hallway outside of the Grand Ballroom.

Sponsored by:



CONCESSIONS

Concessions are available at the back of Exhibit Hall 1 at the San Jose McEnery Convention Center. The Convention Center is a cashless venue, only accepting credit cards or e-payment at concession stands.

CONFERENCE BREAKS

Conference breaks will be provided during conference break times for paid conference passholders, event committee members and speakers. The breaks will be located on the Market Terrace near the 210 and 211 session rooms.

Sponsored by: **Tektronix**[®] **LEONI**



CONFERENCE BREAKFAST

Complimentary breakfast is available on Monday, August 16 from 7:00 - 8:00 am in room 230A for all paid conference attendees, event committee members and speakers.

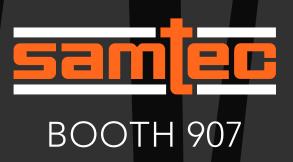
Sponsored by:



The program is subject to change without notice. Informa Markets reserves the right to alter venue, speakers, content, and/or other offerings.

THE TECHNICAL RENAISSANCE IS... SILICON-TO-SILICON SOLUTIONS

Samtec is prepared for the technical renaissance with innovative Silicon-to-Silicon solutions that exceed standard connectivity demands.



2M ON 2021 THE BOARD

GENERAL INFORMATION

CONFERENCE NETWORKING LUNCH

Complimentary lunches are available daily for conference attendees, event committee members, and speakers. Monday, August 16: Room 230A Tuesday, August 17: Expo Hall 1

Wednesday, August 18: Expo Hall 1

Tuesday Sponsor:

📣 MathWorks[®]

CHIPHEAD THEATER

Check out the specialty programming in the Chiphead Theater featuring panels, training, and more right on the expo floor.

Sponsored by:



CAREER ZONE

The Career Zone is a designated area with targeted sessions to help you advance your career. Located on the expo floor, the full schedule can be found in the main agenda. Head shots will be provided on a first come first served basis. Sign up for 1:1 salary negotiation training at the Career Zone, beginning at expo open.

Sponsored by:



DIGITAL ZONE

Catch live interviews recorded with engineering thought leaders right on the expo floor in this new DesignCon feature.

Sponsored by: **Rambus** cadence

PRODUCT SHOWCASE

See live, interactive demos at exhibitor booths as companies give you a first-hand look at their latest products and features. Demo schedule can be found in the main agenda.

BOOTH BAR CRAWL

Wind down at daily meet-and-greets around the expo floor, from 5:00 PM - 6:00 PM, Tuesday and Wednesday. Come for the conversation, stay for the bites and beverages.

Sponsored by:

Rosenberger

Amphenol



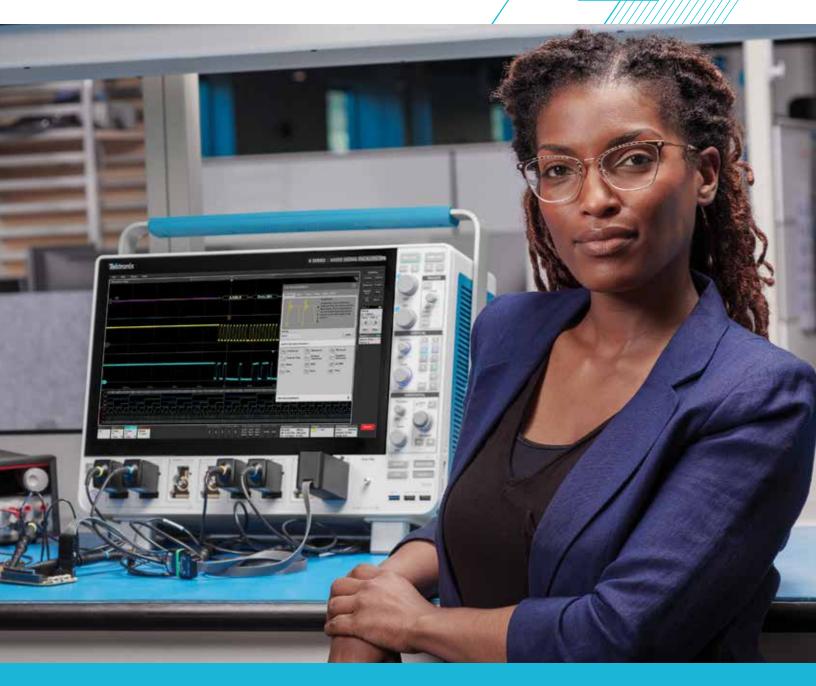
CARLISLE

PRESENTATION DOWNLOAD

Use the QR code below to download select speaker presentations. Note: Some presentations are available only for paid conference attendees. Login information will be emailed to paid conference attendees ahead of the event.







6 SERIES B MS0 #EngineeringTheFuture www.tek.com

GENERAL INFORMATION



APP

This event utilizes a smartphone app to convey any event changes, as well as provide information on the event such as session details, venue maps, and hours. Use the QR code below to download the free event app.

GN U ON 2021

THE BOARD



EVALUATIONS

We value attendee feedback when planning the conference. Conference attendees can evaluate sessions using the below QR code.



INFORMATION DESK

An information desk is available in the event's registration area in room 220BC. Stop by if you have any questions on the event or need to speak to a member of event management.

INTERNET ACCESS

Wireless internet access is available throughout the building. Use the network Wickedly Fast WIFI – no password is required.

LOST & FOUND

Lost and found is located at event registration in room 220BC.

PUBLIC TRANSPORTATION & PARKING

Information on public transportation and the event's discounted parking rates can be found on DesignCon.com's Plan Travel tab.

MINORS

For safety, insurance, and security reasons, no one under the age of 18 is permitted in the expo halls or conference meeting rooms at the event. No childcare services are available onsite.

MEDIA CENTER

Located on the lower level of the San Jose McEnery Convention Center in room 113, the Media Center is open to registered exhibitors and their representatives, as well as members of the press and analysts. You must have a media badge for access. If you would like to set up any meetings please reach out to: pr.ime@informa.com.

SPEAKER CENTER

Located on the lower level of the San Jose McEnery Convention Center in room 114, the Speaker Center is open to registered speakers, as well as members of the DesignCon, Drive World, and ESC planning committees. You must have a speaker badge or be a current committee member for access.



INSTANT INSIGHTS MEETS IN-DEPTH INFORMATION

Attend the full-day seminar series Tuesday, August 17th 8am-5pm in LL20 CD

VISIT BOOTH #607

INTRODUCING THE R&S®RT06 OSCILLOSCOPE SERIES

ROHDE&SCHWARZ



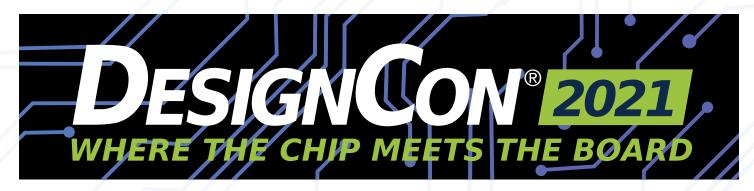
She's got the smarts, but now she needs the speed. Molex expertise across the 5G spectrum connects kids with a bright future.

Molex is enabling faster, reliable access that improves lives.

creating connections for life

Learn more at molex.com/creating-connections

molex



KEYNOTES Open to All Attendees



Mike Fitton VP, Data Platforms Group & GM, Network Business Division at Intel



Mark Wehde Chair, Division of Engineering Mayo Clinic



Indu Vijayan Director of Product Management for ADAS Solutions, AEye

Beyond 5G: The Need for End-to-End Programmability

Monday, August 16 11:00 – 11:45 am Grand Ballroom – 220A

5G has tremendous potential to enable revolutionary services, and 6G will see the convergence of compute and communication, all of which will stress our ability to deliver increasing performance within constrained power envelopes. This keynote will explore how these demands will drive the dual requirements of scalability and programmability.

The Future of Healthcare is at the Edge

Tuesday, August 17 10:20 – 11:00 am Grand Ballroom – 220A

The recent pandemic accelerated the transition from traditional hospitalcentric medical care systems to a more virtual care—only made possible with advances in computational power, communications, and data storage. Conventional wisdom implies that the cloud is the future of healthcare, but the future of medical device innovation is really at the edge.

Autonomous Vehicle Technology: Sensing What Matters

Wednesday, August 18 10:00 – 10:45 am Grand Ballroom – 220A

What is the current market for autonomous vehicles, what are the growth drivers, and how does the industry solve the most challenging edge cases inhibiting broader rollouts? With a real-time, interactive driving demo, this keynote shows how Al-driven sensing is helping vehicles see smarter, respond faster, and accelerate adoption of autonomous features.

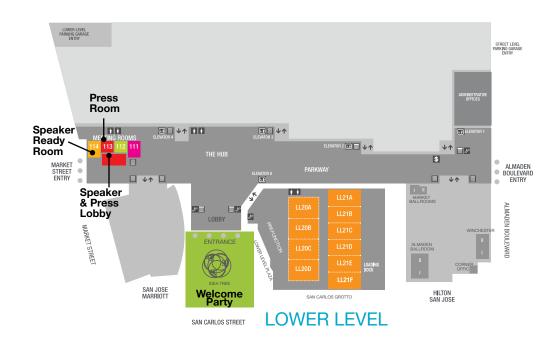
CONFERENCE MAP

R

2021

THE BOARD





RO **SESSIONS – MONDAY, AUGUST 16**

7:00 AM – 5:00 PM 8:00 AM - 10:30 PM Tutorial — What is FEC & How Do I Use It? **Registration Open** Grand Ballroom 220BC **(9**) Exec Ballroom 210A All-Access Pass (8) 7:00 AM - 8:00 AM **Tutorial – Feeding the Beast: Consumption-based Conference Breakfast** PCB Design (11) All-Access Pass, Boot Camp Pass, Drive World+ESC Pass, All-Access Pass Exec Ballroom 210B 2-Day Pass, Speakers, TPC, Media Meeting Room 230A Tutorial – Powering the Connected Vehicle: Sponsored by: **(D)** MathWorks A Focus on Energy Efficiency All-Access Pass, Drive World+ESC Pass Meeting Room 212C 8:00 AM - 4:15 PM Boot Camp — PI Ecosystem Simulation & Tutorial – Writing Reliable Multicore Code Measurement: VRM + PDN + Digital Load All-Access Pass, Drive World+ESC Pass Meeting Room 212D Access Pass, Boot Camp Pass Meeting Room 211CD 11:00 AM - 11:45 AM Boot Camp - IBIS-AMI Model Creation Keynote - Beyond 5G: The Need for All-Access Pass, Boot Camp Pass Meeting Room 211AB End-to-End Programmability Open to All Grand Ballroom 220A 11:45 AM – 1:45 PM **Conference Networking Lunch**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & (4) Processing for PCBs, Modules & Packages
- (5) Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, 6 Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER (8)
- (9) High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power (10) **Distribution Networks**
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement (12) Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for (14) Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- Best Paper Awards Finalist

 - 🛞 Boot Camp
 - Chiphead Theater Presentation
 - (Career Zone
 - General Event
 - 🛞 Special Event
 - Sponsored Sessions

All-Access Pass, Boot Camps, Speakers, TPC Meeting Room 230A

()

(10)

(ez)

(13)

(2)

THE BOA

SESSIONS – MONDAY, AUGUST 16

1:45 PM - 4:15 PM

Tutorial – PCB Design Principles for Implementing High Density Semiconductor Package Technology, WLP, PLP, 2D, 2.5D & 3D All-Access Pass Exec Ballroom 210C Tutorial — Design & Verification for High-Speed (8) I/Os at 10 to 112 Gbps & beyond with Jitter, Signal Integrity & Power Optimized All-Access Pass

Exec Ballroom 210A

(iii) Tutorial — Radiated Emissions: Design for **Compliance, Debugging & Pre-Compliance** Testing All-Access Pass Exec Ballroom 210B

- Tutorial The Building Blocks of Automated **(B)** Vehicles
- All-Access Pass, Drive World+ESC Pass Meeting Room 212C
- (E) Tutorial Effective PCB Design: Techniques to Improve Performance Meeting Room 212D

All-Access Pass, Drive World+ESC Pass

4:45 PM – 6:00 PM

Panel – PCIe 6.0: New Challenges & New Tests for an Old Standard Open to All Exec Ballroom 210A Panel — The Case of the Closing Eyes: (8)

Testing for 400G

Meeting Room 211CD

6:00 PM - 8:00 PM

Open to All

DesignCon Family Reunion Welcome Reception -**Sponsored by Samtec** Open to all DesignCon and Drive World+ESC Attendees, Exhibitors, Speakers, TPC, Media. Badges Required for Entry. **Outdoor Plaza at the Idea Tree** Sponsored by:

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & (4) Processing for PCBs, Modules & Packages
- (5) Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, (6) Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & (8) Improving Jitter, Noise & BER
- (9) High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power (10) **Distribution Networks**
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for (14) Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware E **Design & Verification**
- F ESC Embedded Software **Design & Verification**
- ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- (8) Best Paper Awards Finalist
 - Boot Camp
 - Ohiphead Theater Presentation
 - Career Zone
 - General Event
 - 🛞 Special Event
 - Ø Sponsored Sessions

7:00 AM- 6:00 PM

Registration Open

Grand Ballroom 220BC

THE

BO

8:00 AM - 8:40 AM

- Enabling an XSR Channel for an **Optical Co-packaged Ethernet Switch** All-Access Pass, 2-Day Pass Meeting Room 212AB
- (4) The Impact of Emerging Ultra-thin Film PCB Laminates Technology on PDN Architecture & (10) **Power Noise Reduction Strategies** All-Access Pass, 2-Day Pass Meeting Room 211AB
- (5) Validation Techniques for DDR5 RDIMM **Power Management Systems** (10) All-Access Pass, 2-Day Pass **Exec Ballroom 210A**
- In Situ LPDDR4 Interposer Created on
- 6 HDI PCB for Debugging & Testability (12)
 - All-Access Pass, 2-Day Pass Meeting Room 211CD
- Specification-based IBIS-AMI Model

PCIe 5.0 32GT/s (2)

- All-Access Pass, 2-Day Pass
- **Exec Ballroom 210C**

8:00 AM - 8:40 AM

8	A Generalized PSIJ Sensitivity Analysis Method Based on PSRR Response			
	All-Access Pass, 2-Day Pass	Exec Ballroom 210B		
A	Transitioning from R&D Software Safe Autonomous Systems All-Access Pass, 2-Day Pass, Drive World+ESC Pass	to Meeting Room 212C		
0	In-Situ De-embedding Open to All	Exec Ballroom 210F		
8:3	80 AM – 9:10 AM			
Ø	Advanced Testing Challenges at 32GBaud PAM4 with PCIe 6.0			

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & (4)Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design (5) for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, 6 Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- (9) High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power **Distribution Networks**
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for (14) Microelectronics, Signaling & System Design

A Drive World - Security & Safety

Open to All

- Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware **Design & Verification**
- ESC Embedded Software **Design & Verification**
- ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- 응 Boot Camp
- Ohiphead Theater Presentation

Exec Ballroom 210E

- (Career Zone
- General Event
- 🛞 Special Event
- Sponsored Sessions

THE BOA

9:00 AM – 9:40 AM

3 12	Receiver Design Drives Op Transmitter Test in the PAN All-Access Pass, 2-Day Pass	
8 7	Fiber Weave Intra-pair Ske & Mitigation on 32-Gbps N & 64-Gbps PAM4	-
	All-Access Pass, 2-Day Pass	Exec Ballroom 210B
10	Capacitor Placement Strat Optimum Power Integrity	tegies for
	All-Access Pass, 2-Day Pass	Meeting Room 211CD
8 14	Neural Language Model En Fast & Robust Routing on All-Access Pass, 2-Day Pass	
H	Getting Started with Multion Microcontroller Application All-Access Pass, 2-Day Pass, Drive World+ESC Pass	
Ø	Emerging Compute Archite Data Center	-
	Open to All	Exec Ballroom 210G

9:00 AM - 9:40 AM

8 (1)	Analysis of Electro-static Discha to Through-silicon Via All-Access Pass, 2-Day Pass	rge Exec Ballroom 210C		
0	Developing Good Test Fixtures for De-embedding of S-Parameters Open to All	or Exec Ballroom 210F		
(1) (3)	Wireless Memory Test: A Breakthrough Solution for Highly Reliable HBM			
	All-Access Pass, 2-Day Pass	Exec Ballroom 212AB		
9:2	0 AM – 10:05 AM			
Ø	Next Gen Development in Type-C Open to All	Ecosystem Exec Ballroom 210E		
9:5	0 AM – 10:20 AM			
•	DesignCon Awards Presentations Open to All	S Grand Ballroom 220A		
10:20 AM – 11:00 AM				
-				

Keynote – The Future of Healthcare is at the Edge Open to All

Grand Ballroom 220A

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (f) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- E ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- () Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- Career Zone
- General Event
- 🛞 Special Event
- Sponsored Sessions

DesignCon.com / #DesignCon

WHERE THE CHIP MEETS THE BOARD

SESSIONS – TUESDAY, AUGUST 17

11:00 AM - 11:50 AM

Mastering Phase Noise/Jitter Measurements
 Open to All
 Exec Ballroom 210F

11:00 AM - 6:00 PM

Expo Hall Open
 Open to All

11:10 AM - 11:50 AM

- COM based IBIS-AMI for 106/112Gbps
 System Compliance
 All-Access Pass, 2-Day Pass
 Exec Ballroom 210A
- A Case Study in the Development of

 a 112Gbps-PAM4 Silicon & Connector
 Test Platform
 All-Access Pass, 2-Day Pass
- BER Optimization Through Noise-shaping & Precoding for 112-G SerDes Applications All-Access Pass, 2-Day Pass
 Meeting Room 211CD
- (1) Predicting Emissions Properties All-Access Pass, 2-Day Pass Meeting Room 212AB

Evaluating Fixture Removal Techniques for Sensitivities & Uncertainties

All-Access Pass, 2-Day Pass

11:10 AM - 11:50 AM

Crosstalk & Return Loss Budget Trade-Offs (13) Among Different Sections in the SerDes Channel $\overline{\mathbf{7}}$ All-Access Pass, 2-Day Pass Meeting Room 211CD **Power Integrity Principals for nm-CMOS Devices** (10) All-Access Pass, 2-Day Pass Exec Ballroom 211AB $(\mathbf{1})$ (A) Debugging V2X Systems for Safety & Security All-Access Pass, 2-Day Pass, Drive World+ESC Pass Meeting Room 212C Selecting the Right High-Performance Memory (@) Solution Open to All **Exec Ballroom 210G** 11:15 AM - 11:55 AM Bench Top Troubleshooting the Top Three EMC Issues: Radiated Emissions, Radiated Immunity & ESD Open to All Chiphead Theater (Booth 122) **Physical Layer Validation Challenges of** Characterizing 100 Gbps/lane Designs Open to All Exec Ballroom 210E

TRACKS AND LEGEND

Expo Hall

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

Measurement, Simulation & Improving Jitter, Noise & BER

Exec Ballroom 210B

- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- Career Zone
- General Event
- Special Event
- Sponsored Sessions
- 0 -

THE BO

11:30 AM – 11:45 AM	12:10 PM – 12:50 PM
Product Showcase: Samtec Open to All Booth 907	 Enabling Secure SoC Design by Fast Power-noise & EM Side-channel Emission Analysis All-Access Pass, 2-Day Pass Exec Ballroom 210B
12:05 PM – 12:45 PM	(1) All-Access Fass, 2-Day Fass Exec Ballroom 210B
Solving Your Forward Error Correction Problems Open to All Exec Ballroom 210E	 Effects of Via Configurations on End-to-End System-Level Performance for PCIe Gen5 Modular Solutions
12:00 PM – 12:15 PM	(3) All-Access Pass, 2-Day Pass Exec Ballroom 210C
 Product Showcase: Xpeedic Technology, Inc. Open to All Booth 913 	 Cost-effective Power Integrity Methodology for Integrating Next-generation High-speed IPs
12:00 PM – 1:30 PM	All-Access Pass, 2-Day Pass Meeting Room 211CD
Career Zone — Women & Minorities in STEM Open to All Booth 1025	 System Level Impact to 100-Gb/s Electrical Signaling Due to Common to Differential Mode
12:10 PM – 12:50 PM	Conversion
Designing 224-G High Performance FPGA Package & Board with Confidence All-Access Pass, 2-Day Pass	All-Access Pass, 2-Day Pass Exec Ballroom 210A
Plated-through-hole Via Design Specifications	Open to All Exec Ballroom 210G
 for 112-G Serial Links All-Access Pass, 2-Day Pass Meeting Room 212AB 	Accurately Measuring Data Dependent Jitter on High Bitrate Signals Open to All Exec Ballroom 210F
	•

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- (g) High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
 Machine Learning for
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- (Career Zone
- General Event
- Sponsored Sessions

12:15 PM -	- 12:55 PM			2:00	PM – 2:40 PM
Armou Open to	r-Plating Your C/C	++ Code Chiphead Theat	er (Booth 122)		Holistic Power Supply I Accumulation Respons
12:30 PM -	- 2:30 PM				Chiplet Interconnect Sy All-Access Pass, 2-Day Pass
	ence Networking I ss Pass, Boot Camps, Sp ed by: A Math	peakers, TP	Expo Hall	ž	Hidden Secrets of IBIS All-Access Pass, 2-Day Pass
1:15 PM –	1:55 PM			× I	Multimode System Des Photonic Integrated Ci
\sim	e & Thrive in the Co	oming Semico	nductor		All-Access Pass, 2-Day Pass
"Capac Open to J	city War"	Chiphead Theat	er (Booth 122)		I12G+ Crosstalk Simula ₋ines Based on MOP M
1:45 PM –	3:15 PM			(13)	All-Access Pass, 2-Day Pass
Career Open to	Zone – Emerging		tworking (Booth 1025)		Next Generation 224-G Electrical I/O & Link Sy
2:00 PM –	2:15 PM			4	All-Access Pass, 2-Day Pass
Production Open to A	t Showcase: Roho	le & Schwarz l	JSA Inc. Booth 607	\widetilde{O} 1	JSB4 Cable & Connect for Client Systems All-Access Pass, 2-Day Pass
2:00 PM –	6:00 PM			(E)	ncreasing Code Secur
Career Open to a	Zone – 1:1 Salary	-	Advice (Booth 1025)	\sim I	MISRA C & SEI CERT C All-Access Pass, 2-Day Pass,

THE BOA

8 1 5	Holistic Power Supply Induced Accumulation Response Surface Chiplet Interconnect System All-Access Pass, 2-Day Pass	ce Modeling for
2	Hidden Secrets of IBIS Samplir	ng Specifications
Ĩ	All-Access Pass, 2-Day Pass	Exec Ballroom 2100
3 7	Multimode System Design for I (Photonic Integrated Circuit) In All-Access Pass, 2-Day Pass	
4 3	112G+ Crosstalk Simulation of Lines Based on MOP Model All-Access Pass, 2-Day Pass	Differential Meeting Room 212AE
9	Next Generation 224-Gbps Hig Electrical I/O & Link Systems All-Access Pass, 2-Day Pass	hest-Speed Meeting Room 211AE
13 7	USB4 Cable & Connector Desig for Client Systems All-Access Pass, 2-Day Pass	gn Exec Ballroom 210E
E	Increasing Code Security by in MISRA C & SEI CERT C All-Access Pass, 2-Day Pass, Drive World+ESC Pass	plementing Meeting Room 212D

TRACKS AND LEGEND

To See Speakers for Each Session - Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Ohiphead Theater Presentation
- (S) Career Zone
- General Event
- Special Event
- Sponsored Sessions

THE BOA

2:00 PM - 2:40 PM

0	High-Speed Digital Test Fu Open to All	Indamentals Exec Ballroom 210F	() () () () () () () () () () () () () (
Ø	What's Next for High-Band Open to All	lwidth Memory? Exec Ballroom 210G	6 A
2:1	5 PM – 2:55 PM		A
•	The Modernization of Test Open to All	& Measurement Chiphead Theater (Booth 122)	13 V 8 A
3:0	00 PM – 3:15 PM		BA
Ø	Product Showcase: Keysig Open to All	ht Technologies Booth 807	A A D
3:0	00 PM – 3:40 PM		(F) A
(8) (3)	Highly Integrated Silicon P Beyond 800Gbps All-Access Pass, 2-Day Pass	hotonics Technology Meeting Room 212AB	R A D
(B) (5) (6)	From Simulation to Produc Look at Designing and Pro the World's First PAM-4 Me All-Access Pass, 2-Day Pass	ductizing GDDR6x,	 P O O O Ir N
6 (13)	Electrical Optimization for Small Form Factor Syst	tems	0

3:00 PM - 3:40 PM

8 7 6	Design Case Study & Experiment a 100 Gb/s Per Lane C2M Link U Operating Margin All-Access Pass, 2-Day Pass	
12	Extreme Measurement Challenge All-Access Pass, 2-Day Pass	es Meeting Room 211CD
13 8	Windowing & Risetime All-Access Pass, 2-Day Pass	Exec Ballroom 210A
B	Adaptive MAP & SPaT Messaging Autonomous Vehicles: A Smart C All-Access Pass, 2-Day Pass, Drive World+ESC Pass	
F	Automated Failure Analysis of Remote Edge Devices at Scale All-Access Pass, 2-Day Pass, Drive World+ESC Pass	Meeting Room 212D
0	Power Integrity Measurement Fu	Indamentals Exec Ballroom 210F
ð	Integrated MIPI IP Solutions for Next-Generation Displays Open to All	Exec Ballroom 210G

TRACKS AND LEGEND

To See Speakers for Each Session - Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- 😔 Boot Camp
- Ohiphead Theater Presentation
- (S) Career Zone
- General Event
- Special Event
- Sponsored Sessions

DESIGNUON® 2021 WHERE THE CHIP MEETS THE BOARD

SESSIONS – TUESDAY, AUGUST 17

3:15 PM - 3:55 PM

- Panel Building an Autonomous Test Vehicle
- Open to All
- Chiphead Theater (Booth 122)

3:30 PM - 4:30 PM

Career Zone – How to Start a Start-Up
 Discussion
 Open to All
 Career Zone (Booth 1025)

4:00 PM – 5:15 PM

- Panel Interoperable Common Electrical
 Interfaces (CEI) & Channel Standards Update: An OIF Perspective
 Open to All
 Meeting Room 211AB
- Panel Avoiding Disaster: Planning for Laminate
 Electrical Properties as a Function of Temperature
 Open to All
 Meeting Room 212AB

4:00 PM - 4:40 PM

Ø	Automotive SERDES technology and measurements from1000BASE-T1 to 10GBASE-T1		
	Open to All	Exec Ballroom 210F	
0	2.5D/3D Packag	ging Solutions for AI and HPC Exec Ballroom 210G	
4:1	5 PM – 4:55 PM		
•	Electromagnetic Open to All	c Fields for Normal Folks Chiphead Theater (Booth 122)	
4:3	30 PM – 6:00 PM		
(9)	Career Zone — Open to All	Open Networking Career Zone (Booth 1025)	
5:0	00 PM – 6:00 PM		
€	Booth Bar Craw Open to All	Beer Halls at Front & Rear of Expo Floor	

Sponsored by: Rosenberger

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
 Machine Learning for
- Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Ohiphead Theater Presentation
- (S) Career Zone
- General Event
- 🛞 Special Event
- Sponsored Sessions

THE BOA



8:00 AM - 8:40 AM 7:00 AM - 6:00 PM Machine Learning Based Backchannel Registration Open Grand Ballroom 220BC (14) Mechanism for Expert-free High-speed (7) Link Equalization Tuning 8:00 AM - 8:40 AM All-Access Pass, 2-Day Pass Meeting Room 211CD **Reflection Removal for High-speed** Signal Link & Mid-bus Probing Architecting a Secure Central Vehicle Gateway: (8) All-Access Pass, 2-Day Pass Exec Ballroom 210C Using OPEN Source Software All-Access Pass, 2-Day Pass, 6 LPDDR5 (6.4 Gbps & Beyond) 1-tap & Multi-tap Drive World+ESC Pass Meeting Room 212C 5 DFE Optimal Weights for Signal Integrity All-Access Pass, 2-Day Pass Exec Ballroom 210A E) Embedded Safety & Security: Shift Left & Design It Right Proposal for Automated E-O-E IBIS-AMI Modeling All-Access Pass, 2-Day Pass, All-Access Pass, 2-Day Pass Exec Ballroom 210B Drive World+ESC Pass Meeting Room 212D Matternate Power Integrity Analysis Methodology: 8:30 AM - 9:10 AM PCBs, FPGAs, ASICs & MCMs $(\mathbf{1})$ Quick Guide to Recalibrate Your Signal Integrity All-Access Pass, 2-Day Pass Meeting Room 211AB Intuition for Memory Interfaces Open to All Exec Ballroom 210E 1 Two Novel Skew Compensation Techniques for **Reducing Mode Conversion** Meeting Room 212AB All-Access Pass, 2-Day Pass

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

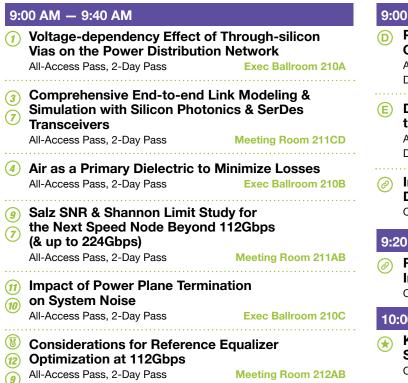
- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- Career Zone
- 阃 General Event
- 🛞 Special Event
- Sponsored Sessions

DesignCon.com / #DesignCon

THE BOA



9:00 AM - 9:40 AM

D	PCI Express Technology: Accelerating Automotive Connectivity, from Infotainment to ADAS All-Access Pass, 2-Day Pass,		
	Drive World+ESC Pass	Meeting Room 212C	
E	DevOps for Hardware Junkies: C the Gap with Automated Infrastru All-Access Pass, 2-Day Pass,		
	Drive World+ESC Pass	Meeting Room 212D	
Ø	Importance of Sequential Peeling De-embedding When Designing Open to All		
9:2	20 AM — 10:05 AM		
Ø	Ramping Up on the Latest Skills for Power Integrity Design/Debug		
	Open to All	Exec Ballroom 210E	
10:	:00 AM — 10:45 AM		
	ℜ Keynote — Autonomous Vehicle Technology:		

 Keynote – Autonomous Vehicle Technology: Sensing What Matters
 Open to All
 Grand Ballroom 220A

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (1) Best Paper Awards Finalist
- Boot Camp
- Ohiphead Theater Presentation
- (Career Zone
- General Event
- Special Event
- Sponsored Sessions

THE BOA **SESSIONS – WEDNESDAY, AUGUST 18**

10:15 AM - 11:15 AM 11:10 AM - 11:50 AM Open House for PCIe 5.0 RX LEQ Test Live demo **IP/PHY Solutions & Rigorous Characterization** (Walk in at any time!) are Critical for Successful USB4/Thunderbolt 4 Implementations Open to All Exec Ballroom 210F All-Access Pass, 2-Day Pass Exec Ballroom 210B 11:00 AM - 6:00 PM **(B)** Innovative Designs for Optimizing 112G+ BGA Expo Hall Open (13) Fan-out And Connector Footprint Crosstalk Open to All Expo Hall All-Access Pass, 2-Day Pass Exec Ballroom 210C (4) 11:10 AM - 11:50 AM (14) Model-based Digital Twin for Anomaly Detection An Innovative Power Decoupling Solution using of On-Chip Transient Thermal Response (6) Integrated Stack Capacitor (ISC) for High-All-Access Pass, 2-Day Pass Meeting Room 211CD **Performance Computing Systems** All-Access Pass, 2-Day Pass Meeting Room 212AB **D** 5G's Future Impact on CV2X All-Access Pass, 2-Day Pass, Design of a Hybrid Equalizer for 12.8-Gb/s High Drive World+ESC Pass Meeting Room 212C Bandwidth Memory Gen. 4 All-Access Pass, 2-Day Pass Exec Ballroom 210A PCB Design Techniques to Improve ESD **(E)** Robustness System Design for 112G: Device Characteristics, All-Access Pass, 2-Day Pass, **Channel Details & Expected System Performance** Drive World+ESC Pass Meeting Room 212D All-Access Pass, 2-Day Pass Meeting Room 211AB PAM4 BER and JTOL Test Solution for PCIe® 6.0and Beyond

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & (4) Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & (8) Improving Jitter, Noise & BER
- High-Speed Signal Processing, 9 Equalization & Coding/FEC
- Power Integrity in Power (10) **Distribution Networks**
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects Machine Learning for
- (14) Microelectronics, Signaling & System Design

A Drive World - Security & Safety

Open to All

- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware E Design & Verification
- F ESC Embedded Software **Design & Verification**
- ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Ohiphead Theater Presentation

Exec Ballroom 210F

- Career Zone
- General Event
- 🛞 Special Event
- Ø Sponsored Sessions

/ #DesignCon DesignCon.com

(5)

(6)

(13)

THE BOA



- Next Generation Memory Solutions
 Open to All
 Exec Ballroom 210E
- Live Hack: Exposing Common IoT Security
 Weaknesses
 Open to All
 Chiphead Theater (Booth 122)

12:00 PM - 12:45 PM

 Live Demo of PAM4 BERT and JTOL, FEC and BurstError Analysis
 Open to All
 Exec Ballroom 210F

12:05 AM - 12:45 AM

Explore Why Testing Disaggregated 5G Elements in Isolation is Required to Ensure Proper O-RAN Fronthaul Conformance

Open to All

Exec Ballroom 210E

12:10 PM - 12:50 PM

The Path to 200-Gbps Serial Links (13) All-Access Pass, 2-Day Pass Exec Ballroom 210B (7) 8 Advanced Modeling for Novel High-performing Low-cost Copper Foils (4) All-Access Pass, 2-Day Pass Meeting Room 211AB (13) Error Signature Generation from IBIS-AMI Link (9) Simulations (8) All-Access Pass, 2-Day Pass Exec Ballroom 210C Capacitor Optimization in Power Distribution (10) **Networks Using Numerical Computation** Techniques All-Access Pass, 2-Day Pass Meeting Room 212AB **(B)** Analytical Prediction of EM Radiation from Stacked Trays in Data Centers \mathbf{n} All-Access Pass, 2-Day Pass Meeting Room 211CD (12) Bridging the Organization Gap for EDA Machine Learning Data All-Access Pass, 2-Day Pass Exec Ballroom 210A

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
 Machine Learning for
- Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- Best Paper Awards Finalist
- Boot Camp
- Ohiphead Theater Presentation
- (Career Zone
- General Event
- 🛞 Special Event
- Sponsored Sessions

DesignCon.com / #DesignCon

THE BOA

12:10 PM — 12:50 PM		2:0	00 PM — 6:00 PM	
C A Foundation for Auto Standards Accelerate Autonomous Vehicles All-Access Pass, 2-Day Pass Drive World+ESC Pass	-	3	Career Zone – Headsh Reception Open to All	ots & Networking Career Zone (
G Internet of Insecure T Eyes of a Hacker All-Access Pass, 2-Day Pass Drive World+ESC Pass		1 5	A New Design Method of Reinforcement Learning All-Access Pass, 2-Day Pass	g for over 20Gbps Exec Ba
12:15PM — 12:55 PM PC Board Design for I Open to All	Low EMI for Wireless & IoT Chiphead Theater (Booth 122)	(2)	A New Approach to IBIS Single-Ended Memory I All-Access Pass, 2-Day Pass	
Open to All Chiphead Theater (Booth 122) 12:30 PM – 1:45 PM Q Career Zone – DesignCon 2022 Paper Topic 		6 7	Signal Integrity Analysis Liquid Cooling All-Access Pass, 2-Day Pass	
Consultations Open to All 12:30 PM — 2:30 PM	Career Zone (Booth 1025)	8 (7)	SNDR Analysis & Its Im Performance All-Access Pass, 2-Day Pass	pacts on Link Meeting R
Conference Networkin All-Access Pass, Boot Camp	-	(B) (1)	Divide & Conquer Appro Frequency Interference All-Access Pass, 2-Day Pass	
1:15 PM — 1:55 PM Developing Edge Dev Management Open to All	ices for Chronic Disease Chiphead Theater (Booth 122)		, , , , , , , , , , , , , , , , , , ,	
To Soo S	TRACKS A			

otion All Career Zone (Booth 1025) 2:40 PM v Design Method of GDDR6 WCLK Using preament Learning for over 20Gbps ess Pass, 2-Day Pass Exec Ballroom 210B Approach to IBIS-AMI Modeling of -Ended Memory Interfaces ess Pass, 2-Day Pass Meeting Room 211AB Integrity Analysis in Immersion Cooling ess Pass, 2-Day Pass Meeting Room 212AB Analysis & Its Impacts on Link rmance ess Pass, 2-Day Pass Meeting Room 211CD & Conquer Approach to Radio ency Interference Simulation Exec Ballroom 210C ess Pass, 2-Day Pass

ee Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & (4) Processing for PCBs, Modules & Packages
- (5) Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, (6) Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- (9) High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power (10) **Distribution Networks**
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for 14 Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- C Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware E Design & Verification
- F ESC Embedded Software **Design & Verification**
- ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- (1) Best Paper Awards Finalist
 - Boot Camp
 - Ohiphead Theater Presentation
 - Career Zone
 - General Event
 - 🛞 Special Event
 - Sponsored Sessions

THE BO



3:00 PM - 3:40 PM

(1)	Optimizing BGA Ball Pattern for Signal Integrity		
Ĭ	All-Access Pass, 2-Day Pass	Exec Ballroom 210A	
8 2	End-to-end IBIS-AMI Mod of Electrical/Optical Links	•	
6	All-Access Pass, 2-Day Pass	Meeting Room 211CD	
3 1	Electronic-Photonic IC Co Power Integrity and Thern Photonics 3D IC		
	All-Access Pass, 2-Day Pass	Meeting Room 211AB	
8 (12)	100G Chip-to-Module Inte New Measurement Metho	dology	
	All-Access Pass, 2-Day Pass	Meeting Room 212AB	
14	Machine Learning for TDE Transceiver Characterizat		
	All-Access Pass, 2-Day Pass	Exec Ballroom 210C	
(B) (9)	Global Optimization of Wi Minimum Post-FEC vs. Pr		
$\check{\mathcal{O}}$	All-Access Pass, 2-Day Pass	Exec Ballroom 210B	
(C)	Enabling the Deployment	of True	
	Driverless Vehicles		
	All-Access Pass, 2-Day Pass,		
	Drive World+ESC Pass	Meeting Room 212C	

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

 Signal & Power Integrity for Single-Multi Die, Interposer & Packaging

Open to All

- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

Measurement, Simulation & Improving Jitter, Noise & BER

Chiphead Theater (Booth 122)

- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- (1) Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
- Machine Learning for Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS
- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- ESC Advanced Technologies

- (8) Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- Career Zone
- General Event
- Special Event
- Sponsored Sessions

ETS

UON[®] 2021

THE BOARD

3:00 PM - 3:40 PM 4:00 PM — 5:15 PM IoT Endpoints Transformed by Intelligence Panel – Getting Onboard (& Package) with 3 (G) All-Access Pass, 2-Day Pass, Photonics: What'll It Take? Meeting Room 212D Drive World+ESC Pass Open to All Meeting Room 212AB USB Type-C® Standard PHY testing. What's the Panel — Bringing AI to the Edge: Hardware & (\mathbf{C}) same, and what's different? Software Enables Autonomous AI Ecosystem on the Edge Open to All Exec Ballroom 210F Open to All Meeting Room 212C 3:15 PM - 3:55 PM 4:00 PM - 5:00 PM **Protecting Autonomous Vehicle Innovations:** Key IP Strategies for the Present & Future PCIe 5.0 Receiver LEQ Compliance Test **Chiphead Theater (Booth 122)** Open to All Open to All Exec Ballroom 210F 5:00 PM - 6:00 PM Booth Bar Crawl Open to All Beer Halls at Front & Rear of Expo Floor Sponsored by:

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App at m.designcon.com

- Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- Chip I/O & Power Modeling & Validation Solutions
- Integrating Photonics & Wireless in Electrical Design
- Advances in Materials & Processing for PCBs, Modules & Packages
- Advanced I/O Interface Design for Memory & 2.5D/3D/SiP Integrations
- System Co-Design: Modeling, Simulation & Measurement Validation
- Optimizing High-Speed Link Design

- Measurement, Simulation & Improving Jitter, Noise & BER
- High-Speed Signal Processing, Equalization & Coding/FEC
- Power Integrity in Power Distribution Networks
- Electromagnetic Compatibility & Interference
- Applying Test & Measurement Methodology
- Modeling & Analysis of Interconnects
 Machine Learning for
- Microelectronics, Signaling & System Design

- A Drive World Security & Safety
- B Drive World Sensing Technologies
- © Drive World Autonomous & ADAS

Rosenberger

- Drive World Connectivity & Infotainment
- ESC Embedded Hardware Design & Verification
- ESC Embedded Software Design & Verification
- G ESC IoT & Connected Devices
- (H) ESC Advanced Technologies

- igncon.com
- Best Paper Awards Finalist
- 🛞 Boot Camp
- Ohiphead Theater Presentation
- (Career Zone

Amphenol

- General Event
- Special Event
- Sponsored Sessions





Drive World+Embedded Systems Conference (ESC) August 16 -18, 2021 | San Jose McEnery Convention Center



In its second year, Drive World+ESC will return to Silicon Valley to bring together the brightest minds across automotive electronics, embedded systems, and IoT who shape the technology of tomorrow.

- Eight educational conference tracks
- Complimentary admission to the DesignCon expo floor for all Drive World+ESC passholders.
- Complimentary admission to all Drive World+ESC sessions for all DesignCon All-Access and 2-Day passholders.

Register at DriveWorldExpo.com or DesignCon.com #DriveWorldESC



EXHIBITOR LIST

33

GN 00 N 2021

THE BOARD

MEETS

Company	Booth
219 Design	516
Accurate Circuit Engineering	325
ACES	821
Advanced Test Equipment Rentals	825
AGC Multi Material, Inc.	719
AiSHi Capacitors	627
Amphenol	707
APCT	924
ARC Technologies, Inc.	316
ARTEK Inc.	428
Avishtech	521
Bellwether Electronic Corp	421
CarlisleIT	724
Co-Tech Development Corp.	335
Cvilux USA	625
Doosan Corporation Electro-Materials BG	507
DVT Solutions, LLC	831
Electro Rent Corporation	917
EMA Design Automation Inc.	414
Ept	415
eTopus Technology Inc	531
evissaP	216
Flexible Circuit Technologies Inc	219
Fotofab, LLC	218
Foxconn Interconnect Technology	315
Gigatest Labs	606
Granite River Labs	835

Company	Booth
Harwin	307
Huber+Suhner	930
Hyperlabs	410
Imagineering Inc.	417
Innosilicon	914
Insulated Wire Inc	433
Ironwood Electronics	418
Isola Group	925
ITEQ Corporation	425
Jess-Link Products Co. Ltd.	630
Junkosha Inc.	827
Kandou Bus S.A.	207
Keysight Technologies	807
KGS America Inc.	424
Langer EMV-Technik GmbH	214
Leeno Industrial Inc.	1013
Luxshare-ICT	615
Marki Microwave, Inc.	208
MPI Corporation	432
MultiLane Inc	931
Neoconix	434
Oak-Mitsui Technologies	815
Ohmega Ticer Technologies	817
OMDIA	427
PacketMicro, Inc.	511
PalPilot International	306
Panasonic Industrial Devices Sales Company of America	728
PFC Flexible Circuits	435
Plastronics	635

Company B	ooth
Polar Instruments	420
Printed Circuit Engineering Association	537
Rigol Technologies Usa	1007
Riva HQ	638
Rogers Corporation	319
Rohde & Schwarz USA, Inc.	607
Rosenberger North America	515
Royal Circuits	329
Samtec	907
Senko	333
Siglent Technologies Co., Ltd.	820
Silitronics	524
Socionext America Inc.	532
Somacis Inc.	634
Sonnet Software	318
Southwest Microwave	514
SRC Inc.	934
Sumitomo Electric Industries	311
Surface Mount Technology Association	636
SV Microwave	530
TDK - Lambda High Power Division	321
Technica, USA	406
Tempo Automation	217
US Conec, Ltd	535
Versatile Power	431
Victory Giant Technology	926
VSI Labs	407
Xpeedic Technology Inc.	913

1

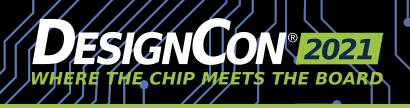


EXHIBIT HALL FLOOR MAP

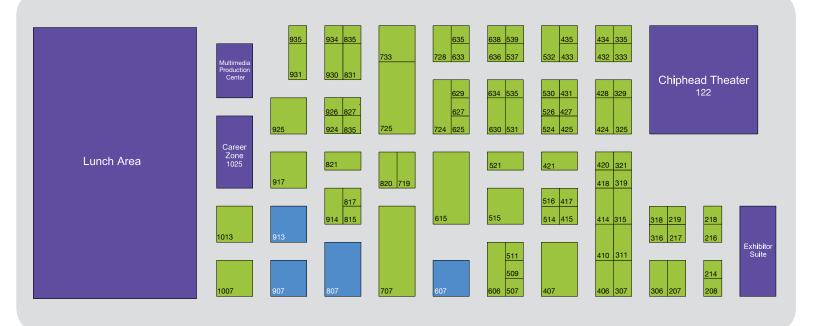


EXHIBIT HOURS:

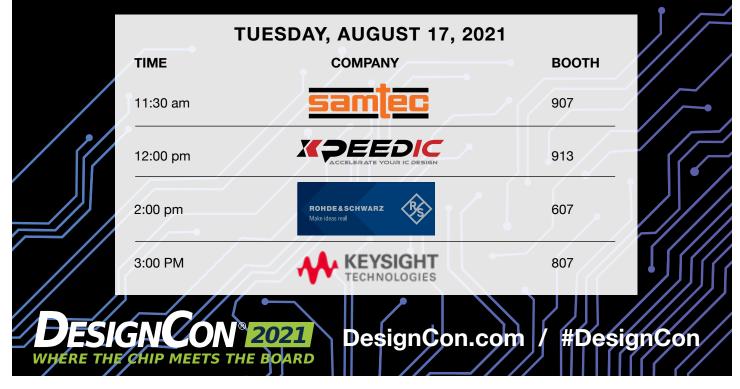
AUGUST 17 - 18, 2021 / 11:00 AM - 6:00 PM

Tuesday Product Showcase Locations



Product Showcase

Don't miss this series of LIVE demos taking place on the DesignCon show floor.



cādence[®]

Clarity 3D Solver Cloud

True 3D electromagnetic field solver for PCB and IC package design

To learn more, please visit www.cadence.com/go/3dsolver

Applied Research on Active Safety and Automated Driving

Why VSI?

» Gain a comprehensive understanding of the state of AV & ADAS tech
 » Examine the complete ecosystem & identify points of entry
 » Leverage in-depth technical content to accelerate your AV development
 » Get your components tested and validated through VSI's test vehicles

LEARN MORE https://vsi-labs.com info@vsi-labs.com



www.signalintegrityjournal.com

FREE subscription gets you:

- **EMC/EMI, Signal Integrity, and Power Integrity topics**
- In-depth, Peer-Reviewed Technical Articles
- Insights from Industry Leaders
- Product & Industry News
- E-Learning Sessions
- Video Demos
- Print editions/technical e-books





Be sure to stop by the DesignCon Career Zone in the expo hall to gain advice on advancing your career and salary, get tips on presenting at technical conferences, network, connect 1:1, or receive a complimentary professional headshot.

WOMEN & MINORITIES IN STEM



Why are there so few women and members of minorities in STEM? This discussion and networking session will explore the challenges and opportunities for women and minorities in STEM fields.

August 17, 2021 | 12:00 - 1:30 pm

EMERGING ENGINEERS NETWORKING



Come meet your fellow leaders of tomorrow's innovations. At this session DesignCon welcomes engineers who are starting their professional journey or who have less than 10 years of experience. Grow your network and connect with like-minded peers and members of DesignCon's Emerging Engineer Committee at this networking session. August 17, 2021 | 1:45 – 3:15 pm

HOW TO START A START-UP DISCUSSION



Silicon Valley is a hotbed for startups but not all thrive or even survive. Connect with entrepreneurs and organizations in the San Jose-area who have not only started a business but sustained and grown it.

August 17, 2021 | 3:30 – 4:30 pm

OPEN NETWORKING



Connect with others looking to advance their careers during this open networking session. August 17, 2021 | 4:30 – 6:00 pm

1:1 SALARY NEGOTIATION ADVICE



Is it time to make a change to your salary? Experts from Riva will offer 1:1 advice on advancing your salary. These meetings are by appointment only and will fill quickly! Sign up at the DesignCon Career Zone starting at 11:00 am.

August 17, 2021 | 2:00 – 6:00 pm

DESIGNCON 2022 PAPER TOPIC CONSULTATIONS



Are you considering submitting a paper for DesignCon 2022 but unsure of the best topic, track, or makeup of the paper? Members of the DesignCon Technical Program Committee will be available to answer your paper submission questions and provide advice on best practices. **August 18, 2021 | 12:30 – 1:45 pm**

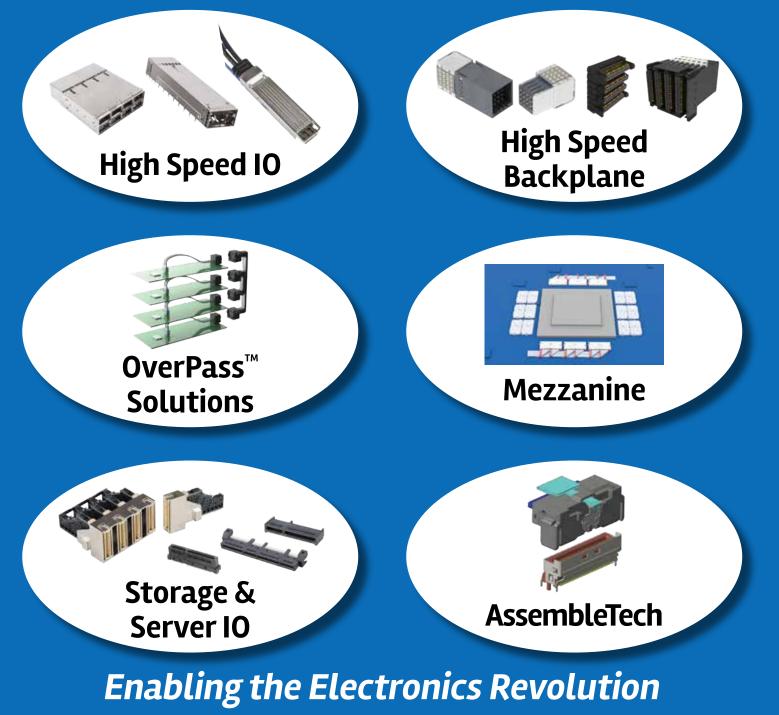
HEADSHOTS & NETWORKING RECEPTION

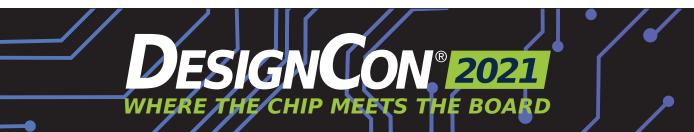


Advance your LinkedIn profile and other professional efforts with a complimentary headshot from a Lunch Break Headshots professional photographer. And while you're at it, make sure to enjoy the DesignCon Booth Bar Crawl (5-6pm), offering refreshments while you network. **August 18, 2021 | 2:00 – 6:00 pm**

Amphenol

Amphenol will be presenting Innovative Product Demonstrations at booth #707







Wind down at daily meet-and-greets at the front and back of the expo floor. Come for the conversation, stay for the bites and beverages.

TUESDAY, 5:00 - 6:00 PM

WEDNESDAY, 5:00 - 6:00 PM

Rosenberger

Rosenberger

CARLISLE

Amphenol

ACCE MCRAFT RUGHTER

#DesignCon

Check Out The DesignCon Mobile App

- Find exhibitors
- → Connect with other attendees
- → Create your event schedule
- → Navigate the expo floor
- Explore event photos

Thank You To Our Mobile App Sponsor:



GET THE FREE APP











WE'RE HEADING BACK TO SANTA CLARA! JOIN US AT:



SAVE THE DATE! APRIL 5-7, 2022 SANTA CLARA CONVENTION CENTER





Registration Opens Fall 2021



Thank You To Our Partners

Official Media



Supporting Partners



Health & Safety Are A Top Priority!

Remember to ...

Wear your mask while indoors

Avoid handshakes and wash your hands frequently Check the app and daily announcements for any updates

Visit DesignCon.com for up-to-date information regarding health & safety.

Digital Badging At DesignCon 2021 How it Works

Expo floor, session room, and networking access has gone digital this year, which means quicker entry into the event. To save your digital credential, follow these simple steps:

- Watch for an email from DesignCon with your digital credential QR Code.
- Depending on your device, choose either the Apple Wallet or Google Pay.
- Load the digital credential to your wallet.

Then when you're onsite, just open the digital credential on your phone (like you would for a mobile boarding pass), have it scanned, and you're good to go!

No smart phone? No problem. Just visit the on-site registration area and print out your credentials.





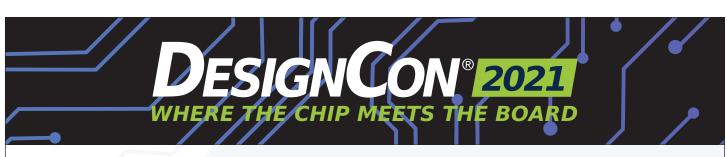
The winner will be selected based on his or her leadership, creativity, and out-of-the-box thinking brought to design/test of chips, boards, or systems, with particular attention paid to areas of signal and power integrity.



Each year DesignCon recognizes outstanding contributions to the educational goals of the DesignCon program.

The **Best Paper Awards** serve to acknowledge the authors who receive them as leading practitioners in semiconductor and electronic design.

When: Tuesday, August 17, 2021, 9:50 – 10:20 am Where: Grand Ballroom 220A



JOIN the Conversation

POST a photo of your favorite booth

SHARE your experience

NETWORK

with fellow industry professionals







ANNOUNCING...



OCTOBER 5 & 6, 2021

Get ready to go beyond Silicon Valley and connect with the DesignCon global engineering community at DesignCon Digital!

KEYNOTES

Daily keynotes by today's industry thought leaders

CONFERENCE SESSIONS & TECH THEATER PRESENTATIONS

Expert educational content that you have come to expect from DesignCon

KNOWLEDGE SHARING

Interviews with some of engineering's leading designers

VIRTUAL EXPO Multiple suppliers with new products and innovations

All content will be available for 30 days from the comfort of your home or office!

Find more information on **DesignCon.com** starting September 2021.

#DesignCon

