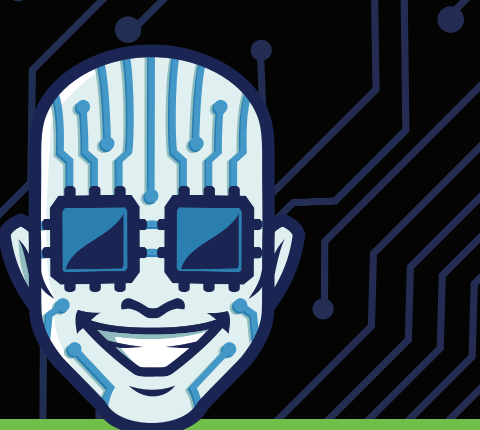
30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – TUESDAY, JANUARY 28

7:00 AM – 6:30 PM

📅 **Registration Open** — Lobby

8:00 AM – 9:00 AM

📅 **Welcome Breakfast**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Mission City Ballrooms B1-B4

9:00 AM – 4:30 PM

④ ⚙ **Boot Camp – How PCB Design Affects Fabrication**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom E

9:00 AM – 11:30 AM

⑫ ⑧ **Tutorial – Channel De-Embedding Methodology for Rx Stress Testing Using Fast-Edge Tx Waveform of BERT**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom B

⑧ **Tutorial – Design & Verification for High-Speed I/Os at 10 to 112, 224 Gbps & Beyond with Jitter, Signal Integrity & Power Optimized**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom C

9:00 AM – 11:30 AM

⑬ ⑥ **Tutorial – How Interconnects Work: Crosstalk Anatomy & Quantification**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom D

⑩ ⑥ **Tutorial – Power Delivery Network Master Class on 2000A: How to Design, Simulate & Validate**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom A

Ⓓ ⑪ **Tutorial – Feeding the Beast: Consumption-Based PCB Design**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — Ballroom H

11:45 AM – 12:45 PM

★ **Keynote – Electronics for Future High Energy Particle Colliders**
All Pass Types — Elizabeth A. Hangs Theater

1:00 PM – 2:00 PM

📅 **Conference Networking Lunch**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Media, Speaker — Mission City Ballrooms B1-B4

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

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

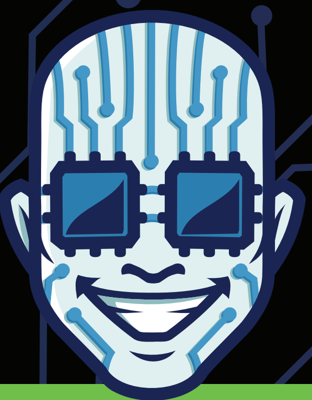
Conference Schedule continued on page 2.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – TUESDAY, JANUARY 28

2:00 PM – 4:30 PM

⑪ ⑫ **Tutorial – Characterization of Shielding Effectiveness of Connectors in Low Intensity Magnetic Fields**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom A

⑬ ⑦ **Tutorial – COM: A Field Guide for Serial Communication Link Designers**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom D

⑨ **Tutorial – Deep Diving into Similarities & Differences in 200+Gbps Receiver Error Mechanism & Error Pattern of DFE vs MLSD**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom C

④ ⑬ **Tutorial – Stackups: The Design Within the Design**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom B

Ⓓ ⑪ **Tutorial – EMC/EMI Situations in Automotive Application**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom H

4:45 PM – 6:00 PM

⑥ ⑨ **Panel – PCI Express & PAM4: Balancing Silicon & Interconnect Interdependencies for 128 GT/s**
All Pass Types
Ballroom B

② ⑩ **Panel – Powering the AI Semiconductor Stack: Power Strategies for High-Performance AI Computing**
All Pass Types
Ballroom C

⑦ ⑧ **Panel – The Case of the Closing Eyes: 200G/Lane AI HW Dogfight, it's Impact on You & Ethernet, NVLink, OIF, PCIe**
All Pass Types
Ballroom E

Ⓓ **Panel – EV Options: BEV vs HEV vs EREV**
All Pass Types
Ballroom H

6:00 PM – 8:00 PM

📅 ★ **30th Anniversary Welcome Reception**
All Pass Types **Santa Clara Ballroom, Hyatt Regency Santa Clara**

Sponsored by: mouser.com

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

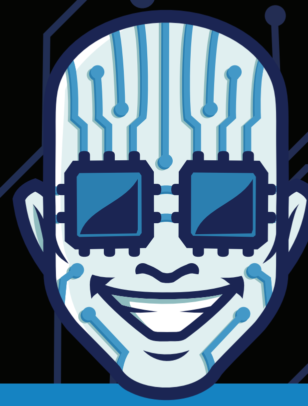
Conference Schedule continued on page 3.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – WEDNESDAY, JANUARY 29

7:30 AM – 6:00 PM

📅 **Registration Open** Lobby

8:00 AM – 8:45 AM

⑬ ⑦ **Differential Skew Mitigation Technique Results**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

⑨ ⑦ 🏅 **Low Latency Speculative Error Correction Using Simplified ML Detector for 64Gbps Wireline Transceiver**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

⑪ ⑬ 🏅 **Magnetic Shielding Effectiveness Simulation & Measurement in Connector for Medical Application**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

② ⑤ **Modeling GDDR7 PAM3 Dual Branch Receiver with IBIS-AMI**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

8:00 AM – 8:45 AM

⑩ ⑭ **Novel Multi Power Domain PCB Decap Layout Synthesis Using Multi-Agent Reinforcement Learning**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

⑫ ⑬ **Practical Implementation of Insertion Loss Correction & Delay Characterization of Test Fixtures Used for 200 Gb/s Per Lane Conformance Testing**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

Ⓓ **Accelerating Next-Gen Vehicle Design through a Standardized Architecture**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

Ⓓ **Receiver Testing for Automotive SerDes: Addressing Challenges & Overcoming Shortfalls**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⛺ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

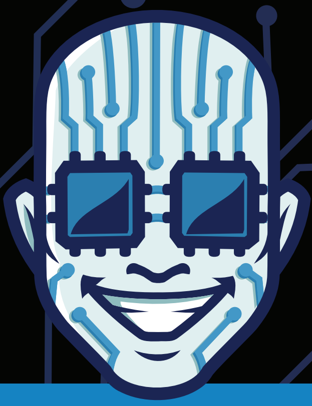
Conference Schedule continued on page 4.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – WEDNESDAY, JANUARY 29

8:00 AM – 8:45 AM

🔗 **Technology Advancements for AI in the Data Center**
All Pass Types — **Great America 1**

🔗 **The Road to PCIe 7.0: Advanced Testing Challenges at 32GBaud PAM4**
All Pass Types — **Great America K**

8:00 AM – 8:40 AM

🔗 **Delta-L Measurement Analysis, Extending PCB Trace Insertion Loss Measurements to 67 GHz**
All Pass Types — **Great America 2**

8:55 AM – 9:40 AM

🔗 **IEEE 802.3dj 212G Physical Validation**
All Pass Types — **Great America K**

9:00 AM – 9:45 AM

① ⑭ **A Novel Machine Learning Based Approach to Accelerate HVM Simulations for Silicon Interconnects**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom D**

9:00 AM – 9:45 AM

⑩ 🏅 **Balancing Current Density to High-Power ASICs in Lateral Power Delivery Designs**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom B**

⑤ ① **Innovative Interposer Solutions for HBM3/4 with CoWoS Technology: A Path to 12.8Gbps**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom E**

⑫ ⑬ **Perspectives on Managing Intra-Pair Skew in Copper Cable Assemblies for High-Volume Deployments**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom C**

④ **The Influence of Copper Crystal Structure on Signal Integrity**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom F**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 5.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – WEDNESDAY, JANUARY 29

9:00 AM – 9:45 AM

⑦ ⑥ **Investigation of Pin Field Crosstalk Performance Degradation Due to PCB Manufacturing Variation**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

Ⓓ ① **Degassing Holes in BGA Package Design: Prediction of Impact on Power Integrity Using Simulation**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

Ⓓ **Design Considerations for High Bandwidth Memory Interfaces in Automotive Devices**

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

🔗 **Accelerating AI Workloads with Composable Memory and Hardware Acceleration**

All Pass Types **Great America 1**

🔗 **Intra-Pair Skew (P/N) Tolerance Test Solution**

All Pass Types **Great America 3**

9:00 AM – 9:40 AM

🔗 **Designing Signal Via Transitions in Next-Generation High-Speed Data Channels**

All Pass Types **Great America 2**

10:00 AM – 11:00 AM

★ **Keynote – The Transformative Power of Accelerated Computing & AI**

All Pass Types **Elizabeth A. Hangs Theater**

11:00 AM – 11:15 AM

☺ 🔗 **Leading the Evolution of High-Speed Interconnect**

All Pass Types **Chiphead Theater**

11:00 AM – 6:00 PM

📅 **Exhibit Hall Open**

All Pass Types **Expo Hall**

11:00 AM – 11:40 AM

🔗 **UCIe vs. BoW: Choosing the Right Chiplet Standard**

All Pass Types **Great America K**

11:10 AM – 11:50 AM

🔗 **Validate 224/448 Gbps PAM4 Multi-Channel SerDes with Novel Testing Solutions**

All Pass Types **Great America 2**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 6.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – WEDNESDAY, JANUARY 29

11:15 AM – 12:00 PM

☺ ⑫ **Solving Common Problems with PCB Power Integrity Measurements & Simulations**
All Pass Types **Chiphead Theater**

③ **Design & Performance Evaluation of 1.6T Linear Direct Drive System Based on Silicon Photonics Modulator**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

② ⑨ **Effective Continuous Time Linear Equalizer Modeling Using Double Transfer Functions**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

⑬ ⑥ **Free Signal Integrity? How Understanding Anisotropic Materials & Tolerances Could Increase Performance at 112/224Gbps & Beyond**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

11:15 AM – 12:00 PM

⑫ ⑦ **Multiple Pulses-Based Decision Feedback Equalizer (MPDFE) for PAM4**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

⑦ ⑨ 🏅 **Next Generation 224 Gbps-PAM4 Chip-to 224 Gbps-PAM4 Chip-to-Chip/MR SERDES, Package, Channels & Link Simulation & Analysis**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

④ ⑬ **Study of TDR Impedance & Loss Based on Modified Cannon-Ball Huray Roughness Model on a 1.6Tbps Optical Module PCB**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

Ⓓ **Latest Progress of Advanced Hydrogen Sensing Technology for Safety Enhancement**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ☻ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

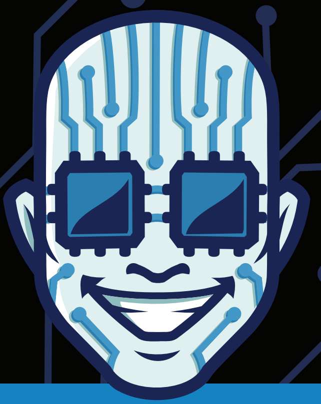
Conference Schedule continued on page 7.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: **Amphenol**



SESSIONS – WEDNESDAY, JANUARY 29

11:15 AM – 12:00 PM

Ⓓ **48V Replacing 12V: Will It Succeed?**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker
Ballroom H

🔗 **The Road Ahead for DDR5 Memory**
All Pass Types
Great America 1

🔗 **USB4 Version 2.0, Thunderbolt 5, and DisplayPort 2.1 Physical Layer Compliance and System Debug**
All Pass Types
Great America 3

11:50 AM – 12:30 PM

🔗 **LPDDR5X SI/PI simulation and evaluation challenges**
All Pass Types
Great America K

12:10 PM – 12:50 PM

🔗 **Analyzing Large Signal Phenomena and Crosstalk in Time & Frequency Domain**
All Pass Types
Great America 2

12:15 PM – 1:00 PM

☺ ⑫ **Obtaining Accurate Signal Measurements: Active Probing**
All Pass Types
Chiphead Theater

12:15 PM – 1:00 PM

⑪ ⑥ **Advancing Technology: Harnessing Transient Electromagnetics for Future Innovations**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom D

⑥ **Enhanced Application of High-Speed Flexible Materials in the Architecture Design of Network Core Equipment**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom E

⑦ ⑥ **IBIS-AMI Modeling & Simulation of DMT in Preparation for 448Gbps Applications**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom F

⑭ **Impedance Profile Prediction & Classification for PCB-Based PDN Decoupling Using Autoencoders**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker
Ballroom C

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 8.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: **Amphenol**

SESSIONS – WEDNESDAY, JANUARY 29

12:15 PM – 1:00 PM

③ 🏅 **Next Generation 224 Gbps-PAM4 Linear: Host TX/RX, Electrical/Optical Channel Characteristics & End-to-End Link Simulation & Analysis**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

⑬ ④ **Reduced Order Geometric Macro Model of PCB Fiberglass Spatial Variation for Skew & Impedance Prediction**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

Ⓓ **Moving Towards Software Defined Vehicles: Cybersecurity & Standardization**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

Ⓓ **Omdia: Recent Research**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

12:15 PM – 1:00 PM

🔗 **Advanced de-embedding algorithms in Signal integrity for high-speed Applications**
All Pass Types **Great America 3**

🔗 **The Path to 448G Interconnect**
All Pass Types **Great America J**

12:40 PM – 1:20 PM

🔗 **OIF-CEI 112G Linear Plugable Optics Validation**
All Pass Types **Great America K**

1:00 PM – 2:00 PM

📅 **Conference Networking Lunch**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, 2-Day Exhibitor Conference Pass, Student 2-Day Conference Pass, Media, Speaker **Mission City Ballrooms B1-B4**

1:00 PM – 1:45 PM

🔗 **Meeting Automotive Design, Safety and Security Challenges with an Integrated HSM Solution**
All Pass Types **Great America 1**

1:15 PM – 2:00 PM

☺ **Five Free SIPI Tools that Should be on Every Engineer's Desktop**
All Pass Types **Chiphead Theater**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

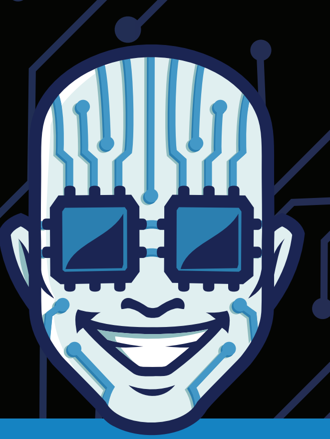
Conference Schedule continued on page 9.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – WEDNESDAY, JANUARY 29

1:30 PM – 2:10 PM

🔗 **Navigating the Challenges Testing USB 80Gbps**
All Pass Types **Great America K**

2:00 PM – 2:45 PM

⑦ **Panel – Expert Discussion: How Will AI Applications Affect High Speed Link Design?**
All Pass Types **Ballroom D**

② ① **Fast BER Analysis Technique for Next Generation Chiplet Simultaneous Bi-Directional Transceiver**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

① **Fast Design & Simulation of Photonics Computing Chip Base on Chiplet-Based Heterogeneous Integration**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

⑭ ⑬ **Flow Model Can Give You Optimal & Diverse Design Guidance for TSV Array Placement in HBM**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

2:00 PM – 2:45 PM

⑬ ⑥ **Parameterized COM Analysis Tool For Substrate Routing Impedance Study**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

⑫ ⑧ **Transmitter Power Spectral Density Noise Impact for 200 Gb/s PAM 4 per Lane**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

Ⓓ ④ **Prediction of Dielectric Constant & Copper Roughness Parameters of High-Speed Automotive PCB Digital Interconnects Using a Data-Based Model**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

Ⓓ ⑦ **Signal Integrity for Automotive Multigigabit Applications When Using ESD Protection Devices**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏆 Best Paper Awards Finalist
- 👢 Boot Camp
- 🙂 Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 10.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – WEDNESDAY, JANUARY 29

2:00 PM – 2:45 PM

🔗 **Liquid Cooling of I/O Connectors**
All Pass Types — **Great America J**

🔗 **Unleashing the Performance of AI Training with HBM4**
All Pass Types — **Great America 1**

2:00 PM – 2:40 PM

🔗 **Using Microwave Instruments to Measure Jitter and Signal Integrity on 32+ Gb/s signals**
All Pass Types — **Great America 2**

2:15 PM – 3:00 PM

☺ **Cybertruck Teardown & Findings**
All Pass Types — **Chiphead Theater**

🔗 **PCI Express 7.0 PHY Electrical Pathfinding Updates**
All Pass Types — **Great America 3**

2:20 PM – 3:00 PM

🔗 **LPDDR5 System Level SI/PI Simulation for the Edge Artificial Intelligence System**
All Pass Types — **Great America K**

2:30 PM – 2:45 PM

🔗 **Product Showcase - Amphenol**
All Pass Types — **Booth 833**

3:00 PM – 3:45 PM

⑥ ④ **Beyond 200G Challenges Towards 400G Systems: Investigating OIF & IEEE Compliant Channel Design with COM-MLSE Equalization. Implementation, Measurement & Correlation**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom A**

⑭ ⑩ **Deep Reinforcement Learning Based Design Optimization of Power/Ground Ball Map in BGA Package in 3D-ICs Considering Multiple Power Domain Environments**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom E**

⑦ ⑨ **Exploring CopprLink & the Future Towards Electro-Optical Interconnects for Evolving Rack Architectures in Data Centers**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom B**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ○ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

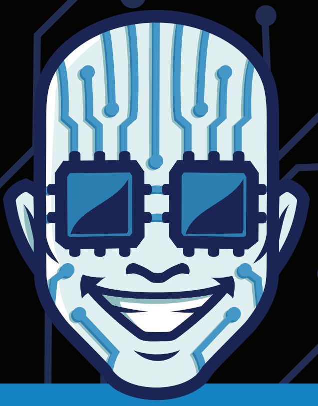
Conference Schedule continued on page 11.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – WEDNESDAY, JANUARY 29

3:00 PM – 3:45 PM

⑧ ⑫ **Navigating the Intricacies of Pcie Gen 6 Electrical Receiver Performance**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

⑩ 🏅 **Parameter Extraction for Behavior Model of Multi-Phase Buck Converter**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

① ⑩ **Reducing Chips Respin Rate by Fixing Common Decoupling Methods Flaws**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

Ⓓ ⑪ **Common Mode & Differential Mode Noise Sources**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

3:00 PM – 3:45 PM

Ⓓ **Benchmarking Next-Generation Automotive High-Speed Technologies**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **Cool Express Link™: A Novel Connectivity Solution for EDSFF Storage and CXL Memory for AI/HPC**
All Pass Types **Great America J**

🔗 **GDDR Memory for High-Performance AI Inference**
All Pass Types **Great America 1**

3:00 PM – 3:40 PM

🔗 **Ultrafast Impedance Measurement of Active Ultra-High Current PDNs**
All Pass Types **Great America 2**

3:10 PM – 3:50 PM

🔗 **Systematic and accurate crosstalk analysis**
All Pass Types **Great America K**

3:15 PM – 4:00 PM

☺ ⑦ **Linear Electro Optical Interfaces: What, Why, When & How?**
All Pass Types **Chiphead Theater**

🔗 **High Frequency Opto-electronics and Signal Integrity Applications and its Relevance in Data Center/AI Applications**
All Pass Types **Great America 3**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⛺ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

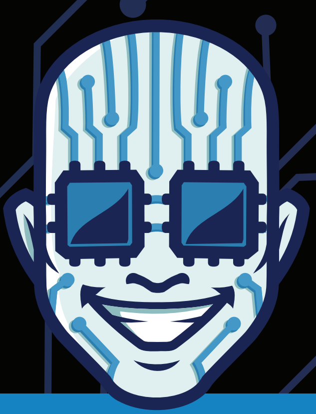
Conference Schedule continued on page 12.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – WEDNESDAY, JANUARY 29

4:00 PM – 5:15 PM

⑤ ① **Panel – Navigating the Complexities of Silicon Interposer Design with UCIe Interfaces**
All Pass Types — **Ballroom F**

⑨ ⑦ **Panel – OIF Update on 224 Gbps & 448 Gbps Common Electrical I/O (CEI) Development**
All Pass Types — **Ballroom C**

③ **Panel – The Need for Speed & Sustainability in Datacenters for AI: Can CPO Take Us There?**
All Pass Types — **Ballroom B**

Ⓓ ⑫ **Panel – Test on Wheels: Test & Measurement for Automotive Standards**
All Pass Types — **Ballroom H**

4:00 PM – 4:45 PM

🔗 **Next-Gen Memory Unlocked: HBM4 and LPDDR5/5X Verification for High-Performance Computing**
All Pass Types — **Great America 1**

4:00 PM – 4:40 PM

🔗 **Reading S-parameters Like a Book**
All Pass Types — **Great America 2**

🔗 **Design Data and IP Management**
All Pass Types — **Great America K**

4:15 PM – 4:45 PM

📅 **1st Timers Meet Up** — **Expo Hall**

4:15 PM – 5:00 PM

☺ **How to Effectively Implement Industry 4.0 Into Your Manufacturing Business**
All Pass Types — **Chiphead Theater**

4:50 PM – 5:30 PM

🔗 **Benchmarking Collective Operations: A Key to Optimizing AI Infrastructure Performance**
All Pass Types — **Great America K**

5:00 PM – 6:00 PM

📅 **Booth Bar Crawl**
All Pass Types — **Expo Hall**

Sponsored by:

Amphenol Amphenol CDI

KEYSIGHT Rosenberger Tektronix®

5:15 PM – 5:45 PM

☺ 📅 **Lunar New Year Celebration Show**
All Pass Types — **Chiphead Theater**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⚙ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 13.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: **Amphenol**

SESSIONS – THURSDAY, JANUARY 30

7:30 AM – 6:00 PM

📅 **Registration Open** — **Lobby**

8:00 AM – 9:00 AM

📅 **40 Under 40 Breakfast**
40 Under 40 Winners — **Meeting Room 204**

8:00 AM – 8:45 AM

⑭ 🏅 **Accelerating Chiplet Placement & Routing Optimization with Machine Learning**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom A**

① ② **Chip-On-Board & Modified-SAP Design for the 100G PAM4 & Beyond Active Cable & Optical Transceivers**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom D**

⑥ ⑦ 🏅 **Direct to Substrate 200G-PAM4 Co-Packaged Connectors: Is it a Reality?**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom E**

8:00 AM – 8:45 AM

⑤ ① **Innovative Layout Optimization Methodology & Via Routing Pattern to Enable UCIe-36Gbps in CoWoS-R Packaging**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom C**

⑦ ⑬ **Intra-Pair Skew in 224G DAC Cables, Mitigation & Operating Environment**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom F**

⑬ ⑥ 🏅 **Via Design for 112 Gbps & Beyond: Theory & Reality**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom B**

⑩ ⑥ **High-Efficiency Timing-Aware Power Integrity Analysis Methodology for Digital Integrated Circuits**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker — **Ballroom G**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
② Chip I/O & Power Modeling
③ Integrating Photonics & Wireless in Electrical Design
④ Advances in Materials & Processing for PCBs, Modules & Packages
⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
⑥ System Co-Design: Modeling, Simulation & Measurement Validation
⑦ Optimizing High-Speed Link Design – Sponsored by samtec
⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
⑪ Electromagnetic Compatibility & Interference
⑫ Applying Test & Measurement Methodology
⑬ Modeling & Analysis of Interconnects
⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
Ⓓ Drive World — Advanced Automotive
Ⓦ Women in Engineering
🏅 Best Paper Awards Finalist
Boot Camp
Chiphead Theater Presentation
📅 General Event
★ Special Event
🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

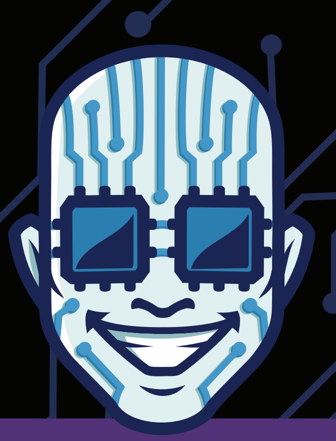
Conference Schedule continued on page 14.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – THURSDAY, JANUARY 30

8:00 AM – 8:45 AM

Ⓓ ⑬ **Manufacturing Challenges & Their Impact on High-Speed Rigid-Flex PCB Performance**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **A Study on the Thermal Implications of Flip-Chip Technology for mmWave MMIC Amplifiers**
All Pass Types **Great America K**

9:00 AM – 9:45 AM

⑤ ⑥ **CAMM: The New Standard for Memory**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

③ ⑦ **Development of a Co-Packaged Application Specific IC with Direct Drive Optical Engine Chiplets**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

⑥ ⑦ 🏅 **IBIS-AMI Modeling Formulation for Bi-Directional MultiGBase-T1 Automotive Ethernet Links**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

9:00 AM – 9:45 AM

⑬ ⑦ 🏅 **Innovative Design of 224G BGA Pinmap & Via Structure**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

⑧ ⑫ **START: Self-Adapting Tool for Automated Receiver Testing - Using Receiver-Specific Stress Symbol Sequences for Above-Compliance Testing**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

① ⑩ 🏅 **Statistical Modeling of System Power Integrity in Adaptive Embedded SoC for Artificial Intelligent (AI) Computing**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

⑨ 🏅 **Post-FEC BER Analysis of 200 Gb/s Wireline Systems Using an FPGA Platform**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 15.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – THURSDAY, JANUARY 30

9:00 AM – 9:45 AM

Ⓓ **Stacking the Deck: Maximizing the PCB Layer Design for Signal Integrity & EMC Performance**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **Platform PDN Optimization and Signoff with IBIS-Approved Streamlined Power Integrity Model (SPIM)**
All Pass Types **Great America K**

10:00 AM – 11:00 AM

★ **Keynote – Enabling Global Connectivity with Low Earth Orbit Satellite Technology**
All Pass Types **Elizabeth A. Hangs Theater**

11:00 AM – 6:00 PM

📅 **Exhibit Hall Open**
All Pass Types **Expo Hall**

11:15 AM – 12:00 PM

☺ ⑩ **Panel – The Expanded Role of SI/PI in Next Gen AI Data Center Development**
All Pass Types **Chiphead Theater**

11:15 AM – 12:00 PM

⑥ ⑬ **112G Signal Integrity Investigation for Immersion-Cooling AI Server**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

⑨ ⑦ 🏅 **400G+ Electrical Pathfinding**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

⑫ ⑧ **Methodology for Accurate PCIe Receiver Testing with Measured Step Response Based Calibration**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

④ ⑬ **Modeling & Parameter Extraction of 224G PCB Under Variable Temperature & Research on the Influence of Temperature on Signal Integrity**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⛺ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

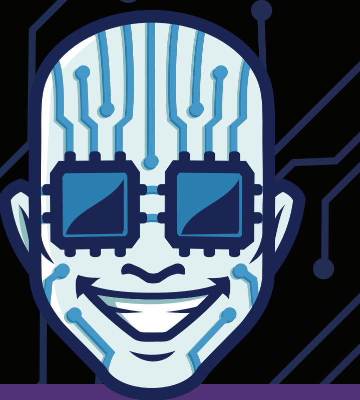
Conference Schedule continued on page 16.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – THURSDAY, JANUARY 30

11:15 AM – 12:00 PM

⑬ Path to PCIe Gen 7.0: Challenges & Design Considerations for Next Generation Internal Cabling

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

① ⑥ Using Response Surface Methodology to Overcome Incumbent Inertia: A T-Coil Case Study

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

⑦ ② Genetic Algorithm-Driven IBIS-AMI Optimization for Robust 200G SerDes Design

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

Ⓓ Solving the Challenge of Software Interoperability in Autonomous and ADAS Systems

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass , Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

11:15 AM – 12:00 PM

🔗 Next-Gen Signal Integrity Solutions for High-Speed Interfaces with Massive (1,000+ Ports) and Ultra-Broadband (100GB+ Size) S-Parameters.

All Pass Types **Great America J**

🔗 System-Level C-PHY High-Speed Signal Integrity Analysis for Mixed and Virtual Reality Systems

All Pass Types **Great America K**

12:15 PM – 1:00 PM

⑧ ⑫ 200Gbps Lanes Equalization Methods & Required Fixture Bandwidth, S-parameter Bandwidth & Acquired Signal Bandwidth

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

⑥ ⑦ Design Shift-Left: Enabling Early Digital Design & HDL Generation via SerDes System Model

All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- Boot Camp
- Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 17.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: **Amphenol**

SESSIONS – THURSDAY, JANUARY 30

12:15 PM – 1:00 PM

⑭ 🏅 **Foundational Model Approach for SI/PI Analysis Using Large Language Model Techniques**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

⑤ 🏅 **Off-Chip Design Method for Improving Signal Integrity in Multi Branch Parallel interface of Non-Volatile Memory**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

⑦ ⑬ **Solving a Key Signal Integrity Bottleneck Issue to Continue Scaling PCIe 7.0 Over Copper Channels**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

⑩ ④ **Thermal Analysis & Optimized Design for Power Ground Vias of PMIC in DDR5 DIMM**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

12:15 PM – 1:00 PM

⑬ ⑦ 🏅 **Beyond 200G: Brick Walls of 400G Links per Lane**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

Ⓓ ① **Ripple Current: An Increasingly Relevant Test to Complement Design Considerations**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **Resolve SWaP-C challenges with Flexible Integrated Circuits (FlexICs)**
All Pass Types **Great America J**

🔗 **Case Study: How to Sign Off Your UCIe Interface**
All Pass Types **Great America K**

12:15 PM – 12:30 PM

⑦ ① **Novel Method for Improving Differential to Common Signal Integrity Results for 112GB/224GB**
All Pass Types **Chiphead Theater**

12:30 PM – 12:45 PM

④ ① **Use of Thin Film Resistors in Organic Substrates for Modules & Chip Packaging**
All Pass Types **Chiphead Theater**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- 🥾 Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

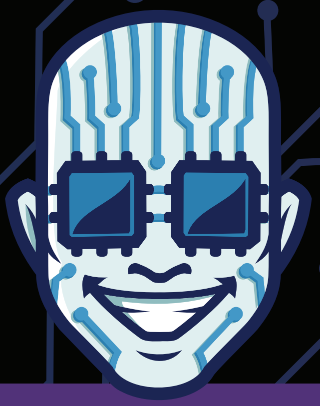
Conference Schedule continued on page 18.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol



SESSIONS – THURSDAY, JANUARY 30

12:45 PM – 1:00 PM

⑫ ⑨ **Arbitrary Waveform Generator Assisted Digitalization of Physical Channels with Fractional Sampling Rate for SerDes High-Speed Evaluation**
All Pass Types — **Chiphead Theater**

1:00 PM – 2:00 PM

📅 **Conference Networking Lunch**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, 2-Day Exhibitor Conference Pass, Student 2-Day Conference Pass, Media, Speaker
Mission City Ballrooms B1-B4

1:15 PM – 2:00 PM

☺ ③ **Panel – Energy Efficient Interfaces for the Next Generation of AI Compute**
All Pass Types — **Chiphead Theater**

2:00 PM – 2:45 PM

⑦ ⑬ **An FM Based Side Channel Communication System for Serial Link Training & Background Performance & Power Optimization**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom C**

2:00 PM – 2:45 PM

⑬ ① **Cascaded Package to PCB Channel Simulation Method Considering Different High-Speed 3D Interconnect Models Extended to Higher Bandwidth up to 75 GHz**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom E**

④ ⑦ **High Speed & High Density Interconnect Using PTFE Material Flexible PCB Ribbon Cables**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom D**

⑩ ⑫ **In-Situ System Level PDN Impedance Measurements**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom A**

⑭ **Large Language Model Enabled Engineering Code Generation Using a Novel Data Processing & Augmentation Flow**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker — **Ballroom B**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ⛺ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 19.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – THURSDAY, JANUARY 30

2:00 PM – 2:45 PM

⑤ ① 🏅 **PSIJ Based Integrated Power Integrity Design for HBM Using Reinforcement Learning: Beyond the Target Impedance**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

⑫ ⑬ **Accurate Adapter Removal in High Precision Low Loss RF Interconnect Characterization**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

Ⓓ **Cybertruck Features & Surprises**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **Accelerating Time to Market in the Chiplet Era**
All Pass Types **Great America K**

2:15 PM – 3:00 PM

☺ **Maximizing Value with Multi-Purpose Test Vehicles for High-Frequency Testing**
All Pass Types **Chiphead Theater**

Ⓦ **Panel – Women in Engineering**
All Pass Types **Great America 2**

🔗 **AI in Electronics Product Development: Separating Reality from Hype**
All Pass Types **Great America J**

3:00 PM – 3:45 PM

① ⑤ **A Novel ThermoFlow Uniformizer Applied Immersion Cooling System (TFU-ICS) for Highly-Dense Multi-GPU-HBM Based Compute Module for AI Supercomputer**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom E**

⑩ **Determining the Requirements, Die vs Package vs Board: Multi-Level Power Distribution Network Design**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom C**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

- ① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
- ② Chip I/O & Power Modeling
- ③ Integrating Photonics & Wireless in Electrical Design
- ④ Advances in Materials & Processing for PCBs, Modules & Packages
- ⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
- ⑥ System Co-Design: Modeling, Simulation & Measurement Validation
- ⑦ Optimizing High-Speed Link Design – Sponsored by samtec
- ⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
- ⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
- ⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
- ⑪ Electromagnetic Compatibility & Interference
- ⑫ Applying Test & Measurement Methodology
- ⑬ Modeling & Analysis of Interconnects
- ⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
- Ⓓ Drive World — Advanced Automotive
- Ⓦ Women in Engineering
- 🏅 Best Paper Awards Finalist
- ☻ Boot Camp
- ☺ Chiphead Theater Presentation
- 📅 General Event
- ★ Special Event
- 🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

Conference Schedule continued on page 20.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: Amphenol

SESSIONS – THURSDAY, JANUARY 30

3:00 PM – 3:45 PM

④ ⑬ **Fitting Lower Loss into More & Smaller Spaces**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom B**

⑦ ⑬ 🏅 **Intra-Pair Skew Electrical Delay Compensation for PCIe 6.0**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom A**

⑬ ⑫ **It Takes a Village: 224Gb/s Mated Test Fixtures for Compliance**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom F**

② ⑦ 🏅 **Modeling & Study of Non-Linearity in DDR Links**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Education Pass, Exhibitor Education Pass, Author Pass, Media, Speaker **Ballroom D**

⑬ ⑦ **Insertion Loss of Mechanically Roughened Conductors**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom G**

3:00 PM – 3:45 PM

Ⓓ **Resurrecting "Dead" Tesla Batteries with Advanced Battery Management Technology**
All-Access Pass, Exhibitor All-Access Pass, Student All-Access Pass, 2-Day Conference Pass, Exhibitor 2-Day Conference Pass, Student 2-Day Conference Pass, Eduction Pass, Exhibitor Education Pass, Author, Media, Speaker **Ballroom H**

🔗 **The Role of EDA as Chips Transform Into 3D Systems**
All Pass Types **Great America K**

3:15 PM – 4:00 PM

☺ ⑪ **Controlling the Waves: A Field-based Perspective on High-speed PCB Design**
All Pass Types **Chiphead Theater**

3:15 PM – 4:15 PM

Ⓦ **Tips to Achieve a Successful, Impactful Career**
All Pass Types **Great America 2**

3:30 PM – 3:45 PM

🔗 **Product Showcase - Amphenol**
All Pass Types **Booth 833**

4:00 PM – 5:15 PM

⑩ ⑥ **Panel – Power Delivery Strategies for AI & Data Center ASICs: Horizontal vs. Vertical**
All Pass Types **Ballroom B**

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
② Chip I/O & Power Modeling
③ Integrating Photonics & Wireless in Electrical Design
④ Advances in Materials & Processing for PCBs, Modules & Packages
⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
⑥ System Co-Design: Modeling, Simulation & Measurement Validation
⑦ Optimizing High-Speed Link Design – Sponsored by samtec
⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
⑪ Electromagnetic Compatibility & Interference
⑫ Applying Test & Measurement Methodology
⑬ Modeling & Analysis of Interconnects
⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
Ⓓ Drive World — Advanced Automotive
Ⓦ Women in Engineering
🏅 Best Paper Awards Finalist
⛺ Boot Camp
☺ Chiphead Theater Presentation
📅 General Event
★ Special Event
🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.

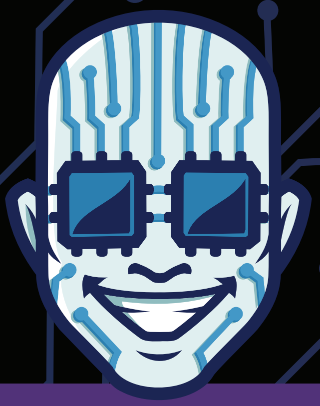
Conference Schedule continued on page 21.

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

Host Sponsor: **Amphenol**



SESSIONS – THURSDAY, JANUARY 30

4:00 PM – 5:15 PM

⑧ **Panel – Unbaking the Cake: The New Science of Compensating for Instrument Noise in Serial Data Measurements**
All Pass Types — **Ballroom C**

Ⓓ **Panel – Opportunities for Security Standardization to Support SDVs**
All Pass Types — **Ballroom H**

4:00 PM – 5:00 PM

🔗 **Accelerate Silicon Interposer Development with Integrated Design and Analysis – A Cadence Exclusive**
All Pass Types — **Great America K**

4:15 PM – 4:35 PM

Ⓦ **Does Good EMC Design Imply Good Signal/Power Integrity? Or is it Vice Versa?**
All Pass Types — **Great America 2**

4:35 PM –5:15 PM

Ⓦ **WIE Networking Reception**
All Pass Types — **Great America 2**

5:00 PM – 6:00 PM

📅 **Booth Bar Crawl**
All Pass Types — **Expo Hall**

Sponsored by: **Amphenol** **Tektronix®**

30th ANNIVERSARY

DESIGNCON® 2025

WHERE THE CHIP MEETS THE BOARD

TRACKS AND LEGEND

To See Speakers for Each Session – Download the DesignCon Event App

① Signal & Power Integrity for Single-Multi Die, Interposer & Packaging
② Chip I/O & Power Modeling
③ Integrating Photonics & Wireless in Electrical Design
④ Advances in Materials & Processing for PCBs, Modules & Packages
⑤ Advanced Interface Design for Memory/HBM, Chiplet, Multi-die & 3DIC/SiP Integrations
⑥ System Co-Design: Modeling, Simulation & Measurement Validation
⑦ Optimizing High-Speed Link Design – Sponsored by samtec
⑧ Measurement & Simulation Techniques for Analyzing Jitter, Noise, BER/SER/FLR
⑨ High-Speed Signal Processing, Modulation, Equalization & Coding/FEC
⑩ Power Integrity in Power Distribution Networks, Power Supplies & Power Delivery
⑪ Electromagnetic Compatibility & Interference
⑫ Applying Test & Measurement Methodology
⑬ Modeling & Analysis of Interconnects
⑭ Machine Learning & AI for Microelectronics, Signaling, Multi-physics & System Design
Ⓓ Drive World — Advanced Automotive
Ⓦ Women in Engineering
🏅 Best Paper Awards Finalist
🥾 Boot Camp
☺ Chiphead Theater Presentation
📅 General Event
★ Special Event
🔗 Sponsor-led Sessions

This guide was created on January 8, 2025. Utilize the DesignCon 2025 app for the most up-to-date information on exhibitors, sessions, and networking.