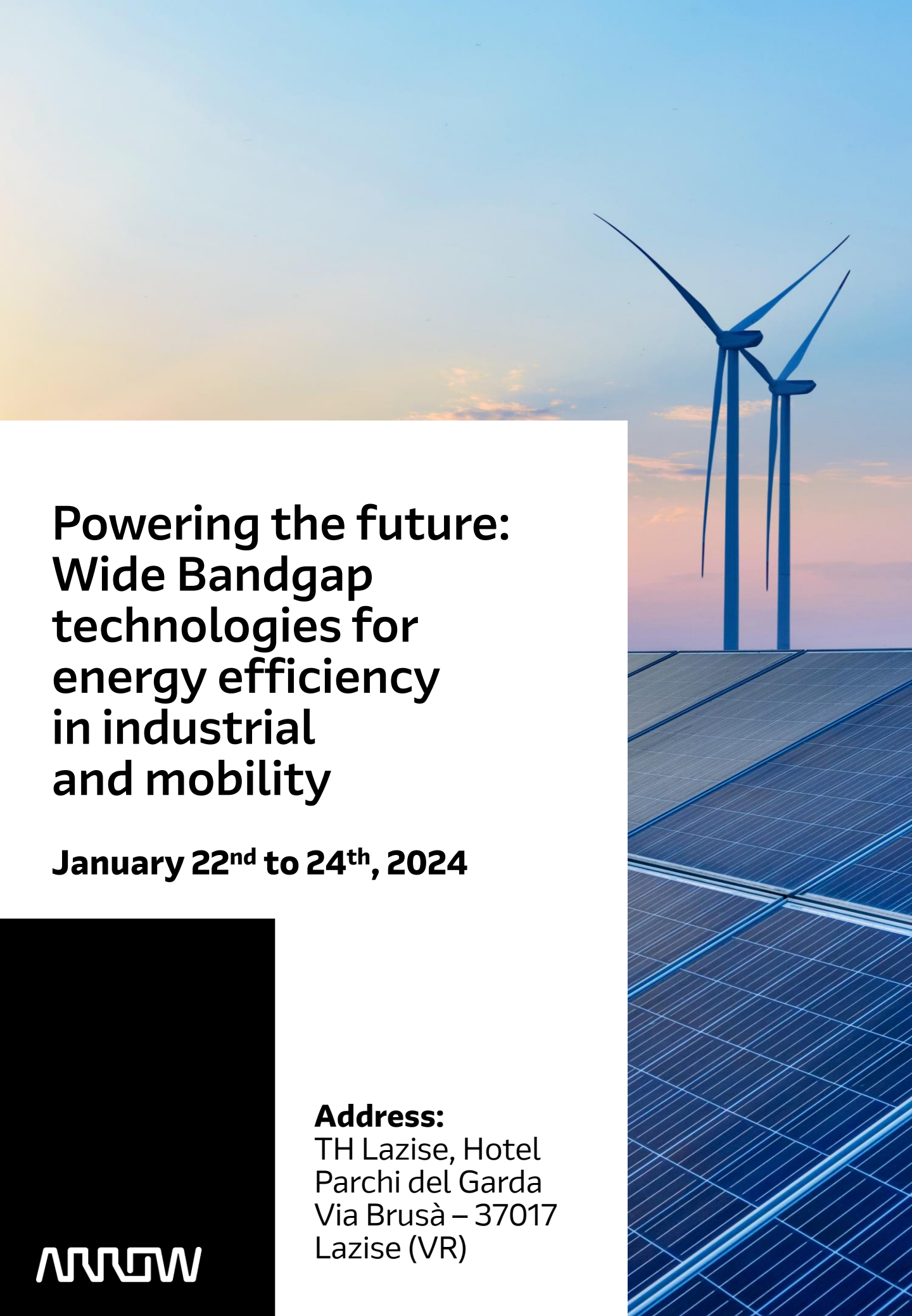

Powering the future: Wide Bandgap technologies for energy efficiency in industrial and mobility

January 22nd to 24th, 2024

Address:
TH Lazise, Hotel Parchi del Garda
Via Brusà – 37017 Lazise (VR)

We are pleased to invite you to the event “Powering the future: Wide Bandgap technologies (SiC and GaN) for energy efficiency in industrial and mobility”, organized by Arrow Electronics from 22nd to 24th January 2024 in TH Lazise, Hotel Parchi del Garda.

This event will show all the news and updates about Wide Bandgap power devices with related driving and sensing solutions, going into details with the most innovative topologies. In addition, connectors, passives and magnetic solutions, tailored for high power applications, will be presented.

This three-days seminar is dedicated to power electronics designers interested in the latest technology trends. Participants will have the possibility to find out all they need to design their power projects.

The event includes trainings in parallel focused on three main topics:

Motor Drives, Energy Efficiency and Electrification.

The showcase area with all demos and solutions will be available throughout the event, accessible to all customers at any time of the day.

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Agenda 22/01

22/01	MOTOR DRIVE	ELECTRIFICATION	ENERGY EFFICIENCY
9.30 - 10.00	**Welcome Coffee**		
10.00 - 10.15	**Arrow Electronics intro**		
10.20 - 10.50	**STMicroelectronics Keynote** - The evolution of SiC and GaN technologies and STMicroelectronics' investments		
10.55 - 11.45	**Infineon** -The future of motor control	**Molex** - High-Power Solutions for maximize the efficiency	**Wolfspeed** - Low Load Efficiency Simulations with Silicon Carbide
11.45 - 12.10	**Coffee Break + Showcase**		
12.10 - 13.00		**Onsemi** - Advancing On Board Charger to 800V Battery Architecture with onsemi EliteSiC MOSFETs	**Analog Devices** - Enhancing Efficiency with GaN MOSFETs: New 100V Controllers, Applications, and Performance Insights
13.00 - 14.30	**Lunch + Showcase**		
14.30 - 15:20	**Isabellenhütte** - Excellent control over drive systems with ISA-shunts	**Nexperia** - Nexperia's Wide Bandgap Solutions for Enhanced Electric Vehicle Charging Systems	**STMicroelectronics** - How to choose STMicroelectronics' "Wide Bandgap" technologies and the consequent application implications
15.30 - 16.20	**Wolfspeed** - Miniaturization of Servo Motors using Silicon Carbide	**STMicroelectronics** - Analysis of a 15KW bidirectional AC/DC converter with "Wide Bandgap" technologies by STMicroelectronics	**TDK-** Ferrites play a crucial role in enhancing energy efficiency in electronic applications
16.20 - 16.50	**Coffee Break + Showcase**		
16.50 - 17.40		**Bourns** - Solutions for Battery Management Systems	**Infineon** - The role of Wide-band gap in Energy storage systems
19.30 – 22.00	**Aperitif & Buffet dinner at TH Lazise, Hotel Parchi del Garda**		

Agenda 23/01

23/01	MOTOR DRIVE	ELECTRIFICATION	ENERGY EFFICIENCY
8:45 - 9.15	**Welcome Coffee**		
9.15 - 9.45	**Infineon Keynote** - Future Trends in SiC & GaN		
9.50 - 10.40	**Molex** - Reliable solutions for connecting industrial controllers to Motor Drives	**Onsemi** - Optimizing Power Efficiency and Performance for Hybrid and Electric Vehicles Traction Inverter	**Infineon** - How will Silicon and WBG technologies shape the future of Residential Solar & ESS Applications
10.40 - 11.10	**Coffee Break + Showcase**		
11.10 - 12.00	**Wolfspeed** - Low Load Motor Drive Efficiency with Silicon Carbide	**TDK** - CeraLink - HV ceramic capacitor optimized for conditions under operation	**STMicroelectronics** - Benefits of GaN in different power conversion topologies. Focus on low power (up to 100-150W): comparison between GaN-based QR flyback and active clamp flyback
12.10 - 13.00	**STMicroelectronics** - Driving SiC and GaN – STMicroelectronics' proposals	**Phoenix Contact** - Empowering the All Electric Society	**Microchip** - Increase the efficiency using mSiC™ devices in power conversion applications
13.00 - 14.30	**Lunch + Showcase**		
14.30 - 15.00	**Università di Cassino e del Lazio Meridionale** - WBG devices robustness in high reliability applications		
15.10 - 16.00	**Bourns** - Bourns Magnetics: Gate Driver Transformer for Wide Bandgap Inverters	**Microchip** - Improve the reliability of E-Mobility applications with Microchip	**Onsemi** - Novel Topologies and Wideband Gap Combine to Improve Power Supply Density and Efficiency
16.00 - 16.30	**Coffee Break + Showcase**		
16.30 - 17.20		**Isabellenhütte** - Trends in current measurements and active developments of our shunts	**Allegro** - Solutions for low common mode capacitance designs to achieve higher efficiency in power conversion
19.00 - 22.00	**Dinner at restaurant La Loggia e La Barchessa Rambaldi, Piazza Principe Amedeo 7 - 37011 Bardolino (VR)**		

Agenda 24/01

24/01	MOTOR DRIVE	ELECTRIFICATION	ENERGY EFFICIENCY
8.45 – 9.00	**Welcome Coffee**		
9.00 - 9.50		**Infineon** - Electric Vehicle charging based on WBG	**Wolfspeed** - Silicon Carbide enabling always online UPS systems
9.50 - 10.40	**Nexperia** - Empowering Motors: Nexperia's GaN solutions for Next-Gen Motor Control Applications	**Wolfspeed** - Enabling Bi-Directional Energy Transfer with Silicon Carbide	**Bourns** - Bourns Magnetics in Wide Bandgap Applications (SiC and GaN) (presenter Cathal Sheehan)
10.40 - 11.10	**Coffee Break + Showcase**		
11.10 - 12.00	**Onsemi** - Silicon Carbide's Role in Next Generation Industrial Motor Drives	**Melexis** - Cutting-edge current sensors tailored for modern wide-bandgap power systems	**Nexperia** - Advancing Energy Efficiency and Power Conversion through Nexperia's Wide Bandgap Solutions
	ELECTRIFICATION	**ELECTRIFICATION**	**ENERGY EFFICIENCY**
12.10 - 13.00	**Infineon** - How to design a Traction Inverter with Infineon	**TDK** - EV charging as an introduction example to TDK's passive components in WBG applications	**Molex** - Molex Flexible Printed Circuits and User Interfaces for Energy Efficiency
13.00 - 14.30	**Lunch + Showcase**		
	MOTOR DRIVE	**ELECTRIFICATION**	**ENERGY EFFICIENCY**
14.30 - 15.20	**STMicroelectronics** - Motor drives with "Wide Bandgap" products from STMicroelectronics. Benefits compared to the use of traditional technologies	**Onsemi** - Highly Optimized Technologies Enable Next-gen DC Fast Charging	**Isabellenhütte** - How better accuracy and smaller shunts lead to saving energy in automotive applications
15.30 - 16.20		**Microchip** - Developing Commercial AC and DC Fast Chargers with Microchip Solutions	**Analog Devices** - The future of isolated power conversion is SiC and GaN

- **BOOK YOUR ROOM at TH Lazise**
  For guests interested in booking a room at TH Lazise, Hotel Parchi del Garda, Arrow offers a special rate.
  Single Room € 99.00 (including breakfast and tourist tax)
  Send the reservation request to: info@hpdg.it, specifying check-in and check-out dates. **SPECIAL RATE CODE to specify: ARROW2024**
  Booking deadline is January 16th, subject to room availability.

- **Places are limited**. Once the form is filled out, your registration will be confirmed through a subsequent email.

- **23rd January dinner info:** 19.00 - Meeting point in front of the hotel. Shuttle bus will be arranged to the restaurant.

Detailed Agenda

Register now!