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Speech subject: Trends and Challenges of Third-Generation Semiconductor Components in

Digital Power

Speech leader: Zhaozheng Hou, Director of the Technology and Platform Planning Dept, Huawei Digital Power Technologies Co., Ltd.

Speech Description/Objective:

Following the trends of decarbonization, electrification, digitalization, and intelligence, the energy industry will be deeply integrated with digital technologies. It is fair to say that the energy industry has ushered in a new era of digital energy. Huawei focuses on three key transformations on the road to carbon neutrality. Huawei is committed to building energy infrastructure in the digital power era for new-type power systems, new-type EVs, and new-type digital industries, supporting energy revolution, mobility revolution, and intelligence revolution. This report will first introduce the development trends and challenges of three key transformations, focusing on the integration and innovation of 4T (Watt, Heat, Battery, and Bit) technologies to promote the green and low-carbon transformation of the energy industry. Then, it focuses on the applications and challenges of compound power semiconductor devices/modules in the field of digital power.

Speech Outline:

- 1. The Global Energy Revolution and Three New-type Infrastructures in the Digital Power Era
- 2. Ten Technology Trends of Huawei Digital Power
- 3. Characteristics, Applications and Challenges of Compound Semiconductors
- 4. Applications and Challenges of Compound Semiconductor Power Modules

Who Should Attend:

Introduction of Speaker:

Zhaozheng Hou, joined Huawei in 2007, led the creation of digital control chip, power package, and power component teams. He Developed multiple products with a shipment of xx million to xx billion PCS. Since 2022, he has served as the director of Huawei's Digital Power Technology and Platform Planning Dept, responsible for the planning and development of three generations of technologies in the fields of new-type power systems, AI, and energy storage. At the same time, he is a member of the (ICEPT) Power Packaging Technology Committee, a member of the Component Professional Committee of the China Power Supply Society, and a corporate mentor of many universities. Now he has more than 60 domestic and foreign patents.