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High Power Electronics

SAMEER PENDHARKER, Texas Instruments

High Power Electronics Future Trends: New process, circuit and packaging technologies over the last 5 years have led to significant innovation and technological developments in high power electronics. In this topic, the trends and performance improvements achieved in the industry will be discussed with focus on gallium-nitride (GaN) and silicon carbide (SiC). Both GaN and SiC technologies have been around for many years but have seen limited adoption and proliferation in high power systems. With the improved transistor performance, power conversion efficiencies and densities previously unrealizable are now available leading to new applications and new system. Trends in these technologies will also be reviewed and remaining challenges to overcome before true mass market adoption can be expected.