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Title: “GaN Power ICs: Device Integration Delivers Application Performance”

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Abstract:

Early GaN implementations (e.g. cascoded dMode or discrete eMode) need complex, expensive control and protection circuits, which restrict device performance and so limit application advances and market adoption. The AllGaN™ process design kit (PDK) is a new, application-focused approach to deliver easy-to-use, high-speed, “digital-in, power-out” 650 V GaN Power ICs. The monolithic integration of logic, drive and powertrain to drive speed and efficiency in power conversion means that designers can achieve 3x power density increases at the same or lower BOM costs vs. typical old and slow Si systems.