POWER INFRASTRUCTURE

Renewables – High density and faster time-to-market

Electrification is pushing power conversion to do more than just convert energy. It must move power bidirectionally, shrink in size, and scale across applications. From single-stage SiC to GaN-enabled bidirectional switches, these demos highlight the practical building blocks engineers can implement to deliver higher efficiency, lower system cost, and faster development cycles.

Benefits
- GaN-enabled higher density
- GaN BDS for 50% reduction in the no. of switches required by traditional back-2-back topologies (HERIC)
- 1500 VDC conversion for PV commercial systems
- Fast development with modular hybrid inverter (MHI) platform

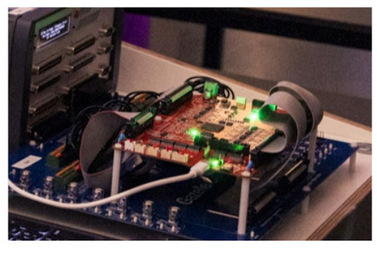
Highlight products
- 650 V GaN BDS
- 2000 V SiC MOSFET
- CoolGaN™ 100 V Gen 5
- PSoC™ Control MCU

Applications
- String/hybrid inverters
- AC-DC, DC-DC bidirectional converters
- Solar PV and energy storage systems
- 48 V residential energy storage systems

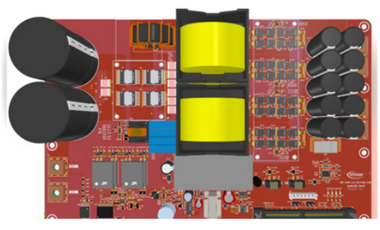


3kW CoolGaN™ BDS based HERIC for solar string/hybrid inverter

Modular Hybrid Inverter SW Development Platform



5kW Bi-Directional IPOS LLC Reference Design: 48V Residential ESS & Hybrid Inverters





Unico IDAC - bidirectional AC/DC, 1500V DC/DC, Battery Storage

Scan for more information