

### GR-10Y005ZQ: Self-Protected 100V GaN with Integrated Driver

#### Description

The GR-10Y005ZQ is a Gallium Nitride (GaN) FET with integrated driver. The device features a 100V rated GaN FET driven by an optimized high-frequency GaN FET driver. The GR-10Y005ZQ incorporates an high-side level shifter and bootstrap circuit. This integration allows GR-10Y005ZQ unit to form a half-bridge topology without the need for external level-shifting circuit. The driver and the GaN FET are mounted using Flip-chip bond packaging technology, resulting in minimized package parasitic elements.

#### Key Specifications

Part Number	GR-10Y005ZQ
V <sub>DSS</sub> , min.	100V
R <sub>DS(ON)</sub> , typ.	3.5mΩ
Package	QFN-4.0x6.5

#### Features

- Gate drive voltage compatibility
- High operating frequency
- Over temperature protection
- Short circuit protection
- 20 ns typical delay time

#### Applications

- Switch Mode Power Supplies (SMPS)
- AC-DC/ DC-DC Converters
- Motor/Robot Drives

