完整版数据手册请联系sales@powerx-ic.com

POWER X
博尔芯半导体科技

PXPG18R125S

700-V 125-mΩ GaN Power Transistor (FET) with Integrated Driver

1 Features

- 700-V 125-mΩ GaN FET with Integrated Gate Driver
- Max 18A continuous drain current @Tc=25°C
- Slew-rate adjustable
- Compatible with 3.3V/5V/15V digital or analog control signal input
- Low QRR, no free wheeling diode required
- Low switching loss
- Low EMI
- High Frequency Operation
- Low Inductance 8mm*8mm ultra thin QFN Package for Ease of Design, and Layout
- RoHS compliant and Halogen-free

2 Applications

- High efficiency power supplies
- DC/DC converter
- Solar Inverters
- Servo motors

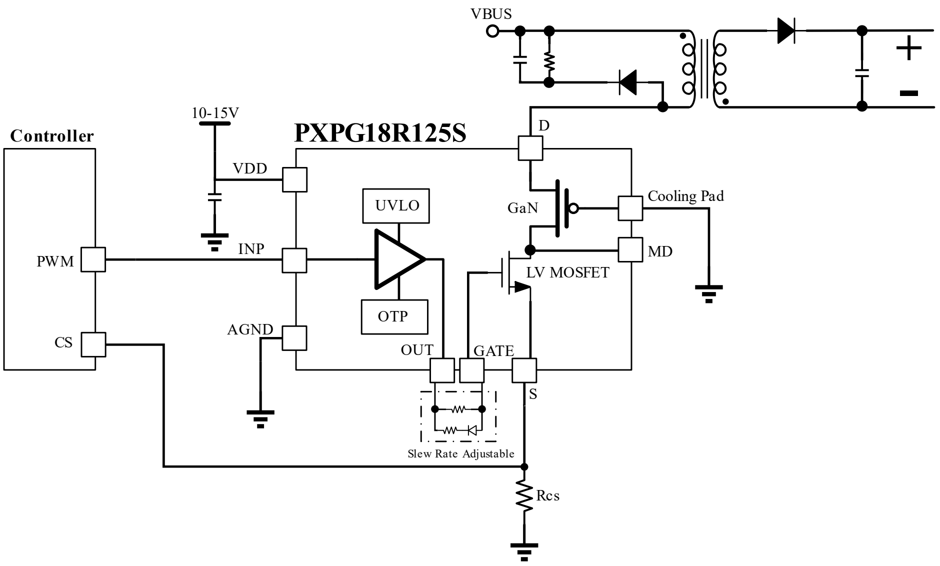
3 Description

The PXPG18R125S GaN FET with integrated driver and protection enables designers to achieve new levels of power density and efficiency in power electronics systems.

The PXPG18R125S integrates a silicon driver that enables switching speed up to 200V/ns. This integration, combined with our low inductance package, delivers clean switching and minimal ringing in hard-switching power supply topologies. Other features, including adjustable gate drive strength for EMI control, over temperature, and compatible with 3.3V/5V/15V digital or analog control signal input provide optimized BOM cost, board size, and better performance.

The PXPG18R125S is available in QFN 8mm*8mm ultra-thin package. It has excellent heat dissipation ability and extremely low packaging inductance, which can best leverage the performance advantages of GaN.

Typical (Simplified) System Diagram



Simplified Application Circuit

V1.1