

GaNpowIR™

**High Frequency GaN-Based Integrated Power Stage**



**Features**

- Input voltage range of 7V to 13.2V
- Output voltage range of 0.6V to 5.5V
- Output current up to 30A
- Benchmark peak and full load efficiency – no heat sink required
- Operation up to 3MHz
- Ultrafast, PowIRtune™ gate driver
- Wireless, low noise flip-chip design
- Industry-standard TTL compatible Enable and PWM inputs
- Small footprint LGA package (7.7mm x 6.5mm x 1.7mm)
- Pin compatible with iP2011

**Description**

The iP2010 is a fully optimized, high frequency power stage solution for synchronous buck applications utilizing IR's Gallium Nitride (GaN)-based power device technology platform.

The iP2010 integrates a highly sophisticated, ultra fast PowIRtune driver IC matched to a multi-switch monolithic GaN-based power device. These devices are mounted in a completely wireless package platform to deliver higher efficiency and more than double the switching frequency of state-of-the-art silicon-based integrated power stage devices.

With a switching capability up to 3MHz, the iP2010 enables designers to dramatically reduce the value and size of output capacitors and inductors where space is at premium. The device can also be configured to operate at a lower switching frequency for applications that require the highest possible efficiencies.

**Applications**

- Server, Storage and Netcom POL
- General DC/DC Converters

**Typical Application**

