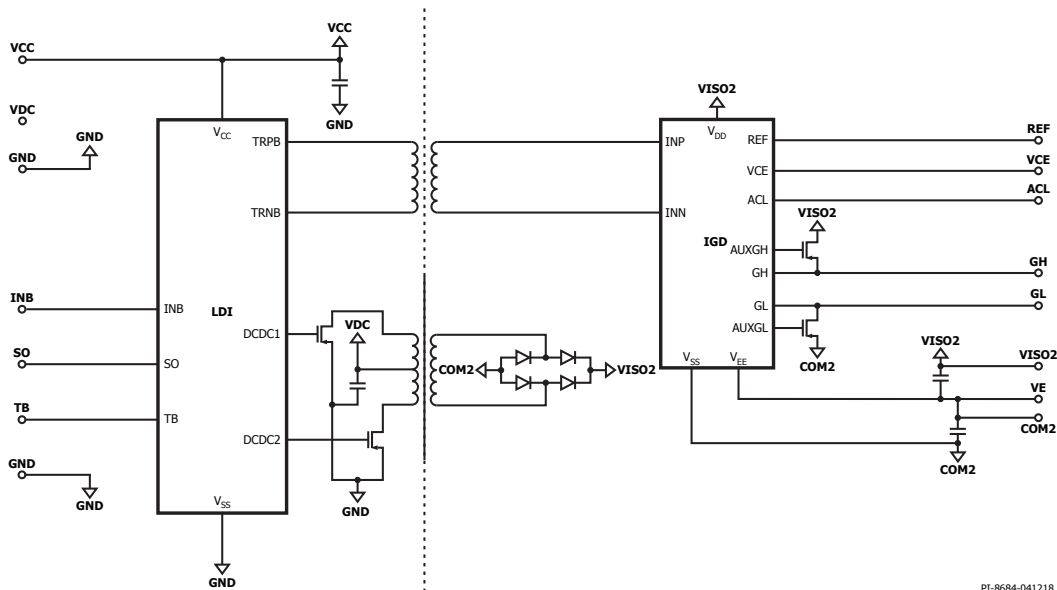


SCALE™ -2 Single-Channel Driver Core 1SC2060P

- ±60 A peak output gate current
- 20 W output power for high frequency applications up to 500 kHz
- <80 ns delay time
- <±1 ns jitter
- IGBT short-circuit protection
- Advanced active clamping (AAC)
- Isolated DC-DC converter

Single-Channel Gate Driver Core for Blocking Voltages up to 1700 V



PI-8684-041218

Applications

- High frequency applications
- High gate current driving applications
- Wind power inverters
- Railway main and auxiliary inverters
- Industrial motor drives
- Induction heating
- SiC MOSFET applications

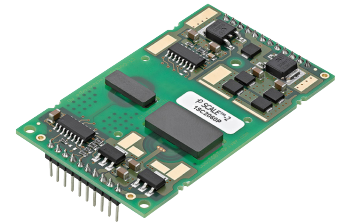
Certifications

- Reinforced isolation according to IEC 60664-1
- UL compliant

Product Details

| Parameter | Min | Typical | Max | Unit |
|--------------------------------------|------|-----------|------|--------------|
| Nominal supply voltage | | 15 | | V |
| Supply current @ $f_{IN}=0$ Hz | | 48 | | mA |
| Supply current, full load | | | 2131 | mA |
| Output power per channel | | | 21 | W |
| Gate voltage | | +15 / -10 | | V |
| Peak output current (gate current) | -60 | | +60 | A |
| Switching frequency (f_s^1) | | | 500 | kHz |
| Duty cycle | 0 | | 100 | % |
| Creepage distance primary-secondary | 15 | | | mm |
| Clearance distance primary-secondary | 15 | | | mm |
| Dielectric test voltage | 5000 | | | V_{RMS} |
| Partial discharge extinction voltage | 1768 | | | V_{PEAK} |
| dv / dt immunity, input-to-output | | | 100 | kV/ μ S |
| Operating temperature | -40 | | +85 | $^{\circ}$ C |

1 Maximum switching frequency depends on the IGBT gate charge. See data sheet for actual value of specific driver.



Design Support

Available Products 1SC2060P Products list (www.power.com/1SC2060)