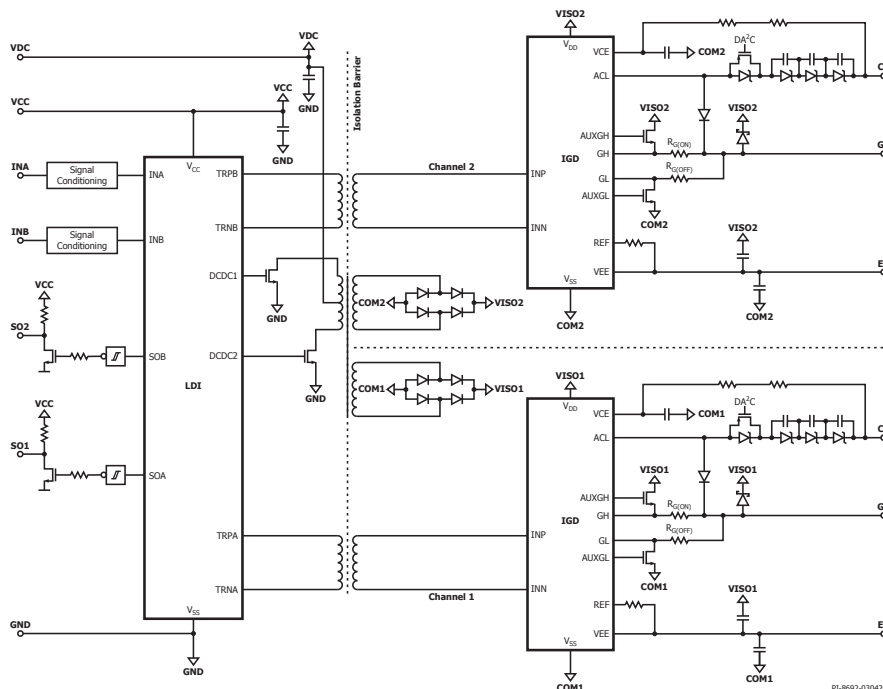


SCALE™ -2 Plug-and-Play IGBT Gate Driver 2SP0430T

- Dual-channel plug-and-play IGBT gate driver for blocking voltages up to 1700 V
- +15 V (regulated) / -10 V gate drive
- Supports three-level converter topologies
- IGBT short-circuit protection
- Isolated DC-DC converter
- Supply undervoltage lockout and Dynamic Advanced Active Clamping (DAAC)
- In-line conformal coating enhances reliability and protection

Application Circuit Diagram (2SP0430T2xx)



Applications

- Wind power inverters
- Photovoltaic inverters
- Uninterruptible power supplies
- Industrial motor drives
- Railway main and auxiliary inverters

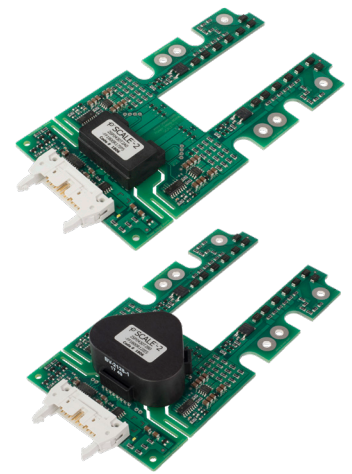
Certifications

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

Product Details

Parameter	Min	Typical	Max	Unit
Nominal supply voltage (V_{VDD}), (V_{VCC})		15		V
Supply current, full load (I_{VDC})			480	mA
Output power per channel (P_{gx})			2	W
Peak output current (gate current)	-30		30	A
Switching frequency f_{sw}		10		kHz
Creepage distance primary-secondary (C_{PGP-S})	30			mm
Clearance distance primary-secondary (C_{PGS-S})	12.6			mm
Dielectric test voltage A-Type ($V_{iso,ps}$)	5000			V_{RMS}
Dielectric test voltage B-Type ($V_{iso,ps}$)	9100			V_{RMS}
Partial discharge extinction voltage A-Type ($P_{D,ps}$)	1768			V_{PEAK}
Partial discharge extinction voltage B-Type ($P_{D,ps}$)	3100			V_{PEAK}
dv/dt immunity, input-to-output			50	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.



2SP0430T SCALE-2 plug-and-play IGBT gate driver

Design Support

Available Products 2SP0430T products list (www.power.com/2SP0430T)

Application Note AN-1301: Do's and don'ts with SCALE-2 gate drivers (www.power.com/an-1301)