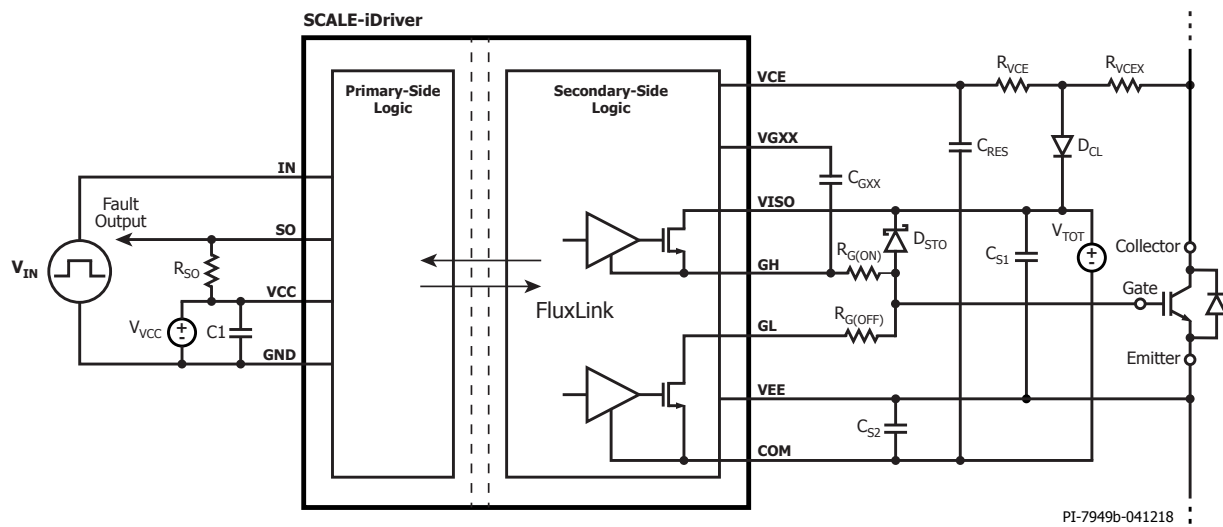


SCALE-iDriver™ Gate Driver SID11x1K

- Split outputs providing up to 8 A peak drive current
- Integrated FluxLink™ technology
- Rail-to-rail stabilized output voltage
- Unipolar supply voltage for secondary-side
- Suitable for 600 V / 650 V / 1200 V IGBT and SiC MOSFET switches
- Providing basic isolation up to 1200 V blocking voltage



Single-Channel IGBT / SiC MOSFET Gate Driver



Applications

- Delivery vehicles
- General purpose drives
- General industrial equipment

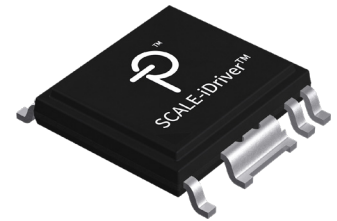
Certifications

- Reinforced isolation according to VDE 0884-10 and IEC 60747-10
- UL 1577 certified: E358471 complies with IEC 61000-4-8 and IEC 61000-4-9 standards

Product Details

Parameter ¹	Min	Typical	Max	Unit
Primary-side supply voltage (V_{VCC})	4.75	5	5.25	V
Secondary-side total supply voltage (V_{TOT})	22	25	28	V
Maximum gate sourcing peak current (I_{GH})		7.3		A
Maximum gate sinking peak current (I_{GL})		8		A
Operating switching frequency (f_s)	0	20	75	kHz
Propagation delay jitter			±5	ns
Turn-on propagation delay time ($t_{P(LH)}$)		253		ns
Turn-off propagation delay time ($t_{P(HL)}$)		262		ns
Minimum turn-on and -off PWM pulses extension ($t_{GE(MIN)}$)			650	ns
Creepage distance primary-secondary (L2)	9.5			mm
Clearance distance primary-secondary (L1)	9.5			mm
Tracking resistance (Comparative Tracking Index - CTI)		600		
Maximum package dissipated power (P_s)			1.79	W
100% production withstanding isolation voltage test (V_{TEST})	6			kV _{RMS}
100% production partial discharge test ($V_{PD(m)}$)	1800			V _{PEAK}

¹ Parameters apply to SID1181K



Design Support

Reference Designs

Gate driver reference designs (www.power.com/solutions/designs/gate-drivers)