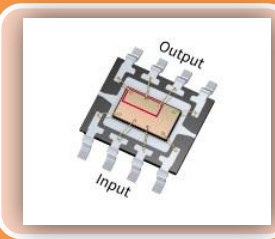
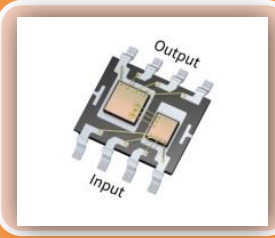


Infinion gate driver IC technologies and applications



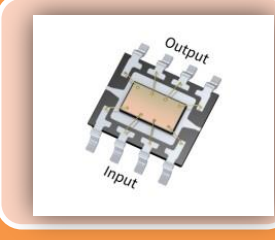
Level-shifting junction isolation (JI)

- Industry standard gate drivers using rugged proprietary HVIC process
- Tailored for specific motor-control and switch-mode power applications



Galvanic isolation technology Coreless transformer (CT)

- Magnetically-coupled isolation technology provides galvanic isolation for industrial applications
- Flexible configurations and options for output current (up to 10 A), DESAT protection, active Miller clamp, isolation rating, and packages



Non-isolated (N-ISO)

- Single- and dual-low-side drivers with flexible options for output current, logic configurations, UVLO, and packages
- Rugged technology of the high-voltage gate drivers, and on the latest state-of-the-art 0.13- μm process

The industrial and general purpose gate driver ICs are well suited for many applications, such as industrial, EV Charging and battery driven applications:

Industrial	EV Charging	Battery driven applications
<p>Inverter (<5 kW): 6EDL04N06PT</p> <ul style="list-style-type: none"> • Thin-film-SOI-technology • Ultra-fast bootstrap diodes • Shutdown of all switches during error conditions <p>Inverter (<30 kW): 1ED020I12-F2</p> <ul style="list-style-type: none"> • Galvanically isolated coreless transformer driver • Desaturation protection • Active miller clamp <p>PFC; SMPS: 2EDN8524F</p> <ul style="list-style-type: none"> • Dual-channel low-side • 5 A source / 5 A sink • High system level efficiencies, excellent power density and consistent system robustness 	<p>DC-DC: 1EDC20I12AH</p> <p>HB (LLC): 1EDC60I12AH</p> <ul style="list-style-type: none"> • 7.6 mm creepage clearance • UL 1577 certified with $V_{\text{ISO}} = 2500 \text{ V}_{\text{(rms)}}$ for 1 min • Separate source and sink outputs • Short circuit clamping • Active shutdown <p>PFC: IR4427S</p> <ul style="list-style-type: none"> • Gate drive supply range from 6 to 20 V • Matched propagation delay for both channels <p>2EDN7524F</p> <ul style="list-style-type: none"> • Dual-channel low-side • 5 A source / 5 A sink • High system level efficiencies, excellent power density and consistent system robustness 	<p>Drone, e-bike, e-scooter, vacuum, service robotic: IRS2008S</p> <ul style="list-style-type: none"> • 70 ns/35 ns typical turn-on rise/turn-off fall times • Less than 60 ns delay matching time • 520 ns deadtime and cross-conduction prevention logic <p>6EDL04N02PR</p> <ul style="list-style-type: none"> • Separate control circuits for all six drives; Interlock • Ultra-fast integrated bootstrap diode (RBSD 40 Ω) • Over-current protection • Shutdown of all switches during error conditions • Evaluation board available: EVAL-6EDL04N02PR <p>IR2011S</p> <ul style="list-style-type: none"> • Independent low and high side channels • Matched propagation delay for both channels