

Gate Drivers

High Speed, High Current Low Side Gate Drivers

The 30 A IXD_630 additionally offers undervoltage lockout (UVLO) that locks out the source and sink drivers until a sufficient level of V_{CC} is present.

| Part Number ➤ New | Output Type | I_{PK} $T_C = 25^\circ C$ A | Output Resistance Ω | Enable Function | non-inverting | inverting | UVLO V | Package | Fig. No. | Outline drawings on pages O-29...O-51 |
|----------------------|-------------|-------------------------------------|-------------------------------|-----------------|---------------|-----------|--------|------------------|----------|---------------------------------------|
| ➤ IXDD 614PI | Single | 14 | 0.8 | ● | ● | | - | 8-Pin DIP | X502 | X502 8-pin DIP |
| ➤ IXDD 614SI | | | | ● | ● | | | 8-Pin Power SOIC | X512b | |
| ➤ IXDD 614CI | | | | ● | ● | | | 5-Pin TO-220 | X006 | |
| ➤ IXDD 614YI | | | | ● | ● | | | 5-Lead TO-263 | X012a | |
| ➤ IXDI 614PI | | | | | | ● | | 8-Pin DIP | X502 | |
| ➤ IXDI 614SI | | | | | | ● | | 8-Pin Power SOIC | X512b | |
| ➤ IXDI 614CI | | | | | | ● | | 5-Pin TO-220 | X006 | |
| ➤ IXDI 614YI | | | | | | ● | | 5-Lead TO-263 | X012a | |
| ➤ IXDN 614PI | | | | | ● | | | 8-Pin DIP | X502 | |
| ➤ IXDN 614SI | | | | | ● | | | 8-Pin Power SOIC | X512b | |
| ➤ IXDN 614CI | | | | | ● | | | 5-Pin TO-220 | X006 | |
| ➤ IXDN 614YI | | | | | ● | | | 5-Lead TO-263 | X012a | |
| ➤ IXDD 630CI | Single | 30 | 0.4 | ● | ● | | 11.75 | 5-Pin TO-220 | X006 | |
| ➤ IXDD 630MCI | | | | ● | ● | | 8.50 | 5-Pin TO-220 | X006 | |
| ➤ IXDD 630YI | | | | ● | ● | | 11.75 | 5-Pin TO-263 | X012a | |
| ➤ IXDD 630MYI | | | | ● | ● | | 8.50 | 5-Pin TO-263 | X012a | |
| ➤ IXDI 630CI | | | | | | ● | 11.75 | 5-Pin TO-220 | X006 | |
| ➤ IXDI 630MCI | | | | | | ● | 8.50 | 5-Pin TO-220 | X006 | |
| ➤ IXDI 630YI | | | | | | ● | 11.75 | 5-Pin TO-263 | X012a | |
| ➤ IXDI 630MYI | | | | | | ● | 8.50 | 5-Pin TO-263 | X012a | |
| ➤ IXDN 630CI | | | | | ● | | 11.75 | 5-Pin TO-220 | X006 | |
| ➤ IXDN 630MCI | | | | | ● | | 8.50 | 5-Pin TO-220 | X006 | |
| ➤ IXDN 630YI | | | | | ● | | 11.75 | 5-Pin TO-263 | X012a | |
| ➤ IXDN 630MYI | | | | | ● | | 8.50 | 5-Pin TO-263 | X012a | |

IX2127 600 V High-Side MOSFET and IGBT Driver

The IX2127 is a high-voltage, high-speed power MOSFET and IGBT driver. The device's high-voltage level-shift technique enables it to operate at up to 600 V. Clare's proprietary common-mode design techniques provide stable operation in high dV/dt noise environments.

The IX2127 detects an over-current condition in the driven MOSFET or IGBT device, and shuts down drive to that device. An open-drain output, the FAULT output, indicates that an over-current shutdown has occurred. The gate driver output typically can source 250 mA and sink 500 mA, which is suitable for fluorescent lamp ballast, motor control, SMPS, and other converter drive topologies. Available in 8-pin DIP and 8-pin SOIC packages.

Features

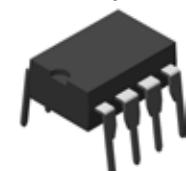
- Floating Channel Designed for Bootstrap Operation up to 600 V
- Tolerant to Negative Transient Voltages; dV/dt Immune
- Undervoltage Lockout
- 3.3 V, 5 V, and 12 V Input Logic Compatible
- Open-Drain FAULT Indicator Pin Shows Over-Current Shutdown
- Output in Phase with the Input

Applications

- High Speed Gate Driver
- Motor Drive Inverter
- Automotive

Outline drawings on pages O-29...O-51

X502 8-pin DIP



X512a 8-pin SOIC



| Part Number ➤ New | V_{offset} V | I_o Source/Sink \pm mA | V_{csth} Comparator Threshold mV | t_{on} / t_{off} typ. ns | Package | Fig. No. |
|----------------------|-------------------|----------------------------------|--|----------------------------------|------------|----------|
| ➤ IX 2127G | 600 | 250/500 | 250 | 100 | 8-Pin DIP | X502 |
| ➤ IX 2127N | | | | | 8-Pin SOIC | X512a |