

Integrated Circuits

Ultra-fast Power MOSFET / IGBT Drivers

These ultra-fast high current drivers are optimized for high efficiency performance in the motor drive and power conversion applications. They are designed to switch largest MOSFETs and IGBTs with minimum switching times at frequencies to 10 MHz. These MOSFET / IGBT drivers are manufactured in industry standard outlines, which include TO-263, TO-220 and many IC packages offering superior thermal performance.


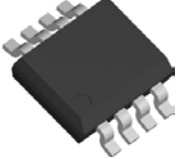
Features

- Wide operating voltage range from 4.5 V to 35 V
- Rated for -55°C to +125°C operation
- Very Low output impedance
- No internal cross conduction which allows operating frequency to 10 MHz
- Latch-up protected to rated reverse current
- Output Current - up to 30 A peak
- Very low thermal impedance for TO-263 and TO-220 packages
- Matched rise and fall times
- ENABLE pin for emergency shutdown
- TTL or CMOS input signals
- Grounded base tab in 8-Pin SOIC-CT, 14-Pin SOIC-CT, 16-PIN SOIC-CT and 28 Pin SOIC-CT packages for PC board cooling.

Applications

- Inverters
- SMPS Class D Amplifiers
- Power Factor Correction
- Motor drives
- Line drivers
- Traction
- Radiology and laser technology

Low Side MOSFET / IGBT Gate Driver Selection Guide

Part Number	Output Type	I_{PK} $T_c = 25^\circ\text{C}$ A	Output Resistance Ω	Logic Configuration	Enable Function	Package	Fig. No.	Outline drawings on pages O-30...O-52
IXDF 402SI IXDF 402SI-16 IXDF 402SIA-16 IXDF 502D1 IXDF 502PI IXDF 502SIA IXDI 402SI IXDI 402SI-16 IXDI 402SIA-16 IXDI 502D1 IXDI 502PI IXDI 502SIA IXDN 402SI IXDN 402SI-16 IXDN4 02SIA-16 IXDN 502D1 IXDN 502PI IXDN 502SIA	Dual	2	4	Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Inverting Inverting Inverting Inverting Inverting Non-Inverting Non-Inverting Non-Inverting Non-Inverting Non-Inverting		8-pin SOIC-CT 16-pin SOIC-CT(W) 16-pin SOIC(W) 6-pin DFN 4x5 8-pin DIP 8-pin SOIC 8-pin SOIC-CT 16-pin SOIC-CT(W) 16-pin SOIC(W) 6-pin DFN 4x5 8-pin DIP 8-pin SOIC 8-pin SOIC-CT 16-pin SOIC-CT(W) 16-pin SOIC(W) 6-pin DFN 8-pin DIP 8-pin SOIC	X512a X515a X515 X531 X502 X512 X512a X515a X515 X531 X502 X512 X512a X515a X515 X531 X502 X512	<p>X502 8-pin DIP</p>  <p>X512(a) 8-pin SOIC</p> 
IXDR 502D1B IXDS 502D1B	Single	2	4	Inverting Non-Inverting OR Inverting		6-pin DFN 2x2 6-pin DFN 2x2	X530 X530	
IXDD 404SI IXDD 404SI-16 IXDD 404SIA-16 IXDD 504D2 IXDD 504PI IXDD 504SIA IXDE 504D2 IXDE 504PI IXDE 504SIA IXDF 404SI IXDF 404SI-16 IXDF 404SIA-16 IXDF 504D1 IXDF 504PI	Dual	4	2.5	Non-Inverting Non-Inverting Non-Inverting Non-Inverting Non-Inverting Non-Inverting Inverting Inverting Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting Non-Inverting & Inverting	<ul style="list-style-type: none"> • 8-pin SOIC-CT • 16-pin SOP-CT(W) • 16-pin SOP(W) • 8-pin DFN 4x5 • 8-pin DIP • 8-pin SOIC • 8-pin DFN 4x5 • 8-pin DIP • 8-pin SOIC 	X512a X515a X515 X532 X502 X512 X532 X502 X502 X512 X512a X515a X515 X531 X502	<p>X515(a) 16-pin SOIC-CT(W)</p> 