

Dashboard Dimmer

Devices	Description
U6083B	Dashboard Dimmer IC: PWM high-side driver, $f < 2.000$ Hz, 18 to 100% duty cycle.
U6084B	Dashboard Dimmer IC: PWM Power Control with Automatic Duty-cycle Reduction.

Driver

Devices	Description
ATA6026	H-bridge gate driver with 5V voltage regulator, window watchdog and SCI interface
ATA6821	Single-channel high-speed gate driver with push-pull output
ATA6823	H-bridge Motor Driver
ATA6824	High Temperature H-bridge Motor Driver
ATA6826	Triple Half-bridge DMOS Output Driver with Serial Input Control
ATA6827	High Temperature Triple Half-bridge Driver with Serial Input Control
ATA6828	40-V triple halfbridge driver
ATA6829	40-V dual triple driver
ATA6830	Intelligent Stepper Motor Driver
ATA6831	Triple Half-bridge Driver with SPI and PWM
ATA6832	High Temperature Triple Half-bridge Driver with SPI and PWM
ATA6836	Hex Half-bridge Driver with Serial Input Control

Driver IC

High Speed, High Current Low Side Gate Drivers

IXYS's line of ultra-fast, high current MOSFET and IGBT gate drivers are optimized for high efficiency performance in motor drive and power conversion applications. With output current ratings of 2 A to 30 A, they are designed to switch the largest MOSFETs and IGBTs with minimum switching times and at frequencies up to 10 MHz. Depending on the output current rating, these gate drivers are offered in DFN, SOIC, Power SOIC, DIP, TO-220 and TO-263 packages.


Features

- 2 A to 30 A Peak Source/Sink Drive Current
- Wide Operating Voltage Range: 4.5 V to 35 V
- -40°C to +125°C Extended Operating Temperature Range
- Logic Input Withstands Negative Swing of up to 5 V
- Matched Rise and Fall Times
- Low Propagation Delay Time
- Low 10 μ A Supply Current
- Low Output Impedance

Applications

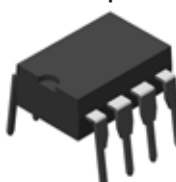
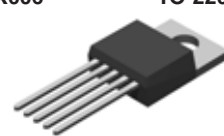
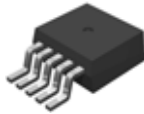
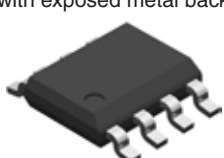
- Efficient Power MOSFET and IGBT Switching
- Switch Mode Power Supplies
- Motor Controls
- DC to DC Converters
- Class-D Switching Amplifiers
- Pulse Transformer Driver

Low Side MOSFET / IGBT Gate Driver Selection Guide

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			
➤ IXDF 602D2	Dual	2	4		1x	1x	-	8-Pin DFN	X532	X502 8-pin DIP 			
➤ IXDF 602PI					1x	1x		8-Pin DIP	X502				
➤ IXDF 602SI					1x	1x		8-Pin Power SOIC	X512b				
➤ IXDF 602SIA					1x	1x		8-Pin SOIC	X512a				
➤ IXDI 602D2						2x		8-Pin DFN	X532				
➤ IXDI 602PI						2x		8-Pin DIP	X502				
➤ IXDI 602SI						2x		8-Pin Power SOIC	X512b				
➤ IXDI 602SIA						2x		8-Pin SOIC	X512a				
➤ IXDN 602D2					2x			8-Pin DFN	X532				
➤ IXDN 602PI					2x			8-Pin DIP	X502				
➤ IXDN 602SI					2x			8-Pin Power SOIC	X512b				
➤ IXDN 602SIA					2x			8-Pin SOIC	X512a				
➤ IXDD 604D2					Dual	4		2.5	•		2x	-	8-Pin DFN
➤ IXDD 604PI	•	2x	8-Pin DIP	X502									
➤ IXDD 604SI	•	2x	8-Pin Power SOIC	X512b									
➤ IXDD 604SIA	•	2x	8-Pin SOIC	X512a									
➤ IXDF 604PI		1x	8-Pin DIP	X502									
➤ IXDF 604SI		1x	8-Pin Power SOIC	X512b									
➤ IXDF 604SIA		1x	8-Pin SOIC	X512a									
➤ IXDI 604PI			8-Pin DIP	X502									
➤ IXDI 604SI			8-Pin Power SOIC	X512b									
➤ IXDI 604SIA			8-Pin SOIC	X512a									
➤ IXDN 604PI		2x	8-Pin DIP	X502									
➤ IXDN 604SI		2x	8-Pin Power SOIC	X512b									
➤ IXDN 604SIA		2x	8-Pin SOIC	X512a									
➤ IXDD 609D2	Single	9	1	•			•		-	8-Pin DFN	X532		
➤ IXDD 609SI				•			•			8-Pin Power SOIC	X512b		
➤ IXDD 609SIA				•			•			8-Pin SOIC	X512a		
➤ IXDD 609PI				•			•			8-Pin DIP	X502		
➤ IXDD 609CI				•			•			5-Pin TO-220	X006		
➤ IXDD 609YI				•	•	5-Pin TO-263	X012a						
➤ IXDI 609SI						8-Pin Power SOIC	X512b						
➤ IXDI 609SIA						8-Pin SOIC	X512a						
➤ IXDI 609PI						8-Pin DIP	X502						
➤ IXDI 609CI						5-Pin TO-220	X006						
➤ IXDI 609YI						5-Pin TO-263	X012a						
➤ IXDN 609SI						8-Pin Power SOIC	X512b						
➤ IXDN 609SIA						8-Pin SOIC	X512a						
➤ IXDN 609PI						8-Pin DIP	X502						
➤ IXDN 609CI						5-Pin TO-220	X006						
➤ IXDN 609YI			5-Pin TO-263	X012a									

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	Output Type	I_{PK} $T_C = 25^\circ\text{C}$ A	Output Resistance Ω	Enable Function	non-inverting	inverting	UVLO V	Package	Fig. No.	Outline drawings on pages O-29...O-51		
➤ New												
➤ IXDD 614PI	Single	14	0.8	●	●		-	8-Pin DIP	X502	X502 8-pin DIP  X006 TO-220  X012a TO-263  X512a 8-pin SOIC X512b 8-pin PowerSOIC with exposed metal back 		
➤ 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
➤ 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

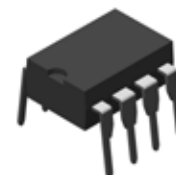
- Floating Channel Designed for Bootstrap Operation up to 600 V
- Tolerant to Negative Transient Voltages; dV/dt Immune
- Undervoltage Lockout
- 3.3 V, 5 V, and 12 V Input Logic Compatible
- Open-Drain FAULT Indicator Pin Shows Over-Current Shutdown
- Output in Phase with the Input

Applications

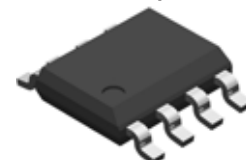
- High Speed Gate Driver
- Motor Drive Inverter
- Automotive

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

X502 8-pin DIP



X512a 8-pin SOIC



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

Driver IC

ExPDs

Low-Side Power Switches

Package WxDxH (unit: mm)	Type No.	V _{DS} (DC) [V]	I _O (DC) [A]	P _D [W]	R _{DS} (on) [Ω]			T _J (sd) [°C]			I _S [A]			V _{IN} clamp [V]	
					V _{IN} [V]	I _O [A]	max	V _{IN} [V]	I _O [A]	typ	V _{IN} [V]	typ	max	I _{IN} [A]	min
TSSOP8 3.0×6.4×1.0	TND027TD	60	1.5	1.3	5	1	0.4	5	1	150	5	6	9	0.001	10
SOP8 5.0×6.0×1.8	TND017SW	60	1.5	2	5	1	0.4	5	1	150	5	4	5	0.001	10
	TND027SW	60	1.5	1.7	5	1	0.4	5	1	150	5	6	9	0.001	10

ExPDs

Low-Side Dual Drivers

Package WxDxH (unit: mm)	Type No.	Functions	V _{DD} max [V]	P _D max [W]	Operating voltage range [V]	Drive capability		V _{IH} min [V]	V _{IL} max [V]
						Source [A]	Sink [A]		
VEC8 2.9×2.8×0.75	● TND322VD	Dual buffer (Built-in input-pulldown resistance)	25	0.2	4.5 to 25	0.8	1	2.6	0.8
	● TND323VD	Inverter buffer (Built-in input-pulldown resistance)	25	0.2	4.5 to 25	0.8	1	2.6	0.8
TSSOP8 3.0×6.4×1.0	TND307TD	Dual inverter	25	0.25	4.5 to 25	1	1	2.6	0.8
	TND309TD	Inverter buffer	25	0.25	4.5 to 25	1	1	2.6	0.8
SOP8 5.0×6.0×1.8	TND301S	Dual inverter	25	0.3	4.5 to 25	2	2	2.6	0.8
	TND302S	Dual buffer	25	0.3	4.5 to 25	2	2	2.6	0.8
	TND303S	Inverter buffer	25	0.3	4.5 to 25	2	2	2.6	0.8
	TND304S	Dual inverter	25	0.3	4.5 to 25	1	1	2.6	0.8
	TND305S	Dual buffer	25	0.3	4.5 to 25	1	1	2.6	0.8
	TND306S	Inverter buffer	25	0.3	4.5 to 25	1	1	2.6	0.8
	TND311S	Dual inverter (Built-in input-pulldown resistance)	25	0.3	4.5 to 25	2	2	2.6	0.8
	TND313S	Inverter buffer (Built-in input-pulldown resistance)	25	0.3	4.5 to 25	2	2	2.6	0.8
	TND314S	Dual inverter (Built-in input-pulldown resistance)	25	0.3	4.5 to 25	1	1	2.6	0.8
	TND315S	Dual buffer (Built-in input-pulldown resistance)	25	0.3	4.5 to 25	1	1	2.6	0.8

ExPDs

Half Bridge Drivers

Package WxDxH (unit: mm)	Type No.	V _S [V]	I _O		Features	Applications
			Source [mA]	Sink [mA]		
SOP8 5.0×6.0×1.8	● TND516SS	600	200	400	Single-phase high side driver	Ballasts, PDP maintenance drive, DC/AC motor drive, induction heaters, charging circuits, high-frequency switching power supplies, switching amplifiers, and other general-purpose driver applications
	TND507S	600	250	500	Single input/two output half bridge driver circuits	
	TND508S	600	250	500	Single input/two output half bridge driver circuits	
MFP16 10.1×6.4×1.8	● TND512MD	600	200	400	3-phase high side driver	3-phase motor drive application
	TND505MD	600	250	500	Two input/output half bridge driver circuits, Built-in shutdown function and low-side priority circuit	PDP maintenance drive, DC/AC motor drive, ballasts, charging circuits, high-frequency switching power supplies, induction heaters,

ELMOS DC/DC converters and driver ICs

DC/DC Converter		Driver IC / DC/DC											
Description		E910.22	E910.23	E910.24	E910.25	E910.26	E910.27	E910.28	910.96	981.06	E981.01	E910.13	E910.01
Power / Voltage / Current		3V - 55V	3V - 55V	3V - 60V	3V - 60V	3V - 60V	5V - 40V	5V - 40V	5V - 40V	5V - 60V	5V - 60V	Logic: 4,75V - 5,25V Driver: 5,25V - 25V	Logic: 4,75V - 5,5V Driver: 5,5V - 25V
Input Voltage Range (Vin)		3V - 55V	3V - 55V	3V - 60V	3V - 60V	3V - 60V	5V - 40V	5V - 40V	5V - 40V	5V - 60V	5V - 60V	Logic: 4,75V - 5,25V Driver: 5,25V - 25V	Logic: 4,75V - 5,5V Driver: 5,5V - 25V
Output Voltage Range (Vout)		5V first	5V first	> 1.5 V	> 1.5 V	> 1.5 V	1.25V - (Vin - 0.5V)	1.25V - (Vin - 0.5V)	> 1.25 V	> 1.25 V	> 5V	max. 25V	max. 25V
Output current (Iout)		driver for external FET	driver for external FET	driver for external FET	driver for external FET	driver for external FET	driver for external FET	driver for external FET	high current driver for external FET	high current driver for external FET with PWM driver	9 high current drivers for external FET's, 3 PWM drivers	350 mA / channel (max 8x 200 mA simultaneously)	350 mA / channel (max 8x 200 mA simultaneously)
Channels		1	1	1	1	1	1	1	4	1	3	8	8
reference voltage (internal)		1.20 V	1.20 V	1.22 V	1.22 V	1.22 V	selectable: 0.2V or 1.2V	selectable: 0.2V or 1.2V	1.2V (SMPS); 0.25/0.5V (PWM)	1.2 V for SMPS, 0.2/1.2 V for PWM	1.2 V for SMPS, 0.2/1.2 V for PWM	-	-
reference voltage (ext. input)		-	-	-	-	-	x 0 - 1.3 V (analog input, i.e. for dimming)	x 0 - 1.3 V (analog input, i.e. for dimming)	x 4*(0 - 1.6 V) for dimming	x (analog input, i.e. for dimming)	x (3* - 1 per channel)	-	-
Comments		Additional output voltages possible with additional windings on transformer - watchdog input	Additional output voltages possible with additional windings on transformer - RESET output for micro controller	error amp gain control for excellent light load compatibility	error amp gain control for excellent light load and short circuit protection by "block and release"	Adjustable, wide input range PFM controller	externally adjustable high efficiency PFM step down converter, fully integrated	External adjustable high efficiency PFM step down converter	adjustable Switching power supply with 4 PWM controllers for LED lighting applications	Switching Power Supply with high resolution PWM driver for LED lighting applications	multi phase switching power supply for high output power applications with triple PWM driver	Low side driver (8 channel, parallel Microcontroller interface)	Low Side Driver (8 chan.) serial interface
Switching frequency		> 10 - 300 kHz	> 10 - 300 kHz	up to 300 kHz	up to 300 kHz	up to 300 kHz	up to 300 kHz	up to 300 kHz	up to 500 kHz	up to 500 kHz	up to 4,5 MHz	-	-
Duty		2% - 92%	2% - 92%	3% - 88%	3% - 88%	3% - 88%	max 100%	max 100%	3% - 90%	3% - 85%	n.a.	-	-
PMOS Driver		Push/pull driver for logic level Power-MOSFET	Push/pull driver for logic level Power-MOSFET	Push/pull driver for logic level Power-MOSFET	Push/pull driver for logic level Power-MOSFET	Push/pull driver for logic level Power-MOSFET	High Side and Low Side drivers for external MOSFET pair	High Side and Low Side drivers for external MOSFET pair	Push/pull driver for N-Channel Power MOSFET	Push/pull driver for logic level Power-MOSFET	9* Push/pull driver for N-Channel Power MOSFET	-	-
Topologies													
boost		-	x	x	x	x	-	-	x	x	x	-	-
flyback		x	x	x	x	x	-	-	x	x	x	-	-
sepic		-	-	x	x	x	-	-	x	x	x	-	-
buck		-	-	-	-	-	x	x	x	x	x	-	-
cuk		-	-	x	x	x	-	-	x	x	x	-	-
buck & boost		-	-	-	-	-	-	-	-	-	-	-	-
Comments		quasi resonant flyback controller with degaussing	quasi resonant flyback controller with degaussing	advanced PFM controller; extended ON-time	advanced PFM controller; extended over load protection	advanced PFM Controller	Step down with internal FET	Step down controller, synchronous rectifier (external Power FET pair)	multi topology PWM	multi-topology with dual PWM	multi topology, configurable phase count per output	-	-
Security features													
Watchdog		yes	yes	no	no	no	x	x	-	-	-	-	-
-power good- output		-	-	-	-	-	x	x	-	-	x	-	-
overtemperature detection		-	-	-	-	-	-	-	-	-	-	x	x
thermal shut down		x	x	x	x	x	x	x	x	x	x	x	x
thermal flag		-	-	-	-	-	-	-	-	-	-	-	-
under voltage lock out		x	x	x	x	x	x	x	x	x	x	diagnostic read out	diagnostic read out
current limiting		x	x	x	x	x	x	x	x	x	x	x	x
peak current halving		-	-	x	x	x	-	-	-	-	-	-	-
fault protection		x (short circuit detection)	x (short circuit detection)	x (short circuit protection)	x (enhanced over load and short circuit protection)	x (short circuit protection)	x (short circuit and over load protection)	x (short circuit and over load protection)	x (short circuit, overload and over voltage protection)	x (short circuit, overload and over voltage protection)	x (short circuit, overload and over voltage protection)	x (short circuit)	x (short circuit)
-Enable- output for external systems		x	x	-	-	-	-	-	-	-	-	-	-
Snapshot output current after short circuit on load		x	x	-	-	-	-	-	-	-	-	-	-
diagnostic read out		-	-	-	-	-	internal short delay time, the losses of the whole application in case of short or overload	internal short delay time, the losses of the whole application in case of short or overload	-	-	-	diagnostic read out function	diagnostic read out function
Additional information													
Operating temperature range		-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C	-40°C to +125°C
Package		S020	S020	S08	S08	S08	TSSOP24	TSSOP24	QFN32	TSSOP24	QFN64, QFN64	S024	S020, QFN20

Driver IC

Driver ICs

Brush Motor Driver Ics

Type No.	Vm [V]		IO max [A]	Channels	Features	Package
	min	max				
LV8011V	2	6,5	1	1	1-channel H-bridge driver	SSOP20(225mil)
LV8012T	2	7	1,4	2	2-channel H-bridge driver	TSSOP24(225mil)
LV8013T	2	15	1,2	1	1-channel H-bridge driver	TSSOP24(225mil)
LV8014T	2	7	1,4	2	2-channel H-bridge driver	TSSOP24(225mil)
LV8018W	2	3,6	0,5	4	4-channel H-bridge driver	SQFP48(7×7)
LV8019LP	3	7,4	1,2	1	1-channel H-bridge driver	VQLP24(3,5×3,5)
LV8019V	3	7,4	1,2	1	1-channel H-bridge driver	SSOP16(225mil)
LV8075LP	2,5	5,5	0,5	1	Single channels constant-voltage H-bridge driver	VCT16(2.6×2.6)
LV8080LP	2,5	6	0,4	2	2-channels constant-current H-bridge driver	VCT16(2.6×2.6)
LV8082LP	2,5	6	0,4	2	1-CH cv-mode H-bridge driver+1-CH cc-mode H-bridge driver	VCT16(2.6×2.6)
LV8086T	2	7	1,4	2	2-channel H-bridge driver	TSSOP24(225mil)
LV8400V	4	15	1,2	1	1-channel H-bridge driver	SSOP16(225mil)
LV8401V	4	15	1,2	1	1-channel H-bridge driver	SSOP16(225mil)
LV8405V	1,5	15	1,4	2	2-channel H-bridge driver	SSOP16(225mil)
LV8406T	1,5	15	1,4	2	Two channels H-bridge driver	TSSOP20J(225mil)
LV8411GR	2,5	5,5	0,4	4	4-channel H-bridge driver	VCT24(3.0×3.0)
LV8413GP	2,5	5,5	0,4	2	2-channel H-bridge driver	VCT16(2.6×2.6)
LV8731V	9	32	2	2	PWM current control stepping motor (selectable with bidirectional motor driver)	SSOP44K(275mil)
LV8732V	9	32	2	2	PWM current control stepping motor (selectable with bidirectional motor driver)	SSOP44K(275mil)
LV8740V	9	35	2,5	2	PWM current control stepping motor (selectable with bidirectional motor driver)	SSOP44J(275mil)
LV8741V	9,5	35	1,5	2	PWM current control stepping motor (selectable with bidirectional motor driver)	SSOP44K(275mil)
LV8741VB	9,5	35	1,5	2	PWM current control stepping motor driver (selectable with bidirectional motor driver)	SSOP36J(275mil)
LV8760T	9	35	3	1	PWM current control bidirectional motor driver	TSSOP20J(225mil)
LV8761V	9	35	3	1	PWM current control bidirectional motor driver	SSOP36J(275mil)
LV8762T	9	32	1	1	PWM current control bidirectional motor driver	TSSOP24(225mil)
LB11650	8	28	1,5	1	PWM input bidirectional motor driver	SIP14HZ
LB11651	8	28	3	1	PWM input bidirectional motor driver	SIP14HZ
LB1638	2,2	7	1	1	Low-voltage, low-saturation, bidirectional motor driver	DIP10S(300mil)
LB1638M	2,2	7	1	1	Low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LB1641	5	18	1,6	1	Bidirectional motor driver	SIP10
LB1830M	3	9	0,5	1	Low-voltage, low-saturation, constant voltage bidirectional motor driver	MFP10S(225mil)
LB1836M	1,8	9	1	2	Low-voltage, low-saturation, bidirectional motor driver	MFP14S(225mil)
LB1837M	3	9	0,25	2	Low-voltage, low-saturation, constant voltage bidirectional motor driver	MFP14S(225mil)
LB1843V	3	9	0,8	1	Low-voltage, low-saturation, current control bidirectional motor driver	SSOP20(225mil)
LB1930M	2,2	10,8	1	1	Low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LB1938T	2,2	10	0,8	1	Low-voltage, low-saturation, bidirectional motor driver	MSOP8(150mil)
LB1947	10	45	2	1	PWM current control bidirectional motor driver	SIP13H
LB1948M	2,5	16	0,8	2	12V operation, low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
STK681-300	10	42	2,9	1	Current control bidirectional DC brush motor driver	Low-profile type (H=18.2mm)
STK681-310	10	42	4,2	1	Current control bidirectional DC brush motor driver	Low-profile type (H=18.2mm)
STK681-320	10	42	5,2	1	Current control bidirectional DC brush motor driver	Low-profile type (H=18.2mm)
STK681-332-E	10	42	8,5	1	Current control bidirectional DC brush motor driver	Low-profile-small type (W=24.2mm)

Brush Motor Driver Ics 1-Phase

Type No.	Vm [V]		IO max [A]	Features	Package
	min	max			
LV8063TT	2,2	6	0,7	Single-phase full-wave motor driver	MSOP10(150mil)
LV8064TT	2,2	6	0,7	Single-phase full-wave motor driver	MSOP12(150mil)
LV8860V	4	34	0,7	Single-phase full-wave PWM motor driver	SSOP16(225mil)
LB11660FV	4	15	1,5	Speed-control-circuit integrated single-phase full-wave half predriver	SSOP16(225mil)
LB11660RV	4	15	1,5	Speed-control-circuit integrated single-phase full-wave half predriver	SSOP16(225mil)
LB11850VA	-	-	0,02	Speed-control-circuit integrated single-phase full-wave predriver	SSOP24(225mil)
LB11852FV	-	-	0,02	Speed-control-circuit integrated single-phase full-wave predriver	SSOP20J(225mil)
LB11861	4,5	16	1,5	Speed-control-circuit integrated direct PWM structure single-phase full-wave motor driver	HSSOP14(225mil)
LB11861H	4,5	16	1,5	Speed-control-circuit integrated direct PWM structure single-phase full-wave motor driver	HSSOP16(275mil)
LB11861M	4,5	16	1,5	Speed-control-circuit integrated direct PWM structure single-phase full-wave motor driver	MFP10S(225mil)
LB11862M	3,8	16,8	0,8	Single-phase full-wave fan motor driver	MFP10S(225mil)
LB11961	4,5	16	1	Speed-control-circuit integrated PWM single-phase full-wave motor driver	HSSOP14(225mil)
LB11961RM	4,5	16	1	Speed-control-circuit integrated PWM single-phase full-wave motor driver	MFP14S(225mil)
LB11961V	4,5	16	1	Speed-control-circuit integrated PWM single-phase full-wave motor driver	SSOP16(225mil)
LB11964T	3,5	13,8	0,5	Single-phase full-wave motor driver	MSOP8(150mil)
LB11967V	6	16	0,05	Speed-control-circuit integrated PWM single-phase full-wave predriver	SSOP20(225mil)
LB11970FV	4,5	16	1,2	Speed-control-circuit integrated PWM single-phase full-wave motor driver	SSOP18(225mil)
LB1862	3,8	16,8	0,8	Single-phase full-wave motor driver	DIP10S(300mil)
LB1862M	3,8	16,8	0,5	Single-phase full-wave motor driver	MFP10S(225mil)
LB1962M	3,8	16,8	0,5	Single-phase full-wave motor driver	MFP10S(225mil)
LB8503V	7,5	17	0.003	DC motor speed control IC	SSOP16(225mil)
LA6581CL	2,2	16	0,5	Single-phase full-wave BTL motor driver	ECSP2828-10x02
LA6581M	2,2	16	0,5	Single-phase full-wave BTL motor driver	MFP8(225mil)
LA6581T	2,5	16	0,3	Single-phase full-wave BTL motor driver	MSOP8(150mil)
LA6581U	2,2	16	0,36	Single-phase full-wave BTL motor driver	MSOP8J(150mil)
LA6583M	2,8	14	0,8	Single-phase full-wave BTL motor driver	MFP10S(225mil)
LA6584	2,8	14	1,2	Single-phase full-wave BTL motor driver	HSSOP14(225mil)
LA6584M	2,8	14	1,6	Single-phase full-wave BTL motor driver	MFP16FS(300mil)
LA6585M	2,2	14	0,7	Single-phase full-wave BTL motor driver	MFP10S(225mil)
LA6585T	2,2	14	0,5	Single-phase full-wave BTL motor driver	MSOP8(150mil)
LA6586T	2,2	14	0,6	Single-phase full-wave BTL motor driver	MSOP10(150mil)
LA6587T	2,2	14	0,6	Single-phase full-wave BTL motor driver	MSOP10(150mil)
LA6588M	8	26,4	0,8	Single-phase full-wave BTL motor driver	MFP10S(225mil)
LA6595T	2,2	14	0,5	Single-phase full-wave BTL motor driver	MSOP8(150mil)

Driver ICs

Brush Motor Driver Ics 2-Phase

Type No.	Vm [V]		IO max [A]	Features	Package
	min	max			
LB11668M	-	-	0,4	2-phase half-wave driver	MFP10S(225mil)
LB11669M	-	-	0,4	2-phase half-wave driver	MFP10S(225mil)
LB1663	-	-	1,5	2-phase half-wave driver	DIP10S(300mil)
LB1663M	-	-	1,5	unipolar brushless motor driver	MFP16FS(300mil)
LB1668	-	-	1,5	2-phase half-wave driver	DIP10S(300mil)
LB1668M	-	-	1,5	2-phase half-wave driver	MFP14S(225mil)
LB1860	-	-	1,5	half-wave variable-speed driver	DIP10S(300mil)
LB1860M	-	-	1,5	2-phase half-wave variable-speed driver	MFP14S(225mil)
LB1861	-	-	1,5	2-phase half-wave variable-speed	DIP10S(300mil)
LB1861M	-	-	1,5	2-phase half-wave variable-speed driver	MFP14S(225mil)
LB1863M	-	-	1,5	2-phase half-wave driver	MFP14S(225mil)
LB1867M	-	-	1	2-phase half-wave driver	MFP14S(225mil)
LB1868	-	-	1	2-phase half-wave driver	DIP10S(300mil)
LB1868M	-	-	1	2-phase half-wave driver	MFP14S(225mil)
LB1960M	3,6	17	0,5	2-phase half-wave driver	MFP8(225mil)

BLDC Motor Driver Ics 3-Phase

Type No.	Vm [V]		IO max [A]	Features	Package
	min	max			
LV8111V	10	35	2,5	Direct PWM structure 3-phase driver	SSOP44K(275mil)
LV8112V	10	35	2,5	Direct PWM structure 3-phase driver	SSOP44K(275mil)
LV8130V	9	21	0,05	Direct PWM Drive, Quiet Predriver IC	SSOP30(275mil)
LV8800V	2,2	6	0,7	Direct PWM structure 3-phase sensorless motor driver	SSOP16(225mil)
LV8804FV	6	15	1,2	Direct PWM structure 3-phase sensorless driver	SSOP20J(225mil)
LV8804V	6	15	1,2	Direct PWM structure 3-phase sensorless driver	SSOP36J(275mil)
LV8805SV	6	15	1,2	Direct PWM structure 3-phase sensorless driver	SSOP20J(225mil)
LV8805V	6	15	1,2	Direct PWM structure 3-phase sensorless driver	SSOP36J(275mil)
LV8827LF	8	35	1,5	PWM Driver	VQFN24K(4.0×4.0)
LV8829LF	8	35	1,5	PWM Driver	VQFN24K(4.0×4.0)
LB11620GP	8	17	0,03	Direct PWM structure 3-phase predriver	VCT24(3.5×3.5)
LB11620T	-	-	0,03	Direct PWM structure 3-phase predriver	TSSOP24(225mil)
LB11683H	7	13,8	1,5	3-phase sensorless driver	HSOP28HC(375mil)
LB11683V	7	13,8	1,5	3-phase sensorless driver	SSOP24J(275mil)
LB11685AV	4,5	18	1,2	3-phase sensor less driver	SSOP24J(275mil)
LB11685VH	4,5	18	1,2	3-phase sensor less Motor driver	HSOP28(275mil)
LB11693H	9,5	28	1,8	Direct PWM structure 3-phase driver	HSOP36R(375mil)
LB11693JH	8	28	1,8	Direct PWM structure 3-phase driver	HSOP36R(375mil)
LB11696V	-	-	0,03	Direct PWM structure 3-phase predriver	SSOP30(275mil)
LB11697V	8	17	0,03	Direct PWM structure 3-phase predriver	SSOP30(275mil)
LB11822	9,5	28	3,1	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	DIP28H(500mil)
LB11826	9,5	28	2,5	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	DIP28H(500mil)
LB11870	9,5	28	2,3	Speed-control-circuit integrated direct PWM structure 3-phase driver	HSSOP48(375mil)

BLDC Motor Driver Ics 3-Phase

Type No.	Vm [V]		IO max [A]	Features	Package
	min	max			
LB11872H	10	28	1,2	Speed-control-circuit integrated current-linear-drive 3-phase motor driver	HSOP28H(375mil)
LB11873	9,5	28	1,8	Speed-control-circuit integrated direct PWM structure 3-phase driver	HSOP36(375mil)
LB11876	-	-	0,03	Speed-control-circuit integrated direct PWM structure 3-phase predriver	SSOP36(275mil)
LB11920	9,5	30	3,5	Direct PWM structure 3-phase motor driver	DIP28H(500mil)
LB11921T	-	-	0,01	Speed-control-circuit integrated direct PWM structure 3-phase predriver for OA products	TSSOP36(275mil)
LB11922	-	-	0,03	Speed-control-circuit integrated direct PWM structure 3-phase predriver for OA products	SSOP36(275mil)
LB11923V	-	-	0,03	Speed-control-circuit integrated direct PWM structure 3-phase predriver for OA products	SSOP44(275mil)
LB11983	7	13,8	1	3-phase sensorless driver	DIP20(300mil)
LB11988	5	22	1,3	Current-linear-drive 3-phase motor driver	DIP18(300mil)
LB11988D	5	22	1,3	Current-linear-drive 3-phase motor driver	DIP20H(500mil)
LB11988H	5	22	1,3	Current-linear-drive 3-phase motor driver	HSOP28HC(375mil)
LB11988HR	5	22	1,3	Current-linear-drive 3-phase motor driver	HSOP28H(375mil)
LB11988V	5	22	1,3	Current-linear-drive 3-phase driver for fan motor	SSOP24J(275mil)
LB1876	9,5	28	2,5	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	HSOP36(375mil)
LB1927	9,5	28	2,5	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	DIP28H(500mil)
LB1928	9,5	28	3,1	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	DIP28H(500mil)
LB1929	9,5	28	3,5	Speed-control-circuit integrated direct PWM structure 3-phase driver for OA products	DIP28H(500mil)
LB1950V	12	1	-	Sensorless, 3-phase full-wave	SSOP30(275mil)
LB1975	20	42	2,5	Direct PWM structure 3-phase driver	DIP28H(500mil)
LB1976	20	56	2,5	Direct PWM structure 3-phase driver	DIP28H(500mil)
LB1980H	5	22	1,3	Current-linear-drive 3-phase driver	HSOP28H(375mil)
LB1980JH	5	22	1,3	Current-linear-drive 3-phase driver	HSOP28H(375mil)
LB1991V	3,5	9	1	3-phase spindle motor driver	SSOP24(275mil)
SS30	2,2	6	0,7	Direct PWM structure 3-phase sensorless motor driver	VCT20(3.0×3.0)

Driver ICs

Stepping Motor Driver ICs -Bipolar-

Type No.	Vm [V]		IO max [A]	Excitation	Motors	Features	Package
	min	max		mode			
LV8012T	2	7	1,4	1-2 phase	1	2-channel H-bridge driver	TSSOP24(225mil)
LV8014T	2	7	1,4	1-2 phase	1	2-channel H-bridge driver	TSSOP24(225mil)
LV8080LP	2,5	6	0,4	1-2 phase	1	2-channels constant-current H-bridge driver	VCT16(2.6×2.6)
LV8081GQ	2,5	6	0,4	1-2phase	1	Two channels Constant-current H-bridge Driver	UCT16(2.6×2.6)
LV8086T	2	7	1,4	1-2 phase	1	2-channel H-bridge driver	TSSOP24(225mil)
LV8402GP	1,5	15	1,4	2 phase	1	2-channel H-bridge driver	VCT24(3.5×3.5)
LV8402V	1,5	15	1,4	1-2 phase	1	2-channel H-bridge driver	SSOP16(225mil)
LV8405V	1,5	15	1,4	1-2 phase	1	2-channel H-bridge driver	SSOP16(225mil)
LV8406T	1,5	15	1,4	1-2 phase	1	Two channels H-bridge driver	TSSOP20J(225mil)
LV8411GR	2,5	5,5	0,4	1-2 phase	2	4-channel H-bridge driver	VCT24(3.0×3.0)
LV8412GR	2,5	5,5	0,4	1-2 phase	2	4-channel H-bridge driver	VCT24(3.0×3.0)
LV8413GP	2,5	5,5	0,4	1-2 phase	1	2-channel H-bridge driver	VCT16(2.6×2.6)
LV8414CS	2,5	5,5	0,6	2 phase, 1-2 phase	2	Microstep Driver Motor Driver IC	WLP32J(2.47×2.47)
LV8415CB	2,7	5,5	0,6	-	1	2-channel H-bridge driver	WLP32(2.47×2.47)
LV8416CB	2,5	5,5	0,4	1-2 phase	2	4-channel H-bridge driver	WLP18(2.47×1.27)
LV8481CS	2,5	4,5	0,4	1-2phase	1	Saturated Driver with 2 channels +Constant Current Driver	WLP10(2.47×0.97)
LV8548M	4	16	1	1-2 phase	1	12V operation, low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LV8549M	4	16	1	2 phase	1	12V operation, low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LV8711T	4	16	1	1-2 phase	1	Two circuits of PWM constant-current control H-bridge drivers incorporated	TSSOP24(225mil)
LV8712T	4	16	1	2W1-2 phase	1	Single-channel PWM constant-current control stepping motor driver incorporated	TSSOP24(225mil)
LV8713T	4	16	1	8W1-2 phase	1	Single-channel PWM constant-current control stepping motor driver incorporated	TSSOP24(225mil)
LV8729V	9	32	1,8	the second phase to 32W1-second phase	1	Single-channel PWM current control stepping motor driver	SSOP44K(275mil)
LV8731V	9	32	2	4W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP44K(275mil)
LV8732V	9	32	2	2W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP44K(275mil)
LV8734V	9	32	1,5	2W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP44K(275mil)
LV8735V	9	32	1	4W 1-2 phase	1	PWM Constant-Current Control Stepping Motor Driver	SSOP44K(275mil)
LV8736V	9	32	1	2W1-2 phase	1	PWM Constant-Current Control Stepping Motor Driver	SSOP44K(275mil)
LV8740V	9	35	2,5	W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP44J(275mil)
LV8741V	9,5	35	1,5	W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP44K(275mil)
LV8741VB	9,5	35	1,5	W1-2 phase	1	PWM current control stepping motor driver (selectable with bidirectional motor driver channel 2)	SSOP36J(275mil)
LV8743V	10	35	0,5	W1-2 phase	1	PWM constant-current control stepping motor driver and switching regulator controller	SSOP44K(275mil)

Stepping Motor Driver ICs -Bipolar-

Type No.	Vm [V]		IO max [A]	Excitation	Motors	Features	Package
	min	max		mode			
LV8746V	9	35	1	W1-2 phase	1	PWM Constant-Current Control Stepping Motor Driver	SSOP44K(275mil)
LV8746VB	9	35	1	W1-2 phase	1	PWM current control stepping motor driver	SSOP36J(275mil)
LV8747T	10	35	1,5	W1-2 phase	2	2-channel PWM constant-current control stepping motor driver and switching regulator controller	TQFP64K(7×7)
LB11847	10	45	1,5	4W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB11946	10	45	1	4W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB11948T	3	15	0,4	1-2 phase	1	PWM current control stepping motor driver	TSSOP30(275mil)
LB1836M	1,8	9	1	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MFP14S(225mil)
LB1837M	3	9	0,25	1-2 phase	1	Low-voltage, low-saturation, constant voltage bidirectional motor driver	MFP14S(225mil)
LB1838JM	2,5	9	1	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MFP14S(225mil)
LB1838M	2,5	9	1	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MFP14S(225mil)
LB1845	10	44,5	1,5	W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB1846M	2,5	7,5	0,8	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LB1847	10	45	1,5	4W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB1848M	2,5	7,5	0,8	2 phase	1	Stepping motor driver only for 2-phase excitation	MFP10S(225mil)
LB1909M	2,5	16	0,8	2 phase	1	Stepping motor driver only for 2-phase excitation	MFP10S(225mil)
LB1933M	1,8	7,5	1	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MFP14S(225mil)
LB1935CL	2,2	7,5	0,4	2 phase	1	Stepping motor driver only for 2-phase excitation	ECSP2828-10
LB1935T	2,2	7,5	0,4	2 phase	1	Stepping motor driver only for 2-phase excitation	MSOP10(150mil)
LB1936V	2,5	9,5	0,8	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	SSOP16(225mil)
LB1937T	2,5	9,5	0,8	1-2 phase	2	Low-voltage, low-saturation, bidirectional motor driver	TSSOP24(225mil)
LB1939T	1,6	7,5	0,4	1-2 phase	1	Low-voltage, low-saturation, constant voltage and constant current bidirectional motor driver	TSSOP20(225mil)
LB1940T	1,6	7,5	0,4	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	TSSOP20(225mil)
LB1940U	1,6	7,5	0,4	1-2 phase	1	Low-voltage, low-saturation, bidirectional motor driver	MSOP20(225mil)
LB1945D	10	28	0,8	W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB1945H	10	28	0,8	W1-2 phase	1	PWM current control stepping motor driver	HSOP28H(375mil)
LB1946	10	45	1,5	4W1-2 phase	1	PWM current control stepping motor driver	DIP28H(500mil)
LB1948M	2,5	16	0,8	1-2 phase	1	12V operation, low-voltage, low-saturation, bidirectional motor driver	MFP10S(225mil)
LB1973M	1,8	7,5	1	1-2 phase	1	Two-channel H-Bridge Driver	MFP10S(225mil)

Driver ICs

Stepping Motor Driver ICs -Unipolar-

Type No.	V _m [V]		I _O max [A]	Excitation mode	Motors	Features	Package
	min	max					
STK672-630A-E	10	42	2,65	1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile type (H=18.2mm)
STK672-632A-E	10	42	2,65	1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile-small type (W=24.2mm)
STK672-640A-E	10	42	4	1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile type (H=18.2mm)
STK672-642A-E	10	42	4	1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile-small type (W=24.2mm)
STK672-732A-E	10	42	2,65	1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile-small type (W=24.2mm)
STK672-430A-E	10	42	2,5	4W1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile type (H=18.2mm)
STK672-432A-E	10	42	2,5	4W1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile-small type (W=24.2mm)
STK672-440A-E	10	42	3,5	4W1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile type (H=18.2mm)
STK672-442A-E	10	42	3,5	4W1-2 phase	1	Unipolar separate-excitation constant-current control stepping motor driver	Low-profile-small type (W=24.2mm)

Hall ICs



Part No.	Features	V _{CC}	V _{OL} (V)	I _{CC} (mA)	Package
		PD(mW)	B _{HYST} (T _A =25°C)		
UH277	Complementary Dual Output Hall Effect Latch	3V~20V	-	25mA	SIP-4
		500mW	140G		
H1277	High Sensitivity Hall Effect Sensor IC with FG Output	3.7V~20.0V	-	25mA	SIP-4
		500mW	-		
SK1812	Bipolar Latch Type HALL - Effect For High-Temperature Operation	2.5V~20V	0.7V	10mA	SIP-3 SOT-23
		400/200mW	100G		
SK1816	Bipolar Latch Type Hall-Effect for High-Temperature Operation	2.5V~20V	0.7V	10mA	SIP-3 SOT-23
		400/200mW	100G		
SK1901	Hall-Effect Switch for High-Temperature	2.5V ~ 20V	-	-	SIP-3 SOT-23
		400/200mW	90.0G		
SK8509	Hall-Effect Sensor IC	4V~7V	-	10mA	SIP-3 SOT-23
		-	-		
SK8552	Hall-Effect Low Voltage Operation	3V~20V	0.7V	5mA	SIP-3 SOT-25
		400/200mW	-		
UH8100AG	LOW POWER HALL EFFECT SWITCH	2.5V~5.5V		2.0mA	SOT-23
		230mW	VDD=3.0,10G		
UH8102AG	LOW POWER HALL EFFECT SWITCH	2.4V~5.5V		1.1mA	SOT-23
			VDD=2.7V,10G		