



DC Brushless Motor Driver IC

**PL392P-A**  
Single coil Motor Pre-Driver IC  
with PWM control

**Applications**

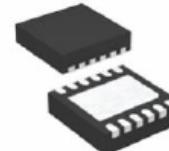
- Automotive fan motor

**Features**

- Built-in hall sensor
- Single phase full wave pre-driver
- Speed controllable by DC voltage /PWM
- FG open drain output
- Low speed setting
- Quick start
- Soft start
- Protections
  - Motor locked protection and automatic restart
  - Current limit protection
  - Jump start overvoltage protection
  - Under voltage lock out protection
- Built-in zener diode
- High balance and low thermal drift magnetic sensing
- AEC Q100 qualified
- RoHS compliance

**Package: DFN-12pin**

3x3x0.75 (mm)

**Specifications****Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Conditions	Rating	Units
Maximum supply voltage	VDDmax		20	V
Allowable power dissipation	Pd		1860 <sup>*1</sup>	mW
Operating temperature	Ta		-40~+125	°C
Storage temperature	Ts		-50~+150	°C
Max. high side output voltage(O1P,O2P)	V <sub>HOMAX</sub>		40	V
Max. low side output voltage(O1N,O2N)	V <sub>LOMAX</sub>		20	V
Max. output current (O1P, O2P, O1N, O2N)	I <sub>OMAX</sub>		50	mA
Max. FG output voltage	V <sub>FGMAX</sub>		20	V
Max. FG output current	I <sub>FGMAX</sub>		10	mA
VREF driving capability	I <sub>VREF</sub>		5	mA
Max. input voltage(PWM,CS,VL,SS,VSEN)	V <sub>INMAX</sub>		6	V

<sup>\*1</sup>: Reduced by 14.88mW for each increase in Ta of 1°C over 25°C When mounted on 50mm x 50mm x 1.6mm glass epoxy board