

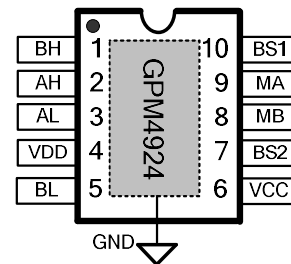
## General Description

The CGPS's GPM4924 Integrated Power Module (IPM) design for Single-Phase BLDC (SBLDC) applications, offering a wide input voltage range 8V to 36V to meet variety design requirements. This IPM integrates charge pump circuits to drive four N-channel high-efficiency MOSFETs, forming an H-bridge. Additionally, it also includes a built-in LDO 5V to power internal/external control circuits. The IPM has built-in protection circuitry that protects against environmental disturbances and prevents damage during overload. Included cycle-by-cycle current limit protection (OCP), under voltage protection (UVP), and thermal shutdown protection (OTP) internally. Due to the integration of power drivers and protection circuits, CGPS's IPM needs only a minimal number of external components for SBLDC system operation. The GPM4924 is available in ESSOP-10EP package.

## Features

- ◆ operating voltage:  
GPM4924@24V: VCC from 8V to 36V
- ◆ operating current:  
GPM4924@24V: 1.0A(Max.24W)
- ◆ Built-in LDO 5V@20mA
- ◆ Built-in 24V Full-wave H-Bridge gate driver support circuit
- ◆ Auto fault recovery
- ◆ Current limits protect (OCP)
- ◆ Under voltage protect (UVP)
- ◆ Over voltage protect (OVP)
- ◆ Internal Thermal shut down (OTP)
- ◆ ESD(HBM)  
High Voltage Side ESD .....6KV  
Others Pin ESD..... 8KV

## Pin Assignment



Pin No.	Name	Function
1	BH	Logic Input 3
2	AH	Logic Input 1
3	AL	Logic Input 2
4	VDD	LDO 5V output
5	BL	Logic Input 4
6	VCC	Load Supply Voltage
7	BS2	100nF capacitor in series
8	MB	H-bridge output
9	MA	H-bridge output
10	BS1	100nF capacitor in series
EP	GND	Ground