BLDC-GEVK: Internet of Things (IOT) BLDC Motor Driver Shield Evaluation Kit

The BLDC-GEVK evaluates the LV8907, a high performance, sensor-less three-phase BLDC motor controller with integrated gate drivers for driving external N-MOSFETs. An on-chip two-stage charge pump provides required gate current for a wide range of ultra low RDS(ON) type external N-MOSFETs. The device offers a rich set of system protection and diagnostic functions such as over-current, over-voltage, short-circuit, under-voltage, over-temperature and many more. It supports open-loop as well as closed-loop speed control with user configurable startup, speed setting and proportional/integral (PI) control coefficients, making it suitable for a wide range of motor and load combinations. With an in-built linear regulator for powering an external circuit, a watchdog timer and a Local Interconnect Network (LIN) transceiver, the LV8907 offers the smallest system solution footprint. An SPI interface is provided for parameter setting and monitoring the system health and utilized through the PCA9655E's 16 bits of General Purpose parallel Input and Output (GPIO) expansion.

Power Supply needed:
Digi-Key
Mouser

Evaluation/Development Tool Information

Product	Status	Compliance	Short Description	Parts Used	Action
BLDC-GEVK	Active	Pb-free	Internet of Things (IOT) BLDC Motor Driver Shield Evaluation Kit	LV8907UWR2G , MBRB40250TG , MM3Z39VT1G , MMDL6050T1G , NTMFS5C404NLTT3G , PCA9655EMTTXG	Contact Local Sales Office Inventory

Technical Documents

Type	Document Title	Document ID/Size	Rev
Eval Board: BOM	BLDC-GEVK Bill of Materials (ROHS Compliant)	BLDC-GEVK_BOM_ROHS - 39 KB	0
Eval Board: Gerber	BLDC-GEVK Gerber Layout Files (Zip Format)	BLDC-GEVK_GERBER - 743 KB	0
Eval Board: Schematic	BLDC-GEVK Schematic	BLDC-GEVK_SCHEMATIC - 322 KB	1