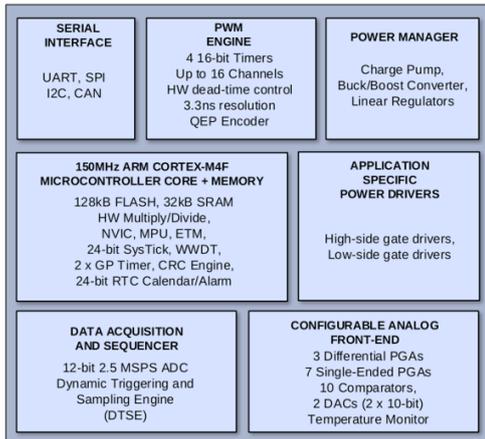


# Qorvo PAC5527 BLDC Motor Controller

## 48V High-Performance BLDC Motor Controller/Driver with Charge Pump and Programmable Gate Drive



The PAC5527 is the latest addition to Qorvo’s series of Power Application Controllers® (PAC), ideally suited for high-speed motor control and driving for battery powered BLDC motors.

It features a 150MHz Cortex® M4F MCU with 128kBytes of Flash, 32kBytes of SRAM with ECC and a 2.5MSPS 12-bit SAR ADC.

Its integrated Power Management makes system design a much easier task. It consists of 48V Input Charge Pump DC/DC, 10V/12V Buck/Boost DC/DC and LDOs for system supply, MCU core, IO and Analog.

It also integrates High-side and Low-side gate drivers with programmable current. In addition to the ADC, there are integrated Differential and Single-Ended PGAs, DACs and comparators. The PAC5527 is available in a 48-pin, 6x6mm TQFN package.

### Benefits

- ◆ Highly-integrated, high-performance motor control
- ◆ Integrated features like Power Manager and Programmable Gate Drivers eliminate many PCB components

### Evaluation Kit

Firmware and Software:

IDE Support: IAR Embedded Workbench for ARM®, Keil uVision 5.X for ARM®, Eclipse.

Application Firmware:

- ◆ High-Speed Sensorless FOC with Windows GUI
- ◆ High-Speed Trapezoidal BLDC with hall sensors with Windows GUI
- ◆ High-Speed Trapezoidal Sensorless BEMF with Windows GUI
- ◆ ActiveSafe IEC60730 Class B Safety Libraries
- ◆ ActiveFlash Field Update boot-loader with Windows GUI

EVK Collateral: Schematic, PCB, Layout Files.

Schematic and Layout Review and FOC Motor Tuning are available.

