

All-in-One Oil & Water Pump Solution

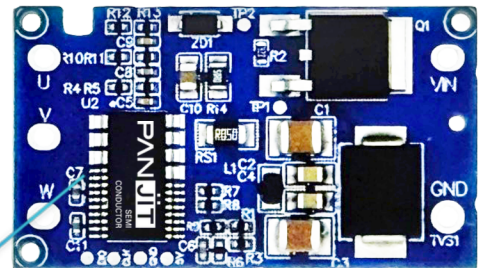
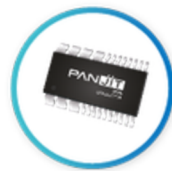
Integrated MCU, Driver, and MOSFETs for BLDC Pump Control



► Demo Board Specifications

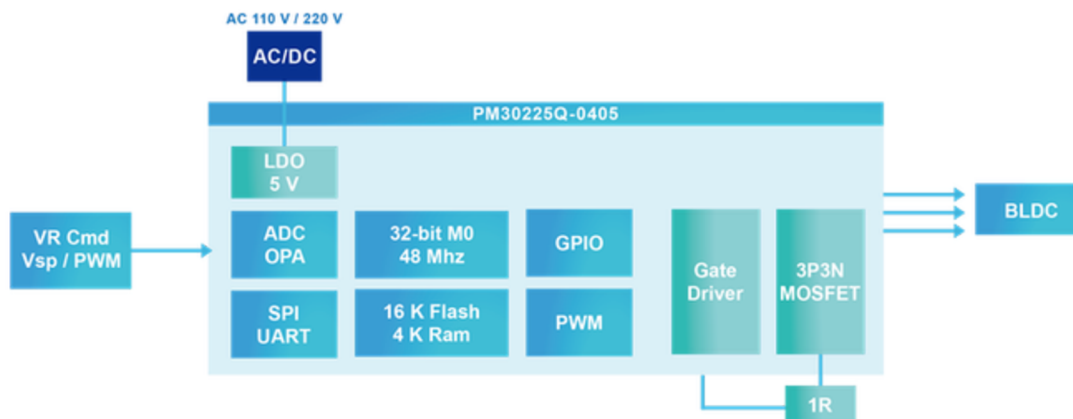
- Breakdown voltage: 40 V
- Sinewave output with FOC control technology
- I²C, LIN, SPI, and UART interfaces
- AEC-Q100 Grade 2 qualified

PM30225Q-0405



MCU	OPA	MOSFET	LDO	Algorithm	Shunt	Command/ Feedback	Protections
ARM® Cortex®-M0	2 rail-to-rail OPAs	3P+3N 50 mΩ	5 V	FOC Sensor-less	2 R	VR Speed, PWM, FG out	LR, OC, LP

► Block Diagram



► PM30225Q-0405 Key Features

- ARM® Cortex®-M0 core operating at 64 MHz
- Operating voltage range: 5 V to 24 V
- Operating temperature range: -40°C to +105°C
- Second-generation 0225 32-bit M0 controller operating at 64 MHz
- 40 V breakdown voltage
- Low $R_{DS(on)}$ MOSFETs with FRDs, supporting up to 5 A
- I²C, LIN, SPI, and UART interfaces
- Supports open-loop, closed-loop, and FOC control
- Built-in LRP, TSD, OVP, OCP, and CL protection
- AEC-Q100 Grade 2 qualified
- TSSOP-25 package

► Motor Product Roadmap

