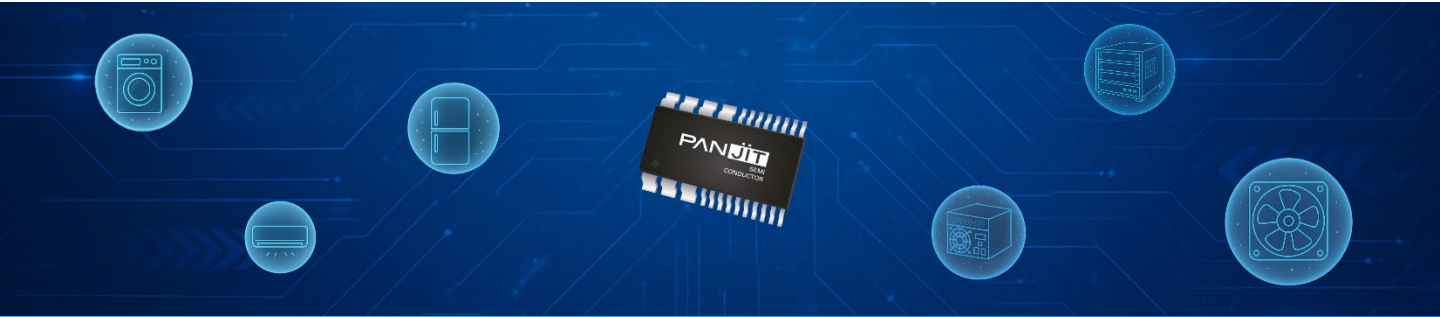


All-in-One BLDC Motor Control Solution

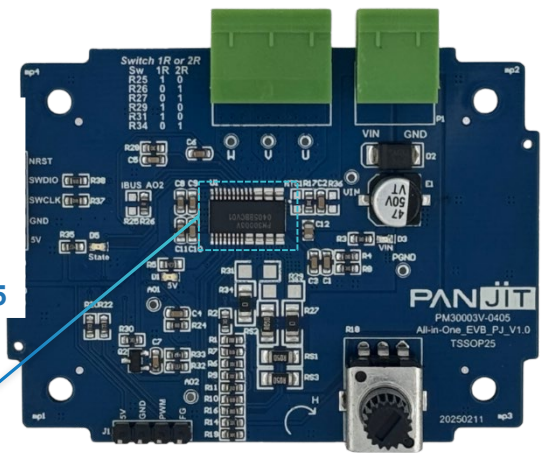
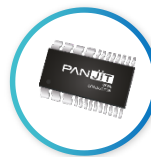
Built-in MCU, Driver, and MOSFET for Compact Thermal and System Designs



► Demo Board Specifications

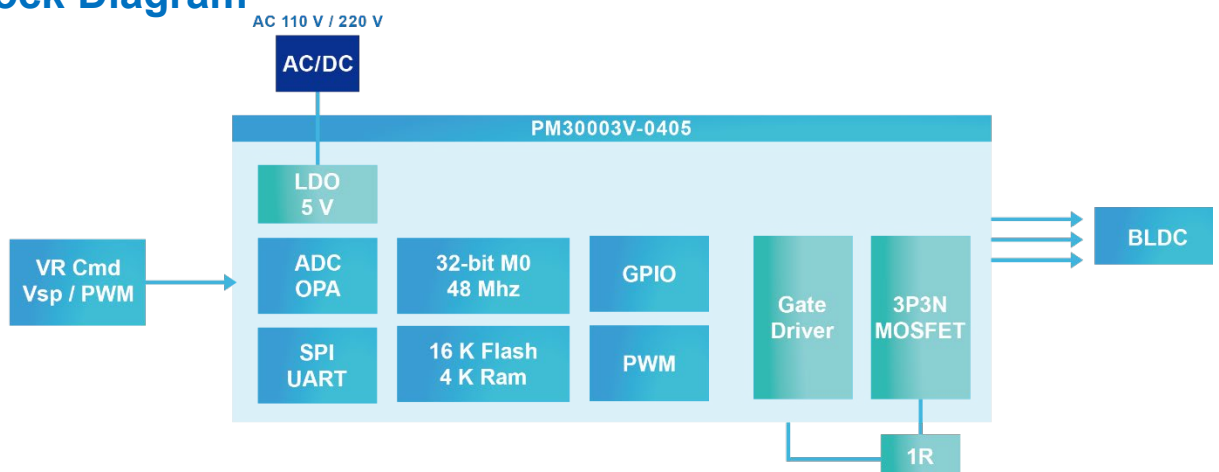
- 24 V motor control board with 220 V AC input
- Sine wave output with FOC control technology
- Speed control range: 400 to 2,000 RPM
- LRP / OCP / LPP

PM30003V-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



➤ **PM30003V-0405 Key Features**

- ARM® Cortex®-M0 , 48 MHz
 - Operating voltage: 7 V to 24 V
 - Configure built-in pass-through prevention function
 - Integrated PN architecture three-phase brushless gate driver and MOSFET array
 - 16 KB Flash, 4 KB SRAM
 - 2 x UART, 1 x I2C, 1 x SPI
 - 2 x 16-bit general-purpose timers (HTU)
 - 1 x 12-bit, 1 MSPS ADC, supporting differential pair inputs
- Configure the built-in 500 ns time of dead-zone
 - Configure the built-in LDO with 5 V/ 50 mA
 - P+N MOSFET, RDS(on) < 70mΩ
 - MCU Voltage : 2.4 V to 5.5 V
 - 10 x GPIO, all of which can be used as external terminal inputs
 - 1 x 16-bit advanced PWM timer (ATU)
 - 2 x low-offset OPA
 - Operating temperature: -40°C to +105°C

➤ **Product Roadmap**

