

AMT49400: Integrated Sensorless FOC BLDC Driver

The AMT49400 is an advanced 3-phase, sensorless, brushless DC (BLDC) motor driver with integrated power MOSFETs.

A minimal application circuit can be achieved with only two external components due to device's high level of integration, which includes control algorithm, analog circuit, and power stage.

A field-oriented control (FOC) algorithm is fully integrated to achieve the best efficiency and acoustic noise performance. EEPROM programmability is included to optimize motor startup performance.

The motor speed is controlled by applying a duty cycle command to the PWM input. A simple I2C interface is provided for setting motor-rated voltage, rated current, rated speed, resistance, and startup profiles. The I2C interface is also used for on/off control, speed control, and speed readback.

The AMT49400 is available in a very small 10-lead SOIC with exposed pad, (suffix LK).

Featured Applications:

- All-in-One PC & Computer Fans
- Exhaust & Graphical Cooling Fans
- Home Appliance Fans & Pumps



FEATURES & BENEFITS

PACKAGING

TECHNICAL DOCS

NEWS

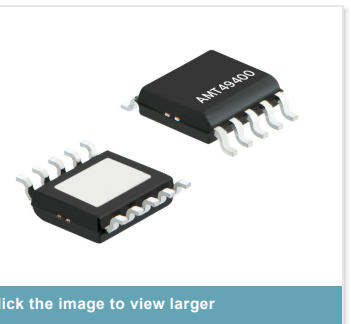
- Coding-free sensorless field-oriented control (FOC)
- Standby mode current less than 10 μ A
- Quiet and quick startup
- Only two external components for minimal application circuit
- PWM speed input, FG speed output
- Lock detection
- Soft-on soft-off (SOSO)
- Optional closed-loop speed control
- Configurable current limit
- Windmill and reverse windmill operation
- Lock detection
- Short-circuit protection (OCP)

DATASHEETS

[Contact Marketing for Datasheet](#)

SAMPLE & BUY

Arrow Electronics (Distributor,
Allegro & Sanken Semiconductors)
25 Hub Drive
Melville, NY 11747
Phone: 1-800-777-2776 for local
distributor
Web: www.arrow.com
If this is not your local
representative, find your local
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Part Number Specifications and Availability

Part Number	Package Type	Temperature	RoHS Compliant	Part Composition / RoHS Data	Comments	Samples	Check Distributor Stock
APEK49400GLK-01-T	DEMO BOARD	-20°C to 85°C	No	--	New	Contact your local sales rep	Check Stock
AMT49400GLKATR	10-lead SOIC	-40°C to 105°C	Yes	View Data	New	Contact your local sales rep	Check Stock

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