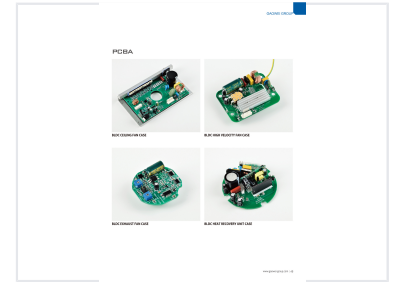


PCBA for BLDC Motor Control and Fan Applications

This PCBA is designed for brushless DC motor control, featuring FOC control and multiple protection mechanisms. It is also suitable for use in BLDC ceiling fans, high-velocity fans, exhaust fans, and heat recovery units.



ADDITIONAL IMAGES



Overview

Advanced BLDC Motor Control Solutions

This series of Printed Circuit Board Assemblies (PCBAs) is engineered for high-performance brushless DC (BLDC) motor control in various ventilation and appliance applications. Featuring advanced Field Oriented Control (FOC) algorithms, these boards ensure smooth operation, high efficiency, and low noise. Designed for reliability, the system includes comprehensive protection mechanisms and optimized startup sequences for seamless integration into industrial and consumer hardware.

Technical Capabilities

Control Features

- FOC (Field Oriented Control)
- Senseless closed-loop start
- Millisecond position detection
- Pulse injection method for rotor positioning
- Positive and reverse rotation
- Electronic brake

Safety Protections

Overcurrent Protection, Overvoltage Protection, Undervoltage Protection, Blocked Rotor Protection, Startup Failure Protection

Performance Metrics

Operational Performance

100 %

Startup Success Rate

Application Scope

Compatible Applications

Cooker Hoods • Ceiling Fans • High-Velocity Fans • Exhaust Fans • Heat Recovery Units • Electric Tools • Servo Control

Hardware Specifications

Component Examples

Component Type	Specification
Capacitor	50 μ F 400V
Capacitor	150 μ F 400V