

PAC5556A + CGD GaN IC Collaboration:

REVOLUTIONISING MOTOR CONTROL SOLUTIONS

Partnering with Cambridge GaN Devices (CGD), Qorvo presents the PAC5556A + ICeGaN® evaluation kit (EVK), combining industry-leading motor control and power efficiency technologies.

This collaboration combines Qorvo's high-performance BLDC/PMSM motor controller/driver and CGD's easy-to-use ICeGaN® ICs to deliver an evaluation kit (EVK) that significantly improves motor control applications.

PARTNERING FOR POWER EFFICIENCY

The PAC5556A + CGD GaN solutions are perfectly suited for white goods, compressors, pumps, industrial fans, and home automation markets. They are particularly beneficial in applications that require compact, high efficiency motor control systems.





Key Highlights

Partnering for Power Efficiency 2 Superior GaN Performance

S Evaluation Kits

Thermal Results of EVK

5 Ease of Integration





PARTNERING FOR POWER **EFFICIENCY**

Qorvo, a leader in power solutions, and CGD, a clean-tech semiconductor company, have partnered to integrate GaN technology into motor control solutions.

This allows the development of compact, energy-efficient, and high-power-density systems. The ICeGaN® technology, unlike other GaN implementations, easily interfaces with Qorvo's PAC5556A motor control IC for seamless performance in BLDC and PMSM applications.

SUPERIOR GaN PERFORMANCE

- IMPROVED THERMAL MANAGEMENT: PAC5556AEVK2 achieves up to 400 W peak performance with minimal heatsinking and PAC5556AEVK3 up to 800 W peak with minimal cooling requirements.
- EFFICIENCY GAINS: Reduces power loss, increases power availability, and minimizes heat, resulting in smaller and more reliable systems.
- TORQUE AND CONTROL: GaN's higher torque at low speeds and precise control make it ideal for domestic applications like compressors, ceiling fans, refrigerators, and pumps.

EVALUATION KITS





PAC5556AEVK2:

Supports 240 mOhm CGD devices for up to 400 W peak power.

PAC5556AEVK3:

Features 55 mOhm CGD devices, supporting up to 800 W peak power with airflow.



Available now! These EVKs allow designers to explore the benefits of GaN in motor control applications.

THERMAL RESULTS OF EVK





EASE OF INTEGRATION

- ICeGaN® integrates essential functions like a current sense feature and Miller Clamp, simplifying gate driver design, eliminating pricey SENSE resistors and reducing bill of materials (BOM) costs.
- · Compatible with low-cost current drivers and no negative Turn-Off voltage required.







Dare to innovate differently













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