Light and Compact Power Management and Motor Drive for eVTOL Aircraft

Contact Information Description

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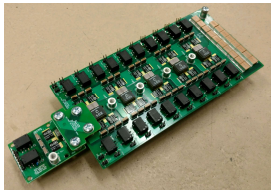
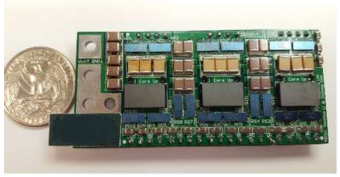
Picture (and more Capability Description)

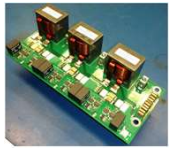
100 kW SiC Power Converter 42 kW/L 99% efficiency



GaN Power Management



600W GaN DC-DC Converter 99% efficiency



GaN Motor Drive Controller

Description in Bullet Format
(Relate to Requirement(s) & Heilmeier Questions)

- Power Management, Battery Charging, Motor Control
- DC-DC Conversion, DC – AC/AC - DC Conversion
- New Circuit Topology, Control and High Efficiency Design
- GaN and SiC Devices are used
- It would be integrated to eVTOL platform for on-board power management, motor control, and offboard battery charging
- Maturity (TRL 3 – 6)

Requirement(s) Benefits, Money Saved, Eliminates What?

•Increase the eVTOL operating time, increase payload and reduce maintenance
•What are you looking for?
- •Funding to demonstrate and advance the technology
- •Partner to commercialize the power management
- •Partner to integrate the technology on board

Airspace Management	Command & Control	Comms	Power & Energy Storage	Propulsion	Sensors & Awareness	Other
☐	☐	☐	x	☐	☐	☐