





Power modules, Motor drivers & Motor controllers

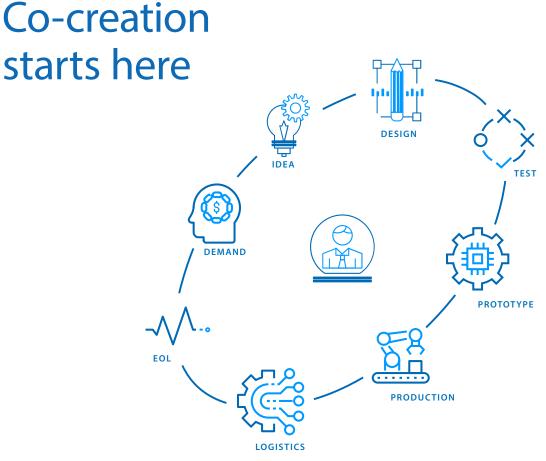




Monolithic Power Systems & Alcom



Monolithic Power Systems provides small, highly energy efficient, easy-to-use power solutions for systems found in industrial applications, telecom infrastructures, cloud computing, automotive, and consumer applications. MPS' mission is to reduce total energy consumption in system designs and offers green, practical, compact solutions in power management IC's and modules and motor driver & motor controller solutions. Alcom is happy to advise you on your next project.



Alcom considers everybody an indispensable added value in the collaborative chain with all of its partners.

Applications & Markets



E-BIKES



CONSUMER ELECTRONICS



AUTOMOTIVE



INDUSTRIAL



LED LIGHTING & ILLUMINATION



MEDICAL



MOTION CONTROL SENSING & ROBOTICS



ENERGY STORAGE



MOBILE & WEARABLES



SMART HOME/BUILDING



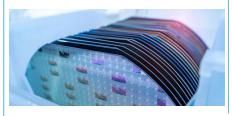


WHITE GOODS

Technologies



MOTION/MOTOR CONTROL



POWER SEMI & MODULES



POWER MANAGEMENT ICS

Product Overview

Power Modules

MPS power modules have a wide range of input voltage and output current with a variety of packages. Our extensive portfolio of DC/DC modules integrates inductors, FETs, compensation and other passive components into a single package to simplify the design process. Choose what module works best for your design based on our beneficial features.

Power Modules (Integrated Inductor)

- Minimal external components
- Easy layout
- Fast design cycle
- Meets EN55022 Class B
- Programmable over PMBus / I2C interface

Isolated DC/DC Converters & modules

These isolated converters meet design specifications more easily, reduce magnetic interference, and come in a small, low-profile size making designs simple and reliable. They are ideal for a variety of products, including medical and industrial automation, inverters, smart meters, and more.

The monolithic design allows for faster switching frequency, which leads to ultra fast transient response and size reduction. Our high efficiency and advanced packaging make thermal design easy.





Ultra-Thin Power Solutions

Fully integrated low profile power solutions are optimal for high-performance applications. These low profile solutions of 2.0mm or less, have the inductor integrated which allows for the whole power solution to be placed on the back side of an Acceleration or FPGA Card or under the heatsink. These solutions make it easy to save top-side board space.

- <2mm Profile Solutions, Up to 60A
- Power Module with Integrated Inductor
- Best in Class Efficiency & Power Density



Product Overview

Motor Drivers & Motor Controllers

MPS motor driver & motor controller solutions offer a wide range of high-performance, cost-effective, and reliable solutions for stepper motor drivers, brushless DC motor drivers, position sensors, DC brush motor drivers, and solenoid drivers. MPS motor drivers achieve the highest efficiency, best thermal performance, and smallest solution size.

Stepper Motor Drivers

Optimized to drive bipolar stepper motors used in printers, document scanners, robots, and other office and factory automation equipment.



Brushed DC / Solenoid Fan Drivers

MPS has fan drivers for single-phase and three-phase motors, with sine-wave control and non-sine-wave control for different application scenarios. They feature highly integrated, digital programming, and open/close speed to simplify design and minimize the bill of materials (BOM).

H-bridge drivers are designed to drive DC brush motors and solenoids in consumer appliances, toys, automotive, and industrial applications. Interfaces supported include SPI control, PWM interfaces, and separate high-side and low-side controls. Half, single and dual H-bridge parts are available to drive DC brush motors of various sizes, from 2V up to 60V and up to 5A.



BLDC Pre Drivers and Integrated Solutions

Designed to drive brushless DC (BLDC) motors and permanent magnet synchronous motors (PMSMs) used in robotics, industrial, automotive, and consumer applications. These ICs minimize the need for external components by integrating more functionality onto the single silicon die, saving board space by keeping everything in a tiny package.



Servo / BLDC Motor Controllers

Servo / BLDC Motor Controllers are designed to drive PMSM Motors, BLDC Motors, Servo Motors, etc. These controllers have integrated robust algorithms and protection functions, support speed mode, position mode, and torque mode optional. Interfaces include I2C, SPI, or RS485, application design is aided by MPS eMotion System[™] Virtual Bench online developer tool.



New product releases

MPS FEATURED PRODUCTS TO REPLACE ENPIRION

While many of MPS' power solutions provide a compact footprint, not all of MPS' parts are smaller than Enpirion's but in scenarios of size discrepancy, MPS components tend to have higher efficiency. Generally, MPS solutions are more compact and efficient than their counterparts.





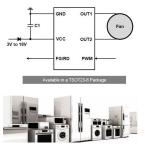
DC/DC POWER MODULE WITH PMBUS

The MPM3695-100 is a 100A, scalable, fully integrated power module with a PMBus interface. The device offers a complete power solution that achieves up to 100A of output current, with excellent load and line regulation across a wide input voltage range. It operates at high efficiency across a wide load range and can be paralleled to deliver up to 800A of current.

STEPPER MOTOR DRIVER WITH STALL DETECTION

The MP6602 is a stepper motor driver with a built-in indexer/translator and internal current regulation. Current sensing is performed internally, and does not require external sense resistors. High integration and a small package size make the MP6602 a cost-effective solution for stepper motor drivers.



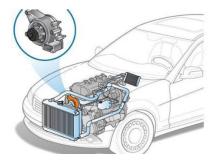


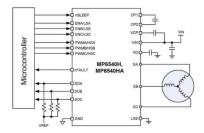
BLDC MOTOR DRIVER WITH INTEGRATED HALL SENSOR

The MP6652 is a single-phase brushless DC (BLDC) motor driver with integrated power MOSFETs and a Hall-effect sensor. It drives a single-phase BLDC fan motor, with a 3V to 18V input voltage (VIN) range.

THREE-PHASE BRUSHLESS DC MOTOR PRE-DRIVER

The MPQ6532-AEC1 is a 5V to 60V, three-phase brushless DC (BLDC) gate driver, AEC-100 Qualified that can drive three half-bridges, consisting of six N-channel power MOSFETs.





MP6540H/MP6540HA DC MOTOR DRIVERS

The MP6540H and MP6540HA are three-phase brushless DC motor drivers. These devices integrate three half-bridges consisting of six N-channel power MOSFETs, pre-drivers, gate drive power supplies, and current-sense amplifiers.

Alcom product portfolio

ELECTRONIC COMPONENT	WIRELESS EMBEDDED	WIRELESS & INDUSTRIAL	DISPLAY & TOUCH
SOLUTIONS	CONNECTIVITY & SENSORS	CONTROLS NETWORKING	
LED & SOLID STATE LIGHTING	POWER & EMC	RUGGED MOBILE COMPUTING	EMBEDDED SYSTEMS, AI & EDGE COMPUTING

 Semiconductors Frequency & timing Power management Circuit protection & discretes Magnetics Passives & electromechanical Connectors & cable assemblies Photonics 	 Wireless modules Antenna's Sensors
 Routers & gateways Wireless embedded computers Industrial ethernet and IP variations Wired & wireless machine networking Antenna's Device to cloud solutions Connectivity & remote management services Networking & connectivity 	 Displays Touch screens Optical bonding Total display solutions
 LED light sources Optics Thermal management Power & intelligent controls LED modules 	 AC/DC power supplies DC/DC converters Power management modules Wireless charging E-mobility solutions Transformers & power inductors UPS EMC filters
 Tablets PDA's Vehicle mount computers Accessories 	 Computer-on-modules Embedded boards Industrial PC & automation System integration

Bridging the gap between technology, people and business with a human interface.



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Get to know us

ALCOM PROVIDES THE WORLD'S MOST AD-VANCED TECHNOLOGIES.

With a team of like-minded entrepreneurs, Alcom will continue to inspire its valued customers to use advanced innovative building blocks in vertical markets. The importance of providing high-level services and a human interface based on specialism, knowledge and design-in expertise will remain key differentiators.

Alcom is positioned for growth. We invite all our customers to discuss their current and future concepts and designs. Let's connect, work and grow together.

