



H-Bridge, Brushed DC Motor Driver, 5–28 V, 5 A, 10 kHz

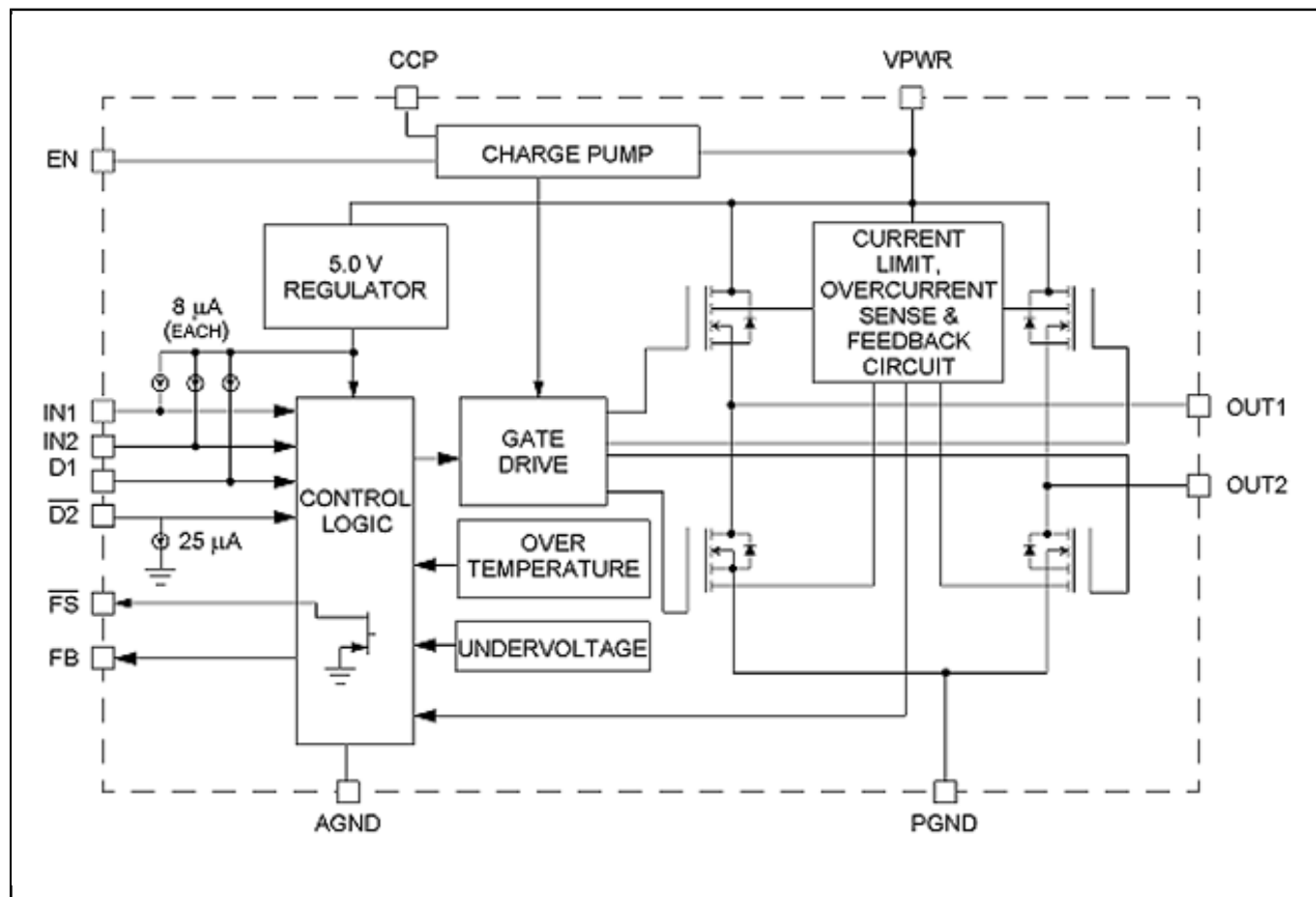
MC33887

Last Updated: Dec 17, 2024

The NXP® MC33887 is a monolithic H-Bridge power IC with a load current feedback feature making it ideal for closed-loop DC motor control.

- The IC incorporates internal control logic, charge pump, gate drive, and low RDS(ON) MOSFET output circuitry
- Able to control inductive loads with continuous DC load currents up to 5.0 A, and with peak current active limiting between 5.2 A and 7.8 A
- Output loads can be pulse width modulated at frequencies up to 10 kHz; voltage, overtemperature, and overcurrent conditions are detected and reported via a status flag output
- The load current feedback feature provides a proportional constant-current output suitable for monitoring by a MCU's A/D input, which facilitates the design of closed-loop torque/speed control as well as open load detection

NXP MC33887 Power Actuation Block Diagram



View additional information for [H-Bridge](#), [Brushed DC Motor Driver](#), 5-28 V, 5 A, 10 kHz.

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.