



H-Bridge, Brushed DC Motor Driver, 5-28 V, 5 A, 11 kHz

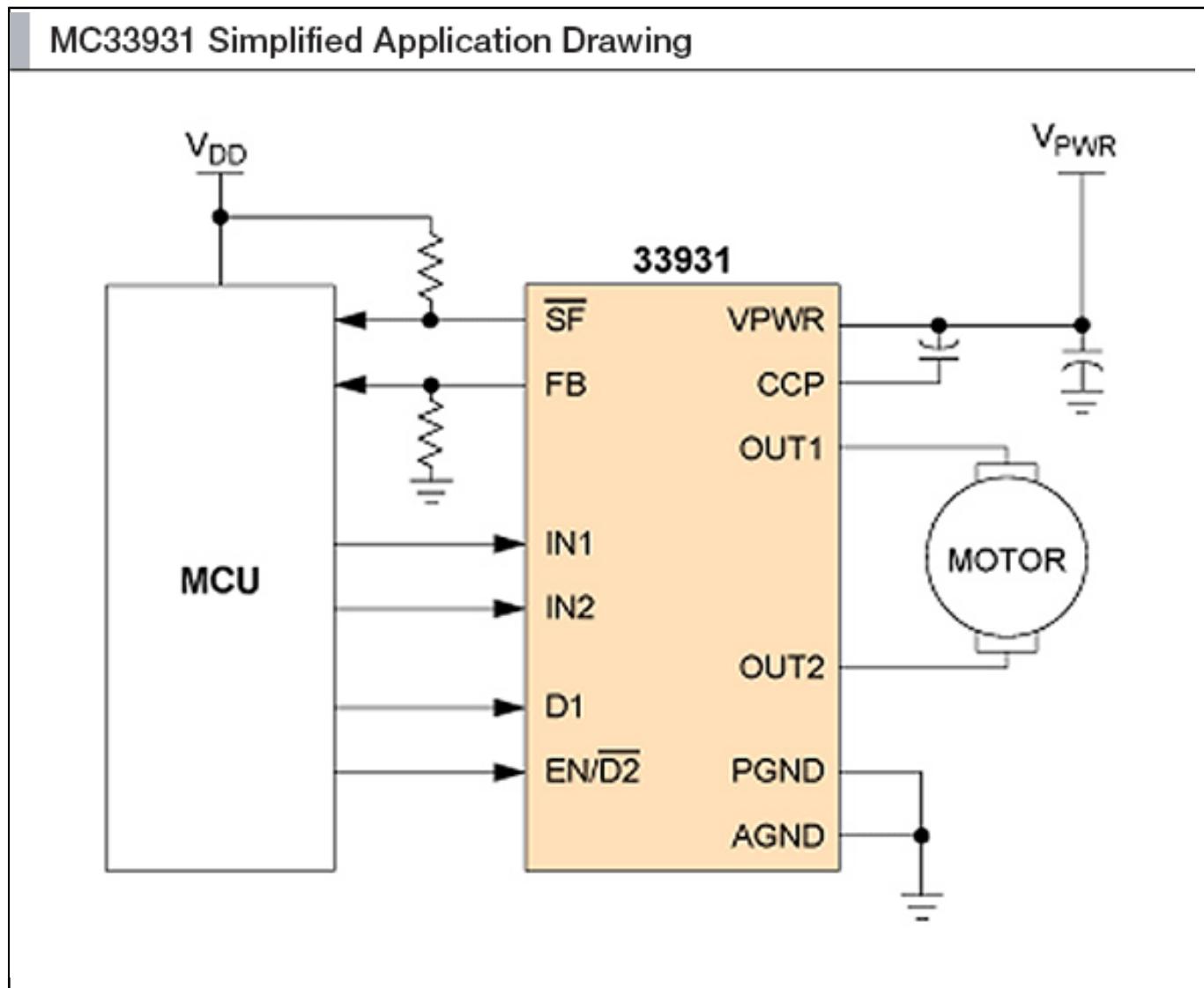
MC33931

Last Updated: Dec 23, 2025

The NXP MC33931 is a monolithic H-Bridge power IC in a robust thermally enhanced package, designed primarily for automotive electronic throttle control, but is applicable to any low-voltage DC servo motor control application within the current and voltage limits stated in this specification.

- The MC33931 H-bridge is able to control inductive loads with currents up to 5.0 A peak
- RMS current capability is subject to the degree of heatsinking provided to the device package. Internal peak-current limiting (regulation) is activated at load currents above 6.5 A ± 1.5 A
- Output loads can be pulse-width modulated at frequencies up to 11 kHz
- [Processor Expert® component for medium voltage H-Bridge](#) products enables rapid embedded application development.

MC33931 Simplified Application Drawing Block Diagram



View additional information for [H-Bridge, Brushed DC Motor Driver, 5-28 V, 5 A, 11 kHz.](#)

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