Logic-Controlled High-Side Power Switch

NX5P2190UK

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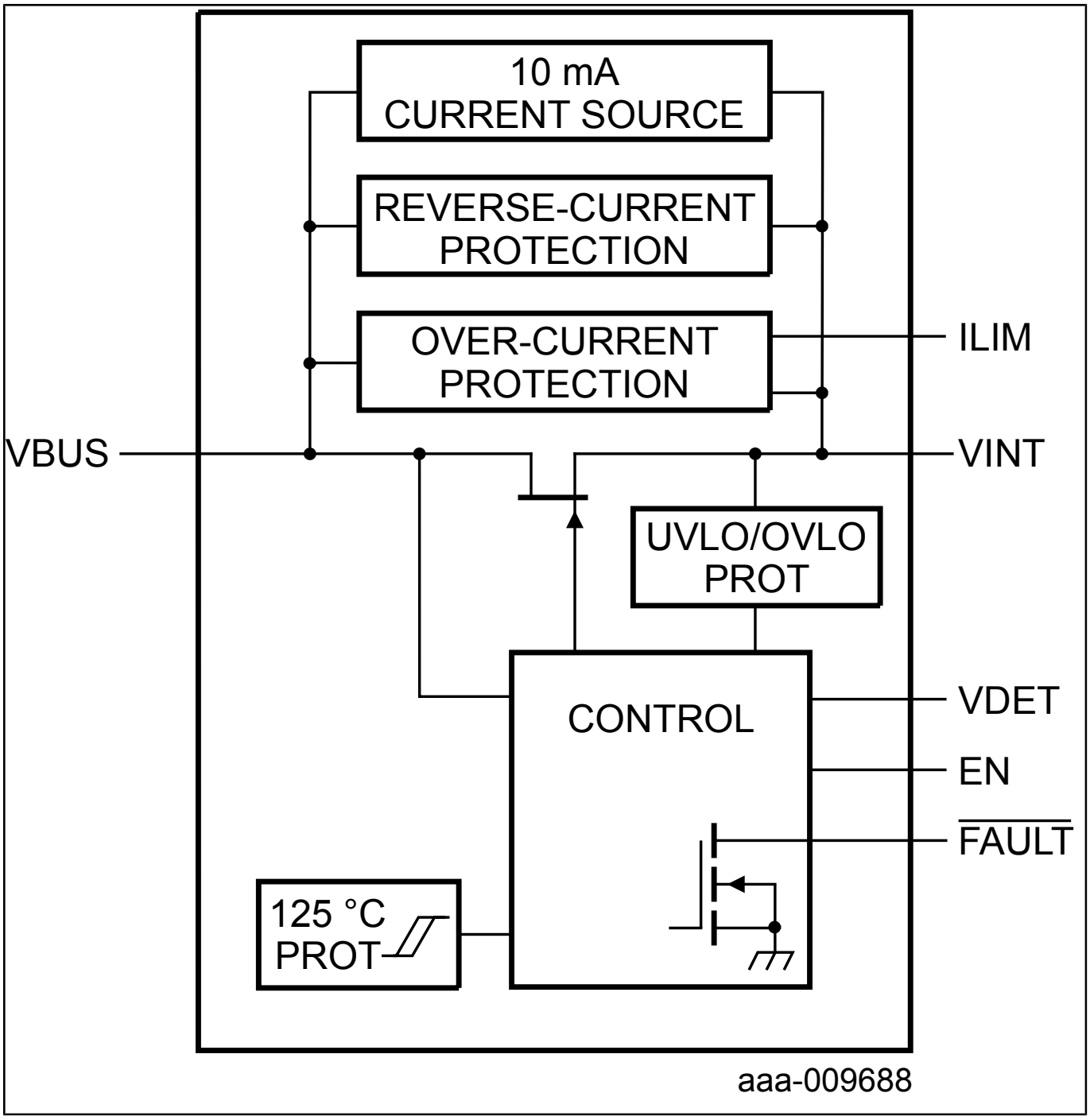
The NX5P2190 is an advanced power switch with adjustable current limit. It includes under-voltage and over-voltage lockout, over-current, over-temperature, reverse bias and in-rush current protection circuits. These circuits are designed to isolate a voltage source from a VBUS interface pin automatically when a fault occurs. The device features two power switch terminals, one input (VINT) and one output (VBUS). A current limit input (ILIM) defines the over-current and in-rush current limit, and a voltage detect output (VDET) monitors the voltage level on VBUS. An open-drain fault output (FAULT) indicates when a fault condition occurs. An enable input (EN) controls the state of the switch. When EN is set LOW the device enters a low-power mode, disabling all protection circuits except the under-voltage lockout. The low-power mode can be entered at anytime unless the over temperature protection circuit has been triggered.

Designed for operation from 3 V to 5.5 V, the NX5P2190 is a complete solution for power domain isolation and protection applications. The enable input includes integrated logic level translation making the device compatible with lower voltage processors and controllers.

NX5P2190 Block Diagram Block Diagram



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