

Logic-Controlled High-Side Power Switch

NX5P2090UK

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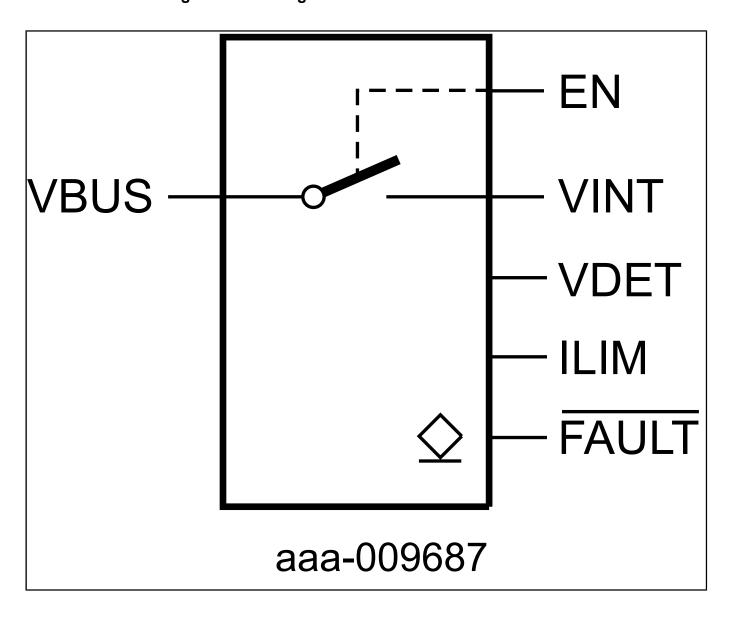
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The NX5P2090 is an advanced power switch for USB OTG applications. It includes undervoltage and over-voltage lockout, over-current, over-temperature, reverse bias and in-rush current protection circuits. These are designed to automatically isolate a VBUS OTG voltage source from a VBUS interface pin when a fault occurs. The device features two power switch terminals, one input (VINT) and one output (VBUS); a current limit input (ILIM) for defining the over-current and in-rush current limit; a voltage detect output (VDET) to monitor the voltage level on VBUS; an open-drain fault output (FAULT) to indicate when a fault condition has occurred and an enable input (EN) to control 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, it is used in power domain isolation applications to protect from out of range operation. The enable input includes integrated logic level translation making the device compatible with lower voltage processors and controllers.

NX5P2090 Block Diagram Block Diagram



View additional information for Logic-Controlled High-Side Power Switch.

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