



Logic-Controlled High-Side Power Switch

NX5P1000UK

Archived

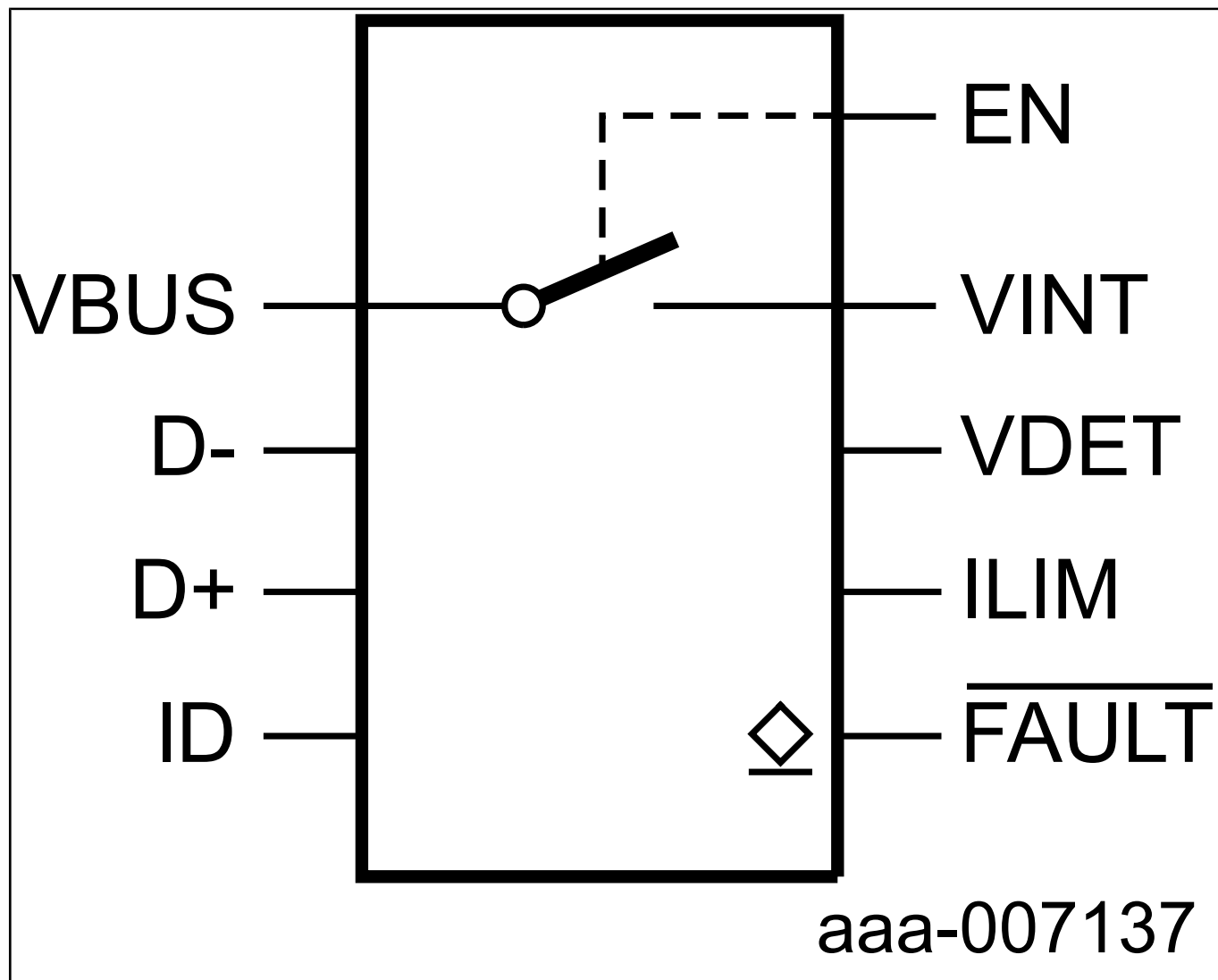
This page contains information on a product that is no longer manufactured (discontinued). Specifications and information herein are available for historical reference only.

Last Updated: Jul 13, 2023

The NX5P1000 is an advanced power switch and ESD- protection device for USB OTG applications. The device 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 VBUS OTG voltage source automatically from a VBUS interface pin when a fault condition occurs. The device features two power switch terminals, one input (VINT) and one output (VBUS). It has a current limit input (ILIM) for defining the over-current and in-rush current limit. A voltage detect output (VDET) is used to determine when VINT is in the correct voltage range. An open-drain fault output (FAULT) indicates when a fault condition has occurred and 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 undervoltage 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.

NX5P1000 Block Diagram



View additional information for [Logic-Controlled High-Side Power Switch](#).

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. © 2026 NXP B.V.