



USB PD和Type C限流电源开关

NX5P3090UK

Last Updated: Mar 7, 2025

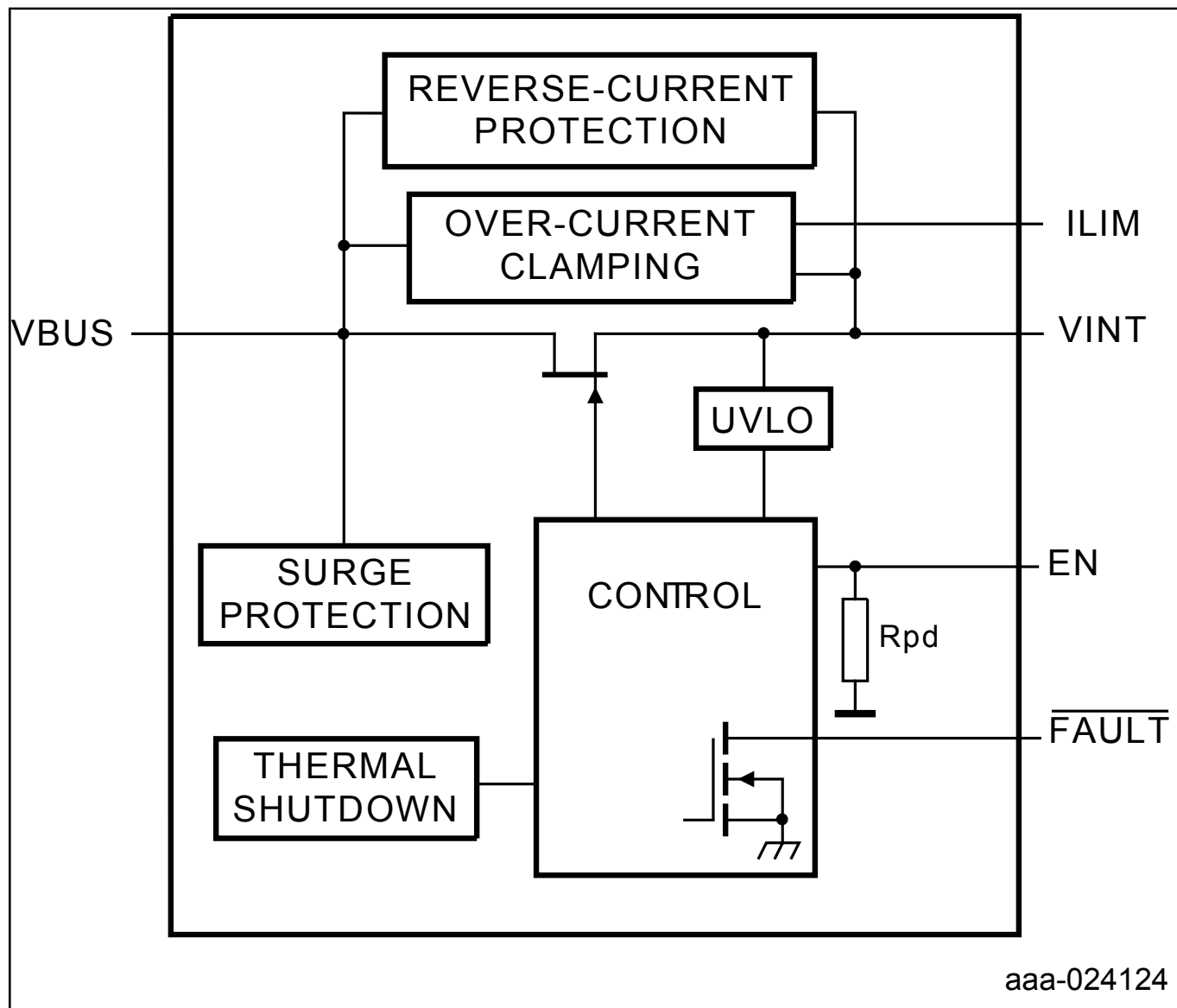
NX5P3090是一款精密可调的限流电源开关，适用于USB PD应用。该器件包含欠压锁定、过温保护和反向电流保护电路，在发生故障时能够自动隔离开关终端。VBUS引脚上的29V容差确保器件能够在USB PD端口上工作；电流限制输入(ILIM)引脚可定义过流限制阈值；开漏故障输出(FAULT)指示何时发生故障情况。

过流限制阈值可以使用ILIM引脚和GND引脚之间的外部电阻将电流从400mA设定为3.3A。在过流情况下，器件会将输出电流限制为ILIM设置的值，并在设置FAULT标志时打开开关。为了尽量减少开启和关闭期间的电流浪涌，该器件内置了软启动功能，可控制电源开关的上升和下降时间。

该器件集成了浪涌保护功能，增强了系统的稳健性。使能输入包括集成式逻辑电平转换，因此该器件与电压较低的处理器和控制器兼容。

NX5P3090采用12凸点1.35×1.65mm、0.4mm间距WLCSP封装。

NX5P3090 Block Diagram



View additional information for [USB PD](#) and [Type C](#) 限流电源开关.

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.