



# 3 A USB Power Switch and 6 A High-Side Load Switch

## NX5P3201CUK

Last Updated: Apr 9, 2022

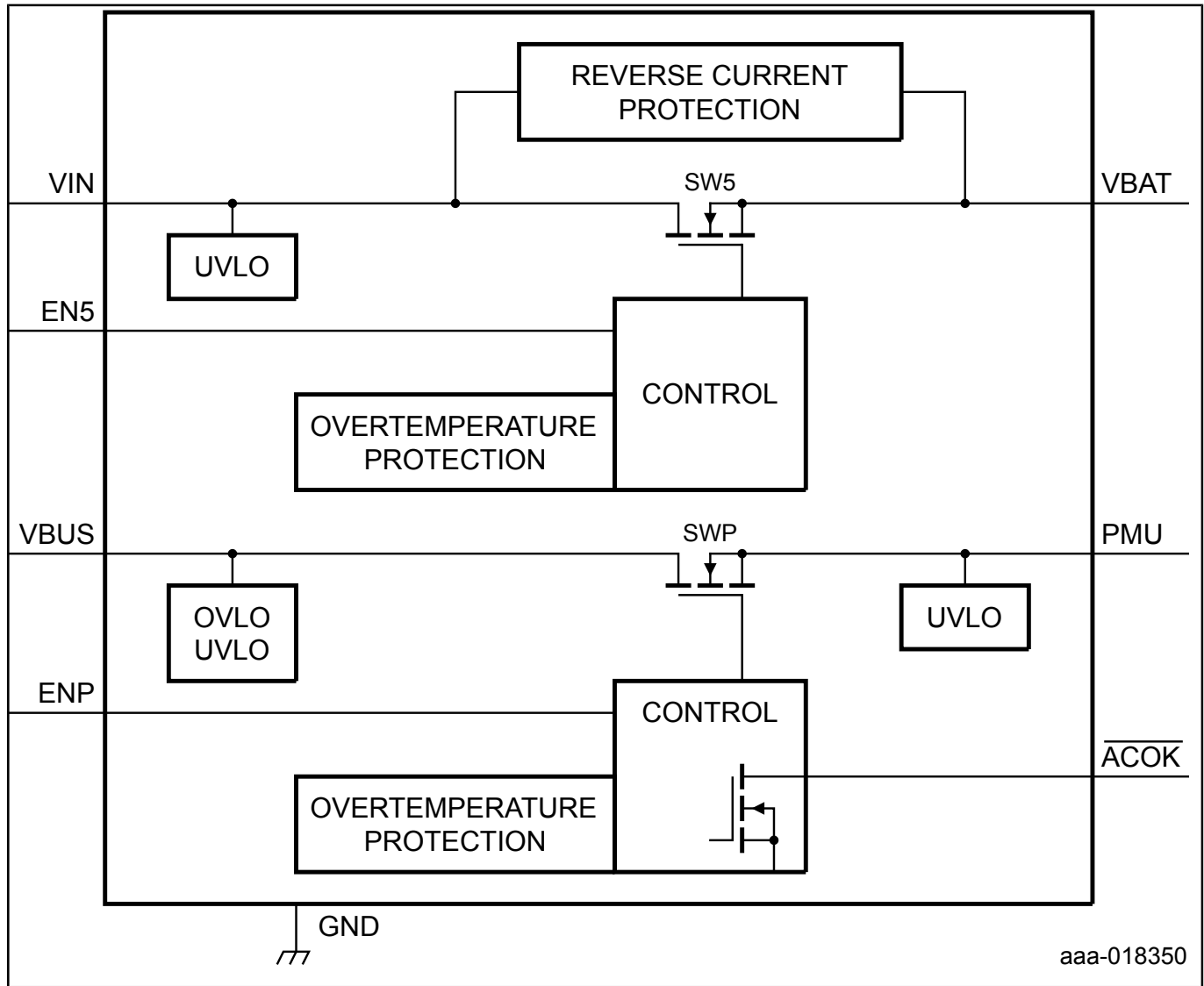
The NX5P3201 is an advanced dual power switch consisting of two independent switches. They are, an advanced 3 A bidirectional power switch (SWP) for USB OTG and charger port applications, and a high-side 6 A load switch (SW5).

SWP includes an open-drain status indicator. It also consists of OverTemperature Protection (OTP), UnderVoltage LockOut (UVLO) and OverVoltage LockOut (OVLO) protection circuits. The OVLO circuit isolates the pin VBUS when more than 6.55 V is applied to pin VBUS via the USB connector. To prevent unnecessary switching due to ringing on pins VBUS or PMU, the UVLO circuits include a 15 ms turn-on delay. This deglitch function allows the applied voltage to stabilize above VUVLO before closing SWP.

SW5 consists of OTP, Reverse Current Protection (RCP), and UVLO protection circuits. The UVLO isolates VBAT from VIN until VI exceeds VUVLO. If the voltage at VBAT exceeds VI by 30 mV, the RCP circuit isolates VBAT from VIN. It prevents damage to devices on the input side of the switch.

Both switches include slew rate controlled inrush current reduction to prevent damage when switching high capacitive loads.

# NX5P3201 Block Diagram Block Diagram



View additional information for [3 A USB Power Switch and 6 A High-Side Load Switch](#).

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

[www.nxp.com](http://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. © 2022 NXP B.V.