



High-Voltage Back-to-Back OVP Switch with Current Sense

NX30P0121UK

Last Updated: Dec 15, 2024

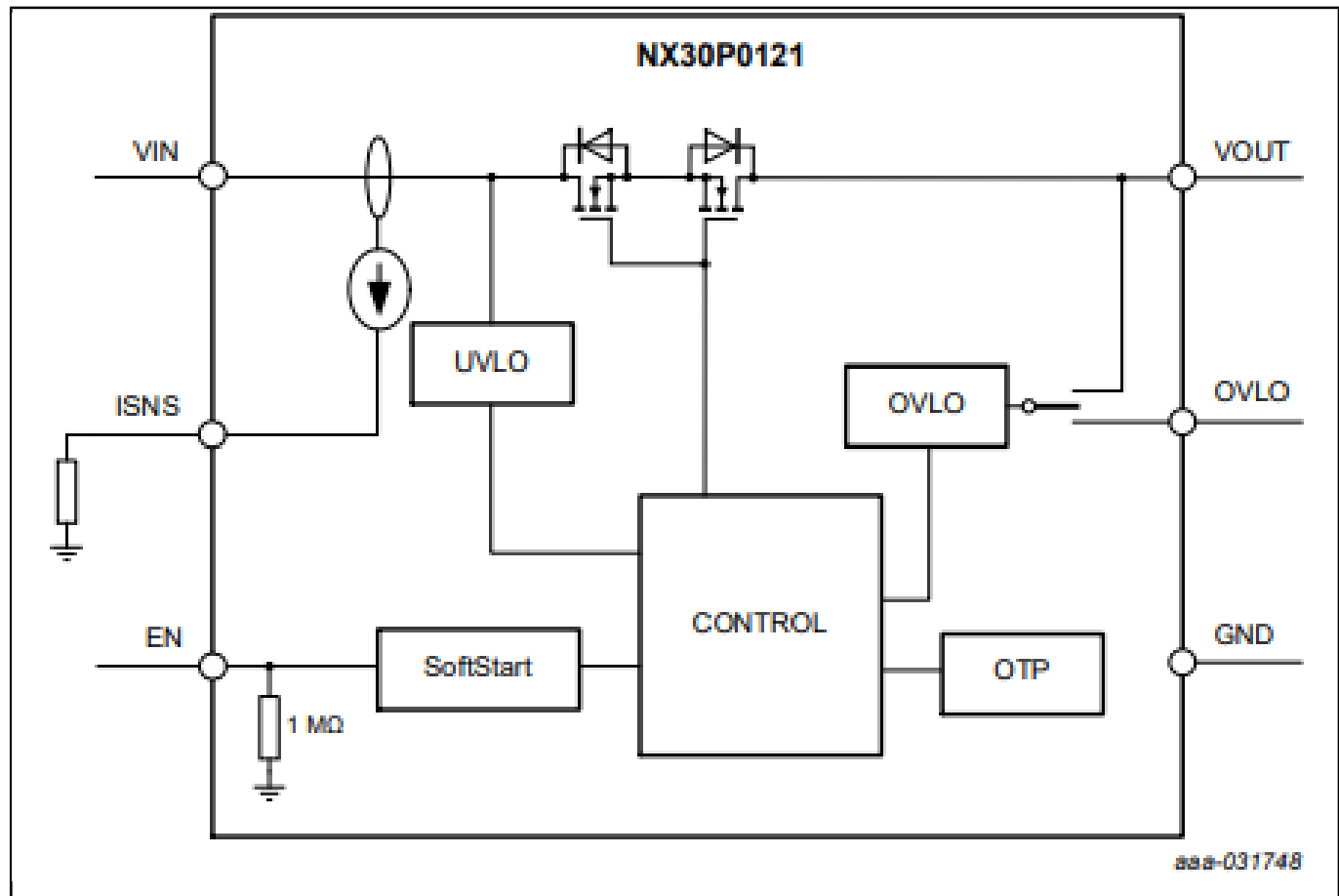
The NX30P0121UK is an advanced 3 A power switch. It includes UnderVoltage LockOut (UVLO), VOUT OverVoltage LockOut (OVLO), OVLO adjustable pin, and over-temperature protection circuits. It is designed to automatically isolate the power switch terminals when a fault condition occurs. Both VIN and VOUT pins have 29 V tolerance in shutdown mode.

The device has a default internal 14.5 V overvoltage protection threshold in VOUT and adjustable OVP threshold by resistor divider from VOUT. ISNS pin is current source output proportional to input current from VIN to VOUT when the device is enabled.

The device is enabled by external EN pin. When EN pin is driven LOW, the device is in shutdown mode where all internal circuitries are off and OVP switch is off. When EN pin is driven HIGH and VIN is valid, the OVP switch soft starts after VIN debounce time to limit the inrush current.

NX30P0121UK is offered in a small 12 bumps, 1.65 x 1.25 x 0.525 mm WLCSP package.

NX30P0121UK Block diagram Block Diagram



View additional information for [High-Voltage Back-to-Back OVP Switch with Current Sense](#).

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.