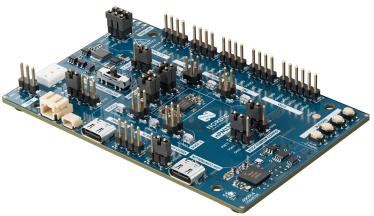


nPM1304 EK

Easily configure and evaluate the nPM1304 Power Management IC (PMIC) through an intuitive desktop GUI. Automatically generate and export configuration code for use in final application.

Key benefits

- Seamless integration and code free configuration with the nPM PowerUP desktop app
- Male pin headers provide access to all nPM1304 PMIC connections, for easy connection to external test equipment
- Integrated LEDs and pushbuttons allow for evaluation of the built-in LED drivers and GPIOs of the PMIC



Overview

The nPM1304 Evaluation Kit allows for simple evaluation and code-free configuration of the nPM1304 Power Management IC (PMIC). By connecting to the nPM PowerUP app found in nRF Connect for Desktop, all settings of the nPM1304 can easily be configured through an intuitive GUI and exported as code to be implemented in your MCUs application.

The kit itself offers JST battery connectors for batteries with or without internal NTC, and male pin headers for access to all nPM1304 connections. In addition, three LEDs and four pushbuttons are implemented for ease of use when evaluating the GPIO and LED diver functionality of the PMIC.

The kit contains a controllable active load needed for fuel gauge battery profiling. No extra hardware required.



Key features

- Male pin-headers for all pins on the nPM1304 PMIC, and battery connectors
- USB-C for power and data communication
- Three LEDs and four pushbuttons
- Controllable active load for battery profiling and load emulation
- nPMI304 highly efficient PMIC with advanced system management features
 - Two highly efficient buck regulators
 - 4-100 mA battery charger
 - USB-C compatible
 - Accurate fuel gauge with nRF SoC
 - Single- or two-button hard-reset functionality
 - Watchdog and boot timer
 - Ship- and hibernate modes
 - -40°C to 85°C operating temperature
 - Easy-to-use QFN or small WLCSP package
- Seamless configuration through nPM PowerUP desktop software
- 20 mAh battery included

Applications

- Evaluation of nPM1304 PMIC
- Power management for breadboard prototyping of embedded power applications
- Battery charge controller board for charging prototypes without integrated PMICs

nPM1304 specifications

Battery charger Regulatory compliance Termination voltage Power path Charge current	JEITA compliant 3.6 - 4.65V Dynamic 4 mA to 100 mA
Input regulator Input voltage Output voltage Overvoltage protection	4.0 to 5.5 V 4.0 to 5.5 V unregulated 22 V transient
Buck regulators Output voltage Current limit	2 1.0 - 3.3 V 200 mA output each
Battery voltage	2.3 to 4.65 V
Operating temp	-40°C to 85°C

