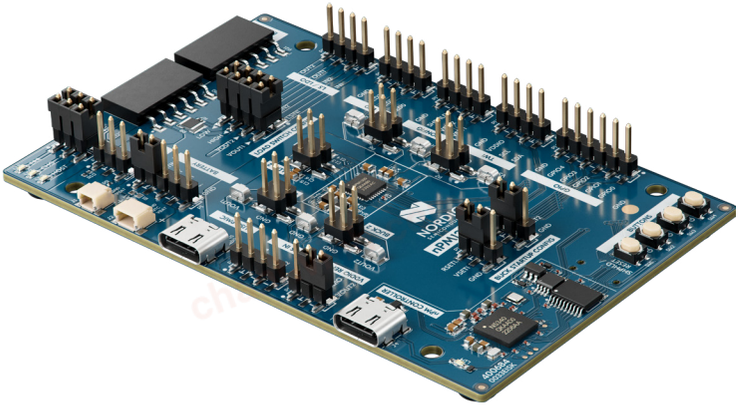
chanhvinh.com

# nPM1300 EK

Easily configure and evaluate the nPM1300 Power Management IC (PMIC) through an intuitive desktop GUI. Automatically generate and export configuration code for use in final application.

## Key benefits

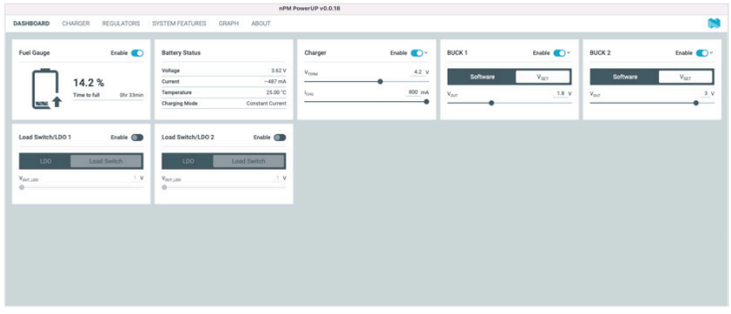
- Seamless integration and code free configuration with the nPM PowerUP desktop app
- Male pin headers provide access to all nPM1300 PMIC connections, for easy connection to external test equipment
- Integrated LEDs and pushbuttons allow for evaluation of the built-in LED drivers and GPIOs of the PMIC



## Overview

The nPM1300 Evaluation Kit allows for simple evaluation and code-free configuration of the nPM1300 Power Management IC (PMIC). By connecting to the nPM PowerUP app found in nRF Connect for Desktop, all settings of the nPM1300 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 nPM1300 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.




## Key features

- Male pin-headers for all pins on the nPM1300 PMIC, and battery connectors
- USB-C for power and data communication
- Three LEDs and four pushbuttons
- nPM1300 - highly efficient PMIC with advanced system management features
  - Two highly efficient buck regulators
  - 800 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

## Applications

- Evaluation of nPM1300 PMIC
- Power management for breadboard prototyping of embedded power applications
- Battery charge controller board for charging prototypes without integrated PMICs

## nPM1300 specifications

| | |
|---|---|
| **Battery charger** | |
| Regulatory compliance | JEITA compliant |
| Termination voltage | 3.5 to 4.45 V |
| Power path | Dynamic |
| Charge current | 32 mA to 800 mA |
| **Input regulator** | |
| Input voltage | 4.0 to 5.5 V |
| Output voltage | 4.0 to 5.5 V unregulated |
| Overvoltage protection | 22 V transient |
| USB current limit | 1500 mA on USB-C |
| **Buck regulators** | |
| Output voltage | 2 |
| Current limit | 1.0 - 3.3 V |
| | 200 mA output each |
| Quiescent currents | TBD nA typical, TBD nA in ship mode |
| Battery voltage | 2.3 to 4.45 V |
| Operating temp | -40°C to 85°C |

nPM FAMILY

For more information please visit: **nordicsemi.com/nPM1300EK**