



## NXP Power Management IC for Low Power Applications PCA9420

# Designed to provide a full power management solution for low power applications

NXP's PCA9420 is highly-integrated Power Management IC (PMIC), greatly extends battery life, thanks to our light load power efficiency, ultra-low standby power, two integrated high-efficiency buck regulators, ultra-small footprint, and built-in "mode transition" function for fast PMIC operation mode switch. Easily compatible with an array of different MCU operation modes, it is enabling a new wave of power efficient devices for li-ion battery powered low power applications, such as hearable, fitness band, watch.

### KEY FEATURES

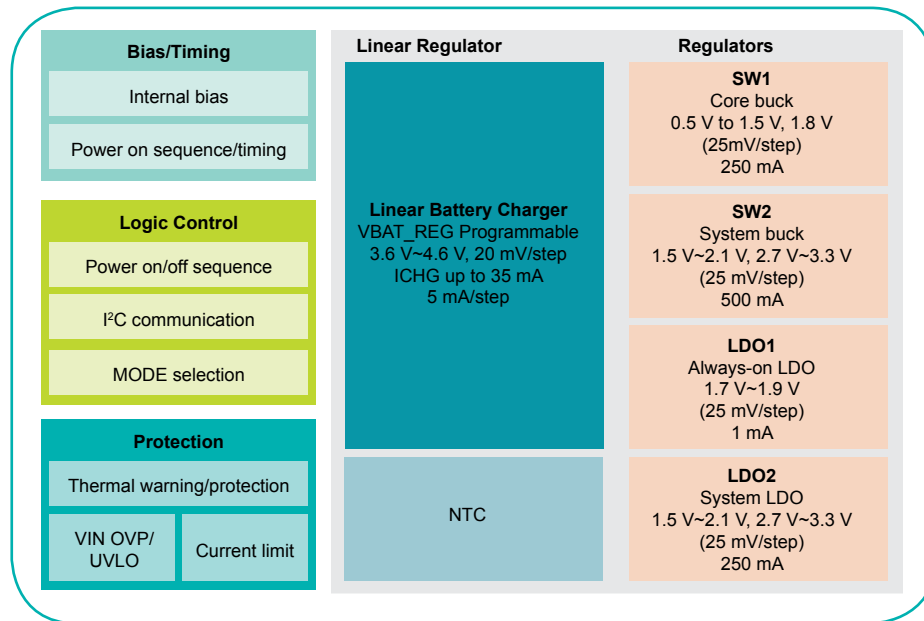
- ▶ Ultra-compact Low-Iq PMIC for Li-ion battery powered low power applications
- ▶ Very low Iq, high light load efficiency, longer system standby time
- ▶ Highly integrated solution, flexible programmability, small solution size
- ▶ 20V DC Tolerance on Vin Pin with Programmable OVP
- ▶ Fm+ 1MHz I2C Interface
- ▶ Offered in two package options:
  - WLCSP 25-bump, 2.09mm x 2.09mm, 0.4mm pitch
  - QFN 24-pin 3mm x 3mm

### TARGET APPLICATIONS

- ▶ Wearable devices
- ▶ Hearable device
- ▶ Other low-power applications powered by li-ion battery

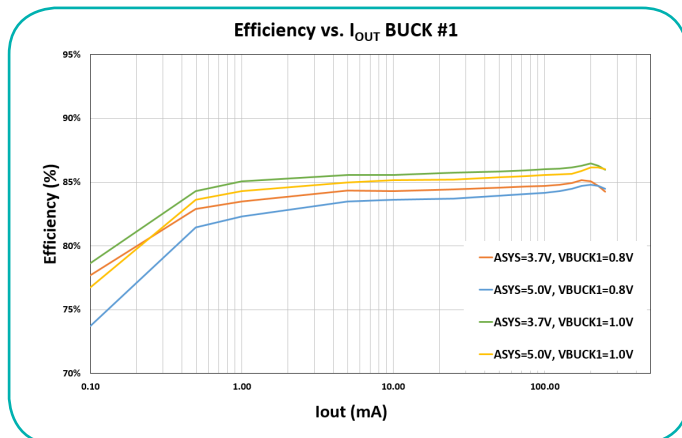


## PINOUT DIAGRAMS



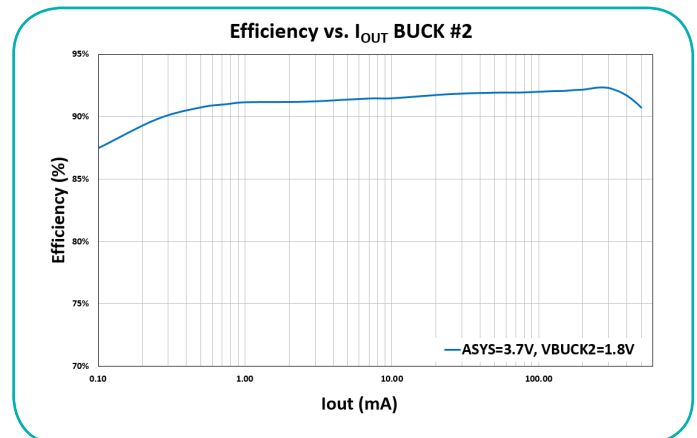
## OPERATION CHARACTERISTICS

### EFFICIENCY CURVES FOR SW1

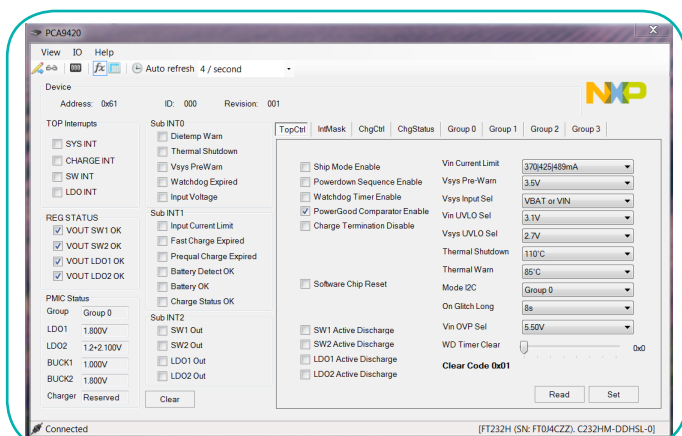


Labeled Photo of Efficiency Curve #1

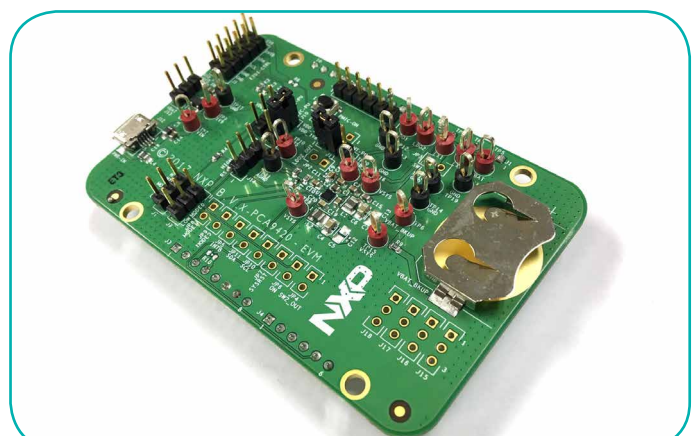
### EFFICIENCY CURVES FOR SW2



## EVALUATION KIT GUI



## EVALUATION KIT



To get started and to learn more, visit [www.nxp.com/PCA9420](http://www.nxp.com/PCA9420)