



# PCA9451A Power Management IC for i.MX 93x Application Processor

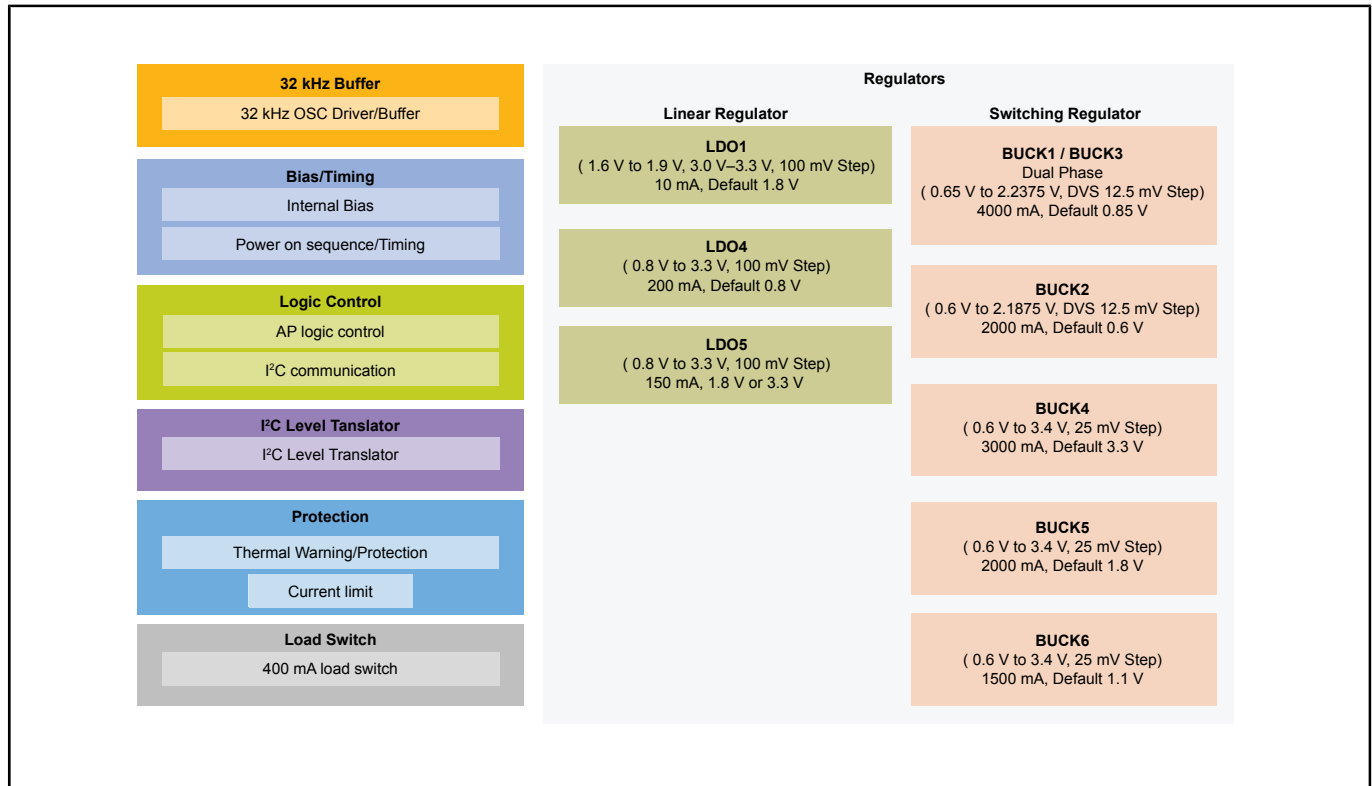
## PCA9451A

Last Updated: Apr 11, 2024

The PCA9451A is a single chip power management IC (PMIC) designed to support i.MX 93x family processor in both 1 cell Li-Ion and Li-polymer battery portable application and 5 V adapter non-portable applications. The device provides six high efficiency step-down regulators, three LDOs, one 400 mA load switch, 2-channel level translator and 32.768 kHz crystal oscillator driver.

Three buck regulators support dynamic voltage scaling (DVS)<sup>1</sup> along with programmable ramping up and down time. The buck regulators support remote sense to compensate IR drop to load from buck regulator, allowing better performance to meet the demand for accuracy in critical supply rails. This device is characterized across -40 °C to 105 °C ambient temperature range, making it a good option for the industrial, extended industrial and consumer markets.

# PCA9451A Power Management IC for i.MX 93x Block Diagram



View additional information for [PCA9451A Power Management IC for i.MX 93x Application Processor](#).

**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. © 2024 NXP B.V.