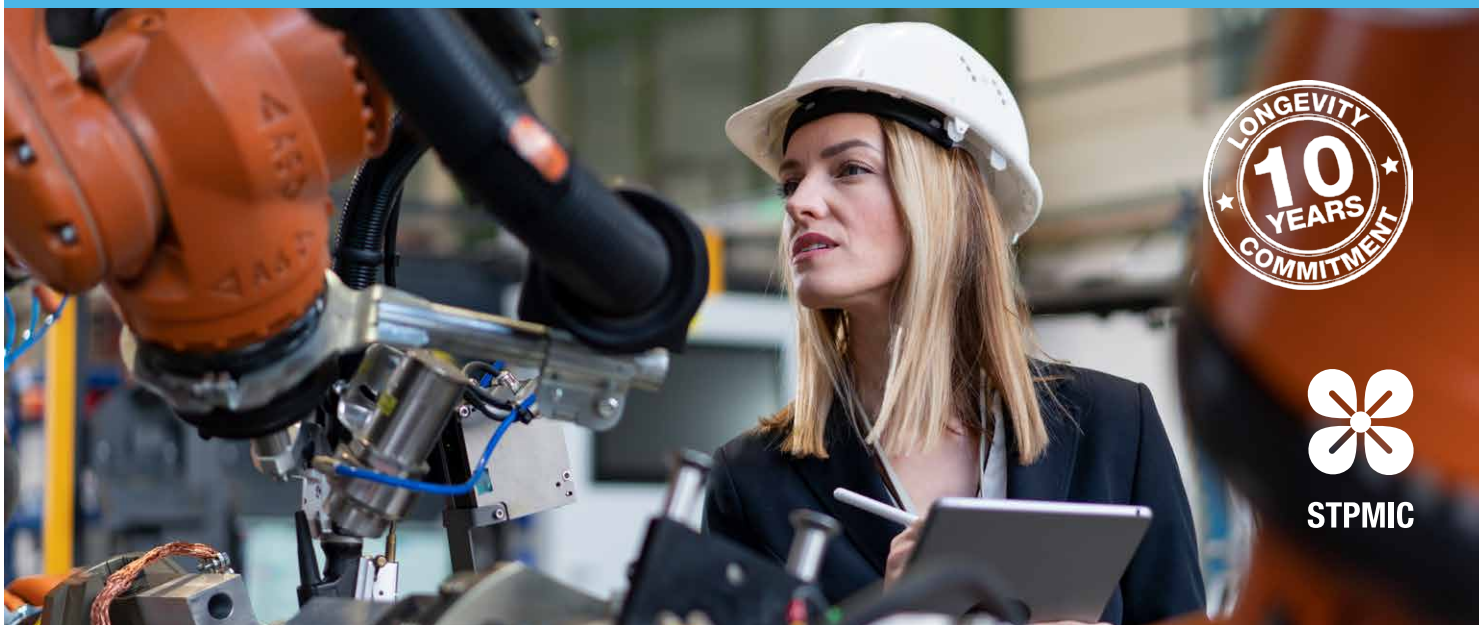
STPMIC1L & STPMIC2L

Cost-effective PMICs for the STM32MP1/2 microprocessors



Compact and efficient power management solutions for embedded MPU applications

The STPMIC1L and STPMIC2L are versatile and cost-effective power management ICs tailored for the STM32MP1 and STM32MP2 microprocessor series. Engineered to streamline component for efficiency and reliability, these PMICs provide seamless power delivery to processors and peripherals like DDR memory and flash storage. Featuring advanced features like programmable power sequencing and compact packaging, these devices are ideal for IoT, industrial, and portable applications. The STPMIC1L offers 2 buck-converters, while the STPMIC2L has 3 buck converters, both enhance power outputs while ensuring scalability, reduced system costs, and optimized performance for today's embedded systems.

KEY FEATURES

- STPMIC1L
  - 2 high-efficiency buck converters optimized for core and DDR power rails
  - 4 versatile LDOs, including dedicated DDR and USB PHY supplies
  - Compact VFQFPN 28L (4 x 4 x 1.0 mm) package
  - Programmable power sequencing and I²C interface
- STPMIC2L
  - 3 buck converters with advanced EMI reduction and spread spectrum modulation
  - 7 adjustable LDOs, supporting DDR and USB PHY
  - Compact VFQFPN 40L (5.0 x 5.0x 1.0 mm) package
  - Integrated spread spectrum for low EMI

KEY BENEFITS

- Compact design
- High efficiency

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Applications

Industrial:
- Ideal for PLCs, HMIs, metering, and other industrial embedded systems.

POS sales:
- Enable fast, secure electronic financial transactions with reliable power management.
- Compact footprint: fits space-constrained designs without compromising performance.

Portable devices:
- Enhance battery efficiency and reliability in smartphones, tablets, and portable electronics.
- Integrated power control: simplifies design with multiple regulated outputs and power sequencing.
- Low quiescent current: extends battery life for longer operation between charges.

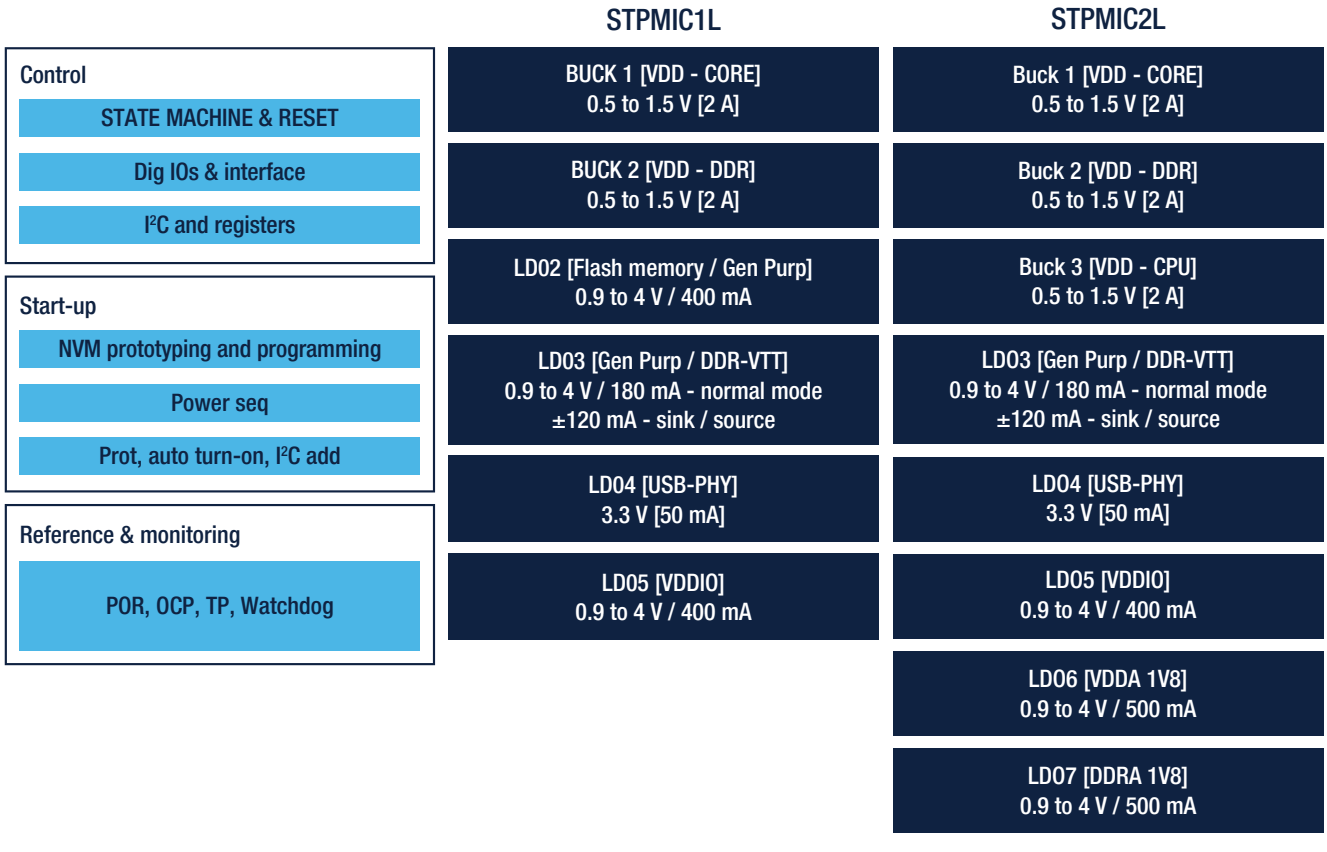
Smart home and automation:
- Power connected appliances and home automation systems efficiently.
- Compatibility: perfectly matched with STM32 MPU series for optimized system efficiency.

Explore our evaluation boards

STEVAL-PMIC1LKV1

STEVAL-PMIC2LKV1

STPMIC1L/2L block diagram



Order code: FL2511STPMICL

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