



# PAGE EEPROM FAMILY

## Boost accuracy and battery life in asset tracking devices



### New 8 to 32-Mbit memory for asset tracking

In global manufacturing and commerce, raw materials, components, and final goods can travel long distances through warehouses and logistic hubs before arriving at their final destination. More often than not, the direct or indirect value of any particular item warrants certain costs associated with monitoring its condition and position.

The Page EEPROM, ST's latest memory, has been designed for efficient datalogging and fast firmware upload/download in battery-operated devices. This innovative memory combines the power efficiency and durability of an EEPROM with the impressive capacity and speed of a Flash memory.

#### KEY FEATURES

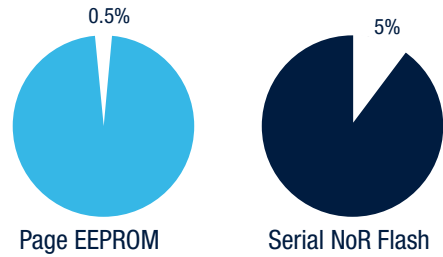
- 1.6 to 3.6 V
- -40 to +105 °C temperature
- 80 MHz Quad output SPI
- Write byte granularity
- Page program up to 512 bytes
- Page/sector/block erase
- 500 k write cycle endurance
- Current peak below 3 mA
- Deep power down below 1  $\mu$ A
- Error Correction Code
- 100-year data retention

#### BENEFITS

- Power-saving for intensive use
- Lower downtime during FOTA
- Easy data logging
- Code integrity & high reliability
- Write byte flexibility

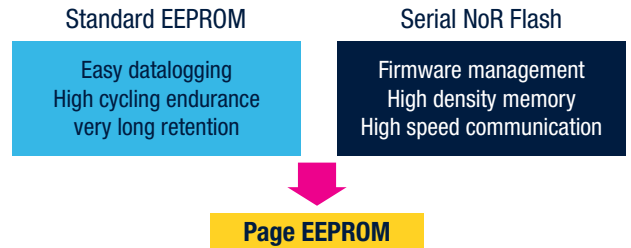
## Build smarter asset tracking applications

Ultralow power, the Page EEPROM consumes a mere 0.5% of the application's total energy budget—significantly less than a Serial NoR Flash, which uses 5%. This efficiency means that applications using the Page EEPROM can collect more data, all while minimizing battery consumption.



## Merging EEPROM and Serial Flash benefits

By combining the benefits of EEPROM and Flash memories, developers get the best of both worlds. The transition from a Serial NoR Flash is straightforward, and with the robustness of an EEPROM, this solution provides the flexibility that asset tracking applications demand.



## Applications and segmentation

<b>Outdoor real-time monitoring</b>		Containers		Fleet management		Livestock monitoring		Tractors		Mobility sharing
<b>Indoor localization &amp; Warehouse logistics</b>		RTLS*		Mobile assets		Pallets		Smart parcels		Employee safety
<b>Goods guarantee</b>		Cold chain		Food tracing		Medical				
<b>Disposable</b>		Letters		Packages		Parcels				

\*RTLS = Real-Time Localization System

## Product summary

Part number	Memory size	Serial Interface	Supply (V)	Temperature range (°C)	Packages
M95P32-I/E	32 Mbit	Single, Dual and Quad-SPI	1.6 to 3.6	-40 to 85 °C (industrial) -40 to 105 °C (extended)	SO-8, DFN, WLCSP
M95P16-I/E	16 Mbit				
M95P08-I/E	8 Mbit				

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