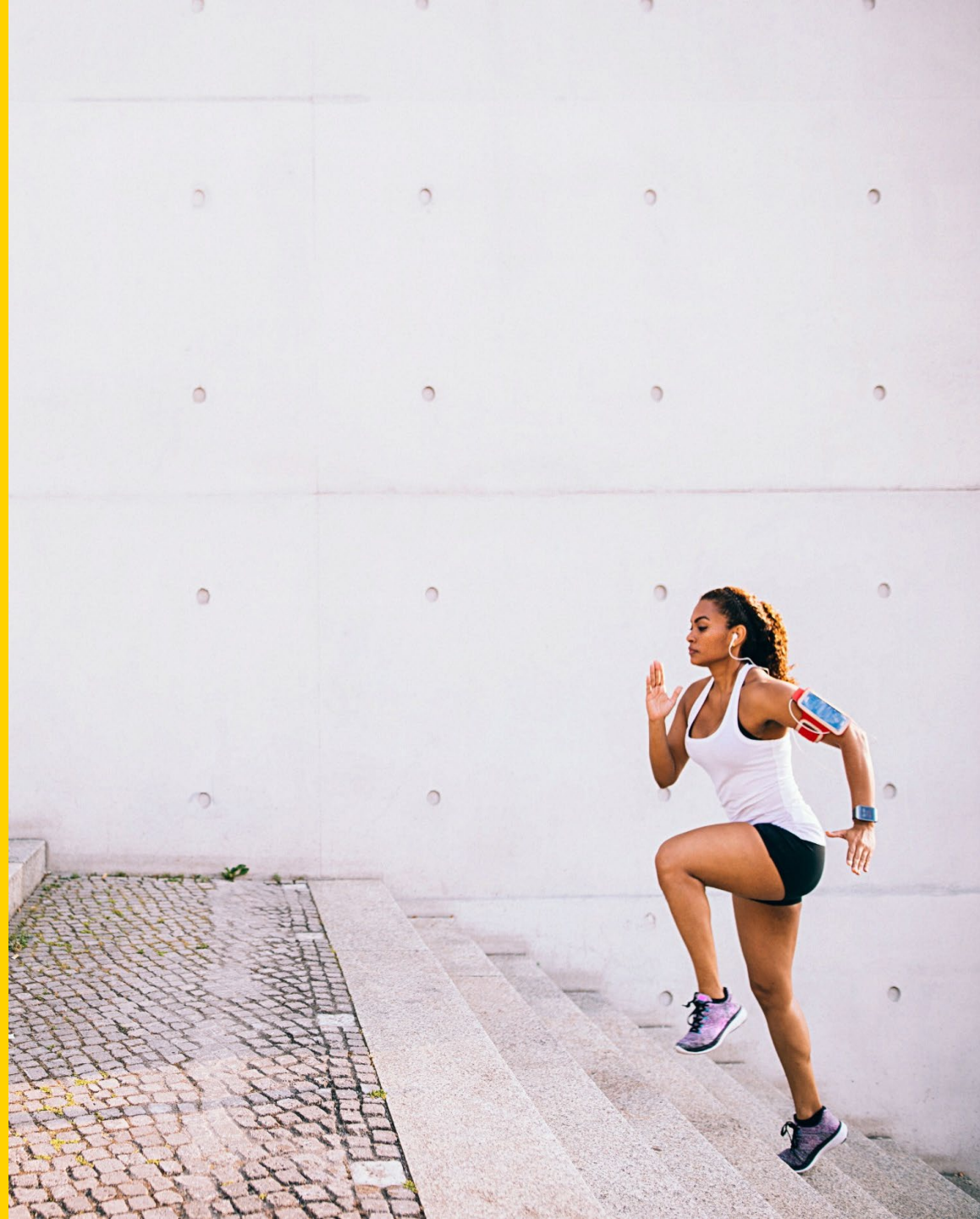




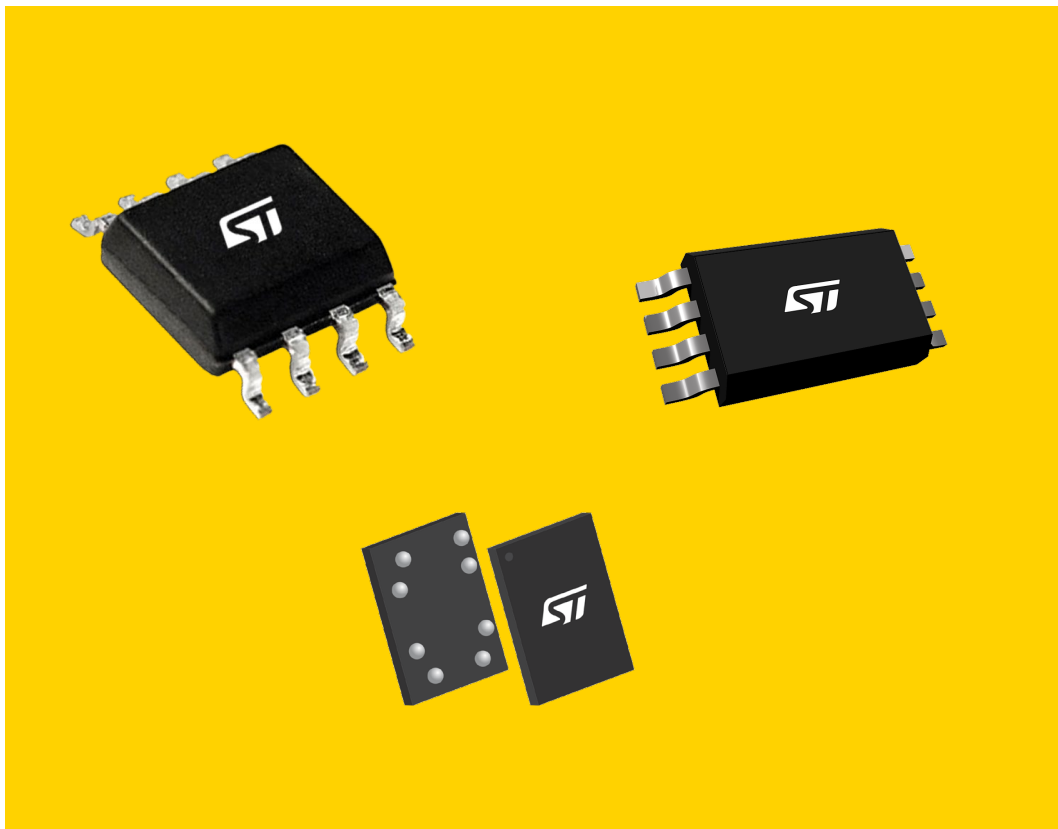
The world's first  
**4-Mbit SPI EEPROM**

**M95M04-DR**





# 4-Mbit SPI EEPROM now available



Available in SO8N, TSSOP8 & WLCSP packages



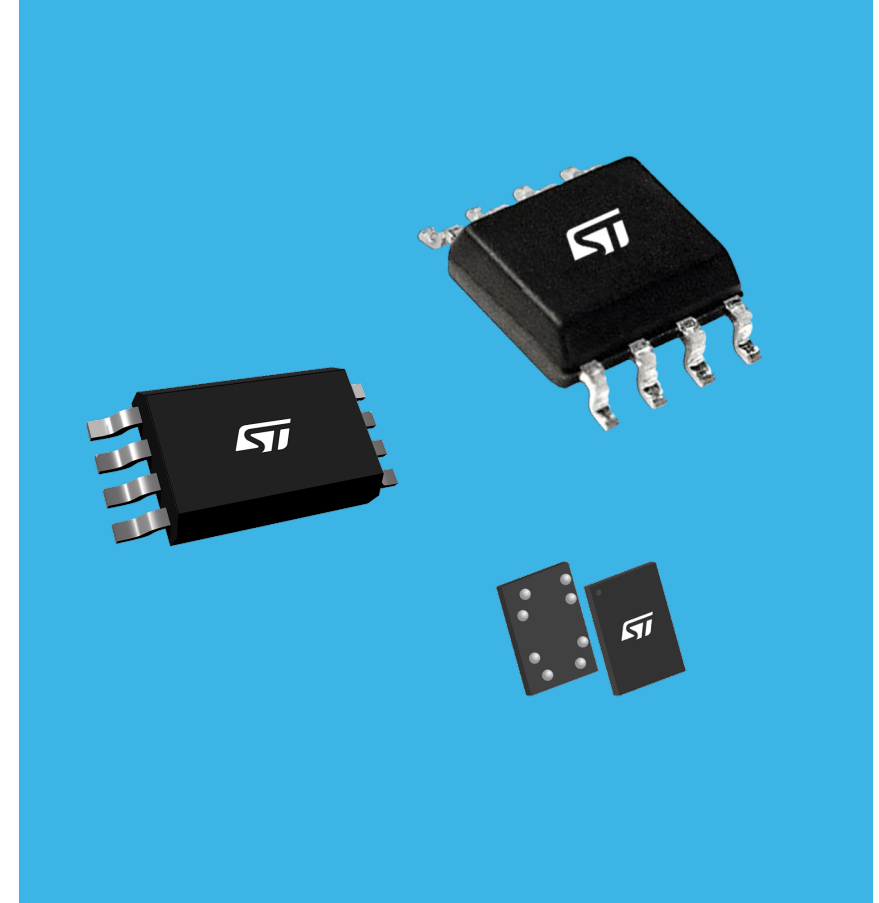
## Key features

- 4-Mbit memory organized as 512K bytes
- 1024 **pages of 512 Bytes**
- **Byte alterability**
- Lockable page
- Error Code Correction for high reliability
- **1.8 V to 5.5 V    - 40 / + 85°C**
- 5 ms write time
- **4 million erase/write cycles**
- 40 years of data retention



# 4-Mbit EEPROM – Features

- SPI 10 MHz at 85 °C
  - Less than 0.5 second for sequential read of 4-Mbit (512 Kbytes)
- Write time: 5 ms for 512 bytes
  - 5 seconds for data storage of 4-Mbit (512 Kbytes)
  - 1.4 second for data storage of 1-Mbit (128 Kbytes)
- Lockable page of 512 bytes
  - Specific instruction and set read-only lock to protect sensitive data.
- 4 million write cycles at 25 °C
  - Datalog: 1 cycle per minute over 8 years





# 4-Mbit EEPROM – Ultralow power

- **Standby mode:** 1  $\mu\text{A}$  typically
  - 90% of application operating time
- **Read operation:** 400  $\mu\text{A}$  typically at 1V8 5 MHz
  - 9% of application operating time
- **Write operation:** 800  $\mu\text{A}$  typically at 1V8
  - 1% of application operating time





# 4-Mbit EEPROM – Targeted applications

## Medical and healthcare, wearables



## Smart meters, automation



## 5G network, routers, servers



### More accurate & more flexible:

- Allows more data to be stored
- Suitable for a wider range of applications

**Mix of boot code, calibration tables, user parameters, and datalogging**

# Request samples

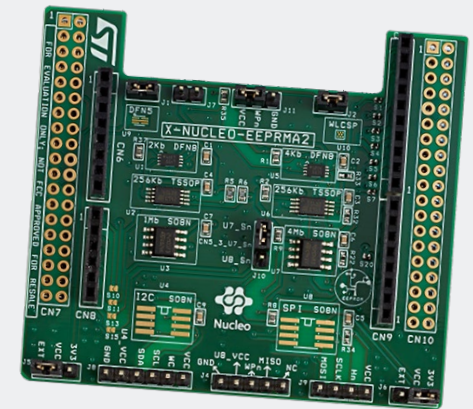
## 4-Mbit products [here](#)

- **SO8N**  
M95M04-DRMN6TP
- **TSSOP8**  
M95M04-DRDW6TP
- **WLCSP8**  
M95M04-DRCS6TPVF



## X-NUCLEO-EEPRMA2

[X-NUCLEO expansion board](#)  
for prototyping





# Our technology starts with You



Find out more at [www.st.com/eeeprom](http://www.st.com/eeeprom)

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