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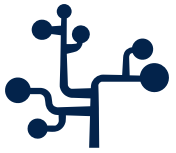
The world's first Automotive-Qualified 4Mbit SPI EEPROM

M95M04-A125

M95M04-A145

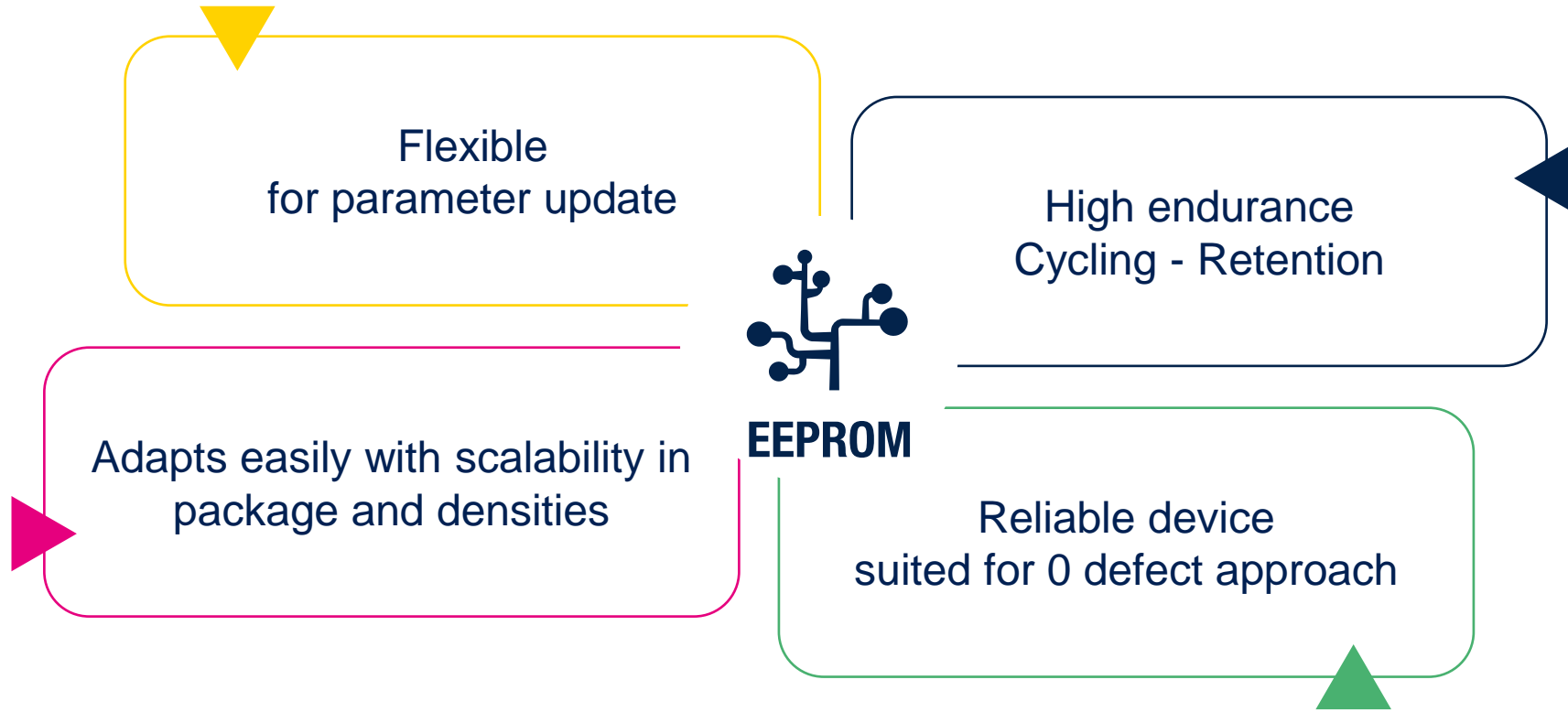


EEPROM



EEPROM

EEPROMs make Applications Smarter



**High quality
Flexible parameter management**



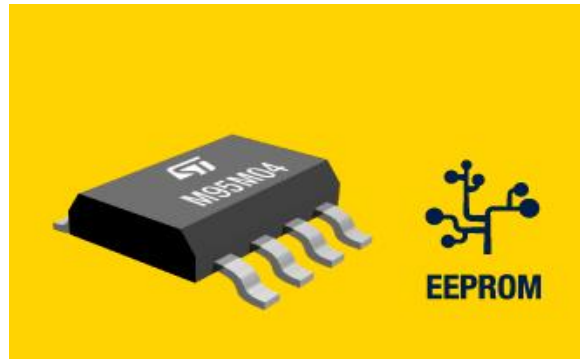
EEPROM

4Mbit Automotive EEPROM

Storage



- 512 Kbytes with embedded **Error Correction Code (ECC)**
- 1024 **pages of 512 bytes**
- Additionnal IDentification Lockable page
- Page **write time 4ms**
- 1 Million E/W cycles
- 10 years data retention at 55°C after max cycling
- SPI bus 10MHz
- **Vcc 2.9 to 5.5V**



AEC-Q100 Grade 1 (125°C) SO8N & TSSOP

AEC-Q100 Grade 0 (145°C) TSSOP

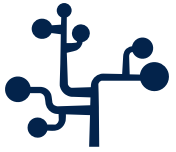
Store safe your most sensitive data



Lockable
page

Additional Lockable page of 512 bytes

- Delivered with 3 ID bytes for software identification
- Access with specific instruction set
- Lockable in read only mode at anytime



EEPROM

Flexible data management

SPI 10MHz speed clock

- Sequential read of **512Kbytes (4Mbit)** in **less than 0.5 sec**



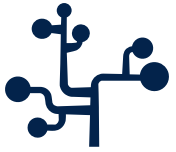
Fast 512 bytes page write

- Full memory write **512Kbytes (4Mbit)** in **less than 5 sec.**

Store 512 bytes in 1 single instruction

- Fast event recording of 512bytes in **less than 4ms**





EEPROM

High endurance

Monitoring and datalog function



1 Million cycles per byte at 25°C

- 1 Cycle/min for active mission profile of 18000h

100 Million cycles per device

- 1 Cycle/sec. for active mission profile of 18000h
- Cycled data must be evenly distributed over 65 different locations*

*1 cycle/sec during 18000h are 64,8 Million cycles. To respect the 1Million cycles per byte, total cycling must be distributed over 65 different locations.



EEPROM

Low power consumption

Less than 1mA operating current

Write mode

- At 3.3V, average 0.75mA current consumption during 4ms
- Only 10 μ J energy budget for write instruction

Read mode

- At 3.3V, average 0.65mA current consumption at 10Mhz
- Only 1 μ J energy budget for reading 512 bytes





EEPROM

Apply for samples at [st.com](https://www.st.com)



SO8N M95M04-DWMN3TP/V

TSSOP M95M04-DWDW3TP/V

TSSOP M95M04-DWDW4TP/V



[Automotive Serial EEPROM](#)



[4Mbit 125°C](#) / [4Mbit 145°C](#)



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EEPROM

Serial EEPROM - make it easy

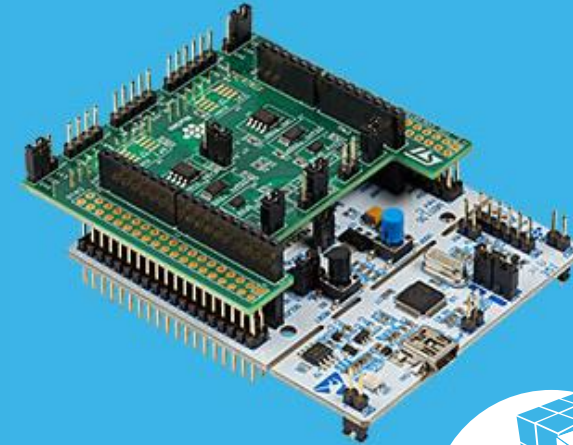
ST EEPROM Finder app

*Select & order the right EEPROM
for your design*



X-Nucleo-EEPRMA2 *Plug-in shield*

Prototype and validate

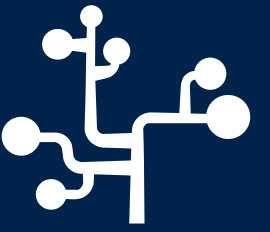


New 4Mbit for a Safer and Greener Trip



»» ST EEPROM service

- IBIS and Verilog models
- Easy Buy-on-Line & through our Distributors
- ROHS and Halogen-free package
- Long term commitment



EEPROM

Thank you



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