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The world's first 4Mbit SPI EEPROM M95M04-DR

STMicroelectronics - September 2020



EEPROM

4Mbit SPI EEPROM – Key features



- 4Mbit memory organized as 512K bytes
- **Byte alterability**
- **1024 pages of 512 Bytes**
- Lockable page
- Error Code Correction for high reliability

- **1.8V to 5.5V -40 / +85°C**
- 10MHz SPI Bus
- 5ms Write Time
- **4Millions Erase/Write cycles**
- 40 years data retention



EEPROM

4Mbit EEPROM - Performance

- **SPI 10MHz at 85°C**
 - Less than 0.5 seconds for Sequential Read of 4Mbit (512Kbytes)
- **Write time: 5ms for 512 bytes**
 - 5 seconds for Data storage of 4Mbit (512Kbytes)
 - 1.4 seconds for Data storage of 1Mbit (128Kbytes)
- **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

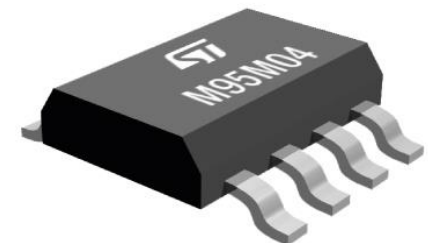
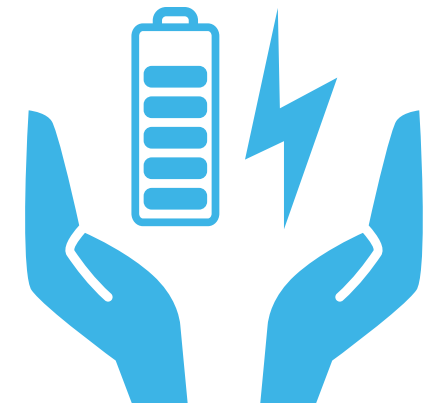




EEPROM

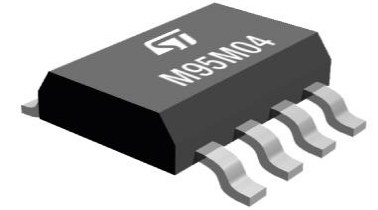
4Mbit EEPROM - Low power

- **Standby mode: 1 μ A typically**
 - 90% of application operating time
- **Read operation: 400 μ A typically at 1V8 5MHz**
 - 9% of application operating time
- **Write operation: 800 μ A typically at 1V8**
 - 1% of application operating time



4Mbit EEPROM - More accurate, more flexible

Mix boot code, calibration tables, user parameters and datalogging



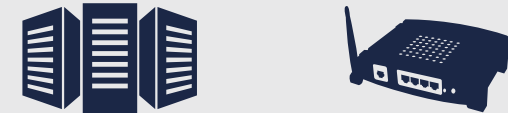
Medical, wearables



Smart meters, automation



5G network, routers, servers





EEPROM

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SO8N M95M04-DRMN6TP

TSSOP M95M04-DRDW6TP



[4Mbit product page](#)



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