Product Brief

Never stop thinking

SLM 76 for
Machine-to-Machine (M2M)

MACHINE-TO-MACHINE communication over cellular networks is a promising and fast-evolving new field for the diversification of SIM applications. Many system integrators promote the virtues of the SIM in the context of industrial M2M applications for their inherent security and relatively low integration costs. The M2M market will develop globally, with a vast variety of different market segments and applications. One major market will involve the automotive industry, with applications such as emergency call, fleet management and innovative services centered on the consumer. Another market will be smart metering, where a constantly available meter readout offers opportunities in cost saving and marketing concepts that are better tailored for the consumer.

What is so special about M2M?

- large number of applications with specifically demanding requirements
- extreme environmental conditions, such as high and low temperatures or vibrations
- frequent access and change of data within non volatile memory
- longer lifetimes
- solderability

Our dedicated SLM 76 platform offers

- a complete product portfolio dedicated for M2M addressing the needs of a large number of applications
- extended temperature range from -40 to 105°C
- very robust E²PROM cell concept leading up to 500k cycles per page
- resistance to harsh environmental conditions such as vibration or humidity achieving 10 years of lifetime and 10 years data retention
- optimized package solutions, i.e. a tiny standard surface mount package VQFN with 8 pins or dedicated M2M chip card modules

These outstanding characteristics together with our in-house experience and partner network beyond chip card industry enables you to participate in this fast growing market.

Whatever your M2M application is, SLM 76 is your platform.

www.infineon.com/security

SLM 76 Features

- true 16-bit secure microcontroller
- 256-504 kBytes E²PROM
- 8-12 kBytes RAM
- supply voltage range: 1.62 V to 5.5 V
- suited for a temperature range from -40 °C to +105 °C
- delivery forms:
  - ultra-thin SMD package (VQFN-8)
  - enhanced molded Chip Card package (P-M2M5.1-8-1)
  - bare dies
- fulfills industrial requirements according JEDEC norm including:
  - solderability
  - moisture level MSL 3
  - ESD robustness
  - humidity
  - temperature cycling
  - vibration
- up to 500k cycles per E² PROM page
- 10 years of lifetime
- 10 years of data retention at 85°C
- internal clock up to 33 MHz supported by 1 kByte unified cache for code and data
- memory management unit
- defined migration path from SLE 50PE/SLE 66PE products with minimized customer effort based on an adapted tool set
- software compatible with SLE 76P
- automatically adjusted internal frequency according to available power budget

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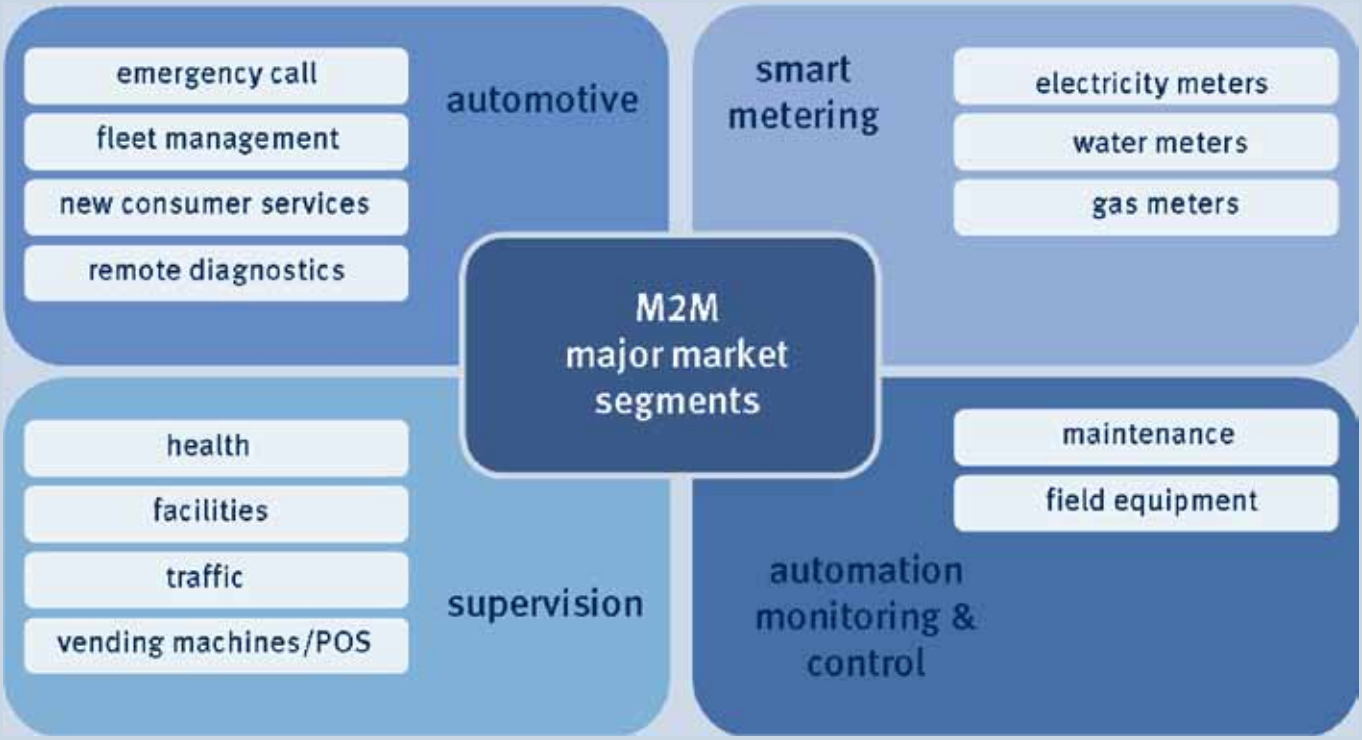

SLM 76 platform

VOFN-8 package

P-M2M5.1-8-1 (molded chip card module)

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