

Numonyx® automotive-grade flash memory

Designed and optimized specifically for intense, exacting automotive applications



FLASH MEMORY FOR INTENSE AUTOMOTIVE APPLICATIONS

Next-generation performance, quality and reliability for demanding automotive applications.

High-performance automotive systems demand high-performance memory. So we put our dedicated team of automotive memory experts to work for you on next-generation performance, quality and reliability.

Robust, automotive-grade flash memory delivers the wide operating temperature range, 100,000 program/erase cycles, 20-year data retention and optimization for 32-bit microcontrollers needed for intense engine and transmission systems, safety and onboard entertainment systems, or electronics.

Our specific screening methodology, including Statistical Yield Analysis (STA) and Part Average Testing (PAT), detects and eliminates abnormal manufacturing lots and outlier products, delivering the zero-defect quality targets your systems demand.

M58BW parallel burst family of products

The M58BW family of products delivers high performance data throughput and is especially suited to automotive applications that require x32 databus width and fast burst mode read.

Optimized for engine control units, transmission control and other automotive applications, the M58BW family is designed to interface with 2.5V low voltage microcontrollers operating in the full automotive temperature range. The device

features 4, 8 or continuous long-word synchronous burst mode reads.

The M58BW family enables higher performance and lower component count. Customized burst flash solutions make us our customers' first choice for power train applications.

Forté™ M25P and Forté™ M25PX

With fast system speed, sequential read capability, low power consumption, small package and low cost, the Forté™ M25P and Forté™ M25PX families of serial flash memory offers added value to both high- and low-end applications such as car-body, driving assistance, lane detection and night-vision systems.

M25 devices are available in densities from 1Mb to 64Mb (Forté M25P) and from 8Mb to 64Mb (Forté M25PX), in diverse package types.

With a single supply voltage of 2.7V to 3.6V perform in the intense temperature range of the automotive environment at a maximum speed of 75MHz.

Forté™ N25Q

Compatible with the M25P and M25PX families, the 65nm N25Q product line supports multiple I/O SPI protocols on the same device (single, dual and quad) featuring 108MHz read throughput and security options and is ideally suited for Automotive infotainment applications.

Axcell™ parallel NOR flash memory

These parallel flash memory families are widely used in applications for dashboards, car-body, car multimedia and connectivity.

Devices are available in densities ranging from 4Mb up to 256Mb. Each block can sustain over 100,000 program/erase cycles with 20 years data retention in the wide temperature range of the automotive environment. They are offered in numerous package options, including TSOP, SO, BGA and KGD, and are drop-in compatible with market standards and command sets.

Numonyx® Wireless (W) family of products for Automotive

The M58WR family of products is designed to interface with 1.8V low-voltage microcontrollers operating in the Automotive temperature range from -40 to +85°C. It is offered in 32Mb and 64Mb densities and enables higher performance in on-body applications.

NAND SLC solutions for Automotive

Ideally suited for infotainment as well as dashboard car communication applications, the Numonyx® NAND SLC solutions are able to meet the increasing demand of data storage in these applications. They are offered in both Small Page as well as Large Page configuration, in 1.8V and 3V power supply.

eMMC* solutions

The rapid advancement of electronics in automotive applications is increasing the need for eMMC* solutions in the industry. Turn to our expertise in all flash memories—and our commitment to long-term supply you can depend on.

numonyx.com

Copyright © 2010 Numonyx B.V. All rights reserved. Numonyx, the Numonyx logo, Forté and Axcell are trademarks or registered of Numonyx B.V. or its subsidiaries in other countries.

*Other names and brands may be claimed as the property of others. 0310/VA/BMCG/PDF 108119-006 Please recycle ♻

NUMONYX AUTOMOTIVE-GRADE MEMORY

M58BW parallel burst family of flash memory

- / High-performance data throughput
- / Well-suited for applications that require x32 databus width and fast burst mode read
- / Optimized for engine control units, transmission control and other automotive applications

Forté™ Serial Flash Product Lines

- / Single, Dual, Multiple I/O protocols offered
- / Fast system speed, sequential read capability and low power consumption
- / Small package
- / Added value for low and high-end applications, including automotive car-body, driving assistance, lane detection and night-vision systems

Axcell™ M29 parallel NOR flash memory

- / Low and high densities
- / Drop-in compatible with market standards and command sets
- / Well-suited for automotive dashboards, car-body, multimedia and connectivity, as well as industrial applications
- / 3V and 5V power supplies are offered for long standing and stable supply

Numonyx® Wireless (W) parallel burst family

- / Synchronous burst and asynchronous page mode read operations
- / Well suited for applications that require x16 databus width and fast burst read mode
- / Optimized for telematics and all other automotive applications

NAND SLC and eMMC* Solutions*

- / Multiple solutions offered
- / Well-suited for Automotive car infotainment applications, like Car Radio and DVD , Navigation system, Traffic and Meteo info Multimedia

Table 1. All Numonyx automotive-grade products are designed to perform in intense automotive applications, such as power-train, safety, car body and infotainment. Grade 3 (-40C to +125C) and grade 6 (-40 to +85) Products meet PPAP, AEC-Q100 compliance and long-term commitment requirements.

* Numonyx eMMC* solutions for Automotive are in line with key requirements of AEC-Q100 quality standards

Manufacturing excellence

We apply our history of manufacturing excellence and a dedicated design and testing flow to deliver the level of product reliability required for automotive applications. More than design tools and testing, our zero-defect manufacturing standards encompass all aspects of the development and production cycle. Plus, our commitment to multi-year supply helps ensure the long-term support your business requires.

Learn more today

For more information about product availability, please contact your local Numonyx sales representative, or visit us online at numonyx.com.



numonyx®