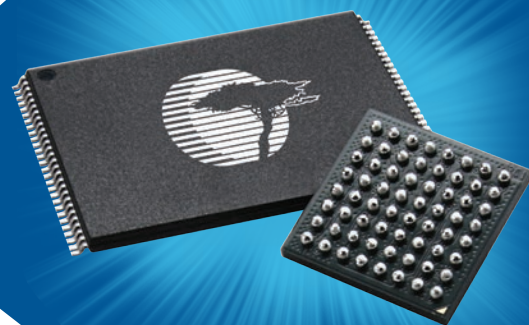


CYPRESS

512 MB TO 2 GB PARALLEL PAGE MODE GL-T NOR FLASH MEMORY FAMILY



PRODUCT OVERVIEW

INTRODUCTION

The Cypress GL-T family of 3.0-V NOR Flash memory is fabricated on leading-edge 45-nm MirrorBit® charge-trapping technology with densities ranging from 512 Mb to 2 Gb. These devices offer a fast page access time of 15ns with an initial access time as fast as 100ns. In addition, the GL-T is the only parallel Page Mode NOR Flash memory that supports the extended temperature range of -40°C to +125°C. This makes these devices ideal for embedded applications that require higher densities and better execute-in-place (XIP) performance over a wide temperature range.

High Read Bandwidth

- Higher NOR Flash Memory Read Bandwidth reduces delays in the execution of CPU instructions, increasing system performance
- Initial access time as fast as 100ns and page access time of 15ns
- Read Bandwidth up to 98.5 MBps

High Density Support

- Higher Flash densities are required as code size increases to support additional system features
- Densities from 512 Mb up through industry leading 2 Gb

High Temperature Range

- High performance embedded systems require higher temperature components as enclosures shrink reducing air flow
- Three temperature ranges supported including the industry leading -40°C to +125°C Extended Temperature range

FEATURES

HIGH DENSITY RANGE:

- 512 Mb to 2 Gb

HIGH PERFORMANCE:

- 98.5 MBps read bandwidth

LEADING-EDGE TECHNOLOGY:

- 45-nm MirrorBit Charge Trapping Technology

ARCHITECTURE FEATURES:

- x8/x16 Data Bus
- 32-Byte Page Read Buffer
- 512-Byte Program Buffer
- 128-Kbyte Uniform Sectors

HIGH TEMPERATURE RANGES:

- Industrial (-40°C to +85°C)
- Industrial-Plus (-40°C to +105°C)
- Extended (-40°C to +125°C)

AUTOMOTIVE SUPPORT

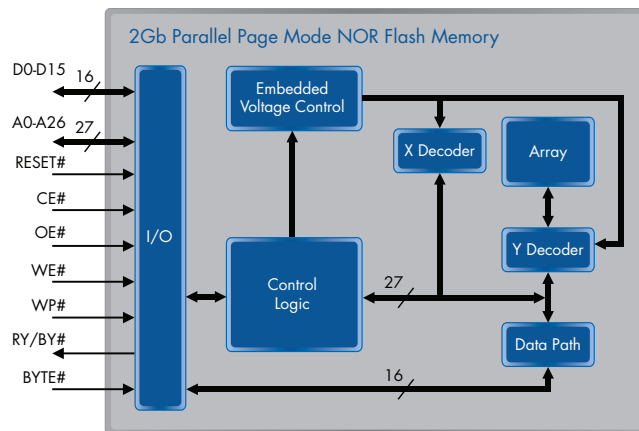
- AEC-Q100 Qualification
- PPAP Support

PACKAGES:

- 56-pin TSOP 14 mm x 20 mm
- 64-Ball BGA 9 mm x 9 mm, 1.0-mm pitch
- 64-Ball BGA 13 mm x 11 mm, 1.0-mm pitch
- 56-Ball BGA 9 mm x 7 mm, 0.8mm-pitch

APPLICATIONS

Automotive Instrument Cluster | Automotive Infotainment | Communication Equipment | Industrial Automation



GL-T DEVICE PORTFOLIO

Base MPN	Density	Speed	Package	Temperature	Model
S29GL512T	512 Mb	100 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 64-Ball BGA, 13mm x 11mm, 1.0 mm pitch 56-Ball BGA, 9mm x 7mm, 0.8mm pitch 56-Pin TSOP	-40°C to +85°C	Highest Address Sector Protected Lowest Address Sector Protected
		110 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 56-Pin TSOP	-40°C to +105°C	Highest Address Sector Protected Lowest Address Sector Protected
		120 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 56-Pin TSOP	-40°C to +125°C	Lowest Address Sector Protected
S29GL01GT	1 Gb	100 ns	56-Pin TSOP 64-Ball BGA, 13mm x 11mm, 1.0 mm pitch 56-Ball BGA, 9mm x 7mm, 0.8mm pitch 56-Pin TSOP	-40°C to +85°C	Highest Address Sector Protected Lowest Address Sector Protected
		110 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 56-Pin TSOP	-40°C to +105°C	Highest Address Sector Protected Lowest Address Sector Protected
		120 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 56-Pin TSOP	-40°C to +125°C	Highest Address Sector Protected Lowest Address Sector Protected
S70GL02GT	2 Gb	110 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 64-Ball BGA, 13mm x 11mm, 1.0 mm pitch	-40°C to +85°C	Highest Address Sector Protected Lowest Address Sector Protected
		120 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 64-Ball BGA, 13mm x 11mm, 1.0 mm pitch	-40°C to +105°C	Highest Address Sector Protected Lowest Address Sector Protected
		130 ns	64-Ball BGA, 9mm x 9mm, 1.0 mm pitch 64-Ball BGA, 13mm x 11mm, 1.0 mm pitch	-40°C to +125°C	Highest Address Sector Protected Lowest Address Sector Protected

GET STARTED NOW

1 DOWNLOAD THE
GL-T DATASHEET

[www.cypress.com/
S29GLT_Family_Datasheet](http://www.cypress.com/S29GLT_Family_Datasheet)

2 DOWNLOAD APP NOTE

[www.cypress.com/
Migration_From_GL-P_AND_GL-S_TO_GL-T](http://www.cypress.com/Migration_From_GL-P_AND_GL-S_TO_GL-T)

3 DOWNLOAD SOFTWARE,
TOOLS AND DESIGN MODELS

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