

AGIGARAM™ Non-Volatile System

CAPRI NVS: 256MB to 2GB with DDR2 Interface



AGIGARAM Technology

Battery-Free Power Source

- SAFE and GREEN
- Powers NVS on power loss
- 5-year and 10-year operating life
- 10-year data retention
- Up to 200,000 power cycles
- No catastrophic failure modes

Highest capacity NV RAM available

- Starting at 4MB, up to 2GB today
- Up to 48GB in future products

Completely Integrated System

- Ultra high reliability
- Small board area
- Fast time-to-market
- Low cost of ownership

Non-Volatility 100% Managed by NVS

- Unlimited read/write cycles
- No wear issues

System Level Features

- Variable partitioning
- Continuous health monitoring
- Automatic history tracking
- System safe control sequencing
- AGIGASAFE archives
- Enables 'Instant ON/Recovery'
- Zero standby power

AGIGARAM Applications

Applications

- Storage/server/RAID systems
- Communications/Networking
- Industrial computing & controls
- Medical equipment
- Gaming systems
- Robotics
- Data logging, Service processors
- Point-of-Sale terminals, ATMs
- Security Systems

Examples of Uses

- Battery-Backed Unit replacement
- Power savings, glitch immunity
- RAID write caches
- Instant ON/Recovery
- Data logging, journaling
- Service/maintenance processing
- Unified memory architectures

Overview

In response to the need for a fundamentally better approach to implementing large, high-speed, non-volatile RAM, AGIGATECH presents the **AGIGARAM™** Non-Volatile System (NVS).

AGIGARAM delivers the highest capacity non-volatile RAM available in the industry. It Ranges in sizes from 4MB to 64MB in the first product and 256MB to 2GB in the second product. It comes in multiple form factors and interfaces that enable rapid time-to-market and high performance.

Traditional approaches have made nvRAMs greater than 4 to 8 Megabits impractical due to technology limitations, cost, and lack of a viable power source. As a result, nvRAM has been limited to specialty applications or those with work-arounds for issues from power sources (such as batteries).

AGIGARAM provides a high-density, battery-free non-volatile solution. It delivers unlimited Read/Write performance at RAM speeds, while also safely backing up all DRAM data when power is interrupted. The system utilizes the best features of existing solutions, fast, non-wear random access plus non-volatility. In addition, **AGIGARAM** brings a whole new set of system-level features and reliability to the designer.

The **AGIGARAM** CAPRI 256MB to 2GB NVS is an easy to use, turnkey system. It can be used to enable many value add system features such as zero standby, power interruption immunity, instant on/recovery, write caching/posting, data logging, service/maintenance processing, journaling, unified memory architectures, and UPS replacement / redundancy. It provides all these features while preserving mission-critical data.

The CAPRI NVS is available in 256MB, 512MB, 1GB, & 2GB densities at speeds of 533MHz, 667MHz, & 800MHz. CAPRI comes in a 244 pin mini RDIMM, 240 RDIMM, and custom form factors.

AGIGARAM™ Capri Non-Volatile System

AGIGARAM CAPRI NVS Features

256MB to 2GB NVS with DDR2 Interface

- High-speed DDR2 SDRAM interface. Up to DDR2-800.
- 6,400 MB/second peak transfers
- 2 to 4 optional side band signals
- I²C command/control bus

Separate Power GEM module provides power to main board

244 pin mini-RDIMM form factor, 240 RDIMM upon request

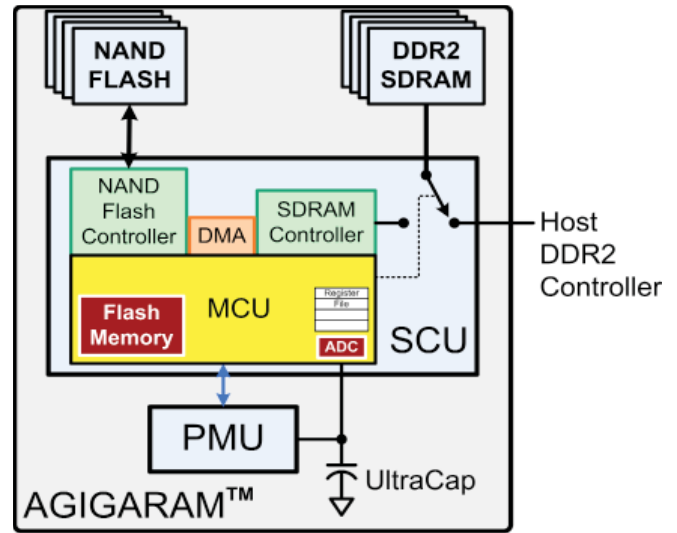
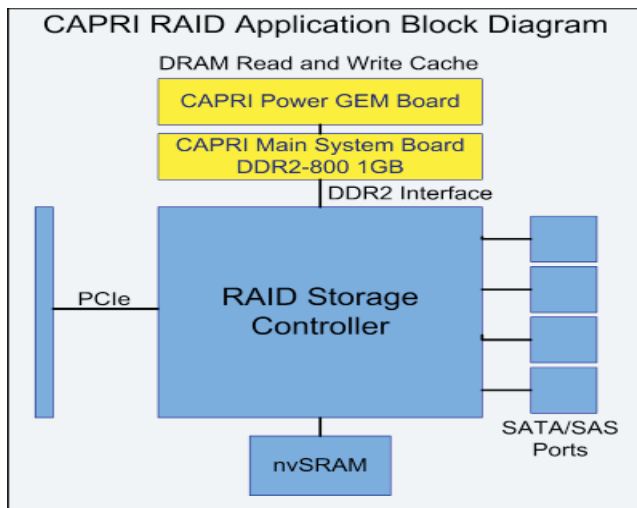
0–70°C Operating Range

- Other temperature ranges available

5-year and 10-year Operating Life

Comprehensive support available

- 'PLUM' PCI-CAPRI Evaluation Kit: AGIGA0002-000AXX
- Datasheet



The Flexibility of AGIGARAM

A highly flexible system

- Can be configured and customized to meet the needs of an array of systems and applications

Many system parameters can be customized

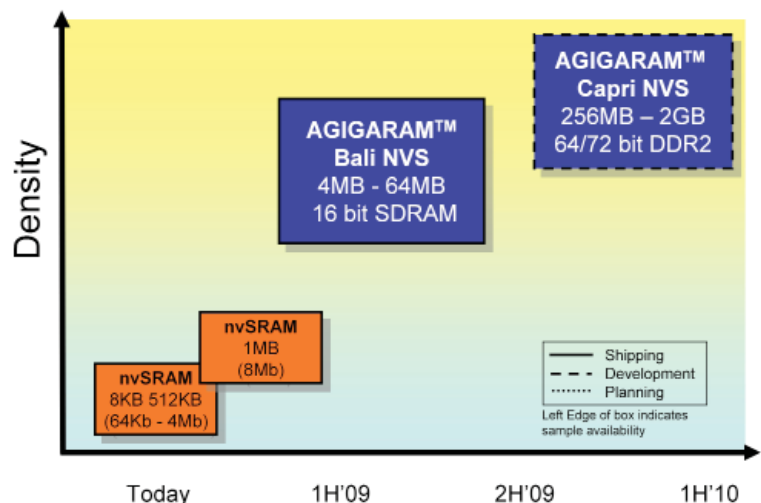
- Memory capacity
- Host interfaces such as PCIe, PCI, USB, SDRAM
- Host software and drivers
- Number of system image snapshots
- Temperature range, including industrial temperature
- Operating lifetimes
- Package
- and more...

Ordering Information

To learn how to tailor AGIGARAM for your needs...

- Visit our website at www.agigatech.com
- Contact your local Cypress representative or distributor for more information

AGIGARAM CAPRI Part Numbers	
256MB mini RDIMM	AGIGA8200-256XCA*
512MB mini RDIMM	AGIGA8200-512XCA*
1GB mini RDIMM	AGIGA8200-100XCA*
2GB mini RDIMM	AGIGA8200-200XCA*
* X = speed: A=533MHz, B=667MHz, C=800MHz	
* 244 mini RDIMM to 240 RDIMM converter also available upon request	



www.agigatech.com

12700 Stowe Drive, Suite 280 • Poway, CA 92064 USA • Phone: 858.375.4530 • FAX: 858.391.0025

Preliminary