Novelics coolCAM™

D A T A S H E E T

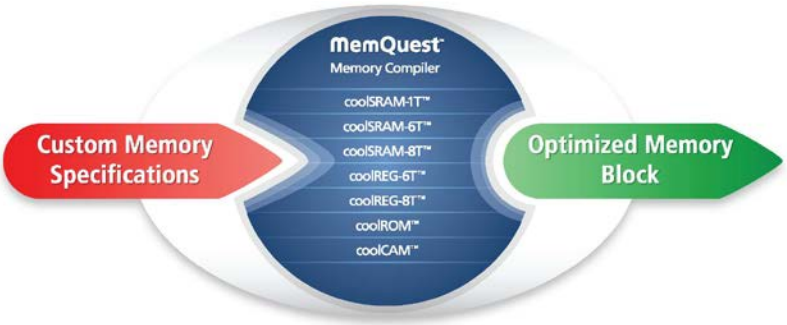
The Novelics compiler-based family of advanced embedded memories include low-power, high-speed, and high-density configurable CAM targeting the most demanding SoC applications.

Embedded CAM blocks are user-definable for organization and performance depending on your SoC, ASIC, or ASSP requirements.

Behind Novelics' breakthrough embedded memory performance is an advanced compiler-based memory generator and optimizer, MemQuest™, which enablees the concurrent optimization of embedded memory designs for power, speed, density, and DFT objectives.

- Significant power reduction during the CAM searches using patented architecture (up to 2x lower active power)
- Higher yield and reliability
- Significant performance advantage due to higher speed CAM searches utilizing patented architecture
- Silicon- and production-validated
- Lower total cost of ownership and time-to-profit

MemQuest Memory Compiler Top Level Flow



FEATURES:

- Based on patented high-density, low-power cell design
- Implemented in standard CMOS logic process
- Multiple match outputs
- Single-cycle match and lookup capability
- Comprehensive search functionality
- Supports binary and true ternary formats
- Designer selectable process nodes(s)
- Industry leading active power and speed, leakage
- Optimized core and peripheral circuitry
- Standby and power down modes
- Ideal for networking, communications, and compression applications
- Silicon-validated at major foundries
- Support for 130nm with a migration path to 90nm, 65nm, and beyond at major foundries
- Flexible IP licensing models
- Supported foundries: TSMC, UMC, SMIC, SilTerra, IBM, Global Foundries, and Samsung

For the latest product information, call us or visit: www.mentor.com

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Corporate Headquarters
Mentor Graphics Corporation
8005 SW Boeckman Road
Wilsonville, OR 97070-7777
Phone: 503.685.7000
Fax: 503.685.1204

Sales and Product Information
Phone: 800.547.3000
sales_info@mentor.com

Silicon Valley
Mentor Graphics Corporation
46871 Bayside Parkway
Fremont, CA 94538 USA
Phone: 510.354.7400
Fax: 510.354.7467

North American Support Center
Phone: 800.547.4303

Europe
Mentor Graphics Deutschland GmbH
Arnulfstrasse 201
80634 Munich
Germany
Phone: +49.89.57096.0
Fax: +49.89.57096.400

Pacific Rim
Mentor Grahpics (Taiwan)
Room 1001, 10F
International Trade Building
No. 333, Section 1, Keelung Road
Taipei, Taiwan, ROC
Phone: 886.2.87252000
Fax: 888.2.27576027

Japan
Mentor Graphics Japan Co., Ltd.
Gotenyama Garden
7-35, Kita-Shinagawa 4-chome
Shinagawa-Ku, Tokyo 140-0001
Japan
Phone: +81.3.5488.3033
Fax: +81.3.5488.3004