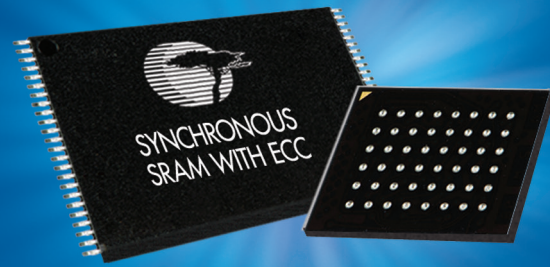


CYPRESS

SYNCHRONOUS SRAM WITH ON-CHIP ECC

HIGH-PERFORMANCE, LOW-POWER SYNCHRONOUS SRAMs WITH ON-CHIP ECC TO IMPROVE RELIABILITY 1,000x



PRODUCT OVERVIEW

INTRODUCTION

Error-free SRAMs

The latest-generation Synchronous SRAMs from Cypress combine advanced process technology and ECC (Error Correcting Code) to mitigate the effects of soft errors. The result is a family of devices that provide lower power consumption and higher performance with the highest levels of reliability. All these features make Synchronous SRAM with ECC the memory of choice for a host of reliability-sensitive applications.



Most reliable synchronous SRAM in the industry

- Ensures a FIT rate of <0.01 FIT/Mbit
- 1,000x more reliable than SRAMs without ECC
- Perfect fit for reliability sensitive applications like Military, Networking and Signal Processing

Lowest power, highest density, high performance synchronous SRAM

- Reduces power consumption by as much as 36 percent over competing standard SRAM solutions
- Offers three high-density options for both Standard Sync and NoBL architecture: 18 Mbit, 36 Mbit and 72 Mbit
- Provides an RTR of 250 MT/s for high-performance applications

Easy to implement form, fit and function compatible with our existing portfolio

- Pin-to-pin compatibility with Cypress's existing products to simplify design effort
- Available in industrial and commercial grades
- Email us at sales@cypress.com for details on military and automotive grades
- Available in industry-standard BGA and TQFP packages

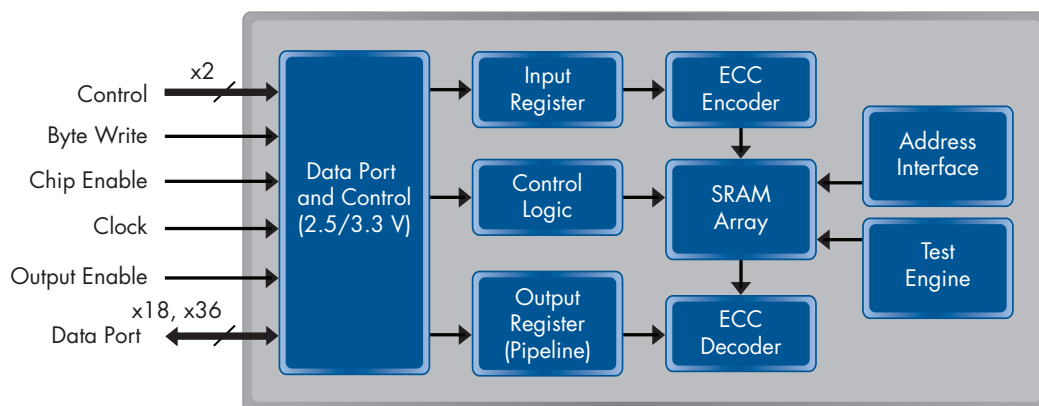
FEATURES

- Available in two modes: pipeline and flow-through
- NoBL® architecture for balanced read and write
- Single-cycle (SCD) and dual-cycle deselect (DCD) options for Standard Synchronous
- Multiple bus-width configurations: x18, x36, x72 (72 Mbit)
- Two voltage options: 2.5/3.3 V
- Industrial and commercial temperature grades
- Error-Correcting Code (ECC) to detect/correct single-bit errors
- Packages: 165 BGA and 100 TQFP
- Industry-standard, RoHS-compliant packages



KEY APPLICATIONS

- Networking
- Military and Avionics
- Signal Processing
- Medical Imaging
- LED Displays
- High-Performance Computing



Synchronous SRAM with On-Chip ECC Block Diagram

PRODUCT AVAILABILITY

Sampling: Q1 2015 (36 Mbit), Q3 2015 (18 Mbit), Q1 2016 (72 Mbit)

Production: Q2 2015 (36 Mbit), Q4 2015 (18 Mbit), Q2 2016 (72 Mbit)

36 MBIT SYNCHRONOUS SRAM WITH ON-CHIP ECC PRODUCT SELECTOR GUIDE

Part Number	Architecture	Option	Bus Width	Max. Freq	Voltage	Package
CY7C1440KVE33-167AXC	Standard Sync	Pipeline SCD1	x36	167 MHz	3.3 V	TQFP
CY7C1441KVE33-133AXC	Standard Sync	Flow-through	x36	133 MHz	3.3 V	TQFP
CY7C1460KVE33-167AXI	NoBL	Pipeline	x36	167 MHz	3.3 V	TQFP
CY7C1460KVE33-200AXC	NoBL	Pipeline	x36	200 MHz	3.3 V	TQFP
CY7C1460KVE25-250AXC	NoBL	Pipeline	x36	250 MHz	2.5 V	TQFP
CY7C1460KVE25-200BZXI	NoBL	Pipeline	x36	200 MHz	2.5 V	BGA
CY7C1460KVE25-167AXC	NoBL	Pipeline	x36	167 MHz	2.5 V	TQFP
CY7C1460KVE33-167BZC	NoBL	Pipeline	x36	167 MHz	3.3 V	BGA
CY7C1462KVE33-167AXC	NoBL	Pipeline	x18	167 MHz	3.3 V	TQFP
CY7C1462KVE25-167BZI	NoBL	Pipeline	x18	167 MHz	3.3 V	BGA

GET STARTED NOW

To learn more about Synchronous SRAM with on-chip ECC products, visit www.cypress.com/SyncNoBLECC

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134

phone +1 408.943.2600 fax +1 408.943.6848

toll free +1 800.858.1810 (U.S. only) Press "1" to reach your local sales representative

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Doc#001-95488 Rev** 122014/ABVY/EWR/ALGE

