

0.18μm Synchronous High Speed Single Port Memory Compiler – FSA0A_C_SU

Key Features

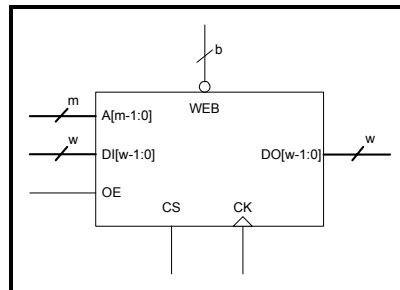
- Operating voltage range: 1.62V ~ 1.98V
- Operating junction temp. range: -40°C ~ 125°C
- Recommended operating ambient temp. range: 0°C ~ 85°C
- Minimum metal requirement: 4 metal layers
- Synchronous read and write operations
- Fully customized layout density per customer configuration
- Automatic power down mechanism to eliminate DC current
- Clocked address inputs and CS to RAM with CK rising edge
- Clocked WEB input pin to RAM with CK rising edge
- Clocked DI input pins to RAM with CK rising edge
- Byte write and word write operations available
- Verilog / VHDL timing / simulation model generator
- SPICE netlist generator
- GDSII layout database
- Memory compiler preview UI (memaker)
- BIST code supported
- Multi-block options for the best aspect ratio

General Description

The FSA0A_C_SU is a high speed, synchronous single port RAM. It is implemented using UMC's 0.18μm 1P6M technology and can be incorporated with Faraday's 0.18μm standard cells. Different combinations of words, bits, and aspect ratios can be used to generate the most desirable configurations.

By requesting the desired size and timing constraints, the FSA0A_C_SU compiler is capable of providing suitable synchronous RAM layout instances in minutes. It automatically generates data sheets, Verilog / VHDL behavioral simulation models, SCS or Viewlogic symbols, place & route models and test patterns for use in ASIC designs. The duty cycle length can be neglected as long as the setup / hold time and minimum high / low pulse widths are satisfied. This allows a flexible clock falling edge during each operation. Both word write and byte write operations are supported.

Symbol



Quick Reference

Maximum Capacity	512K bits
Maximum Words	64K
Minimum Words	64
Maximum Bits	128
Minimum Bits	1
Bit Increment	1
Aspect Ratio (Block Mux)	1, 2, 4, 8, 16

HEADQUARTERS

Hsinchu, Taiwan,
 Tel: 886-3-578-7888
 Fax: 886-3-578-7889
 sales@faraday-tech.com

USA OFFICE

Sunnyvale, USA
 Tel: 1-408-522-8888
 Fax: 1-408-522-8889
 sales@faraday-usa.com

EUROPE OFFICE

Hoofddorp, Netherlands
 Tel: 31-2356-20496
 Fax: 31-2356-36297
 eusales@faraday-tech.com

JAPAN OFFICE

Tokyo, Japan
 Tel: 81-3-5214-0070
 Fax: 81-3-5214-0076
 sales@faraday.co.jp

CHINA OFFICE

Shanghai, P. R. China
 Tel: 86-21-6406-7523
 Fax: 86-21-6406-5327
 sales@faraday.com.cn