

Synchronous High Density Dual-Port SRAM Compiler – FSD0A_A_SJ

Key Features

- Operating voltage range: 0.9V ~ 1.1V
- Operating junction temp. range : -40°C ~ 125°C
- Recommended operating ambient temp. range: 0°C ~ 85°C
- Minimum metal requirement: 5 metal layers
- Synchronous read and write operations
- Standard performance device-based design
- Fully customized layout density
- Automatic power down mechanism to eliminate DC current
- Clocked address inputs and CSA(B) to RAM with CKA(B) rising edge
- Clocked WEA(B)N input pins to RAM with CKA(B) rising edge
- Clocked DIA(B) input pins to RAM with CKA(B) 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
- Column MUX options for the best aspect ratio

General Description

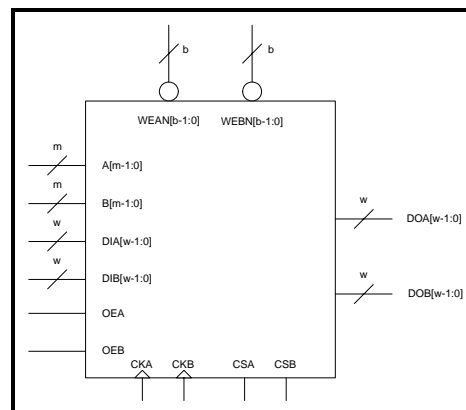
The FSD0A_A_SJ is a synchronous, high density, dual-port SRAM. It is implemented according to UMC's 90nm 1P9M 1.0V Standard Performance Low-k logic process design rules and can be incorporated with Faraday's 90nm standard cells. Different combination of words, bits, and aspect ratios can be used to generate the most desirable configurations.

By requesting the desired size and timing constraints, the FSD0A_A_SJ compiler is capable of providing suitable synchronous RAM layout instances in minutes. The FSD0A_A_SJ 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 length of duty cycle can be neglected as long as the setup / hold time and the minimum widths of high / low pulse are both satisfied. This allows the flexibility of a clock falling edge during each operation. Both word write and byte write operations are supported.

Quick Reference

Maximum Capacity	512K bits
Maximum Words	8K
Minimum Words	32
Maximum Bits	256
Minimum Bits	1
Bit Increment	1
Aspect Ratio (Block Mux)	4, 8, 16

Symbol



HEADQUARTERS

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

USA OFFICE

Sunnyvale, USA
 Tel: 1-408-522-8888
 Fax: 1-408-522-8889
 ussales@faraday-tech.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
 jpsales@faraday-tech.com

CHINA OFFICE

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