

# Synchronous High Speed Single Port Static Memory Compiler – FS90A\_B\_SU

## Key Features

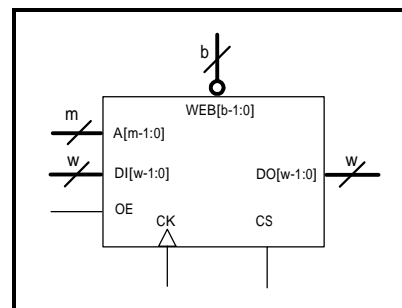
- Operating voltage range: 2.25V ~ 2.75V
- Operating junction temp. range: 0°C ~ 115°C
- Recommended operating ambient temp. range: 0°C ~ 85°C
- Minimum metal requirement: 4 metal layers
- Synchronous read and write operation
- One (1) read / write port
- Fully customized layout density
- High speed – 266 MHz (4K x 16, worst case)
- Automatic power down mechanism to eliminate DC current
- Clocked address inputs into RAM with CK rising edge
- Clocked WEB input into RAM with CK rising edge
- Clocked DI inputs into RAM with CK rising edge
- Byte write and word write operations available
- Different aspect ratios to best fit chip floorplan
- Variable capacity: maximum 512K bits
- Tri-state output buffer

## General Description

The FS90A\_B\_SU is a synchronous, high speed, single port SRAM. It is implemented according to UMC's 0.25µm technology. 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 FS90A\_B\_SU compiler is capable of providing suitable synchronous RAM layout instances in minutes. It automatically generates data sheets, Verilog behavioral simulation models, SCS or Viewlogic symbols, place & route models and test patterns for use in ASIC designs. After the setup / hold time and minimum high / low pulse width are satisfied, the duty cycle length can be neglected, which 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

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