

0.25 μM SYNC. VIA1 PROGRAMMABLE ROM COMPILER

Key Features

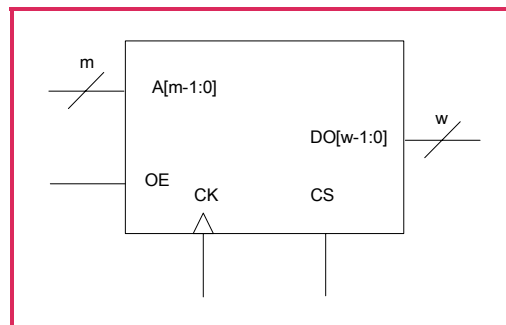
- Operating voltage range: 2.25 ~ 2.75 V
- Operating junction temp. range: -40 ~ 125 °C
- Recommended operating ambient temp. range: 0 ~ 85 °C
- Minimum metal requirement: 5 metal layers
- Synchronous read operation
- Fully customized layout density
- Automatic power down to eliminate DC current
- Clocks address inputs and CS to ROM at CK rising edge
- VIA-1 layer programmable codes
- 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 FS90A_C_SP is a synchronous VIA1 Programmable ROM. It is designed according to UMC's 0.25 μm 1P5M logic process design rules and can be incorporated with Faraday's 0.25 μm standard cells. Different combinations of words, bits, and aspect ratios can be used to generate the most desirable configurations.

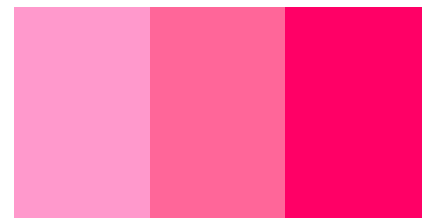
By requesting the desired size and timing constraints, the FS90A_C_SP compiler is capable of providing suitable synchronous ROM layout instances in minutes. It automatically generates data sheets, Verilog/VHDL behavioral simulation models, SCS or Viewlogic symbols, place & route models, and test patterns 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 the flexibility of clock falling edge during each operation.

Block Diagram



In a Capsule

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





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