

Single Port High Speed

SP-HS-TS22ULL

SRAM Memory Compiler

22ULL Process



High Performance: Array is split into multiple banks to reduce the length of each bit line improve timing.

Ultra-Low Leakage: High V_T (HV_T) devices are used with source biasing to minimize leakage currents.

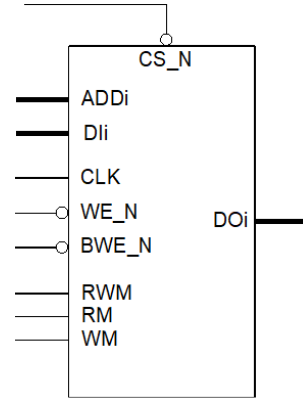
Bit Cell: Utilizes Premier Fab's Low Leakage 6T bit cells to ensure high manufacturing yields

Ultra Low Power Standby: Dedicated Standby mode with optional built in source biasing.

Isolated Array and Periphery supplies: Periphery voltage can be shut off to further reduce standby power

Data Write-Through: Pin controllable write through disables data out transitions during a write to reduce power. During ATPG data out is controllable to ensure full coverage

Error Correction: Single bit error correction and dual bit error detection (SECCDED) is optionally included in the synthesizable wrapper.



Technology	22ULL	Max Instance	288Kbits	EDA Views (Partial List)	
Voltage	0.9V (0.81V to 0.99V)	Min Instance	256 Bits	Verilog Model with UPF	
Temperature	-40°C to +125°C	Word Width	8 –144	Liberty Files (NLDM, LVF, CCS)	
Power	Mesh	Word Depth	32 – 4096	PDF and Text Datasheets	Redhawk APL
# Metal Layers	4	Aspect Ratio	Column Fold: 4 or 8	LEF 5.8	Verilog Test Bench
BIST Mux	Internal	Write Through	Pin control	LVS SPICE Netlist	Bitmap File (x, y)
Modes	Functional, BIST, Sleep	Bit Write Enable	Optional	GDS	Power Grid (Votus)
		User Interface	Command Line	Tessent MBIST Control File	Common Power Format (CPF)

About Mobile Semiconductor:

Nordic Semiconductor's Seattle, Washington memory team continues building on the technology acquired from Mobile Semiconductor. SRAM, ROM, and Register File compilers are available for applications requiring ultra-low power, low leakage, or ultra-high performance.

<http://www.mobile-semiconductor.com/>

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