

# Racyics® Single Rail SRAM

GLOBALFOUNDRIES® 22FDX®



## CHALLENGE

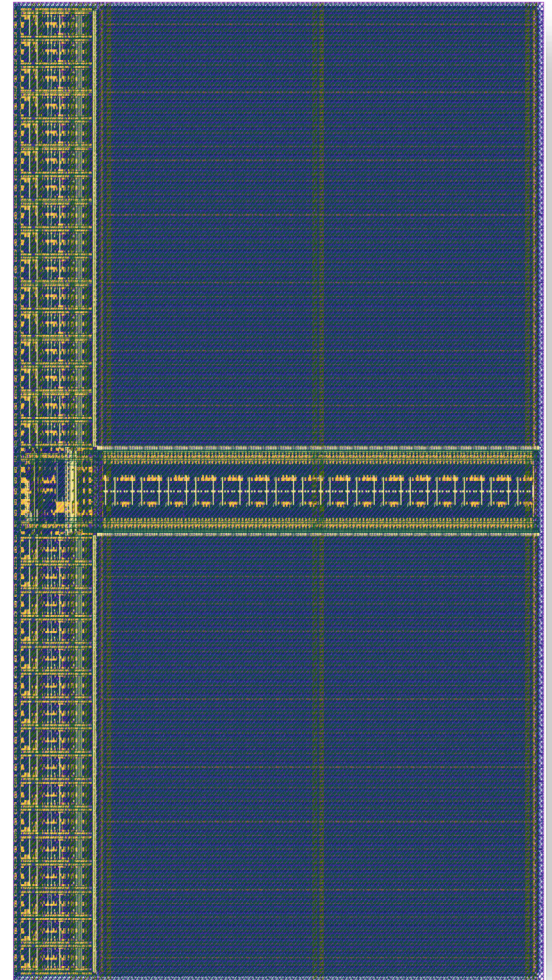
Ultra-low voltage logic designs using adaptive body biasing demand dense SRAM solutions which fully integrate in the ABB aware implementation and sign-off flow of the **Racyics® ABX® Platform** solution. The Racyics® Single Rail SRAM supports ultra-low voltage operation down to **0.55 V** where logic designs with **Minimum-Energy-Point** are implemented.

## KEY FACTS

- ▶ Single port SRAM compiler based on **Racyics® R188** logic memory cell with dual-well architecture
- ▶ Supply voltage 0.55 V to 0.8 V enabled with **Racyics® ABX®**
- ▶ Direct interfacing to ULV **Racyics® ABX®** digital standard cell domains without additional level shifters
- ▶ Full set of characterization corners for -40 °C to 125 °C temperature range for **Racyics® ABX®** aware timing and power sign-off
- ▶ Full statistical LVF characterization for low voltage operation

## DESIGN VIEWS

- ▶ Verilog simulation models
- ▶ .lib /.db timing (NLDM, CCS, LVF) and power models
- ▶ .lef layout abstract views
- ▶ NDM and Milkyway libraries
- ▶ GDSII layouts
- ▶ LVS netlist



## IP SPECIFICATION

IP	Supplier	Description	Supply Voltages [V]	ZBB (Zero Bias)	ABB	Ready for Evaluation	Ready for Testchip	Ready for Production
ri_sram_gf22fdx_RS	Racyics®	Single Rail SP SRAM generator for ULV designs	0.55 / 0.65 / 0.80	no	yes, RBB	now	now	now



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