

DOLPHIN TECHNOLOGY PRODUCT OFFERING MEMORY BIST DLL

MEMORY BIST

Dolphin Technology provides a memory test and repair (BIST) solution which enables customers to efficiently utilize all available memory compiler options.

Our memory BIST is optimized for Dolphin memories, and supports all Dolphin memory compilers, including SRAM and Register File.

	5nm	7nm	12/16nm	22/28nm	40nm	55/65nm	80/90nm
Fully automated MBIST RTL and Gate flow	•	•	•	•	•	•	•
Fully supported BIST test, diagnosis and soft/hard repair	•	•	•	•	•	•	•
Fully supported eFuse controller for automated hard repair	•	•	•	•	•	•	•
Analyze RTL design or netlist to identify memories	•	•	•	•	•	•	•
Plan MBIST engines	•	•	•	•	•	•	•
Verify stand-alone	•	•	•	•	•	•	•
Insert into RTL design or netlist	•	•	•	•	•	•	•
Verify partition level	•	•	•	•	•	•	•
Top level hookup to JTAG	•	•	•	•	•	•	•
Fully supported P1500 interface and Tap controller	•	•	•	•	•	•	•
Verify top level	•	•	•	•	•	•	•
Generate test patterns and SVF file	•	•	•	•	•	•	•
Incremental repair capability	•	•	•	•	•	•	•
Programmable March-style algorithm	•	•	•	•	•	•	•
APB interface for BIST test and fuse operation	•	•	•	•	•	•	•
Diagnosis test, Characterization test and SVF debug flow	•	•	•	•	•	•	•
Fully supported ICL/PDL of IEEE 1687	•	•	•	•	•	•	•
Automated subchip integration flow	•	•	•	•	•	•	•

DLL

Dolphin also provides a fully digital DLL solution with a frequency range from 40Mhz to 1Ghz

DLL: High Precision DLL	•	•	•	•	•	•	•
DLL: Coarse and fine controls to minimize resolution errors	•	•	•	•	•	•	•
DLL: External bypass and check of generated delay code	•	•	•	•	•	•	•