

Proposal - ‘ITC’99’ Benchmarks

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Background

- **ISCAS’85 and ‘89 benchmarks pushed ATPG, DFT research**
- **Now badly outdated - too simple, too small.**
- **University research hampered by lack of real examples.**

Proposal

- **Collect a new set of realistic circuits**
- **Release in early 1999.**
- **Presentations of results at ITC ‘99.**

Got Circuits? Let me know (don’t send any yet!)

Circuit Characteristics

- **Embedded RAM, ROM, CAM - single and multiport.**
- **Embedded cores.**
- **Multiple clock domains - synchronized and unsynchronized.**
- **Internal tristate busses**
- **Bidirectional I/O**
- **Boundary scan**
- **Mixed FF/latch designs - falling and rising edges.**
- **Pass gate muxes**
- **Dynamic Logic**
- **Critical paths to constrain DFT.**