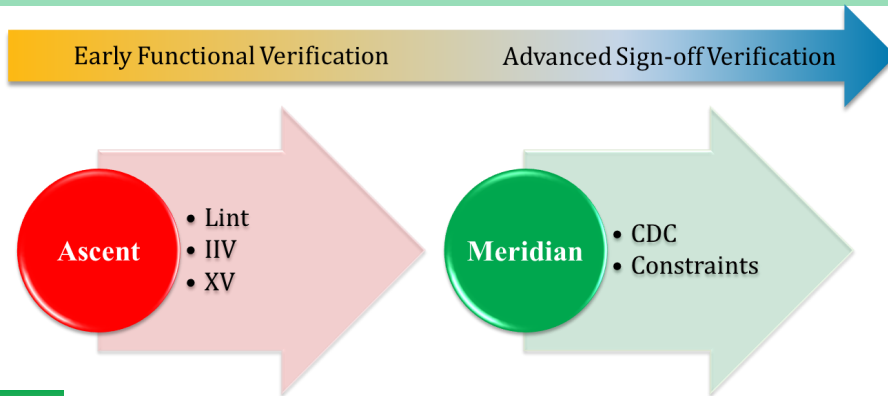


Meridian CDC is the fastest, highest capacity and most precise CDC solution in the market. It performs comprehensive structural and functional analysis to ensure that signals crossing asynchronous clock domains on ASIC, or FPGA devices are received reliably. Meridian CDC injects metastability and generates checkers to enable dynamic CDC verification using simulation. Meridian CDC is the only solution that enables all aspects of CDC sign-off.

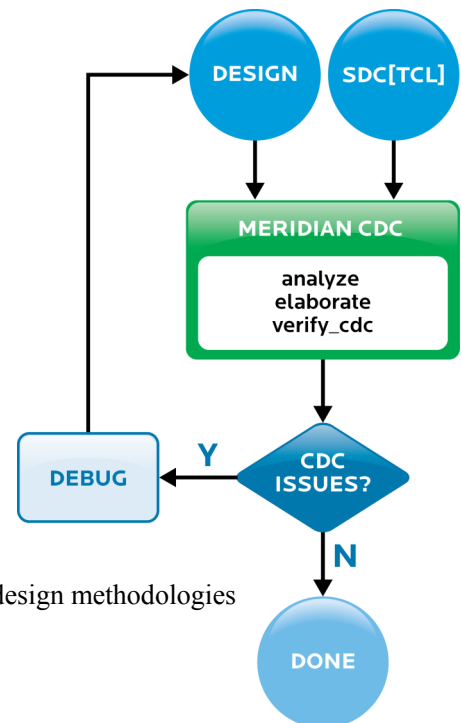


## BENEFITS

- Highest capacity to enable CDC verification on 100+M gate SoC designs
- Fastest performance for quick verification turnaround
- Most precise CDC reporting using crossing-based analysis
- Easiest-to-use CDC solution in the industry, template free
- Multiple technologies to enable complete CDC sign-off from RTL to netlist

## FEATURES

- Automatic design environment capture from designs or SDC constraints
- Comprehensive clock intent inference and analysis catches clock and reset issues, hazard/glitch potentials, reconvergence and loss of correlation
- Metastability aware formal analysis verifies control and data stability for all data transfer protocols, gray code requirements
- Flexible top-down and bottom-up hierarchical analysis to accommodate different design methodologies
- SimPortal enables dynamic CDC verification
- Leading edge language support: Verilog, VHDL and SV with SVA constraints



## ADVANTAGES

### RTL and Netlist Support

Logic synthesis performs structural and timing optimizations, which could potentially introduce glitches in the netlist. For complete confidence and sign-off, CDC verification must be done at both RTL and gate-level netlist. Besides complete RTL support, Meridian CDC also offers many checks for gate-level netlist to enable complete CDC sign-off from RTL to gate.

Please visit [www.realintent.com](http://www.realintent.com) for more information.

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### ADVANTAGES

#### Multiple CDC Strategies for Best Results

Meridian CDC is the only integrated CDC solution in the industry that combines automatic clock intent analysis, metastability aware formal analysis and links to simulation all in one package. Meridian CDC's superior technology allows designers to use any or all of these strategies to guarantee complete CDC correctness.

- **Automatic Clock Intent Analysis**

Automatic clock intent analysis infers CDC intent from the design and offers comprehensive analysis that identifies clock/reset issues, incorrect or missing synchronization, glitch potentials, reconvergence, structurally unsafe crossings and potential data/control crossings that need functional verification. This analysis is the fastest and most accurate due to Real Intent's advanced correlation algorithms and the most complete support of crossing styles in the industry.

- **Integrated Formal Analysis**

Meridian CDC integrated formal analysis exhaustively verifies crossings safety using Real Intent's metastability aware formal engine. Meridian CDC ensures data transfer safety by verifying the underlying design principle that the CDC data path must be a multi-cycle-path. This goes to the root cause of metastability problems and can be applied to any form of data transfer protocols. Meridian CDC integrated formal solution leverages the automatic clock intent analysis results to produce a composite report, saving users time and effort. Meridian CDC automatic formal makes the designer's sign-off task much easier.

- **SimPortal**

Meridian CDC leverages existing simulation testbenches with SimPortal. SimPortal injects the effects of metastability into regression simulation, automates CDC sign-off and supports popular simulators.

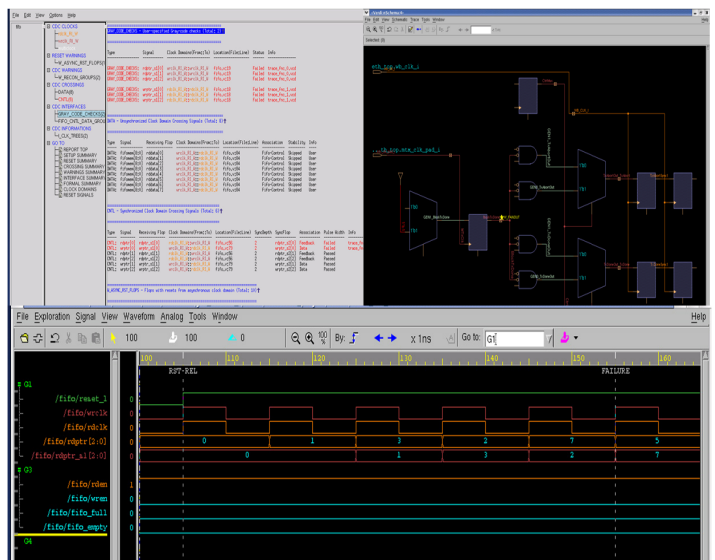
#### Smart Reporting

Meridian CDC smart reporting categorizes findings into warnings and information to keep users focused on important issues. Helpful guidance and suggested actions help users pinpoint the source of the problems quickly.

#### Powerful GUI

Meridian CDC verification comes with a powerful and integrated graphical interface. The GUI supports pruned schematic views that zoom in on just the relevant logic, to speed debugging. With a few mouse clicks, it directs users to the RTL source code that caused the problem. The graphical debugger is designed to enable users to start at the highest level of the problem description and to push deeper until the root cause is isolated.

Meridian CDC supports SpringSoft Verdi interface and OEM versions are available direct from Real Intent.



Please visit [www.realintent.com](http://www.realintent.com) for more information.

