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matic Test Pattern Generation).

TetraMAX ATPG (Auto-

TetraMAX ATPG

DFT Compiler. DFT Compiler,

TetraMAX ATPG.

STIL-

(IEEE 1450, Standart Test Interface Language),

(Design-for-test).

).

ATPG (Automatic Test Pattern Generation).

« »

ATPG.

ATPG

(TBL) , ATPG (STIL).

: Cadence, Mentor Graphics Synopsys. Mentor Graphics

DFTAdvisor.

FastScan ATPG. cadence –

Incisive.

Synopsys Design

Compiler, DFT Compiler, BSD Compiler. ATPG – TetraMAX ATPG.

- Design Vision Synopsys,

- Design Compiler, DFT Compiler BSD Compiler ;

- TetraMax ATPG Synopsys

- NC XLMode – Cadence.

TetraMax

: Netlist,

(STIL Test Protocol File), (Design-for-test),

(ATPG), STIL

1450, Standard Test Interface Language. Verilog IEEE

IEEE 1364-2001 Verilog HDL Standard. IEEE

RTL- (netlist)

, RTL-

TetraMax

TetraMAX [1,2]:

netlist Verilog, VHDL , EDIF

STIL ;

: WGL, STIL, Verilog, VHDL, Fujitsu TDL, TI TDL91 Toshiba

TSTL2;

ATPG.

```

-
-
Basic-Scan ATPG
scan-
scan-
Fast-Sequential ATPG
10
(clock reset)
Full-Sequential ATPG
Fast-Sequential,
Full-Sequential (clock reset) /
ATPG
DFT Compiler
:
- ;
- Scan-input Scan-output scan- ;
- scan- ;
- TetraMax 130 (rule ID,)
-
7 :
- B (Build rules) ;
- C (Clock rules) ;
- N (Netlist rules) Netlist'a;
- S (Scan trace rules for scan chain operation) Scan- ;
- V (Vector rules) ;
- X (X- State rules) ;
- Z (Three-state rules) 3
ATPG Run ATPG
run atpg. 203 20.88%
Write Pat Pat-
terns File Name Pat-
tern Source TetraMax.
File Format .TetraMax -
• Binary : TetraMax binary;
• FTDL: Fujitsu TDL format - ;
• STIL: Standard Test Interface Language;
• TDL91: Texas Instruments TDL91 format - ;

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- TSTL2: Toshiba TSTL2 format - ;
- Verilog Single File;
- Verilog Tables;
- VHDL;
- VHDL93;
- WGL: TSSI Waveform Generation Language format.

TetraMAX
 Run Command File Cmd File
 TetraMAX :
 TetraMax : *tmax tmax_list.cmd* .
 TetraMax.
 TetraMax
 ATPG 21-25%.
 Max 25%.
tmax.cmd.
 VERILOG_Single_file.
 ;
 TetraMAX ATPG;
 Opteron AMD.
 TetraMAX 39
 TetraMAX
 ATPG.

1. TetraMAX® ATPG User Guide, Version T - 2002.09. September 2002. Document Order Number: 37043 - 000 NA.
2. Synopsys. – « RTL - », 2005, 2, . 66 - 69.