

呂彥旻

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一、 實驗名稱

DFT Concept and TetraMax

二、 1. What was the test coverage reported?

A: 98.06%

```
Uncollapsed Stuck Fault Summary Report
-----
fault class                code    #faults
-----
Detected                   DT       3483
Possibly detected          PT         0
Undetectable               UD       106
ATPG untestable            AU        37
Not detected               ND        32
-----
total faults                3658
test coverage               98.06%
-----
Information: The test coverage above may be inferior
              than the real test coverage with customized
              protocol and test simulation library.
```

2. How many scan chains dis you get?

A: 76

```

=====
TEST MODE: Internal_scan
VIEW      : Existing DFT
=====

=====
AS SPECIFIED BY USER
=====

=====
AS BUILT BY insert_dft
=====

Scan_path  Len  ScanDataIn  ScanDataOut  ScanEnable  MasterClock  SlaveClock
-----
I chain1   76   SCAN_IN     SCAN_OUT     SCAN_EN      clk          -
1

```

3. How many flip-flops are in each chain?

A: 75

```

53      num2_reg[1]
54      num2_reg[2]
55      odd1_wr_reg
56      odd2_wr_reg
57      odd3_wr_reg
58      odd4_wr_reg
59      oem_addr_reg[0]
60      oem_addr_reg[1]
61      oem_addr_reg[2]
62      oem_addr_reg[3]
63      oem_addr_reg[4]
64      oem_dataout_reg[0]
65      oem_dataout_reg[1]
66      oem_dataout_reg[2]
67      oem_dataout_reg[3]
68      oem_dataout_reg[4]
69      oem_dataout_reg[5]
70      oem_dataout_reg[6]
71      oem_dataout_reg[7]
72      oem_finish_reg
73      row_reg[0]
74      so_data_reg
75      so_valid_reg

```

4. How many patterns needed?

A: 125

5. What is the total fault count?

A: 3658

6. What is the fault coverage?

A: 95.22%

Uncollapsed Stuck Fault Summary Report		
fault class	code	#faults
Detected	DT	3483
detected_by_simulation	DS	(2944)
detected_by_implication	DI	(539)
Possibly detected	PT	0
Undetectable	UD	106
undetectable-redundant	UR	(106)
ATPG untestable	AU	37
atpg_untestable-not_detected	AN	(37)
Not detected	ND	32
not-observed	NO	(32)
total faults		3658
test coverage		98.06%
fault coverage		95.22%
Pattern Summary Report		
#internal patterns		125
#basic_scan patterns		125

三、心得

這是我第一次寫寫這個程式，其中有許多我不知道的東西需要去學習的，像裡面的指令我都還不太清楚他們的使用方式，經過這次的作業讓我學習到了如何使用他們。