25G Mentor – Mentee 2 years Training plan MIDDLE term review – after 1 year

Mentor: Nguyen Minh Tri (10G) Mentee: Ho Quoc Tri (25G)

Date: Apr 17th, 2018 Ho Quoc Tri MiddleEnd 1 Group – MiddleEnd Section BackEnd Design Department Renesas Design Vietnam



AGENDA

- I. Target and Training methods
- II. Milestone and Plan for next year
- III. Achievement
- IV. Difficulties and Countermeasures





1. Target (1/5)

	DFT/SCAN engineer Target											
No.	Field	Skill	1-year	Current	2-years							
1	BSD	Can do BSD insertion			2							
2	ספט	Can do BSD verification			2							
3		Can do SCAN/LBIST insertion	2	2	3							
4		Can do SCAN grouping considering routing, timing, power, test-time.	2	2	3							
5		Can do SCAN/LBIST verification & make tester pattern	2	2	3							
6	SCAN	Can analyze SCAN/LBIST coverage result & give solution to improve it (such as: TPI analysis & decide TPI insertion configuration)	2	2	3							
7		Can generate correct IDDQ pattern (bridge fault, stuck at fault) to get target coverage	2	2	3							
8		Can make Burn-in pattern and analysis toggle result to achieve target	2	2	3							
9		Can generate path-delay pattern (to check critical path)			2							

1. Target (2/5)

	DFT/SCAN engineer Target											
No.	Field	Skill	1-year	Current	2-years							
10		Can make DFT strategy (method, flow, circuit structure, circuit configuration,)			2							
11		Can make DFT clean netlist (if necessary)	2	2	3							
12	General	Can do Test-cost estimation & test-cost calculation			2							
13		Can do Formal verification (build env, check result, failure debug)	2	2	3							
14		Can do Synthesis considering power, area, timing.	2	2	2							
15		Can do SDF simulation			2							
16		Can check wire congestion (Using Amateras)		2	2							

1. Target (3/5)

Target not achieved:

Can do project Lesson Learn & PDCA

Reason:

I have not a chance to finish and complete for one PRJ, So the target also have not finished.

I will put more effort to cover this target in the next term

		Target						
No.	Field	Skill	1-year	Current	2-years			
17		Can keep assigned schedule, and rise alarm if necessary	2	2	3			
18		Can define input/output criteria for each design phase	2	2	3			
19		Can make project plan (scope, target, schedule, in-output, resource)						
20	Dui/Tools	Can do risk assessment(identify the risk & make countermeasure, ex. method: DRBFM,)	2	2	2			
21	Prj/Task Management	Can monitor & control project work			2			
22		Can follow design procedure (make/apply checklist, do review, get approve before releasing) to guarantee output quality	2	2	3			
23		Can make detail project schedule, including discuss schedule with related			2			
24		Can do project Lesson Learn & PDCA	2	1	2			



1. Target (4/5)

	DFT/SCAN engineer Target										
No.	Field	Skill 1-year Curren									
21		Can make plan to proceed the task (what to do, target, milestone, how to do)	2	2	3						
22		Can make the report (prj report, weekly report,)	2	2	3						
23	Others	Can make the document			-						
24		Con do OC issue analysis (include DDCA)	2	2	3						
25		Can do QC issue analysis (include PDCA)			2						
26		Can use scripting language (TCL, SCH, PERL, AWK, SED,)	2	2	3						

1. Target (5/5)

Final target after 2 years training program: Achieve level 2

(Based on map skill score from MiddleEnd Section)

Target for Mentor-Mentee											
Count for each level	1-year	Current	2-year								
1	0	0	0								
2	18	18	13								
3	0	0	15								
4	0	0	0								
5	0	0	0								
Final score	36	36	71								

Map from skill score to role level										
Role Level	Skill score									
1	<= 50									
2	51-80									
3	81-110									
4	111-140									
5	>140									
6	TBD									
7	TBD									



2. Methods **MENTEE MENTOR** ☐ Prepare related document ☐ Self investigate first, ask mentor ☐ Prepare sample data for for unclearly point practice ☐ Self practice sample data, just ☐ Make detail target for mentee ask mentor it's necessary and review ☐ Feed back ideas and try reaching ☐ Assign task and support target by all means mentee when needed ☐ Take advises and do following ☐ Monitoring Mentee mentor's guidance compliance and ☐ Follow design procedure and check/feedback Mentee's report in time



report strictly





→ Non - Progress Target

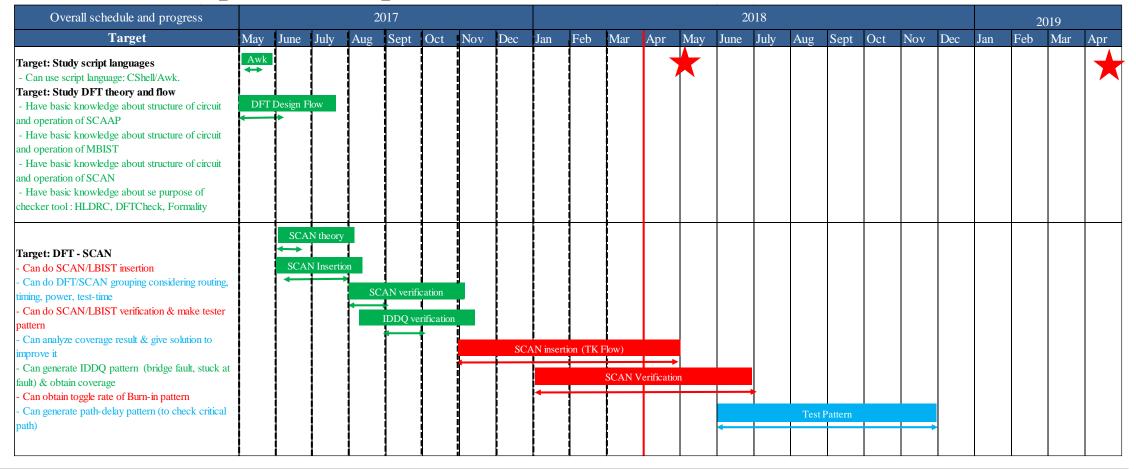
Finished Target

← In-progress Target

II. Milestone and Plan for next year

1. Milestone (Apr, 2018 – Apr, 2019)







II. Milestone and Plan for next year

1. Milestone (Apr, 2018 – Apr, 2019)

Overall schedule and progress	2017						2018												2019					
Target	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr.
Target: DFT - General - Can make DFT strategy (method, flow, circuit structure, circuit)												*					-		Can make	DFT str	ategy			*
 Can make DFT clean netlist (if necessary) Can do test-cost estimation & test-cost calculation Can do Formal verification (built env, check result, 										Ca	n make D	FT clean	netlist											
failure debug) - Can do Synthesis considering power, area, timing. - Can check wire congestion (using Amates)										Ca	an do For	mal verifi	cation											
- Can do SDF simulation										1	Can do	Synthesi	S											
						Cl	neck wire	congestio •	n										←		Can do SI	DF simulat	ion	ļ
Target: Prj/Task Management - Can keep assigned schedule, and rise alarm if necessary - Can define input/output criteria for each design															Project	t Manage	ement							
phase - Can do risk assessment (identify the risk & make countermeasure, ex) - Can monitor and control project work - Can follow design procedure (make/apply checklist, do review, get approve) - Can make detail project schedule, including discuss schedule with related - Can do project Lesson leran & PDCA	l																							•





II. Milestone and Plan for next year

1. Milestone (Apr, 2018 – Apr, 2019)

Overall schedule and progress		2017					2018										2019							
Target	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
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Target: Others	į	-	-		<u> </u>	-	!	-	! 	<u> </u>	-													+
- Can make plan to proceed the task (what to do,		!	1	1	1	1	3	!	ŀ	1	1													
target, milestone, how to do)	!	į			1	1		į	!	ì	į													
- Can make the report (prj report, weekly report,)				Can use so	cripting		.!	ł	i	ł	i													
- Can make the document	l		!	}	i		1	1	i	1	1													
- Can do QC issue analysis (include PDCA)	İ	Į.	į	į	ł]		į	!	Ì	İ													
- Can use scripting language (TCL, SCH, PERL,	j	į.	}	1	[Ì	1	i	i	1	i							Can do	OC isss	ue analysi	S			
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II. Milestone and Plan for next year

2. Plan for next years – Second stage (Apr, 2018 – Apr, 2019)

DFT training target

- Can do DFT/SCAN grouping considering routing, timing, power, test-time.
- Can obtain toggle rate of Burn-in pattern.
- Can generate path-delay pattern (to check critical path).
- Can make tester pattern.
- Can do BSD insertion.
- Can do BSD verification & make tester pattern.
- Can make DFT strategy (method, flow, circuit structure).
- Can do SDF simulation.
- Can do Test-cost estimation & test-cost calculation.

Common training target

- Can make plan to proceed the task (what to do, target, milestone, how to do).
- Can do QC issue analysis (include PDCA).
- Can make detail project schedule, including discuss schedule with related group.







III. Achievement

Achievement:

- Be able to do SCAN insertion & verification with support.
- Be able to solve simple problems usually meet in SCAN insertion & verification tasks.





IV. Difficulties and Countermeasures

Difficulties	Countermeasure
❖ Have difficulty when solving issue (SCAN issue) because of understanding not clearly	➤ Improve knowledge by investigating documents and confirm my understanding with experience engineer.
Have difficulties with tasks parallel: task arrangement and time management	> Set priority for tasks based on the information already have. According to priority, follow and complete one by one task within deadline or other constraints.
The target: "Can do project Lesson Learn & PDCA" can not achieve in the first term. Because I have not a chance to finish and complete for one PRJ, so this target have also not finished.	➤ I will put more effort to cover and complete it in the next term when the milestone L&L of PRJ RX72M coming (Sep/2018).



