Bound Flasher Verification Checklist

Version 01, Apr.2, 2024

<Revision history>

Date	Content of revision	Version	Creator
Mar. 26, 2024	New creation	01	Group 5 Mar. 26, 2024

<Reference document>

No.	Title name	Version
1	design_spec.pdf	0.00

BOUND FLASHER VALIDATION CHECK

Created by: Group 5 - L02

Target		BOUND FLASHER								
1st category		2nd category		3rd category		Judgment	TM Name	Judged by	Confirmation Method	Remark
No.		No.	(Test case name)	No.	(Test case explanation)					
1	**Combination block check**	1	next_state_generator_tb	1	Check the next states generated when the LED state reaches the transition value, and when kickback occurs.	Correctness	next_state_generator_tb.sv	Nguyễn Hữu Thông	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		2	next_counter_generator_tb	2	Check the next counter in count-up and count-down and counter-load state	Correctness	next_counter_generator_tb.sv	Nguyễn Hữu Thông	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		3	kickback_match_generator_tb	3	Check all kickback case	Correctness	kickback_match_generator_tb.v	Nguyễn Hữu Thông	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		4	decoder_under_tb	4	Check input values and decode those values into corresponding sets of 1-bit.	Correctness	decoder_under_tb.v	Nguyễn Hữu Thông	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
2	**Sequential block check**	5	bound_flasher_fsm_tb	5	Check loaded value of FFs in the reset and normal case	Correctness	bound_flasher_fsm_tb.v	Võ Thị Hoàng Yến	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		6	counter_tb	6	Check loaded value of FFs in the reset and normal case	Correctness	counter_tb.v	Võ Thị Hoàng Yến	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
3	**System check**	7	system_verification_0_tb	7	Check the reset signal in the system. The reset signal in the system is an asynchronous signal and active low	Correctness	system_verification_0_tb.v	Trần Anh Tài	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		8	system_verification_1_tb	8	Check all states of "flick" signal equal to 0 (except INIT_STATE)	Correctness	system_verification_1_tb.v	Trần Anh Tài	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	Fixed state transition bug (wrong behavior). In the ONLED5_10, ONLED0_5 state, the system only turns on LED[9] in ONLED5_10 and LED[4] in ONLED0_5, and then transitions to next state.
		9	system_verification_2_tb	9	Check kickback case in OFFLED15_5 state	Correctness	system_verification_2_tb.v	Trần Anh Tài	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		10	system_verification_3_tb	10	Check kickback case in OFFLED10_0 state (at kickback LED[5])	Correctness	system_verification_3_tb.v	Trần Anh Tài	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	
		11	system_verification_4_tb	11	Check kickback case in OFFLED10_0 state (at kickback LED[0])	Correctness	system_verification_4_tb.v	Trần Anh Tài	Simulate and compare the correctness of output transactions based on the input stimuli generated by the **testbench**.	