UTM

UNIVERSITI TEKNOLOGI MALAYSIA

SEEE2742

Digital Lab

SESSION 2022/2023-2

Pre Lab:

EXPERIMENT 2

TRAFFIC LIGHT CONTROLLER DESIGN USING STATE MACHINE EDITOR

SECTION	05
GROUP	514
SUPERVISOR	DR. AHMAD SHAHIDAN ABDULLAH

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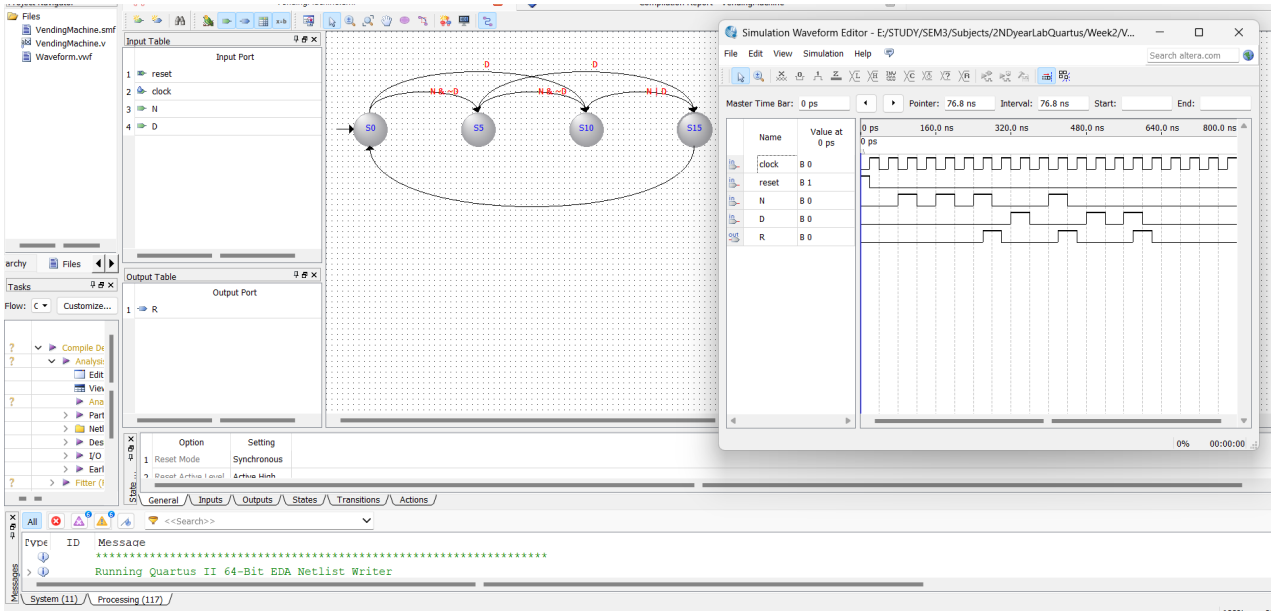
No	Task	Checked by:		Marks
1	Referring to ANS, simulate the state machine example using Quartus State Machine Editor. Demo the simulation to the supervisor at the start of the lab session.			/8
2	Referring to ANS, answer the following questions:			
	a) How many states are required to implement the Moore type vending machine?	Answer : 4 states		/3
	b) Using binary state encoding, how many flip flops are required?	Answer : 2 flip flops		/3
	c) On page 3 of the Quartus new project wizard, is it important to select the device family for state machine functional simulation?	Answer : No		/3
	d) Which type of simulation is performed in the AN5?	Answer : Flip flop simulation		/3

Simulation :

Moore State Diagram



Mealy State Diagram