label	description	stimulus generated	checkers
randomization sequence	In this sequence we will randomize the control module to make sire that the overall functionality of the design	randomization for all the inputs with constraining the reset to be on 5% of the time and no restert request for 95% of the time	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model
start read sequence	this is a directed seequence to check the starting of a read transaction	directed	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model
start write sequence	this is a directed seequence to check the starting of a write transaction	directed	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model
NACK feature	this is a directed sequence where the SDA_in will be held 1 to check the detection of NACK by the controller	directed	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model
valid feaure	this is a directed sequence where we held the valid to low to check the termination of the transaction based on the valid signal	directed	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model
restart feature	this is a directed sequence where we held the restart request to 1 to check the restarting feature of the control module	directed	we check the functionality of the outputs using checkers comparing the output with the reference output from golden model