Test Case Index

Test	*Description*
controlbot_tb	Test the controlbot
controlbot_dff_tb	Test that the DFF with an enable works properly
controlbot_mux2_tb	Test that the 2 input mux works properly
defuzzification_tb	Test that fuzzy data is converted to crisp numbers given the defined membership function
duty_counter_tb	Test that the duty counter will detect a match in the duty rate by counting clock pulses
duty_rate_generator_tb	Test that the duty rate will be generated given an adjustment factor
duty_splitter_tb	Test that the duty rate can be split into an on duty rate and an off duty rate.
frequency_divider_tb	The frequency period is increased by dividing the clock frequency by 2 and 8
fuzzification_tb	Test that crisp inputs are properly encoded into fuzzy numbers
fuzzy_rulebase_tb	Test that each of the 49 rules fires appropriately
latch_rate_tb	Test that the DFF with reset load of a register works properly
motor_control_tb	Test that the motors will be controlled
motor_driver_tb	Test motor enable, stop, and changing direction
photo_reflector_tb	Test that the photo-reflector input will be synchronized and that the output will be transmitted when requested
pwm_generator_tb	Test that the PWM will be generated given the change in duty cycle
shaft_test	Test that the velocity of each wheel is being measured by counting the number of resolution pulses between the reflection pulses
synchronizor_tb	Test that asynchronous input will be synchronously outputted at the rising edge of the clock and glitches in the input do not affect the output