VHDL Index

Entity	Description	Status
Config	Stores Controlbot configuration parameters	Compiled
Controlbot	Controls robot to go straight	Completed - bugs
Motor Control	Maintains constant speed on a DC motor	Completed
Controller	Maintains constant speed on a DC motor	Completed
Input	Performs arithmetic on input data	Completed
Fuzzification	Convert inputs to fuzzy numbers	Completed
Fuzzy Rule base	Perform control rule base	Completed
Defuzzification	Convert outputs to crisp numbers	Completed
Duty Rate Generator	Generate the duty rate for the motors	Completed
Latch Rate	DFF with a reset value	Completed
PWM Generator	Generate the PWM signal for the motors	Completed
Duty Splitter	Split the duty cycle to on and off counts	Completed
Duty Counter	Count the cycles	Completed
Data Fusion	Interface to the external components	Completed
Motor driver	Controls PWM signal to DC Motor	Completed
Shaft encoder	Determine actual velocity of wheel	Completed
Photo reflector	Detect substance in front of sensor	Completed
Controlbot DFF	D Flip Flop with enable	Completed
Controlbot mux2	2 input vector mux	Completed
Frequency divider	Changes frequency of clock	Completed
Synchronizer	Synchronizes asynchronous inputs	Completed
Preset Synchronizer	Synchronizes asynchronous inputs, resets to 1	Completed