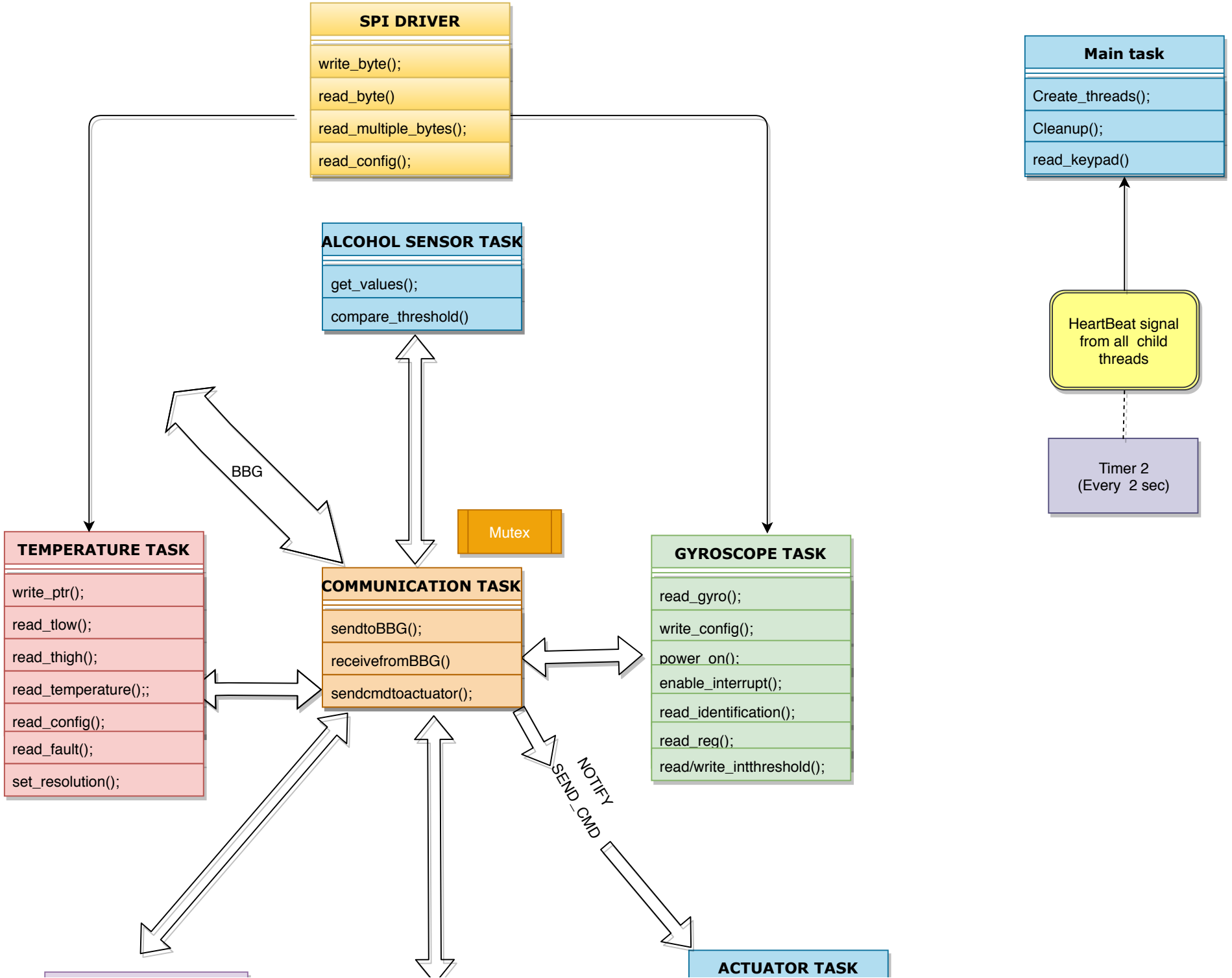
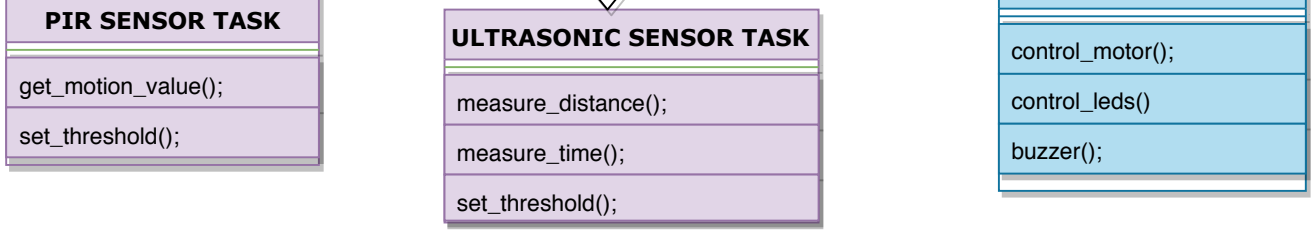
TIVA SIDE


SPI DRIVER
write_byte();
read_byte()
read_multiple_bytes();
read_config();
Main task
Create_threads();
Cleanup();
read_keypad()
ALCOHOL SENSOR TASK
get_values();
compare_threshold()
HeartBeat signal from all child threads
Timer 2 (Every 2 sec)
BBG
Mutex
TEMPERATURE TASK
write_ptr();
read_tlow();
read_thigh();
read_temperature();;
read_config();
read_fault();
set_resolution();
COMMUNICATION TASK
sendtoBBG();
receivefromBBG()
sendcmdtoactuator();
GYROSCOPE TASK
read_gyro();
write_config();
power_on();
enable_interrupt();
read_identification();
read_reg();
read/write_intthreshold();
NOTIFY SEND_CMD
ACTUATOR TASK


PIR SENSOR TASK
get_motion_value();
set_threshold();
ULTRASONIC SENSOR TASK
measure_distance();
measure_time();
set_threshold();
control_motor();
control_leds()
buzzer();