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int8_t bmi2_accel_gyro_set_config(struct bmi2_dev *bmi2_dev)
{
    /* Variable to define result */
    int8_t rslt;

    /* Initialize interrupts for gyroscope */
    //uint8_t sens_int = BMI2_DRDY_INT;

    struct bmi2_sens_int_config sens_int = { .type = BMI2_ANY_MOTION, .hw_int_pin =
BMI2_INT1 };

    /* List the sensors which are required to enable */
    uint8_t sens_list[3] = {BMI2_ACCEL, BMI2_GYRO, BMI2_ANY_MOTION};

    /* Structure to define the type of the sensor and its configurations */
    struct bmi2_sens_config config[3];

    /* Configure type of feature */
    config[0].type = BMI2_ACCEL;
    config[1].type = BMI2_GYRO;
    config[2].type = BMI2_ANY_MOTION;

    /* Enable the selected sensors */
    rslt = bmi2_sensor_enable(sens_list, 3, bmi2_dev);

    if (rslt == BMI2_OK)
    {
        /* Get default configurations for the type of feature selected */
        rslt = bmi2_get_sensor_config(config, 3, bmi2_dev);

        if (rslt == BMI2_OK)
        {
            config[0].cfg.acc.odr = BMI2_ACC_ODR_800HZ;

            /* Gravity range of the sensor (+/- 2G, 4G, 8G, 16G). */
            config[0].cfg.acc.range = BMI2_ACC_RANGE_2G;
            config[0].cfg.acc.bwp = BMI2_ACC_NORMAL_AVG4;
            config[0].cfg.acc.filter_perf = BMI2_PERF_OPT_MODE;

            /* The user can change the following configuration parameter according to
their requirement */
            /* Output data Rate. By default ODR is set as 200Hz for gyro */
            config[1].cfg.gyr.odr = BMI2_GYR_ODR_800HZ;
            /* Gyroscope Angular Rate Measurement Range.By default the range is 2000dps
*/
            config[1].cfg.gyr.range = BMI2_GYR_RANGE_2000;
            config[1].cfg.gyr.bwp = BMI2_GYR_NORMAL_MODE;
            config[1].cfg.gyr.noise_perf = BMI2_PERF_OPT_MODE;
            config[1].cfg.gyr.filter_perf = BMI2_PERF_OPT_MODE;
            // any motion feature configuration.

            config[2].cfg.any_motion.select_x = BMI2_ENABLE;
            config[2].cfg.any_motion.select_y = BMI2_ENABLE;
            config[2].cfg.any_motion.select_z = BMI2_ENABLE;
            config[2].cfg.any_motion.threshold = 1;
            config[2].cfg.any_motion.out_conf = 6; //Any motion interrupt is set to
int_status_0 register bit 6.

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    config[2].cfg.any_motion.duration = 1;

    /* Set the sensor configurations */
    rslt = bmi2_set_sensor_config(config, 3, bmi2_dev);

    if (rslt == BMI2_OK)
    {
        /* Map feature interrupt to pins */
        rslt = bmi2_map_feat_int(&sens_int, 1, bmi2_dev);

        //rslt = bmi2_map_data_int(sens_int, BMI2_INT2, bmi2_dev);
    }
}

return 0;
}

int8_t IMU_init() {

    /* Variable to define result */
    int8_t rslt;
    i2c_bus = 0x68;
    sensor_data[0].type = BMI2_ACCEL;
    sensor_data[1].type = BMI2_GYRO;

    /* To initialize the hal function */

    Wire.begin();
    Wire.setClock(1000000);
    bmi2.intf_ptr = &i2c_bus;
    bmi2.intf = BMI2_I2C_INTF;
    bmi2.read = bmi2xy_hal_i2c_bus_read;
    bmi2.write = bmi2xy_hal_i2c_bus_write;
    bmi2.read_write_len = 16;
    bmi2.delay_us = bmi2xy_hal_delay_usec;

    /* Config file pointer should be assigned to NULL, so that default file address
    is assigned in bmi270_init */
    bmi2.config_file_ptr = NULL;
    uint8_t init_status[1];
    int8_t chip_id;

    /* Initialize bmi270 */
    rslt = bmi270_init(&bmi2);
    //BMI270_read_i2c(0x68, 0x00, init_status, 1);
    rslt = bmi2_accel_gyro_set_config(&bmi2);

    if (rslt != BMI2_OK) return 0;

    delay(250);
    // Interrupt PINs configuration

    struct bmi2_int_pin_config data_int_cfg;
    data_int_cfg.pin_type = BMI2_INT1;
    data_int_cfg.int_latch = BMI2_INT_NON_LATCH;

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data_int_cfg.pin_cfg[0].output_en = BMI2_INT_OUTPUT_ENABLE; // Output enabled
data_int_cfg.pin_cfg[0].od = BMI2_INT_PUSH_PULL; // OpenDrain disabled
data_int_cfg.pin_cfg[0].lvl = BMI2_INT_ACTIVE_HIGH; // Signal Active High
data_int_cfg.pin_cfg[0].input_en = BMI2_INT_INPUT_DISABLE; // Input Disabled
rslt = bmi2_set_int_pin_config( &data_int_cfg, &bmi2);

if (rslt != BMI2_OK) return 0;

BMI270_read_i2c(0x68, 0x21, init_status, 1);
if(init_status[0] != 1) return 0;

return init_status[0];
}
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