

# I2C communication on the same board

An alternative to test the I2C Leader-member (master-slave) communication on the same board is to make one of the i2c port(I2C2) as Leader(Master) and any of the available ports (I2C0/I2C1) as member (Slave).

Steps:

- Create `i2c_slave_init.h` and `i2c_slave_init.c` files. Define a function `i2c_slave_init(...)` which assigns slave address and slave configuration for a given i2c port. (Refer `i2c__initialize` function in `i2c.c`)
- Also refer `peripherals_init.c` to get more info on how I2C2 is initialized.
- Call the `i2c_slave_init(...)` function in your `main.c`
- Connect the SDA and SCL pins of I2C2 with the respective SDA and SCL pins of I2C0/1
- Flash the code and try issuing `i2c detect` command to see if you see a response from member device

You will still need to check a couple of things (`CLK`, `IOPIN` registers) before the driver becomes fully functional.

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