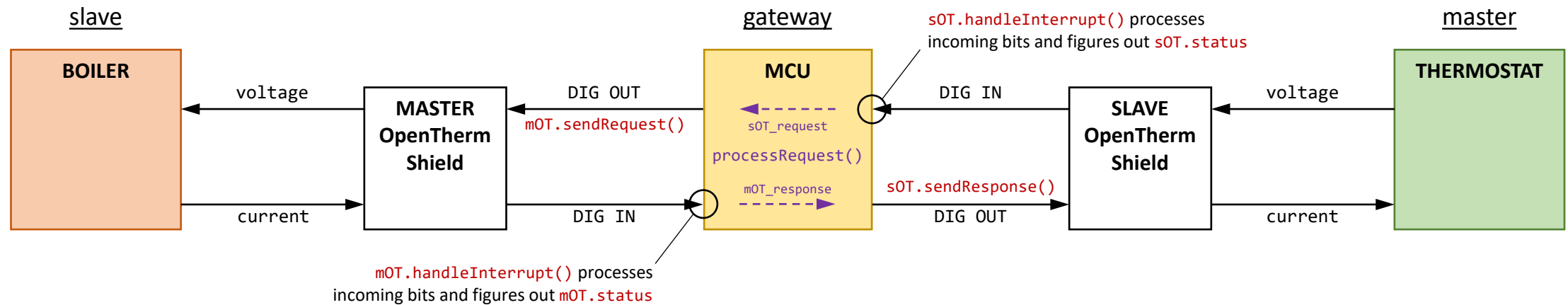


## Schematic: DIYLESS OpenTherm shields and code flow

Dennis van Gils, 15-01-2023



Code excerpt for gateway:

```
#include <Arduino.h>
#include <OpenTherm.h>

OpenTherm mOT(mInPin, mOutPin); // Manages Master OpenTherm Shield
OpenTherm sOT(sInPin, sOutPin, true); // Manages Slave OpenTherm Shield
void ICACHE_RAM_ATTR mHandleInterrupt() { mOT.handleInterrupt(); }
void ICACHE_RAM_ATTR sHandleInterrupt() { sOT.handleInterrupt(); }

void processRequest(unsigned long sOT_request,
                    OpenThermResponseStatus sOT_status) {
    // Send the intercepted thermostat request further downstream to the boiler
    // and listen for the boiler's response.
    unsigned long mOT_response = mOT.sendRequest(sOT_request);
    if (mOT_response) {
        // A boiler response is waiting to be processed. Send this intercepted
        // response further upstream to the thermostat.
        sOT.sendResponse(mOT_response);
    }
}

void setup() {
    mOT.begin(mHandleInterrupt);
    sOT.begin(sHandleInterrupt, processRequest);
}

void loop() {
    // Poll whether a new thermostat request awaits. `process()` will internally
    // call `processRequest()` when needed.
    sOT.process();
}
```