

The code contains three files: main.cpp, ds18b20.cpp and ds18b20.h

The code in ds18b20.cpp is a library developed specifically for ds18b20 sensor in C programming language.

Features such as UART Logging, timing functions (delays), etc. are used from already existing libraries that are included in the ds18b20.h file (Arduino.h, esp_system.h, driver/gpio.h and esp32/rom/ets_sys.h).

The code is tested and executed on the ESP32 NodeMCU.

The code is compiled using PlatformIO set up for arduino and ESP microcontrollers (cpp compiler).

Communication with four ds18b20 sensors is performed using 1-Wire protocol set up on GPIO pin 4 of ESP32 NodeMCU. Temperature data of all four sensors is then sent on UART (115200) for logging.