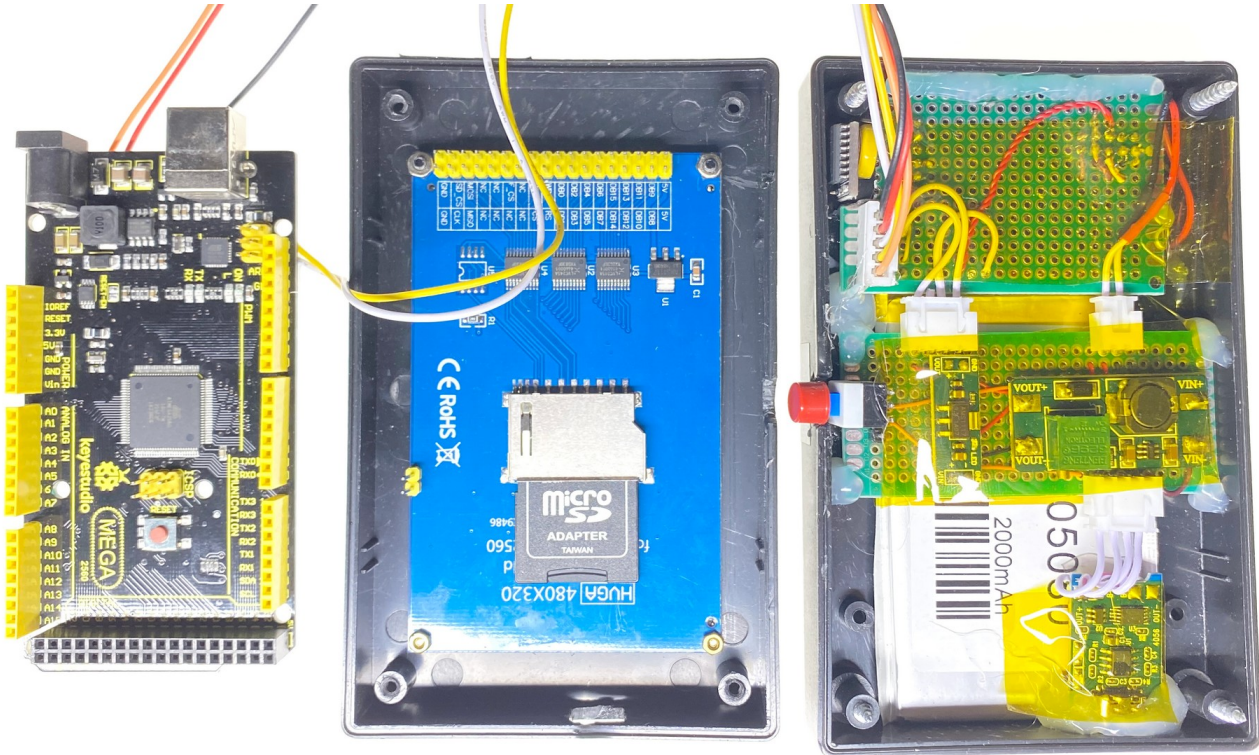


# v8b Sensors Board

1. ChipCap 2 (CC2D33) instead of DHT12

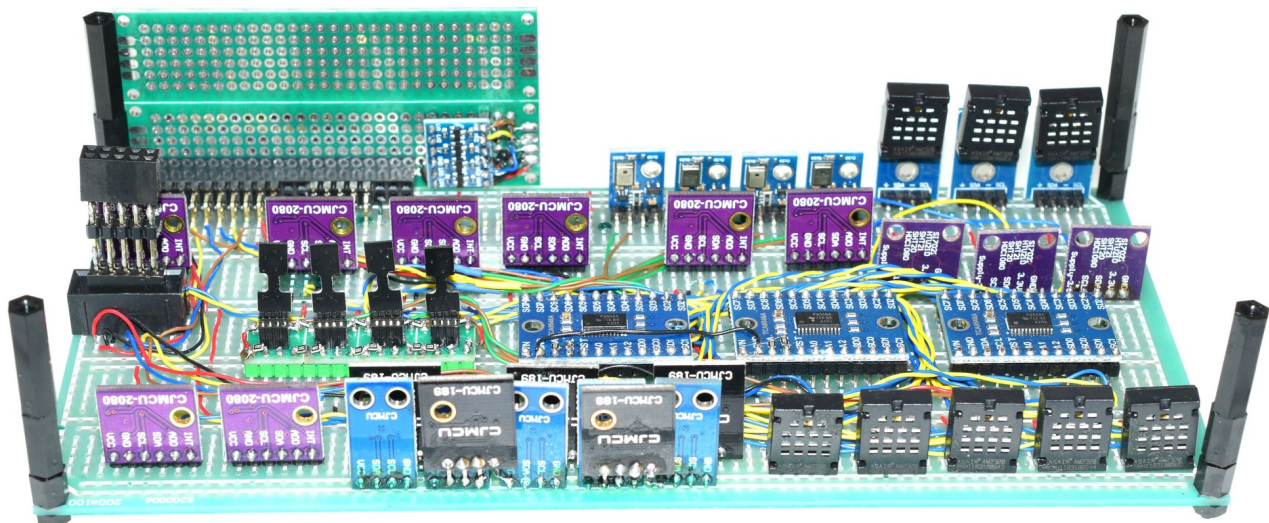
Code: <https://github.com/liutyi/arduino-humidity-sensors-test/tree/v8b>

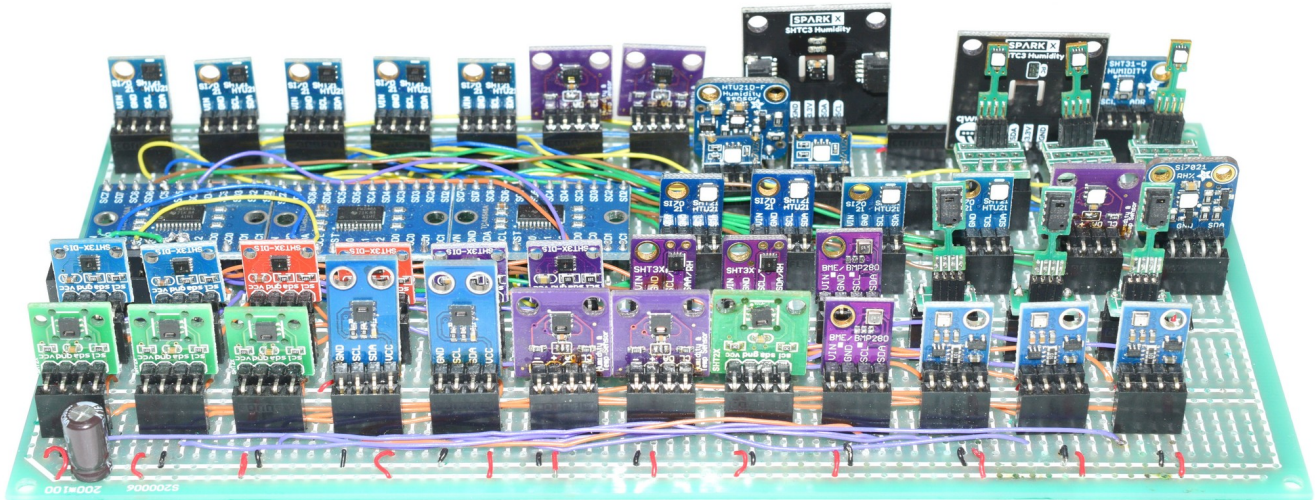
## Main Unit



## Sensor Board

incl levels converter board





## Sensors

Total Sensor cost: ~630\$

- **SHT20** [3] 4\$
- **SHT21-C** [2] 12\$
- **SHT21-G** [2] 4.50\$
- **SHT25** [1] 10\$\*
- **SHT30** [2] 6.30\$
- **SHT31** [2] 8.10\$
- **SHT31-2** [2] 4\$
- **SHT31-A**[1] 17\$
- **SHT35** [2] 16.20\$
- **SHT85** [3] 35\$
- **SHTC1** [5] 3.5\$
- **SHTC3** [2] 17.5\$
- **BME280** [3] 3.2\$
- **BME280-G** [2] 2\$
- **BME680-C** [2] 10\$
- **BME280-A** [1] 31\$
- **Si7021** [2] 4\$
- **Si7021-Y** [4] 3\$
- **Si7021-G** [1] 4.4\$
- **Si7021-A** [1] 15\$
- **HTU21d-Y** [5] 3\$
- **HTU21d-G** [2] 11\$\*\*
- **HTU21d-A** [1] 20\$
- **AHT10** [4] 1.3\$
- **AHT15** [4] 3.4\$
- **HDC1080-G** [3] 2\$
- **HDC1080-C** [5] 4\$
- **HDC2080-C** [8] 4.50\$
- **AM2320** [8] 2\$
- **CC2D33** [3] 18\$

## Known Issues

1. AHT10 and AHT15 occupy multiplexer (unknown compatibility issues when on same i2c bus with other sensors)
2. 1-st and 8-th multiplexers addresses occupied by sensors. so multiplexer limits reached.
3. CJMCU-189 (SHTC1) unstable on 3.3v multiplexers, and also hangs on below zero temperatures (on 5v i2c bus)
4. CC2D33 got thin 1.27 pins (and need pin replace or soldering for secure connect)

## Power Consumption

USB Type-A (Arduino): 1.0W Main Unit. 1.16W Main unit with Sensor Board

USB Type-C (Battery charging circuit): ~1.54W Main Unit, 1.64W Main unit with Sensor Board