

DHT11_Module

Module Responsibility

Module Responsibility :

- generating the start signal, receiving and decoding the 40-bit data frame from the DHT11 sensor
- validating the received data using checksum
- extracting **temperature** and **humidity** values

Output :

- Provide the **temperature** and **humidity** data

Module Design

```
<<block>>
MPU_Sensor
```

```
<<Parameters>>
```

```
typedef struct {
    uint8_t temperature;
    uint8_t humidity;
} Dht11_DataType;
```

```
<<Function>>
```

```
~ Dht11_Init(void) : void
~out: Dht11_Main(Dht11_DataType *data) : int
```

Module Flowchart

