SHT31V01A

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Abstract

SHT31 sensor module which measures relative humidity from 0% to 100% with an accuracy of + / - 2%. Temperature is measured in the range -40 ° C to 125 ° C with a an accuracy of 0.3 ° C.

Contents

1 Technical parameters

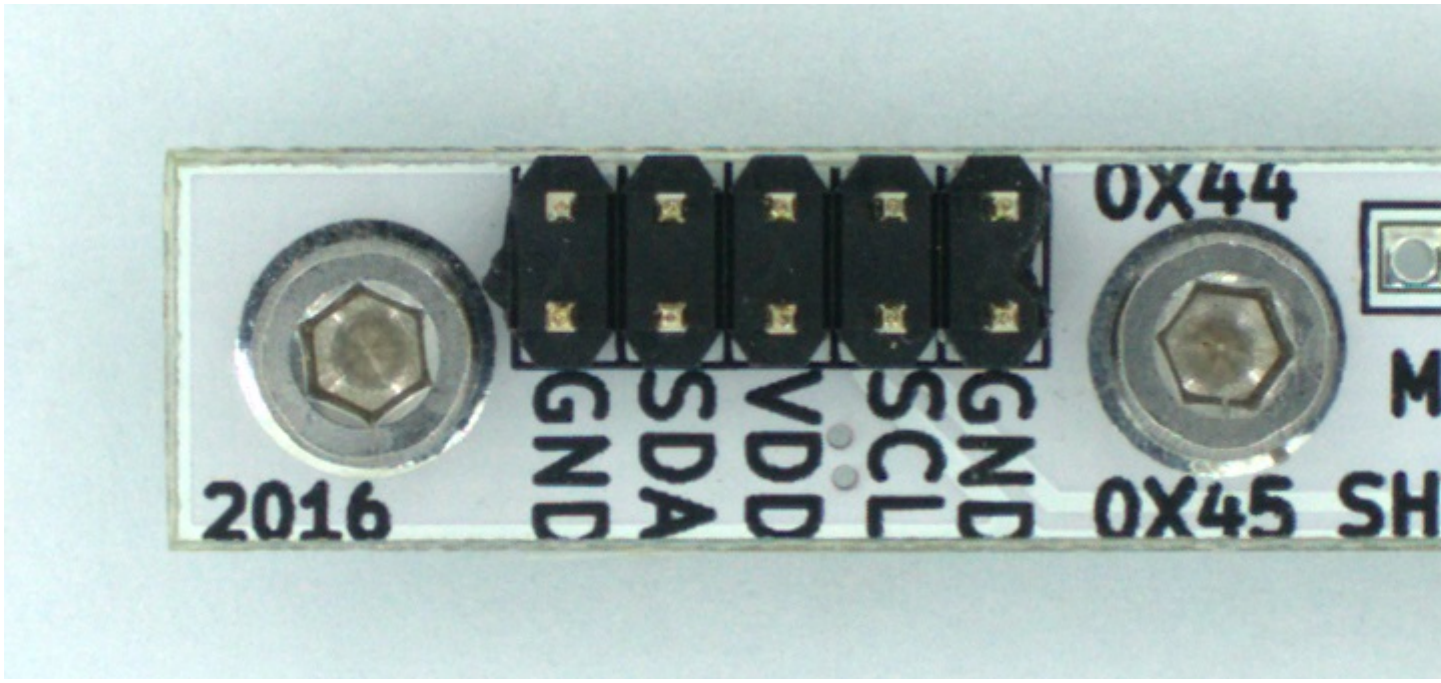
Parametr	Value	Note
Relative humidity	0% - 100%	Accuracy by IO
Temperature	-40°C - 125°C	Accuracy by IO
Integrated circuit	SHT30, SHT31	
Bus	I2C	
Power	Min 2.4V - max. 5.5V	
Size	9.65 x 40.13	

2 Construction description

2.1 Introduction

SHT31V01A module is based on IC SHT31 or SHT30 humidity and temperature meter, which allows measure temperature and relative humidity with high accuracy and precission. Aditional information is possible to find out in official datasheet. Modul contains all requaired components for proprer working.

2.2 Module wiring



3 Assembly and ?? oživení ??

3.1 PCB assembly

Description	Typ	Package	Count
J1,J2	CONN1_1	Straight_1x01	2
J9,J10,J11,J12,J13	JUMP_2x1	Straight_1x02	5
M1,M2	HOLE	MountingHole_3mm	2
R1,R2,R5,R6	10k	SMD-0805	4
R3	-	SMD-0805	1
R4	0R	SMD-0805	1
C1	100nF	SMD-0805	1
U1	SHT31	DFN-8- 1EP_2.4x2.4mm_Pitch0.5mm	1
D1	BZV55C-5,6V	Diode-MiniMELF_Standard	1

3.2 ??? Oživení ???

Is needed to make control if there is no short on PCB and if IC is proprly soldered. I2C address of IC is set according to position of 0R resistor. Position of resistor in R4 means 0x44, position R3 means 0x45.

3.3 Program

Example program is included in module folder. To run this example is required to have installed pyMLAB.