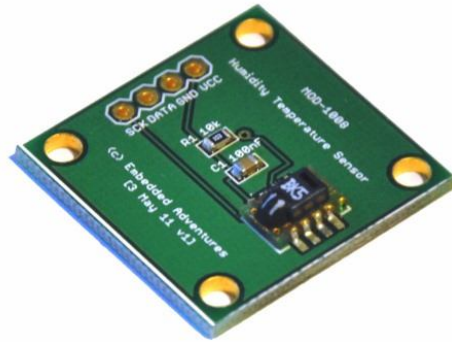
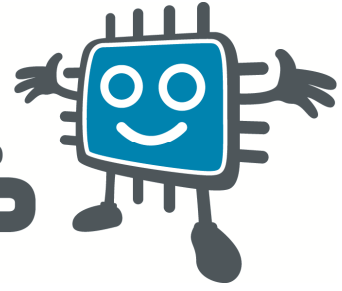


embedded adventures



Device: MOD-1008

This document Version: 1.0

Matches module version: [3 May 11 v1]

Date: 13 June 2011

Description: Humidity / Temperature Sensor

Contents

Introduction.....	3
Features.....	3
Hackability.....	3
Construction.....	3
Connections.....	3
Power.....	4
Pull up resistors.....	4
Schematic.....	4
Programming.....	4
PCB.....	5
Versions.....	5

Introduction

The MOD-1008 is an SHT11 based humidity sensor, giving humidity and temperature readings.

Features

The MOD-1008 features the SHT11 from Sensiron, giving 14 bit measurements for both humidity and temperature.

Hackability

The MOD-1008 is 100% hackable.

At Embedded Adventures, we believe you have the most fun when you have the most control over your hardware. For the MOD-1008 we provide a datasheet, complete schematic and complete source code. After that, it's all up to you. We'd love to hear about the projects you're using it for – send us information and photos to myproject@embeddedadventures.com

Construction

It's all pre-built! Just add female or male header pins, or solder directly to the board, and away you go.

Connections

The MOD-1008 has one connection port.

VCC	Positive supply. 2.4V – 5.5V
GND	Ground (Vss) connection.
DATA	Serial data
SCK	Serial clock

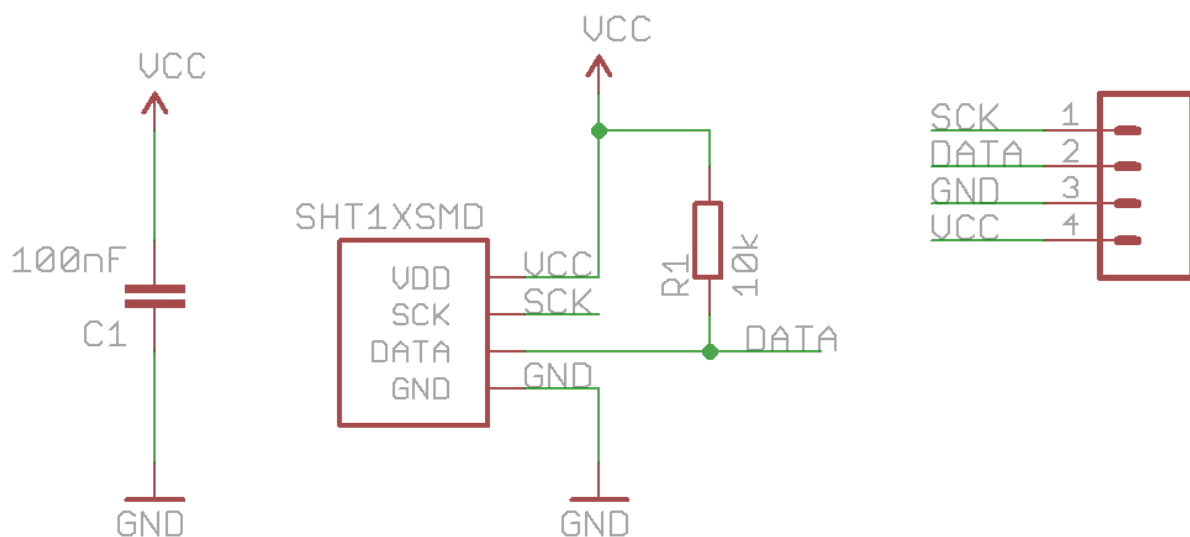
Power

The MOD-1008 can be powered from 2.4 – 5.5V and required 0.55mA while actually making a humidity / temperature measurement, or about 0.3 μ A when in sleep mode.

Pull up resistors

The SHT11 requires the use of a pull-up resistor on the data line. The module comes with the pull-up resistor installed.

Schematic

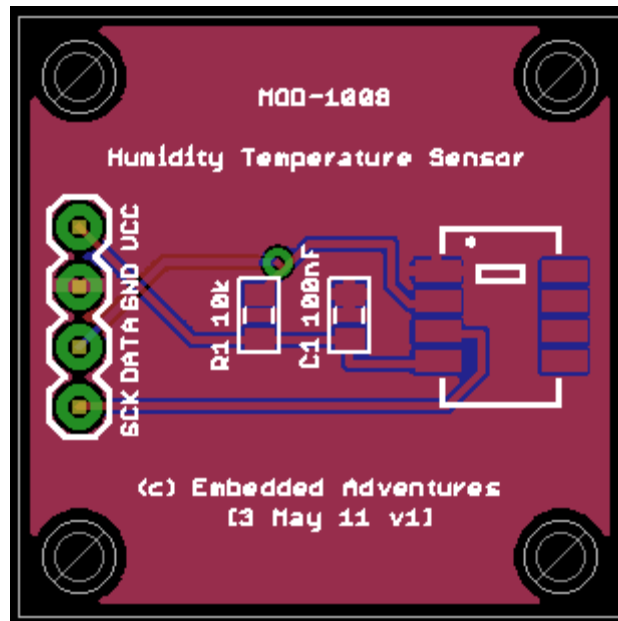


The MOD-1008 schematic is pretty straightforward. Don't forget to have a look at the SHT11 datasheet so you know how to get the most out of the humidity sensor.

Programming

See sht1x.c and sht1x.h available in the PicPack library. The PicPack library can be downloaded from the [Tutorials | Downloads](http://www.embeddedadventures.com) section of www.embeddedadventures.com

PCB



Versions

Version	Date	Comments
Version 1.0	13 June 2011	Initial Version for board v1