Temperature Measurement using AVR Microcontroller

Features

- Displays OF TEMPERATURE.
- Automatically detect the temperature.

4W and 1H

- What - Temperature Measurement circuit to measure the temperature.
- Why - To get to know about electric circuits better.
- When - Whenever needed, one should be able to see the temperature.
- Where - Wherever he is.
- How - By using Atmega32 microcontroller and SimulIDE.

SWOT ANALYSIS

Strengths

- Real time temperature display.
- limited range Weakness
- Not able to show negative temperature.
- It's Very common. Opportunities
- Can add Alarm Threats
- Can get broken easily.

High Level Requirements

ID _____ Description _____ Category

HLR_01 _____ mimic the temperature sensor for simulation _____ Software

HLR_02 _____ Understanding Atmega328 _____ Software

Low Level Requirements

ID _____ Description

LLR_01 _____ Circuit Design

LLR_02 _____ Simulation

TEST CASE [HIGH LEVEL]:

ID	Description	Input	Output	Status
H_01	Generate	C file	Hex File	Implemented
H_02	Assemble Components	Search	Present in simulIDE	Implemented
H_03	Make circuit	Components	circuit	Implemented
H_04	Show time	Run	Displayed	Implemented

TEST CASE [LOW LEVEL];

ID	Description	Input	Output	Status
L_01	Change temperature	Change voltage	As needed	Implemented

OUT PUT: