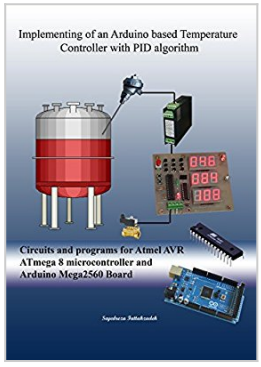

Implementing of an Arduino based Temperature controller with PID algorithm

By Seyedreza Fattahzadeh

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The role of the temperature controller is to measure the value on the thermometer, compare it to the set point and calculate the amount of time the hot water solenoid valve should remain switched on to maintain a constant temperature. How accurately we need to control the temperature will also determine the type of temperature controller we have to use.
The manual is laid into four chapters, three of which emphasize on the code and hardware of a relay can be turned on and off to control the temperature of a small water filled container using a typical ATmega8 Microcontroller. The last chapter explains how, by applying two SSR's, the temperature of the same container with a PID control can be managed using an Arduino ATmega2560 development board.
The main control program solutions are prepared in C language using CodevisionAVR and Arduino software. In addition, the schematic of all the hardware used in these projects are available in the text. You will find details on the creation of code for an ATmega8 Microcontroller and Arduino development board that controls a temperature process. This book has been prepared for those who are already familiar with basic instructions related to any brand of Microcontroller and may have already developed some microcontroller-based programs for different purposes.
Note: By searching for “implementing an Arduino based temperature controller with PID algorithm” on YouTube, you will be able to watch a smoothly functioning prototype.
To receive the main code developed for these projects, you just need to send me an e-mail with the proof of purchase as you are directed in the preface of the text. These code comes real handy when something does not work in your developed code.
Developing this will give you an idea to either how to implement a relatively complex end year college project or give you enough hands on experience to apply for an entry level job on application of Microcontrollers with full confidence.

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Editorial Review

Users Review

From reader reviews:

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Samuel Hamby:

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The book untitled Implementing of an Arduino based Temperature controller with PID algorithm contain a lot of information on the item. The writer explains the girl idea with easy technique. The language is very straightforward all the people, so do not necessarily worry, you can easy to read it. The book was compiled by famous author. The author brings you in the new era of literary works. You can easily read this book

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