PE5004 Controller Board for PE5004 Evaluation



Introduction

The PE5004 requires just a simple MCU to program registers and read back sensed data from other registers. It is useful for a development environment to simply see results and register settings in the Graphical user interface in a WindowsTM environment. This can be accomplished using this small MCU board directly attached to the serial port of the PE5004. The board has to be connected to the PC via USB interface.

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1 Revision History

Version	Date	Changes	Page
Initial Version 1.0	05/2011		



2 General Information

The board can be directly connected to a PE5004 (refer to datasheet for pins) and displays PE5004 data via USB on a Windows system.

The graphical user interface to control the IC and display sensed data is functionally identical to the actual EVA5004 board GUI Version.

Firmware source code is free available, 16 Pins of Atmel UC3 MCU are free and can be used for additional user functions (e.g. LED outputs).

3 Board Layout



Figure 1 - Layout top view (original board size is 30mm x 20mm)

4 Pinhead connections to PE5004

PIN	Function			
1	MOSI			
2	INT			
3	MISO			
4	SEL			
5	VDD			
6	SCL			
7	GND			
8	reserved f.future use			

Table 1 – Pinhead connections

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5 Schematic



Figure 2 - Schematic view

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