MPS I²C Interface User Manual

Revision 1.0

Monolithic Power Systems

www.monolithicpower.com

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1. INTRODUCTION

1.1 What Is the MPS I²C GUI?

The MPS I²C Interface system is a system that helps customers easily use MPS parts with an I²C function. The system includes an **EVB board**, an **I2CBUS KIT** between the PC and IC, and a **computer** with Windows 7 or higher system (see Figure 1 and Figure 2).

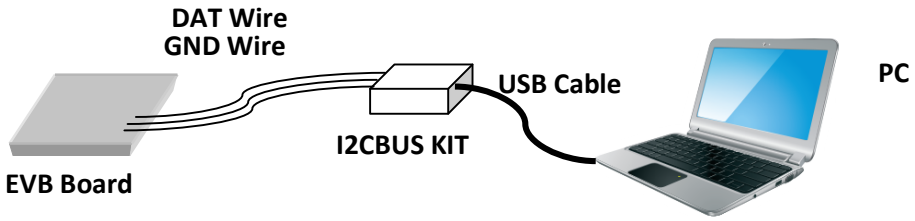


Figure 1: MPS I²C Interface System

Figure 2: MPS I2CBUS KIT (Top and Bottom)

1.2 System Requirements

#	Software	Version
1	Operating System	Windows 7 or later
2	.Net Framework	.NET Framework 4.0 or later

NOTE: .Net Framework can be downloaded from Microsoft.com. The .net Framework4.0 can be downloaded here:

https://www.microsoft.com/en-US/download/details.aspx?id=17718

2. INSTALLATION

The MPS IIC GUI.rar can be downloaded from the MPS website. Extract it into a directory.

2.1 Installing the MPS IIC GUI

Double click the .exe file and flow the set-up guide (see Figure 3). For this example, we'll be using the MP5515.

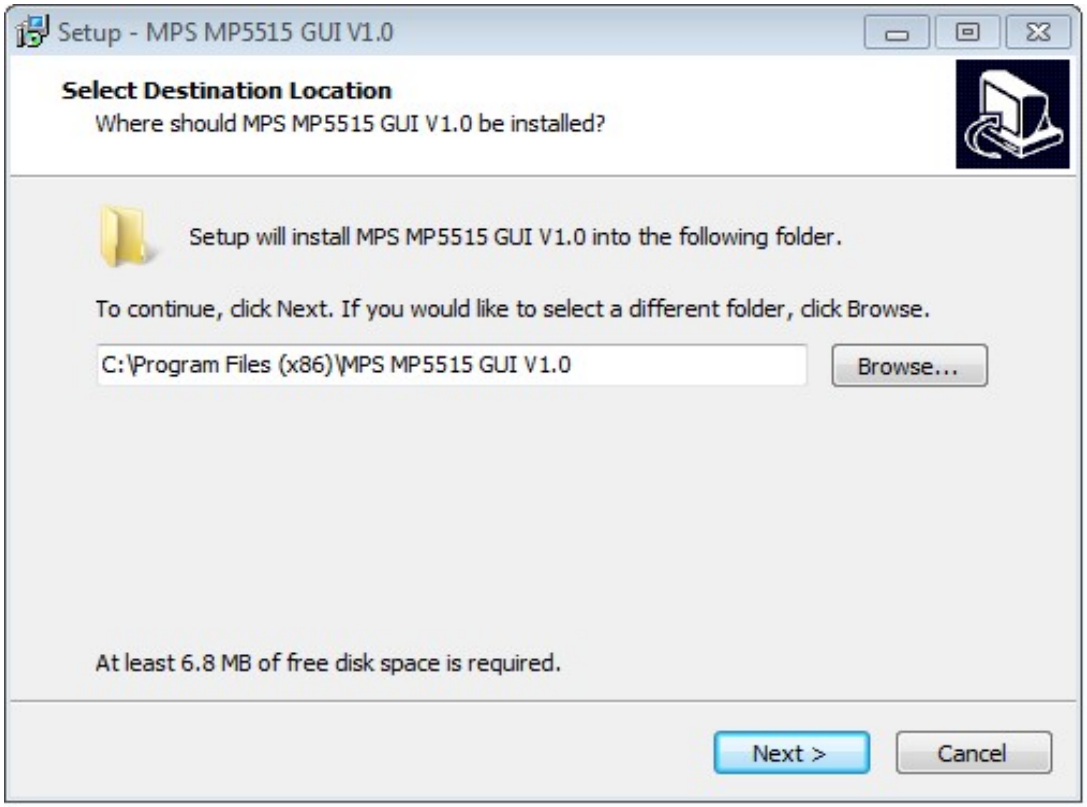
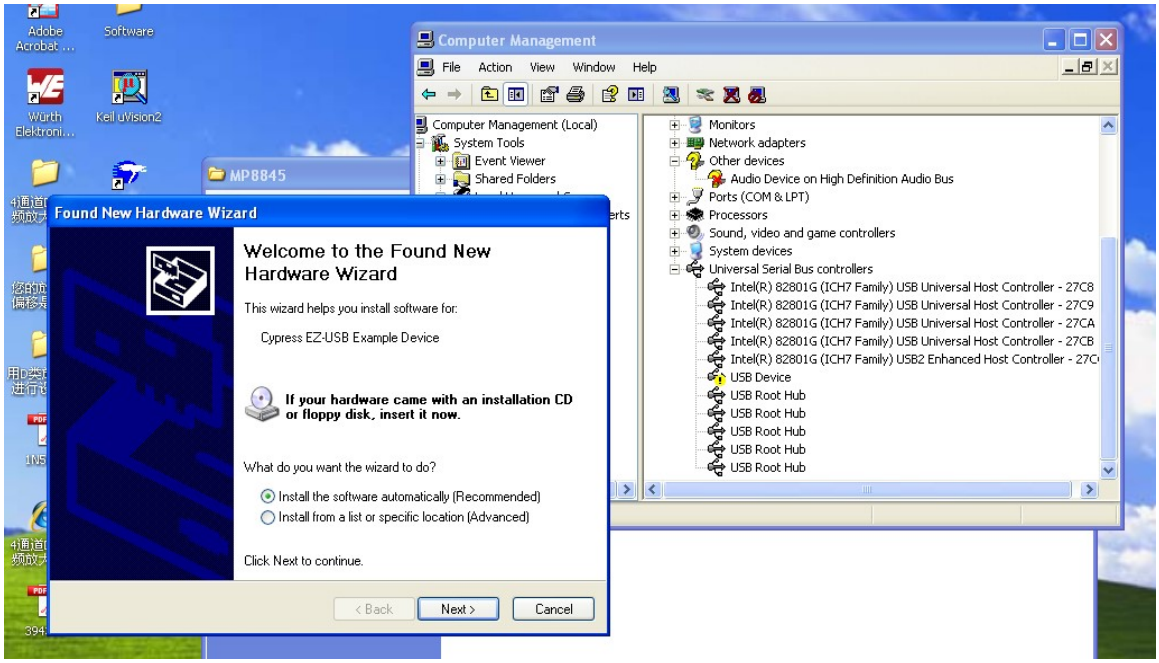


Figure 3: MPS IIC GUI Set-Up Guide

2.2 Installing the USB Driver

The USB-to-I^{2}C driver should be installed before using the system. Follow the steps below to install this driver.

1. Connect the **MPS I2CUSB KIT** to your PC through the black USB cable. Windows will find the new hardware and open a dialog box to instruct you on installing the driver.



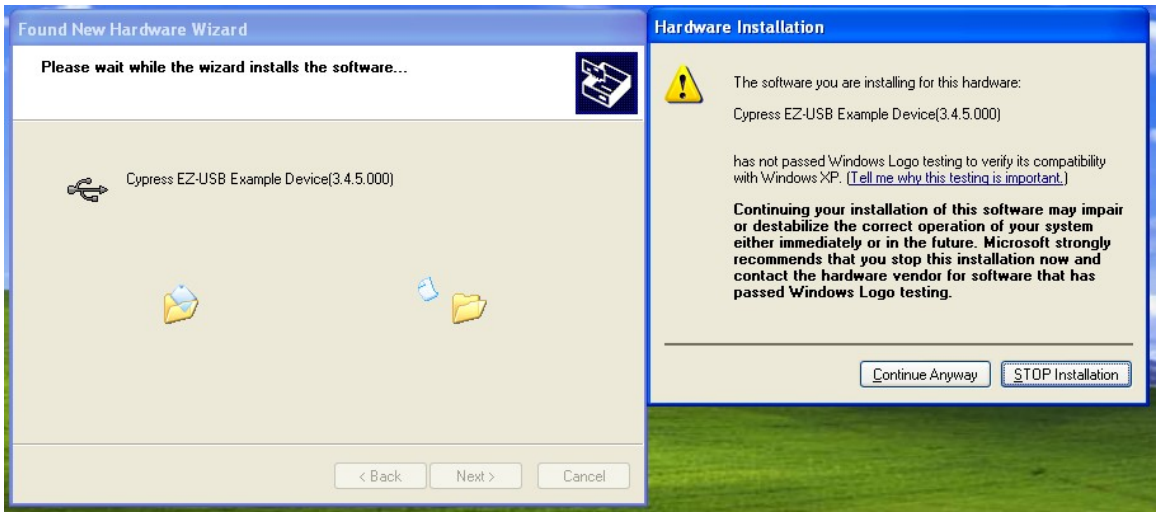
2. Select “Install from a list or specific location (Advanced)” and press “next”.

3. Browse to the location that you extracted the ".rar" file before and choose either the "x86 Driver" or the "x64 Driver" folder, depending on your system type, and press "next".

Contact your system administrator is you need to know your PC's system type.

4. Press "Continue Anyway" to install the driver. Wait for the installation to finish and remove the USB cable from PC.

Sometimes the PC cannot recognize the USB device and shows an "unknown USB device" warning. Try connecting the device to a different USB port. If that does not work, please contact your administrator.



3. USAGE

3.1 Hardware Connection

Use the colored wires to connect the EVB to the MPS I2CBUS KIT (see Figure 4). Please refer to the specific part datasheet for EVB pin definitions.

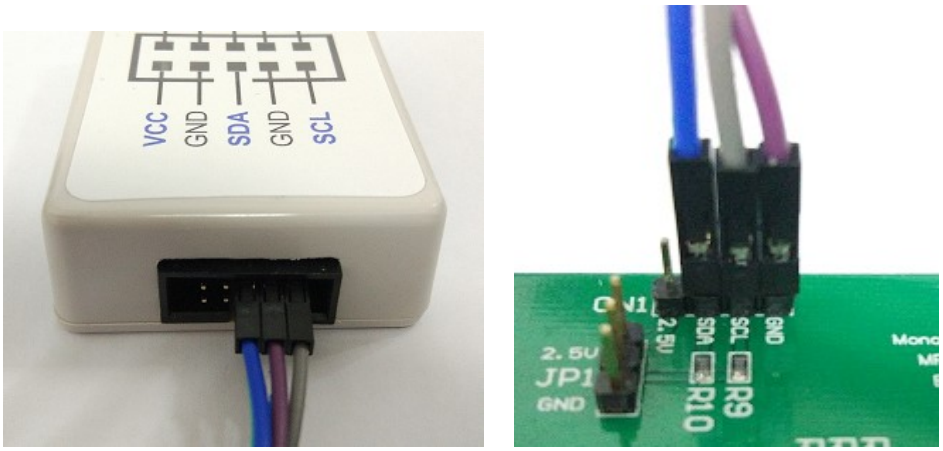
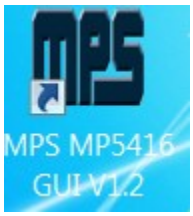


Figure 4: EVB to MPS I2CBUS KIT Wire Connection

Refer to the EVB datasheet to start up the EVB and connect it to the PC via the IICBUS KIT.

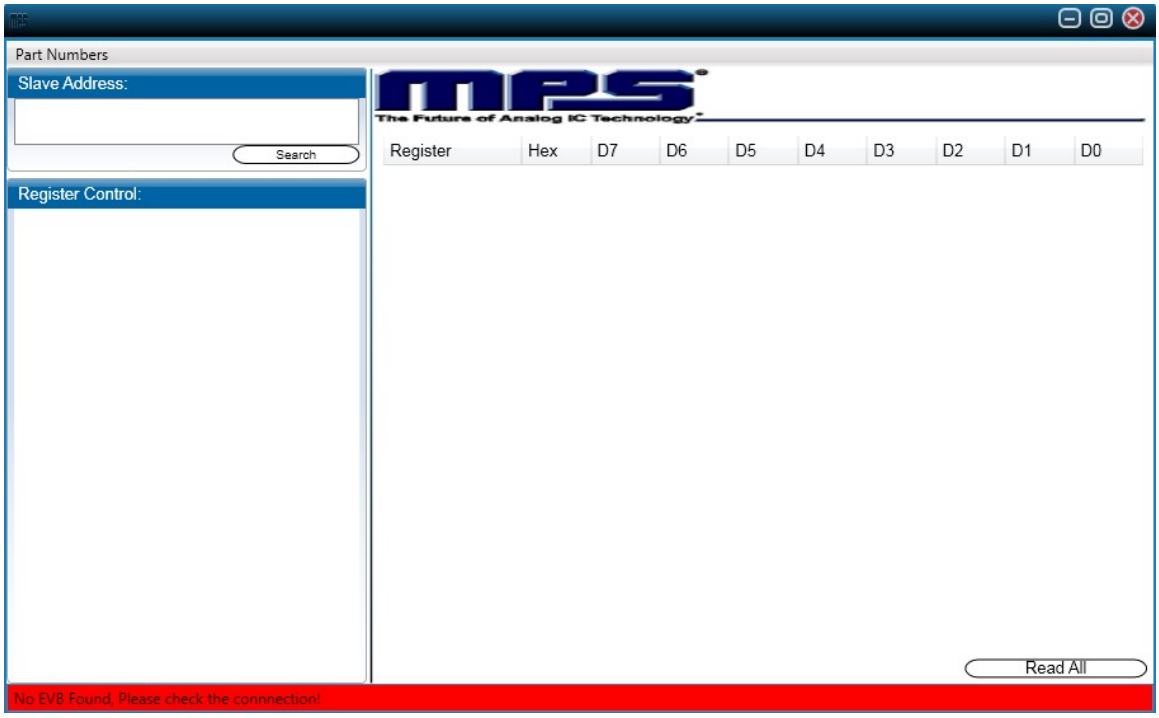
3.2 Using the GUI

After installing the software, start it up from by selecting the desktop shortcut icon or from the Start menu.

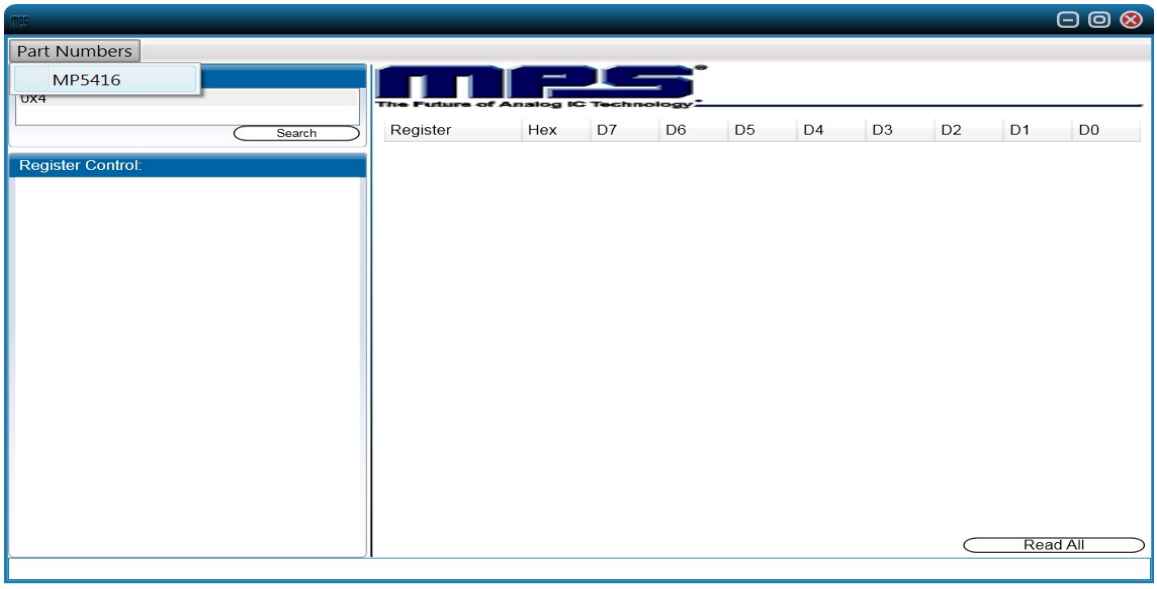
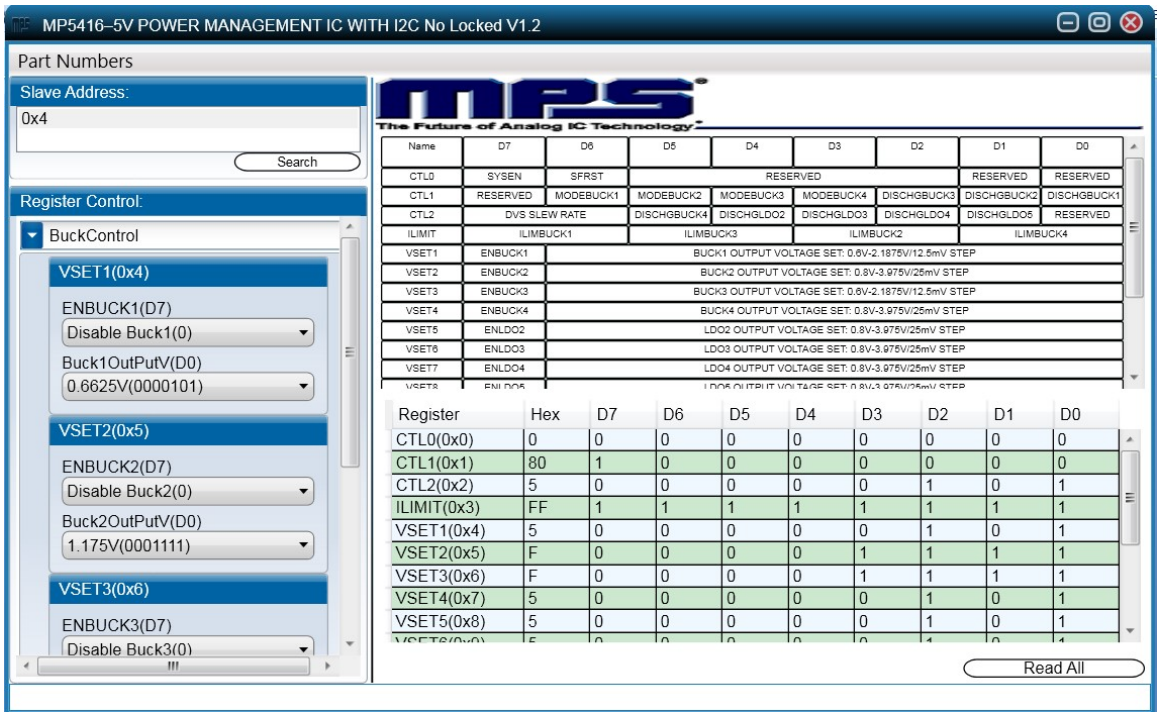


Follow the steps below to use the GUI software.

1. Start the software. It will check the EVB connection automatically. If the connection is not successful, a warning will appear at the bottom. Otherwise, the address will be listed in the “Slave Address.”



2. Select the part number, then, the control information will be seen in the “Register Control.”



3. Find the item you want to change, select the value, and the changed information of the item will appear on the right side. Click the “Read All” button to update all the item’s values.