Rocky Gang Programmer User Guide

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System Requirements

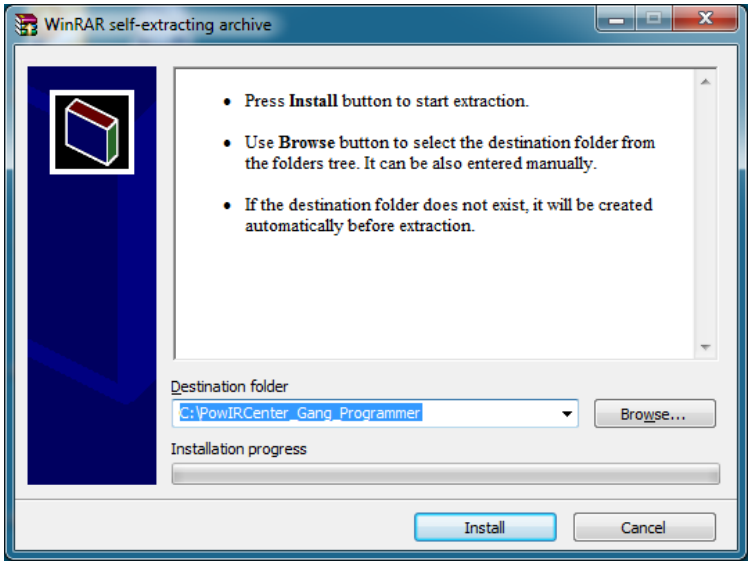
- *Microsoft .NET Framework 4.0* or higher must be installed. This can be downloaded http://www.microsoft.com/en-us/download/details.aspx?id=17718
- Ensure that you are connected to the internet.
- If you're using *Windows 7 or newer version*, you may be prompted with a security warning whenever you run a program. For this setup, allow these programs to run.

Download PowIRCenter Gang Programmer

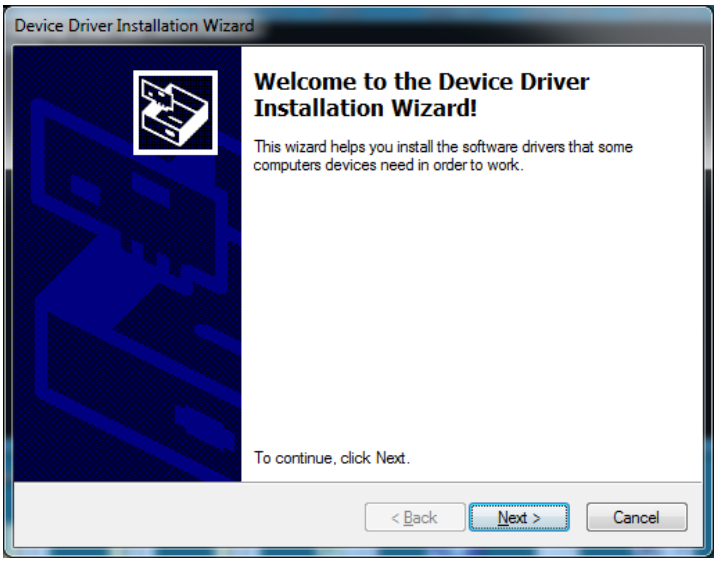
1. Create a folder in C drive as **C:\PowIRCenter Gang Programmer**
2. Copy ftp://irdpdc_ro:mem2011@sftp.irf.com to Windows Explorer address bar and push **Enter** on the keyboard to log into download folder automatically in ftp server.
3. Click the folder labeled **PowIRCenter Gang Programmer** in ftp server.
4. Right click on **PowIRCenter_Gang_Programmer_Setup.exe** and select **Save Target As….** When the dialog box pops up, save the file to any folder**.** Click **OK**.

Install PowIRCenter Gang Programmer

1. Navigate to the folder where **PowIRCenter_Gang_Programmer_Setup.exe** is saved.
2. Right click on **PowIRCenter_Gang_Programmer_Setup.exe** and select **Run as administrator**.
3. Click **Install** when the dialog box pops up.



4. Click **Next** when device driver installation wizard pops up

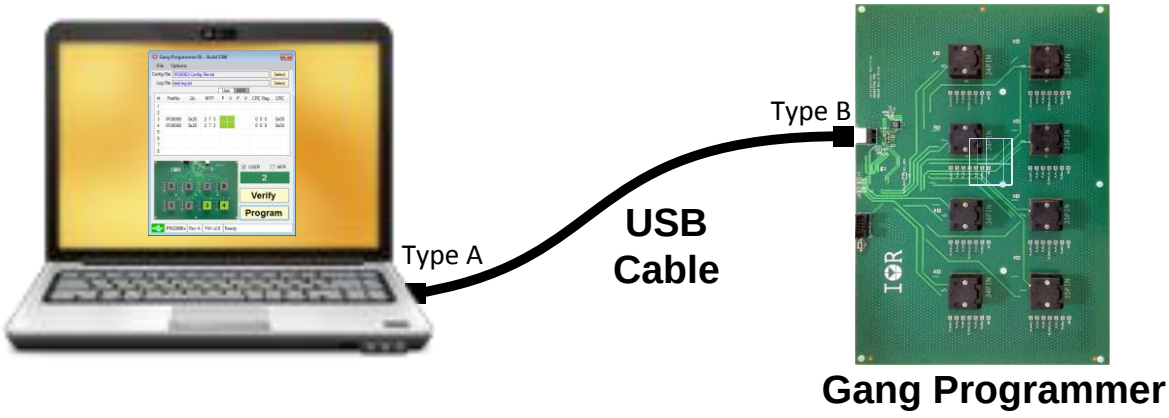


Uninstall PowIRCenter Gang Programmer

Please note the PowIRCenter Gang Programmer is not deployed through setup.exe. Just delete the **C:\PowIRCenter Gang Programmer** folder or files if the user doesn't want to keep them.

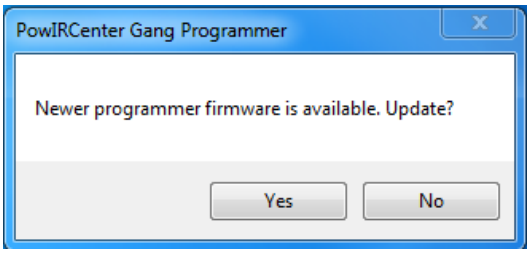
Hardware Setup

Since the programmer is powered through USB port, there is no external power supply required. Just connect a USB cable between your PC and the programmer. A green LED next to the USB connector will be blinking if the connection is successful.

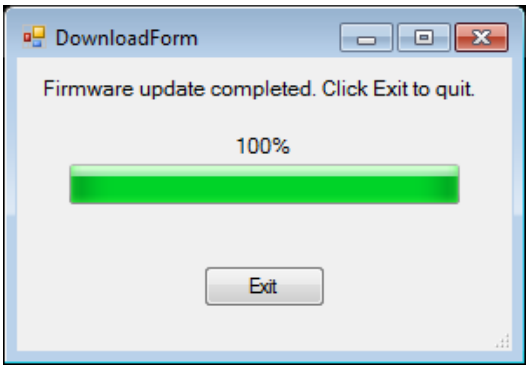


Firmware Update

The USB005 dongle has two layers of firmware, the resident bootloader layer which will not be modified is responsible for updating and flashing the application firmware. The GUI will prompt the user to update the firmware if there is a newer firmware available. The user has the option not to update, but updating is recommended.



Click **Exit** after the update.



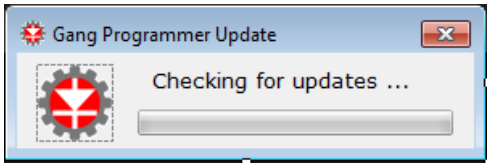
Getting Started

There are two ways to launch the PowIRCenter Gang Programmer GUI.

- **PowIRCenter Gang Programmer Update.exe** – check and download updates if there are newer files in the server.
- **PowIRCenter Gang Programmer.exe** – Launch the GUI directly without checking for updates.

Automatic Updates for PowIRCenter Gang Programmer

1. Make sure your computer is connected to the Internet, then launch the GUI by double-clicking **C:\PowIRCenter Gang Programmer\ PowIRCenter Gang Programmer Update.exe**



2. If there are any updates available from the IR Server, this screen will appear. Click **Update Now** to start downloading or click **Update Later** to download later.



3. After download is complete, click the **Exit** button and restart PowIRCenter Gang Programmer.

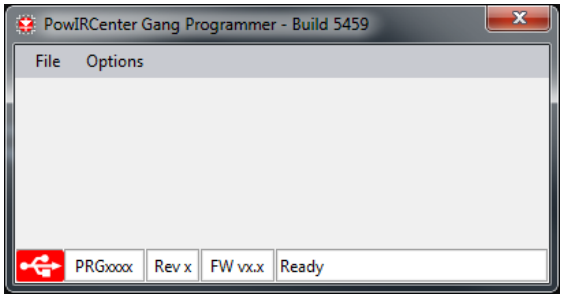
Please note if there are no updates, the PowIRCenter Gang Programmer GUI will start right after the checking.

Launching the GUI

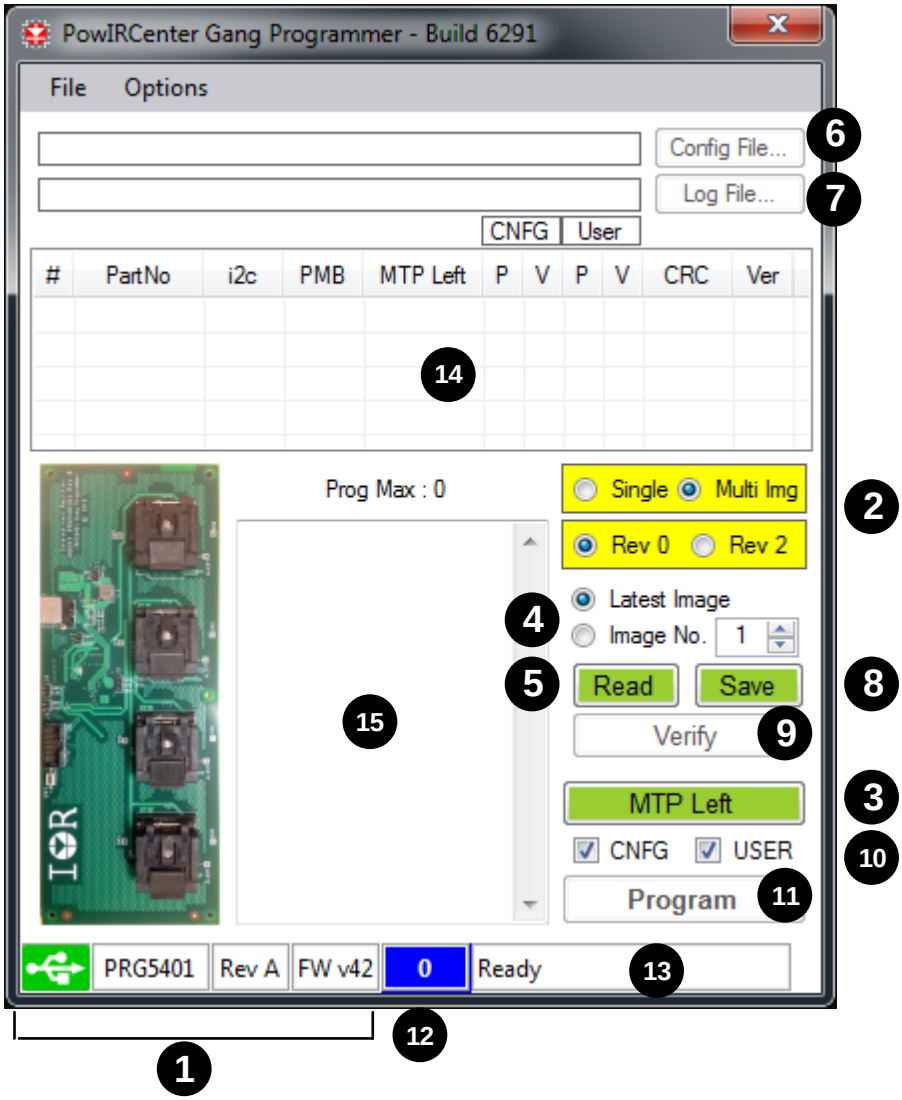
Double-click **PowIRCenter Gang Programmer.exe** from **C:\PowIRCenter Gang Programmer**

User Interface

After launching the programmer, the startup window will pop up on the screen first.



If a gang programmer board is connected, the GUI will bring up the correct board interface. The gang programmer GUI should look like the one below.



1. Programmer board hardware and firmware version number
2. Select correct options of the devices will be programmed.
3. Check MTP writes left of the devices in the sockets.
4. Select the image index which will be read, saved, or verified from the device in the sockets
5. Read device image
6. Select a configuration file for programming or verification. The select button will not be enabled until all options in yellow color are selected and changed to white color.
7. Select a log file for programming results. The Select button will not be enabled until the configuration file is loaded.
8. Save device image to a config file. The Save button will not be enabled until all options in yellow color are selected and changed to white color.
9. Verify a device image against the config file. The Verify button will not be enabled until a config file is selected.
10. Select CNFG or User section which will be programmed.
11. Program the devices in the sockets.

12. Successful programming counter of devices.
13. USB and i2c communication status
14. Device details during the read, verify, or program operations.
15. Read, Verify, Program results log

Programming Procedures

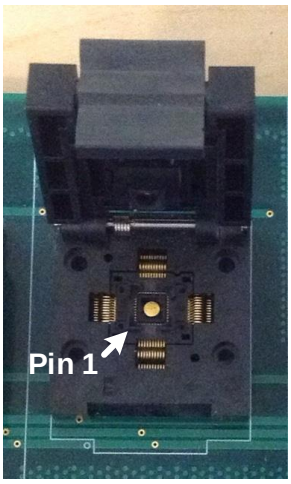
1. Connect a USB cable between computer and the gang Programmer
2. Make sure the USB Connection status change from  to 
3. Select correct options in 2 until all yellow color items are changed to white.
4. Load the configuration file by clicking the Select button 6 .
5. Select the log file by clicking the Select button 7, saving dialog will pop up, enter the file name and click Save.
6. Select the User and/or CNFG section 10 to be programmed .
7. Load devices into the sockets.
8. Click Program button 11.
9. The Program button also does verification after programming. If the verification fails, the failed registers will be listed in the text box 15 .
10. Unload the devices just programmed and load new devices.
11. Click the program button again.
12. Repeat the steps 10 and 11 until all blank devices are programmed.

Verification Only Procedures

1. Connect a USB cable between computer and The gang Programmer
2. Make sure the USB Connection status change from  to 
3. Select correct options in 2 until all yellow color items are changed to white.
4. Load the configuration file by clicking the Select button 6 .
5. Select the User and/or CNFG section 10 to be programmed .
6. Load devices into the sockets.
7. Click Verify button 9 .
8. If the verification fails, the failed registers will be listed in the text box 15 .

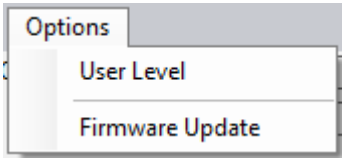
Note:

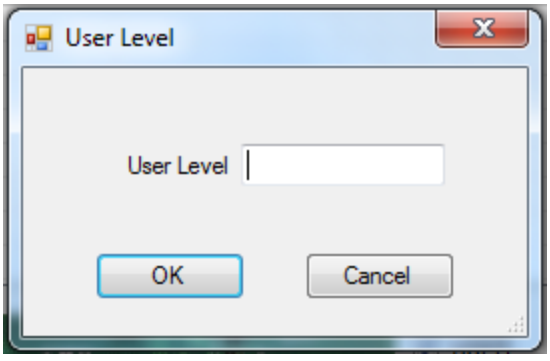
1. **Pin 1 is the bottom left corner as showed below.**



User Level

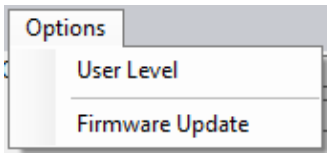
For future use.



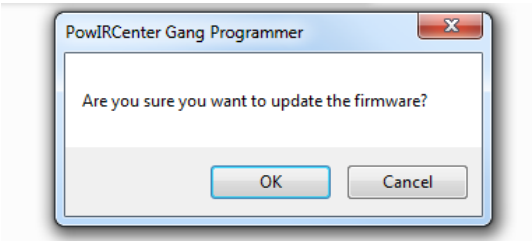


Manually Update Firmware

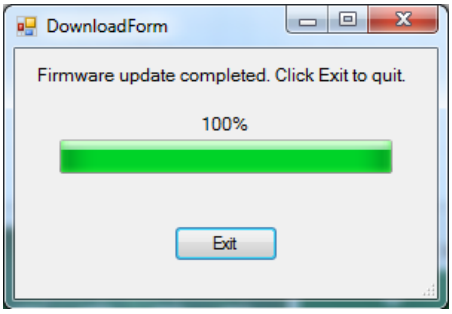
The programmer board firmware will be updated automatically if there are new versions available. However, the firmware can be updated manually. Click Options in the Menu. From the dropdown menu, click Firmware Update.



The message box will pop up. Click OK to update the firmware.



The progress bar will show the status of updating the firmware, click on Exit when it is finished.



Programmer Usage Considerations

Gang Programmer use and care:

The gang programmers that Infineon sells for programming IC's are designed for light production use and do need to be periodically cleaned when programming devices. The socket manufacturer recommends periodic cleaning of the socket contacts with Isopropyl Alcohol and a soft bristle brush to remove debris and residue. To clean the sockets use a soft, but stiff brush and alcohol or other cleaner to remove debris and any residue from the socket pins. As a general maintenance this should be done after every 500 to 1000 parts programmed or when programming problems arise.

Gang Programmer life:

The gang programmers that Infineon sells for programming IC's are specified as having a life of 10,000 mechanical insertions.

Gang Programmer Temperature Range:

The gang programmers sold by Infineon are designed to be used over a temperature range of 20 to 30C.

ESD Considerations:

The Digital IC's are considered static sensitive. Proper handling and grounding techniques must be used while programming IC's. Static ratings for the Digital controllers can be found in the product data sheets.

Revision History

Version	ECN#	Reason for Change	Date	Modified by:	Approved by:
1.0		Initial Release	3/8/2017	Shihchin Lee	

Data and specifications subject to change without notice.

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