

Main GUI window Starting GUI

- › GUI remembers last used settings in a file saved in the computer (typically in the GUI installation directory) and will use that one as default during next time the GUI program is started.
- › If online it will scan for available controllers and read the configuration from them.
- › If no Infineon parts found it will use the last configuration from last time the GUI was closed.

Start the GUI Manual selection

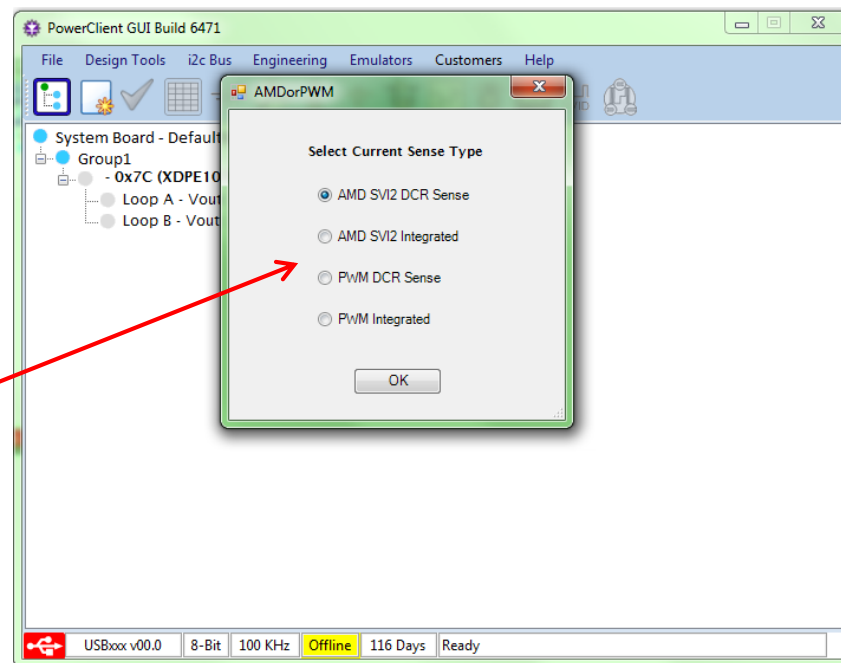


To add a part right click on the **Group1** text and a pulldown opens.
 Select **Add Device**
 Then select **Sierra** (this is the family name of the Controllers)
 And select the partnumber.

Next window opens where **Current Sense Type** is selected.

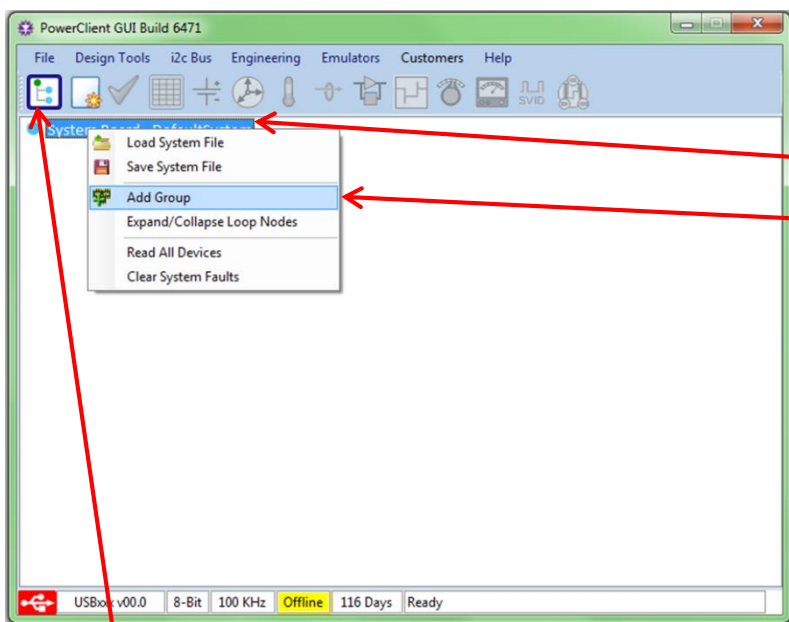
2 modes for setting VID are possible **AMD** or **PWM** signal.
 For each mode either **DCR sense** or powerstage with **Integrated** current sense can be selected.

Once this is done the GUI loads a default configuration file that is a good starting point for making a customized configuration.



Start the GUI

- › When first starting the GUI after installation it will have an empty System Board window.
- › Adding parts can be done manually or automatically if there is a system connected.
- › Manual selection can be used also when not connected to a system via Dongle



Manual selection:
To add a part first right click on the **System Board** text and a pulldown opens.
Select **Add Group**
This will add a **Group1** under the **System Board**

Automatic detection:



Click on the symbol and an automatic scan for Infineon parts connected to the Dongle will occur. It will also ready the configuration setting from the connected parts.

Main GUI window

This is what the main window looks like on startup with a design.

In this example there is one device loaded (XDPE10281A) at 8-Bit address 0xB4.

GUI Title and Build Number.

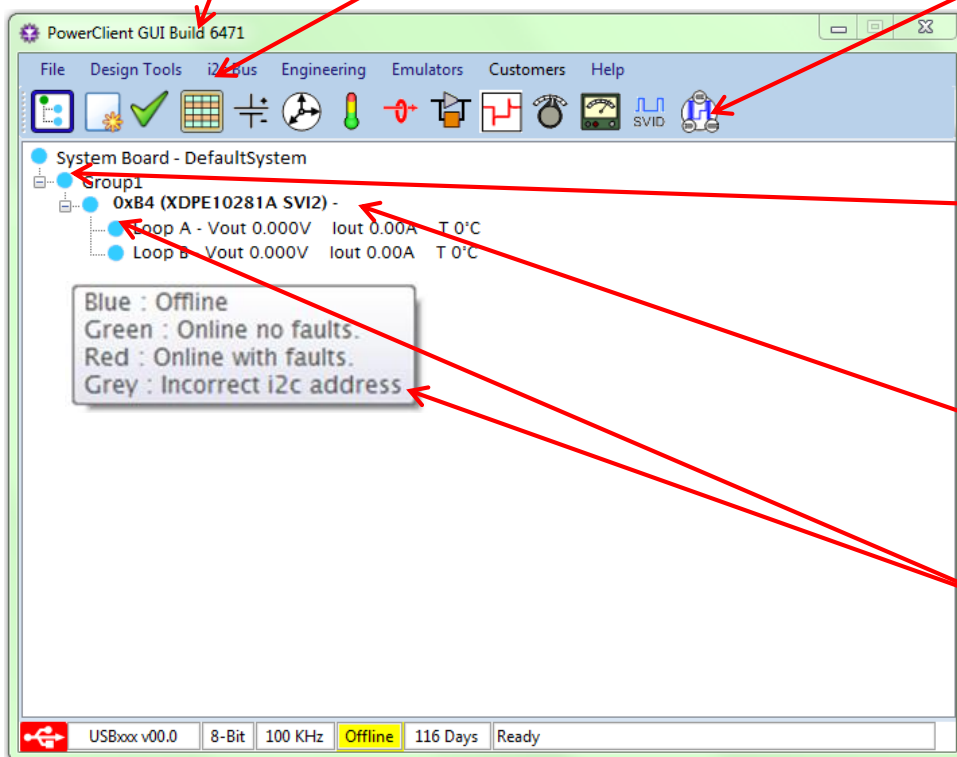
Menu Bar. The menus contain all the functions available to the User. **Design Tools** contains all the tools and utilities required to configure the device.

Tool Bar. The more commonly used Design Tools can be easily accessed with one click on these icons. These include Input Settings, Phase and Frequency, and Telemetry, among others. When a device is not selected the controls will be disabled and gray colored. The user must select a device in the Device Tree by clicking on it to enable the Design Tools.

Device Tree. The root is the „System Board“. At this level, the user can right-click to bring up a context menu, where they can add a Group, Save and Load a Board Design File, or do other board-level functions. The context menu in the next level (Group Level) contains options to Add Devices or delete the Group.

Device Level. Part number and selected operating mode shown (Intel, SVI2 etc,). The right-click context menu allows the user to Load and Save Config Files, Read and Write All Registers, and Delete the device.

1. Status Indicator. Colored round dot.
2. The box only appears when the user hovers over a device in the Device Tree with the cursor. It explains what the various colors mean.



Main GUI window

USB Connectivity. If a dongle is detected, it will display a green icon. If the icon is red, either the dongle is not connected or the driver is not correctly installed.

Dongle Firmware Version. If the dongle is detected and communicating correctly, this will display the Hardware and Firmware version. If the version is **v0**, there may be an issue with the driver.

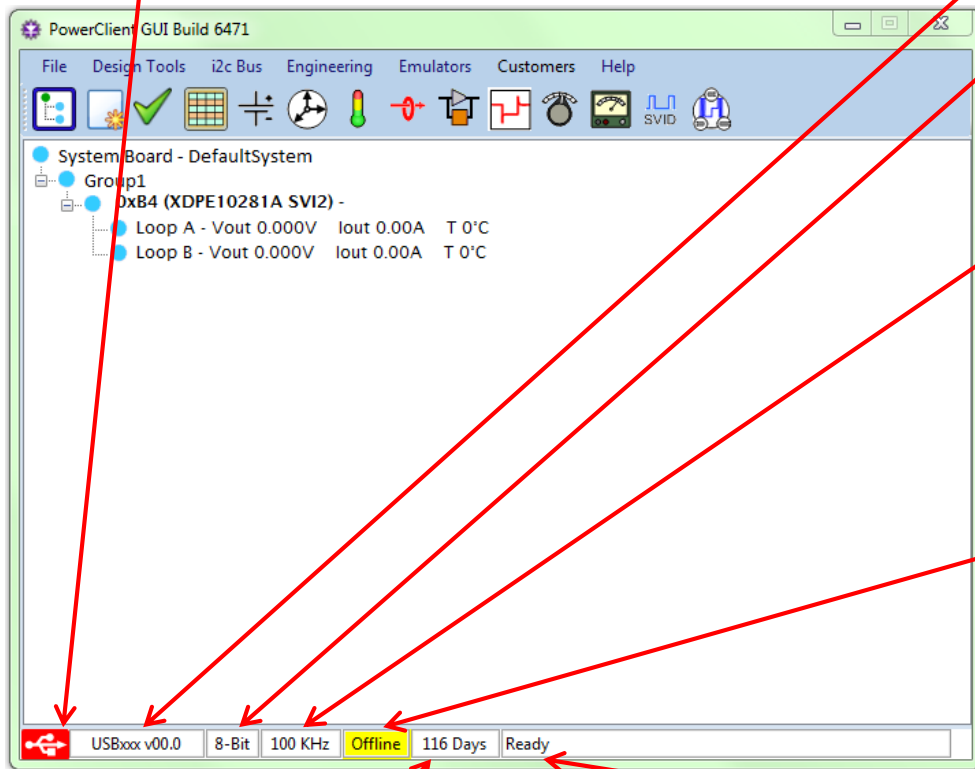
Selectable 7-bit or 8-bit Address Display. The default format is 7-bit Address, but can be changed in the menu **I2C Bus → Use 8-bit I2C Address**.

Bus Communication Speed. The base speed is 100KHz, but this can be changed in the menu **I2C Bus → i2c Address Scanner**. Select the desired bus speed on the right and click **Scan i2c/PMBus Address**. Ensure that the target device(s) show up in the list to verify that the communication is stable at this speed

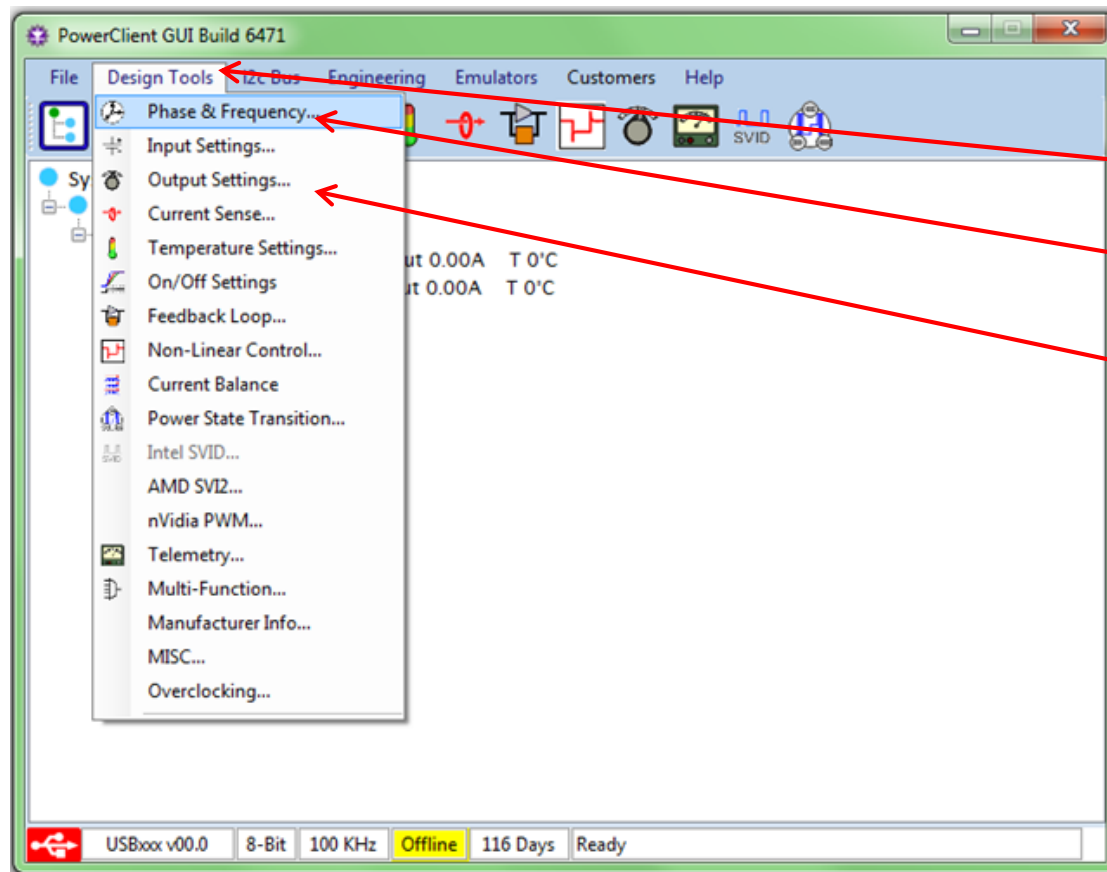
Online/Offline mode. When the GUI is in Online Mode, it will attempt to communicate to the device. If the device cannot be detected, the Write and Refresh buttons will be disabled in the Design Tools. If the GUI is in Offline Mode, it will only write to the internal register map, not to the device, regardless of connection status.

Days Remaining on License. A license lasts 6 months. Contact your Infineon FAE for updated license.

Status Bar. If the GUI is communicating or performing another function, it will display its current status in this bar. If it's not busy with a process, it will display **Ready** with a white background.



Steps to start create a configuration file



Use the **Design Tools** tab to open a pulldown menu.

Then select the **Phase & Frequency...** to open next window

Select each function in turn to step through all the windows to make all settings.

General Errors, warnings and reminders.

- › If there is an error in a setting, i.e. Missing value, there will be a red circle with a white cross in it next to the value.

Fsw: kHz 

- › If something needs attention, i.e temperature conflict, hovering the cursor over the yellow triangle will shown an explanation.

125 °C 

- › The Write button will get a small star in it to get the attention a value is changed but not yet saved. Hitting the write button saves the value and the star goes away.
When in offline mode it saves the data only in the computer. When on online mode it writes the data to the Controller and save it in computer too.

- › If a variable is in gray color, it is for information only and may have been calculated from data in another window or it is not selectable depending on which part number the controller has.

C1 μF Vin Sense Type Vin Fixed V

- › If a parameter name is in blue and bold color it is only used for simulation and calculation in the GUI.
- › It is not saved in a register in the regulator

C1 μF

Often used selection buttons

Shutdown response

Latch ▼

This button is used at many places where different actions can be selected.

In this example how to react to a Shutdown situation

Ignore: fault is ignored

Latch: Shuts down the HS and LS FETs

Hiccup: Shuts down HS and LS FETs and controller will attempt to restart the system in hiccup manner