How-To:

Setting up the environment variables for the development kit GUIs

Note: The development kit GUIs heavy rely on the Quartus® II software version due to specific library requirements.

If you are having any issues launching the GUI for your development kit check following things:

Unlike other Altera® development tools, the GUI for the development kits do not have a relative path relationship to the Quartus II software, in some cases you will need to set the path manually. Below will be instructions that will help guide in checking for the path settings and if needed it will also show you how to set the paths.

1) How to check and set up the environmental variable

To check the Path you can either issue the **set path** command in the DOS command prompt or you can check the **Path** Environment Variable in the Control Panel.

To check the Path in the Control Panel, open the Control Panel => System => Advanced system settings =>

Select the Advanced tab on the top, and then select the Environment Variables

System Properties	×
Computer Name Hardware Advanced System Protection Remote	
Environment Variables	
Edit System Variable	
Variable name: Path	
Variable value: =rShell\v1(0);%QUARTUS_ROOTDIR%\bin	
OK Cancel	
Path C:\Windows\system32:C:\Windows(
PATHEXT .COM; EXE; .BAT; .CMD; .VBS; .VBE; .J:	
PROCESSOR_ARCHITE AMD64	
New Edit Delete	
OK Cancel	

Figure 1-1. Edit System Variable

Verify that you have this **Path** entry: For 32-bit operating systems: **%QUARTUS_ROOTDIR%\bin** For 64-bit operating systems: **%QUARTUS_ROOTDIR%\bin64**

If you do not see this path setting then you will need to manually add it to the end of your existing path by a using semi-colon separator then adding the Path (see Figure 1-1).

In cases that you are <u>NOT</u> an Administrator on your machine, then you will need to add the **Path** into the **User** variables for section (see Figure 1-2).

Sys	tem Properties		×
Co	omputer Name Hardw	are Advanced Remote	
E	nvironment Variable	5	×
	<u>U</u> ser variables for		
	Variable	Value 🔺	
	Path	C:¥Program Files (x86)¥CVSNT¥;d:¥alte.	
	Edit User Variable	×	
	Variable name:	Path	
	Variable value:	n32aloem; %QUARTUS_ROOTDIR %¥bin64;	
		OK Cancel	
-	variable	value	
	AexRS	C: ¥Program Files ¥Altiris ¥Recovery Solut	
	DEFLOGDIR	C:#Windows#system32#cmd.exe	
	FP_NO_HOST_C	NO I	
	1		
		Ne <u>w</u> Edjt Dejete	
1			_ Ľ
		OK Cancel	ΙĽ
			┙┝

Figure 1-2. Edit User Variable

2) Verify the **QUARTUS_ROOTDIR** variable matches the Quartus II version that the development kit GUI is requesting.

Environment Variable	25	×					
⊂User variables for		_					
Variable	Value						
TEMP	%USERPROFILE%\AppData\Local\Temp						
TMP	%USERPROFILE%\AppData\Local\Temp						
	New Edit Delete						
Variable	Value						
PROCESSOR REVI	PROCESSOR REVISION 1a05						
PSModulePath	C:\Windows\system32\WindowsPow						
QUARTUS_ROOTD	IR c:\altera\91sp2\quartus						
1							
	Nem Fait Delete						
	OK Cancel						
		_					

Figure 2-1. Environment Variables

If you are not an administrator, then you will have same entry under the User variables for area.

If the version does not match the Quartus II software version requested by the development kit GUI then you will need to edit the **QUARTUS_ROOTDIR** variable with path to the requested Quartus II software version.

3) Verify the **jtagconfig** version

C:\>jtagco	nfi	gve	ersio	n					
jtagconfig Version 12	.1	Build	177	11/	07/2	012	SJ	Full	Version
Copyright	(C)	1991-	-2012	? Al	tera	Con	rpor	ration	1

Figure 2-2. Command Prompt

To verify the current activated Quartus II software version issue the **jtagconfig** command in the command prompt.

This command will be launched from the **%QUARTUS_ROOTDIR%/bin** directory. This also will verify that you have setup the Path variable correctly.

Additional Options:

1) Automatically set the Path using the **qreg.exe** tool.

From a DOS command prompt navigate to your Quartus II software install folder which matches the Quartus II software version your GUI is requesting:

32-bit version: <install folder>\altera\bin 64-bit version: <install folder>\altera\bin64

Execute this command: qreg.exe --force --jtag -setqdir

2) Launch the development kit from a Nios® II Command Shell

Open the Nios II command shell in the version of the Quartus II software that the GUI is requesting. Navigate to where you installed the development kit GUI. You should be able to see bts.jar, pt.jar, or clk_cont.jar files. These will be java bit files that you can execute from the command shell.

Depending on the GUI you would like launch select from the commands below:

- To start the (Board Test System) BTS GUI: java -jar bts.jar
- To start the CLK GUI : java -jar clk_cont.jar
- To start the Power GUI: java -jar pt.jar

Revision	Changes Made	Date
V1.0	Initial release.	March 2013

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