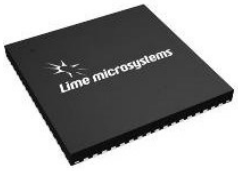

control_LMS6002 Software

- Compilation guide -

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Contents

Introduction

The scope of this document is compilation of the control_LMS6002 using CodeBlocks IDE under MS Windows OS and Linux OS. While wxWidgets library is used for user interface, wxWidgets library set-up and compilation is discussed first. Then detailed procedure of control_LMS6002 compilation is provided.

wxWidgets 2.9.5 library is used in this description (wxWidgets-2.9.5.zip).

CodeBlocks 12.11 bundle version with MinGW is used in this description (codeblocks-12.11mingw-setup.exe).

1

Installation and compilation of WxWidgets library

Installation and compilation of WxWidgets library is covered in this chapter.

1.1 wxWidgets installation

Step by step instruction how to install, prepare and compile wxWidgets library is provided bellow:

1. Install CodeBlocks to c:\CodeBlocks\
2. Install wxWidgets 2.9.5 library to the c:\libraries\wxWidgets-2.9.5\
3. Replace c:\libraries\wxWidgets-2.9.5\build\msw\config.gcc by config.gcc provided (make a copy of original one before), or make following changes in this file:
    a. BUILD ?= release
    b. DEBUG_FLAG ?= 0
    c. RUNTIME_LIBS ?= static
4. Run command prompt as Administrator and execute this command: c:\CodeBlocks\MinGW\mingwvars.bat (this will setup required variables for current command prompt session).
5. Execute this command in command prompt: cd c:\libraries\wxWidgets-2.9.5\build\msw\
6. Execute this command in command prompt: mingw32-make SHELL=CMD.exe -f makefile.gcc (it is possible to speed-up the build process by engaging more CPU cores if available using -j option. This will use 2 CPU cores for instance: mingw32-make SHELL=CMD.exe -j2 -f makefile.gcc).
7. Compilation process will start right now. It will take some time to compile the library wait until this process is complete, please.

We may test compilation result of wxWidget. Simple test of wxWidget compilation:

1. Execute this command in command prompt: cd c:\libraries\wxWidgets-2.9.5\samples\minimal
2. Execute this command in command prompt: mingw32-make SHELL=CMD.exe -f makefile.gcc
3. Execute this command in command prompt: c:\libraries\wxWidgets-2.9.5\samples\minimal\gcc_mswu\minimal.exe
4. GUI should appear.

After these steps we may go for control_LMS6002 compilation.

2

control_LMS6002 compilation

Compilation instructions of control_LMS6002 software is discussed in this chapter.

2.1 Control_LMS6002 compilation description

It is necessary to adjust Search directories in CodeBlocks project of the control_LMS6002 software to match setup of your machine before compilation. To do this open control_LMS6002 project file (control_LMS6002.cbp) in CodeBlocks. Press right mouse button on control_LMS6002 in Projects tab of Management window and choose Build Options... in pop-up menu as shown in Figure 1.

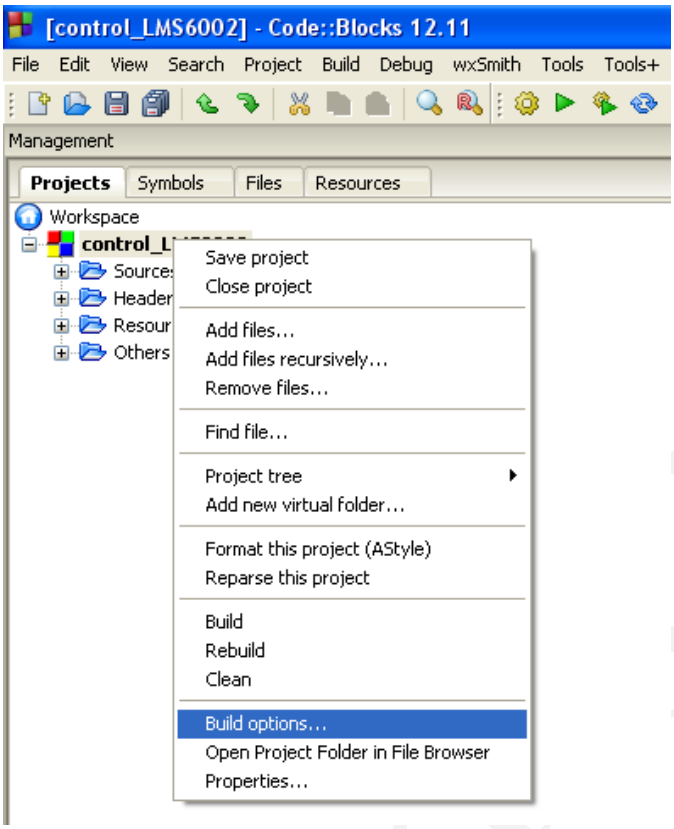

Figure 1 Pop-up menu of control_LMS6002 project

Project build options window will appear after this command. Select Search directories tab. Select control_LMS6002 in left part of the window and update compiler paths highlighted by red box according to your installation setup as shown in Figure 2.

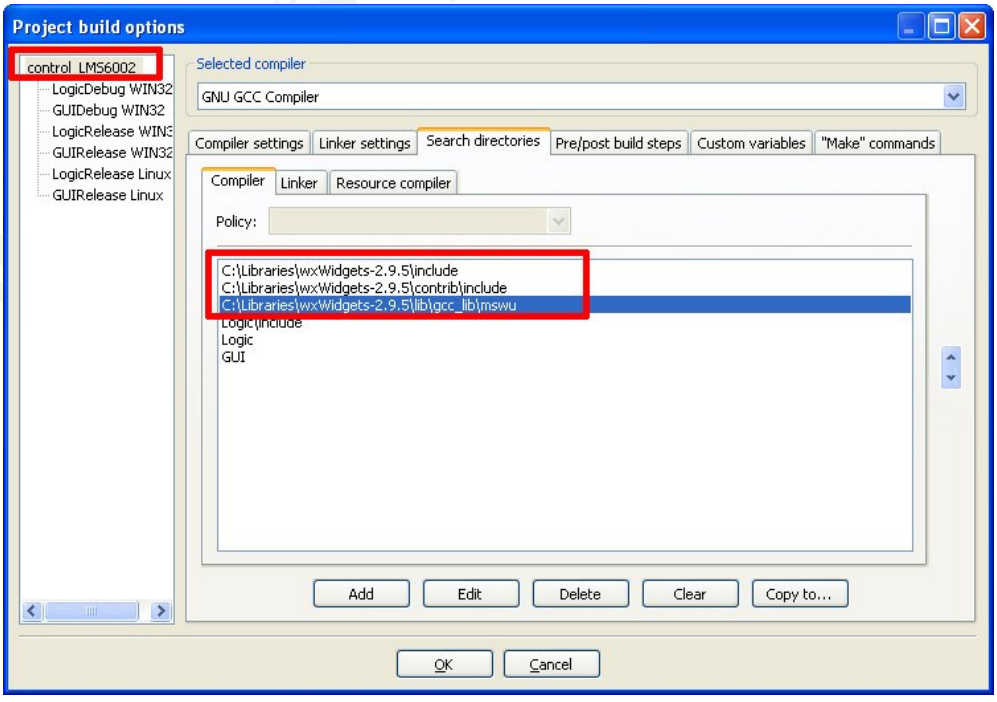

Figure 2 Compiler search directories

Select Linker tab and update Linker path highlighted by red box according to your installation setup as shown in Figure 3.

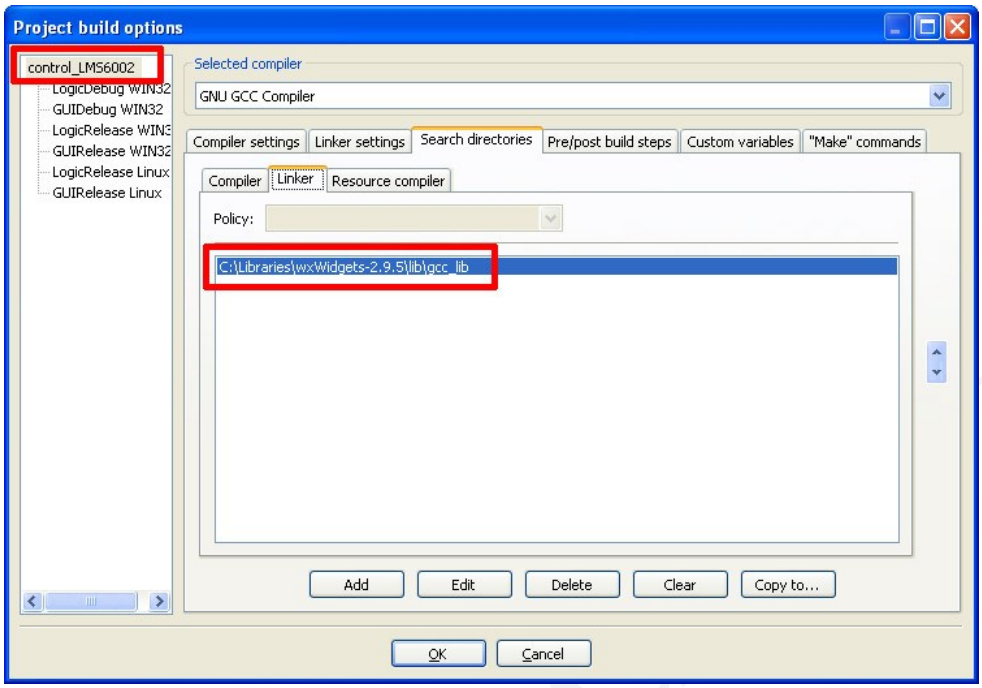

Figure 3 Linker search directories

Select Linker tab and update Resource compiler paths highlighted by red box according to your installation setup as shown in Figure 4.

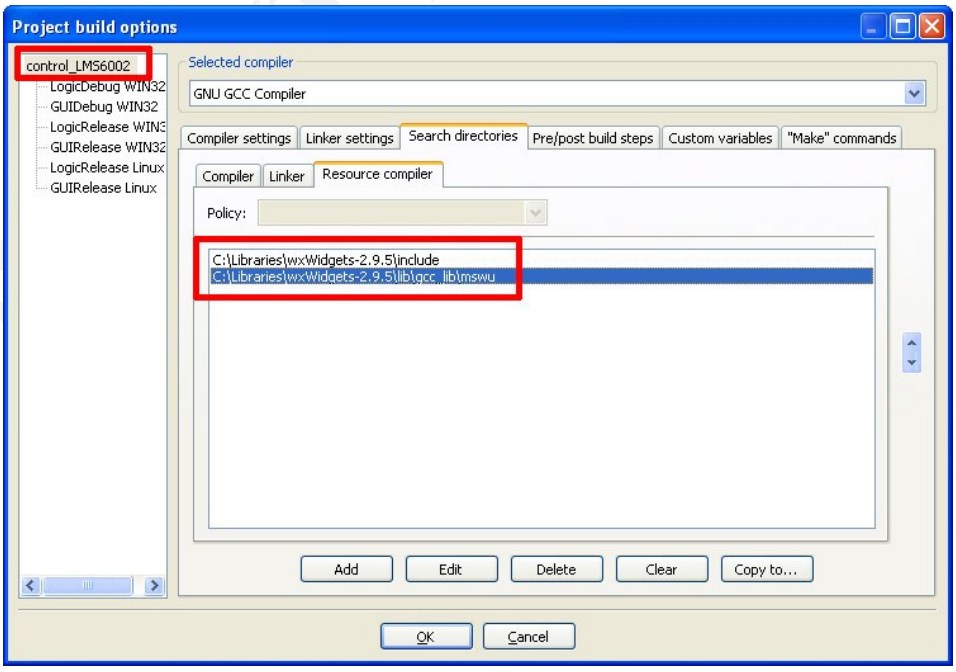

Figure 4 Resource compiler search directories

Press OK button to apply changes and to close Project build options window.

Now it is possible to compile the software. There are virtual build targets prepared for release (Release Win32), debug (Debug Win32) and release(Release Linux) versions. Select desired build target and in CodeBlocks tool bar and push Build and run button (or F9, or menu command Build –> Build and run) to compile the software. After software is built successfully Select target window appears as shown in Figure 5.

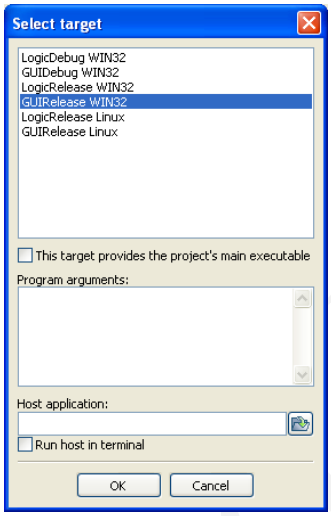

Figure 5 Select target window

Select GUIRelease WIN32 or GUIDebug WIN32 or GUIRelease Linux in Select target window (see Figure 5) and press OK.

Now software will be executed.