# Microprocessor Architectures [ELEC-H-473] Troubleshooting MPLAB dsPIC build errors

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# Purpose

You will soon start you master thesis and your first job. There will not be someone to help you solve problems you can solve by yourself.

This document explains:

- Error solving methodology
- Tool suite location error

## 1 Error solving methodology

This sections explains the general methodology to troubleshoot errors/bugs.

The general methodology is:

- 1. Read the error message<sup>1</sup>
- 2. Understand the error message
- 3. Determine which part of the toolchain is involved
- 4. Imagine possible solutions
- 5. Fix your error

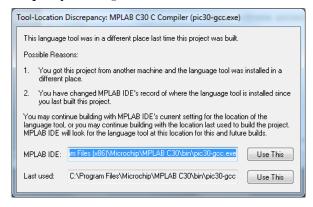
#### 2 Tool suite location

Projects where written on a 32bit OS and the OS you are using to edit it now is 64bit, resulting in changes in the C:/Program Files directory structure.

#### 2.1 Error message

Couldn't locate build tool. Check tool locations."

or "Tool-Location Discrepancy" message box:



#### 2.2 Meaning

You want me to use picC30-gcc.exe, but I can't find the executable file.

 $<sup>^1{\</sup>rm The}$  assistant will  ${\bf NOT}$  help you if you don't do that!

#### 2.3 Part of the tool chain

This is a project management/makefile problem.

#### 2.4 Possible solutions

- Move/install the compile chain in the expected directory (bad idea).
- Tell your project manager where the executable file is (good idea).

### 2.5 Fix the problem

- 1. Go to Project/Set Language Tool Locations
- 2. Then to Microchip C30 Toolsuite/Executables/MPLab C30 C Compiler
- 3. Browse to the correct location (C:\Program Files (x86)\Microchip\MPLAB C30\bin\pic30-gcc.exe see picture below).
- 4. Recompile your project.

