

# Microprocessor Architectures [ELEC-H-473]

## Troubleshooting MPLAB dsPIC build errors

2016–2017

### Purpose

You will soon start your 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 section 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

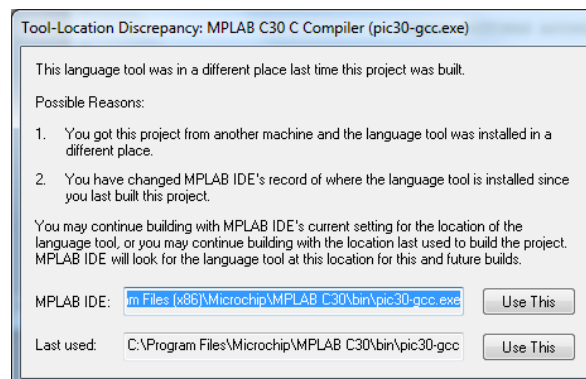
## 2 Tool suite location

Projects were 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 `pic30-gcc.exe`, but I can't find the executable file.

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<sup>1</sup>The assistant will **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.

