

Absence of new line at end of source code can cause problems

I'm just reading the July 2017 issue of SILICON CHIP. I must say that I always enjoy reading the Serviceman's Log; it is gratifying to know that there other are people out there besides myself who are willing to spend a disproportionate (and possibly uneconomic) amount of time and effort in trying to repair some items.

My wife often comments about my repairs. I just replaced two worn bearings in a ceiling exhaust fan. The bearings were nearly as expensive as a brand new fan!

Regarding the Ask SILICON CHIP section, on pages 99 and 100 there is a letter titled "Quirks encountered with Micromite tutorial", regarding a "DO WITHOUT LOOP" error from the Micromite.

I have written quite a lot of code using a range of programming languages, but not any embedded systems or microcontrollers. One thing that I have noticed is that the last line of some source code may or may not compile or interpret correctly depending on the presence or absence of a <CR><LF> pair at the end of the last line in the file.

By this, I mean that if the source code's last line was:

LOOP<CR><LF>

or simply

LOOP

Usually, if there is a CR/LF pair at the end of the file, when you open it in a text editor, you can place the cursor on the line below the last line. Whereas if the CR/LF is absent, normally the cursor will refuse to move past the end of the last line.

I have been bitten by this a number of times. It may result in some sort of syntax error but the reason for it is not obvious. The problem can be caused by the host operating system (Windows, Linux, OS X), the editor

used and whatever digests the source code.

Similarly, the process of copying source code (text files) from one operating system to another can cause problems because Windows/DOS uses <CR><LF> at the end of a line of text whereas Linux and OS X only use <LF>. There are ways around this problem.

I do not know if this the problem but it would be interesting to test whether or not a terminating <CR><LF> was present or absent.

Walter Hill,

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Editor's response: we did consider this at the time of writing the response; we made the sure file was terminated with a CR/LF before uploading it to the Micromite initially. But the error was still produced, so this does not seem to be the cause. However, as you suggest, it is a logical reason why this type of error might occur and it's possible we made a mistake in our testing.