

Re: Source code for CAN Implementations

Source: <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2007-07/msg00484.html>

- *From:* "dathome" <dave@xxxxxxx>
 - *Date:* Wed, 18 Jul 2007 12:00:18 GMT
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"Urs Beeli" <usenet@xx> wrote in message <news:slrnf9rv41.jre.usenet@xx>

On Mon, 16 Jul 2007 20:45:57 GMT dathome wrote:

"raj" <maddukuri.rajesh@xxxxxxx> wrote in message <news:1184104563.300014.48500@xx>

Dear All

I Kindly request the Source code links for CAN Implementation as I am very curious about insights.

Unfortunately I am not aware of any CAN implementation that are open source or in the public domain.

In my former job we have been using CAN on both an infineon C167/C164 and on a PPC5200. On the former we wrote our own CAN and CANopen library, on the latter we bought the Vector CAN/CANopen stack and had them adapt their CAN driver for our hardware.

Hi Raj,

This depends on how much detail you need! I've written my own small drivers for C164 and have also used drivers from Vector. The Vector ones are pretty daunting to get started with and it's unlikely you'll be able to get hold of them anyway unless you know someone ;-).

I doubt you would get them without dishing out some serious money!

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However, despite being daunting, they are a fine piece of software, I was very much impressed with them (both their performance and their source code). Also, their people are competent and helpful.

I've got to disagree somewhat with the comments regarding how good the Vector drivers were with particular reference to the coding standards used. They were littered with continue and break statements as well as having bunches of code that was compiled dependant on #defines. Not at all MISRA-C compliant despite being for vehicle platforms! Additionally the footprint was way bigger than necessary occupying about 8-9k on a 16bit micro. They obviously have very good sales teams to have got all the major car manufacturers to use it.

When I asked them about MISRA compliance and SIL2 in particular they had no good answer and technically if you are using a non SIL2 compliant drivers in your application then you can't claim your system to be SIL2 even if all your code has been developed in this way. Bit of a problem when the customer stipulates both SIL2 and to use the Vector drivers!

To be fair though the support was good including on one occasion that I visited them at short notice in their offices and sat with a developer to fix a problem I had, well worth the ~£1000 round trip cost as it was critical to the project. The execution time of the various tasks also seemed pretty good as well which suggests that a large amount of the code was never actually used.