

Microcontrollers

ApNote

AP2923

☒ : Additional file
AP292301.EXE available

SAE 81C90/91 - CAN Bit Timing Calculation: CP_81C90.EXE

This document describes how to install and to use the "CP_81C90.EXE" tool. "CP_81C90.EXE" facilitates the CAN Bit Timing Calculation for the SAE 81C90\91 by automatically proposing register configurations to reach a given bus baudrate.

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AP2923 ApNote - Revision History		
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1 How to install „CP_81C90“

1.1 Requirements

The software MS-Windows™ 3.1 and MS-Dos™ 6.22¹⁾ are required.

1.2 Installing Procedure

- 1) Download the file "AP292301.EXE" in a directory of your choice, e.g. „c:\xyz“:
- 2) In a MS-Dos session, run "AP292301.EXE". This will start the self-extraction of the files which are required to install "CP_81C90.EXE".
- 3) Once the self-extraction process is finished, return to Win3.1 and run "c:\xyz\setup.exe" from the menu of the program manager. This setup will ask in which directory to install "CP_81C90.EXE". If this directory does not exist it will be created. The following files, if they don't already exist, will be copied to the "c:\windows\system" directory: threed.vbx, ver.dll, cmdialog.vbx, grid.vbx, vbrun300.dll, mscomm.vbx, setupkit.dll.
- 4) Once the installation is finished, a new program group appears in the program manager with the "CP_81C90.EXE" icon.

2 How to use "CP_81C90.EXE"

- 1) Run "CP_81C90.EXE"
- 2) Fill in the "Cpu Freq." field with the SAE 81C90/91 input clock frequency (Xtal2). Press the [Return] key.
- 3) Fill in the "Baudrate" field with the CAN bus desired baudrate. Press the [Return] key.
- 4) Fill in the "Sample Point" field with the bit sample position in %. Press the [Return] key.
- 5) Fill in the "Tolerance" field with the baudrate tolerance (in %) that can be accepted on the bus. Press the [Return] key. This tolerance is particularly useful to specify unusual baudrate. A tolerance of 0% means that the real baudrate must be equal to the given baudrate.
- 6) The "Calculate" button is now selected. Simply press the [Return] key. The possible configurations of the bit timing registers, as well as the real baudrate, will appear in the list window.
- 7) By Double Clicking on a proposal, a message window will appear showing the bit segment composition (Tseg1, Tseg2 and SJW).

1 MS-Windows™ and MS-Dos™ are trademark of Microsoft Corporation.