FINTEK

CAN FD Series

Windows Tools Guide

V1.04

July 12, 2024

Contents

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1. Introduction

1.1 Overview

Currently the tools package contains CAN FD GUI tool (FCANBUSFD.exe) and command line burnin tool (FitCANBusFdBurnIn.exe).

1.2 FitCANBusFdBurnIn.exe Command Syntax

FitCANBusFdBurnIn offers a set of command-line tools for Windows. Open windows command prompt and type the FitCANBusFdBurnIn to run and type any key then press ENTER to exit. This tool provides some parameters, command syntax is as below:

FitCANBusFdBurnIn.exe <ComPortNumber> <CAN_nominal_baudRate> <CAN_data_baudRate> <CANID> <CANID_Bits> <CANFD_nominal_initial[HEX]> <CANFD_data_initial[HEX]> <CANFD_Initial[HEX]> <TxDelay> <TxDiffIdNums> <CAN_option> <TxRxMode> <FilterPatten0> <FilterMask0> ... <FilterPatten15> <FilterMask15>

Parameters:

<ComPortNumber>	Indicate the CAN controller, depends on com port occupied from Fintek driver.
<CAN_nominal_baudRate>	Unit is k, 250 means 250k bps.
<CAN_data_baudRate>	Support nominal baudrate: [10|20|50|100|125|250|500|800|1000]
	Support data(BRS) baudrate: [1000|2000|4000|5000]
<CANID>	CANID with hex format.
<CANID_Bits>	11 or 29 to indicate 11bit or 29bit
<CANFD_nominal_initial>	CANFD_nominal_initial with hex format.
	[13:0]: nominal brp; [15:14]: nominal sjw; [31:16]: nominal sample point;
	The sample point is configured as a percentage value multiplied by 100. For
	example, 7500 (0x1D4C) represents a sample point of 75% and 8750
	(0x222E) represents a sample point of 87.5%.
<CANFD_data_initial>	CANFD_data_initial with hex format.
	[13:0]: data brp; [15:14]: data sjw; [31:16]: data sample point;

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<CANFD_initial>	CANFD_initial with hex format.
	[0]: CAN fd enable; [1]: CAN fd BRS enable; [2]: CAN fd ISO enable;
	[3]: CAN fd SSP; [7:4]: data length; [11:8]: BRP divisor, set to 1;
	[22:16]: SSP offset, set to 4;
<TxDelay>	Indicate the interval after write messages.
	CAN2.0 Minimum: 1M: 140us / 800K: 165us / 500K: 265us / 250K: 530us
	/ 125K: 1100us / 100K: 1350us / 50K: 2650us / 20K: 6550us / 10K: 13100us
	CAN FD Minimum: 500us
<TxDiffIdNums>	Indicate the message numbers to send out. Maximum: 65536
<CAN_option>	Default: 1200;
	[17]: tx/rx message log disable;
	[19]: tx wait mode, for CAN1 to CAN2 loopback test
<TxRxMode>	0: TX+RX mode 1: RX mode, 2: TX mode, others: not support
<FilterPatten>	Filter CANID pattern with hex format.
<FilterMask>	Filter mask with hex format

1.3 FitCANBusFdBurnIn.exe Command Example

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Figure 1. CANFD Port show in Device Manager

EX1:

FitCANBusFdBurnIn.exe COM14 1000 5000 18EA5678 29 1D4CC009 1D4CC000 000401FF 500 10 1200 0 0 0

　　　Means CAN FD baud rate 1000/5000kbps(nominal/data), start CANID 18EA5678, 29bit protocol, wait 500us after write one messages, one cycle write 10 messages, 1200 is dummy parameter. CANFD nominal initial value is 75% sample point, SJW 3, BRP 9, BRP divisor 1, data length 8 and CAN fd/BRS/ISO enabled.

EX2:

FitCANBusFdBurnIn.exe com14 1000 5000 12345678 29 1D4CC009 1D4CC000 000401FF 1000 10 20000 0 0 0

　　　CAN_option gives 20000, means to do cycle test without tx/rx message log.

EX3:

FitCANBusFdBurnIn.exe COM3 250 5000 123 11 222EC009 222EC000 000401FF 3000 10 1200 0 0 0

　　　Means CAN FD baud rate 250/5000kbps(nominal/data), start CANID 123, 11bit protocol, wait 3000us after write one messages, one cycle write 10 messages, receive only mode,1200 is dummy parameter. CANFD nominal initial value is 87.5% sample point, SJW 3, BRP 9, BRP divisor 1, data length 64 and CAN fd/BRS/ISO enabled.

EX4:

FitCANBusFdBurnIn.exe COM14 1000 5000 18EA5678 29 1D4CC009 1D4CC000 000401F0 500 10 1200 0 0 0

　　　Means CAN 2.0 baud rate 1000kbps, start CANID 18EA5678, 29bit protocol, wait 500us after write one messages, one cycle write 10 messages, 1200 is dummy parameter. CAN2.0 is 75% sample point, SJW 3, BRP 9, BRP divisor 1, data length 8.

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