Introduction

1. This is the MATLAB (The MathWorks, Inc.) driver for Memory HiCORDERs 8826, 8835, 8835-01, 8841, 8842 and 8847.
2. The recorded data in binary format can be loaded to MATLAB. However, please note that the applicable data should be recorded in the MEMORY HiCORDER's MEMORY function only.

Operating Environment

Microsoft Windows XP(32bit) + MATLAB R2006b
(The details are according to the operating environment of MATLAB.)

Installation

1. Extract the ZIP file "MEM_Driver.zip" so that the following files are available.
    @HiMemory (HiMemory.m, HiMemory.mexw32)
    MATLAB driver manual.pdf
2. Copy the directory "@HiMemory" to the "work" directory created in the MATLAB installed directory.
"work" directly is installed to "C:¥Program Files¥MATLAB¥R2006b¥work" in standard installation.

Function Specifications

Use as shown below on MATLAB.
    [cAnalogUsage cLogicUsage dTime dAnalog dLogic] = HiMemory(filename)
The following explains each argument.
  -1. Input argument
        @filename
            Specify the file name.
            [Example] data.mem

  -2. Output argument
        @cAnalogUsage (char array)
            Display the storage condition of analog channels.
                1: Stored
                0: Not stored
            CH1 data starts from left in the returned value, and the latter channels follow to the right.
                [Example] 1100000000000000
                    CH1 = Stored
                    CH2 = Stored
                    CH3 and after = Not stored
        @cLogicUsage (char array)
            Display the storage condition of logic channels.
                1: Stored
                0: Not stored
            CHA data starts from left in the returned value, and the latter channels follow to the right.
                [Example] 1100

CHA (CHA-1 to CHA-4) = Stored

CHB (CHB-1 to CHB-4) = Stored

CHC (CHC-1 to CHC-4) and CHD (CHD-1 to CHD-4) = Not stored

@dTime (double array)

Display the time axis data.

@dAnalog (double array)

The storage analog channel data is stored in arrangement.

The storage data found by "@cAnalogUsage" is stored in order.

The channels having no storage data are compressed.

When loading the data of CH1, specify as "dAnalog(:,1)".

@dLogic (unit8 array)

The storage logic channel data is stored in arrangement.

The storage data found by "@cLogicUsage" is stored in order.

One logic channel is composed of 4 data. Therefore, there is 4 times more data found as "1" by "@cLogicUsage".

The channels having no storage data are compressed.

When loading the data of CHA-1, specify as "dLogic(:,1)".

Notes

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