

Description for hipecs file system demo project

The hipecs filesystem demo project is a Example for all functions available for the internal filesystem of the hipecs PLC and Core modules of frenzel + berg electronic.

Introduction

For this demo application you need at least a hipecs core module or a hipecs PLC. It is possible to use a external SD card for evaluation.

Preparation

No special preparation necessary.

hipecs setup

When using a frenzel + berg Visu-P Panel, you have to use the COM3 (RS422) interface for the SGI connection to the panel. Baudrate is 460.000 Baud. Check Visu-Panel DIP switches, too.

The "app_hipecsplc_filesystem_v1r1_en.prj" file is the CoDeSys PLC program for this example. The communication parameters are COM15 and 57600 Baud. **This must be changed to your demands!**

Starting and using the demo project

It is recommended to use the target visualisation to operate the demo application. In the "Filesystem_VISU" visualization, there are several grey buttons. these buttons trigger the corresponding function once. The blue fields are meant to enter strings for changing filename or enter filecontent. Before opening a file, you have to choose whether the shall be opened for writing, reading or appending. This is done by clicking the corresponding button right of "open File". A green frame indicates the selection when using target visualisation.

The different CoDeSys POUs and functions

PLC_PRG

The only action for the PLC_PRG is to call the filesystem_Test POU.

filesystem_Test

In this POU, all functions of the FBESysFile.lib are used. By clicking a grey button in the visu, the corresponding value is assigned to the File_step variable. By the IF selection the corresponding function is called and the step is set to 0 again. Every function is only called once. All IF selections are commented.

Visu

Filesystem Test

Make sure, SD card is inserted!

| | | | |
|---------------------|----------------|------------|-----------|
| Set active Dir | C:\test | | |
| open File | read write app | test.txt | Handle: 0 |
| File Size: 0 | | Close File | |
| Write: | | Write File | |
| Read File | | | |
| | -> copy -> | | |
| Delete File | | | |
| Get File Size No ID | | 0 | |
| Get Pos | 0 | | |
| Set Pos | 0 | | |

| Button | Function |
|---------------------|--|
| Set active Dir | Changes the directory, the functions refer to. In the blue box, the directory can be changed. |
| open File | Opens file for either write, read or append. Filename can be entered in blue box on the right. Filehandle is returned. |
| Filesize | returns Filesize of opened file. |
| Wite File | Writes the characters of the blue filed on the left to the opened fille |
| Read File | Reads an opened file |
| -> copy -> | copies file from the left side to the file on the right side |
| Delete File | Deletes the file in the blue box on the right. |
| Get file size No ID | Returns the size of a file without opening it. |
| Get Pos | Returns the position of the write pointer. |
| Set Pos | Sets the position of the write pointer. |