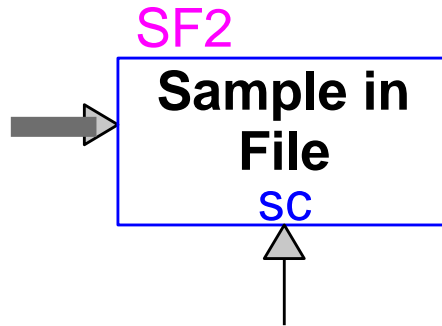


Sample in File



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1 Introduction

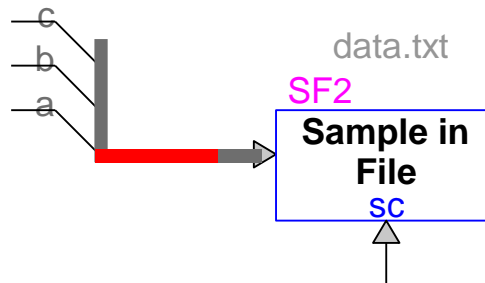
This device functions only in time-domain simulations, it is automatically excluded from all other simulation options.

This device saves into a designated text file (*Text-File*) the instantaneous (time-domain) values of the pin signals contained in the input bundle when the value of the sample pin “sc” signal is greater or equal to one. The values are written in the file ASCII format using double-precision real numbers.

2 Parameters

- **Input signals:** List of all signal names to be saved into *Text-File*. Pins with these names are automatically added to the input bundle (see Figure 1) and become the signal names appearing on the first line in the *Text-File* (see Figure 2).

Input signals	
	Bundle Signal names
1	a
2	b
3	c
4	
5	
6	
7	
8	
9	
10	



- Select signals from Bundle

Figure 1: Selection of pin names appearing in input bundle

a	b	c
7.071067811865E+00	-3.535533905933E+00	-3.535533905933E+00
5.154586597219E+00	1.614684487451E+00	-6.769271084670E+00
4.439960215340E-01	5.889642575004E+00	-6.333638596538E+00
-4.507268256423E+00	6.972044840356E+00	-2.464776583933E+00

Figure 2: Value columns in ASCII format in *Text-File*

- ❑ **Select signals from Bundle:** When this option is checked, the existing bundle pin names are automatically detected and use directly in the *Text-File*. This option is useful for automatically connecting and retrieving waveform data from existing bundles with output pins.
Warning: Bundle pins can be added using different methods in EMTPWorks. When adding Bundle pins using the right-click bundle-pin menu “Bundle Pin Info”, the user must pay attention to the message appearing when clicking on the Done button after performing modifications since the change may be applicable to all “Sample in File” devices. To avoid problems, the user should make the selected device unique (see “Make Unique Type” in “Options” ribbon under “Part Type”) before performing changes in its bundle.
- ❑ **Select File Name:** This button allows to select the *Text-File* name.
- ❑ **Save File Name using relative path:** This option allows EMTP to use the relative path for the selected data file. This option works only for files located in the same folder or in a folder below the design file. Using relative path simplifies the maintenance of designs with external data files. It also simplifies the task of using this design on other computers. When a folder below the design file is used, it must be copied or moved with the design file.
- ❑ **Run Number:** Optional number added at the end of the *Text-File* name. Example: *data.txt* will become *data1.txt* when the run number is 1. Can be left blank.
- ❑ **Auto increment:** When this option is checked, the run number will be automatically incremented at each run. This option is useful for performing parametric studies.
- ❑ **Append waveform data from each run:** When this option is checked, the selected signal waveforms are concatenated into the existing file for each simulation. A new file is created otherwise.

3 Pins

This device has one bundle pin which contains the input pins of the recorded control type signals. The “sc” control input pin is for enabling data acquisition when the signal connected to the pin is greater or equal to 1.