pulse_train Documentation

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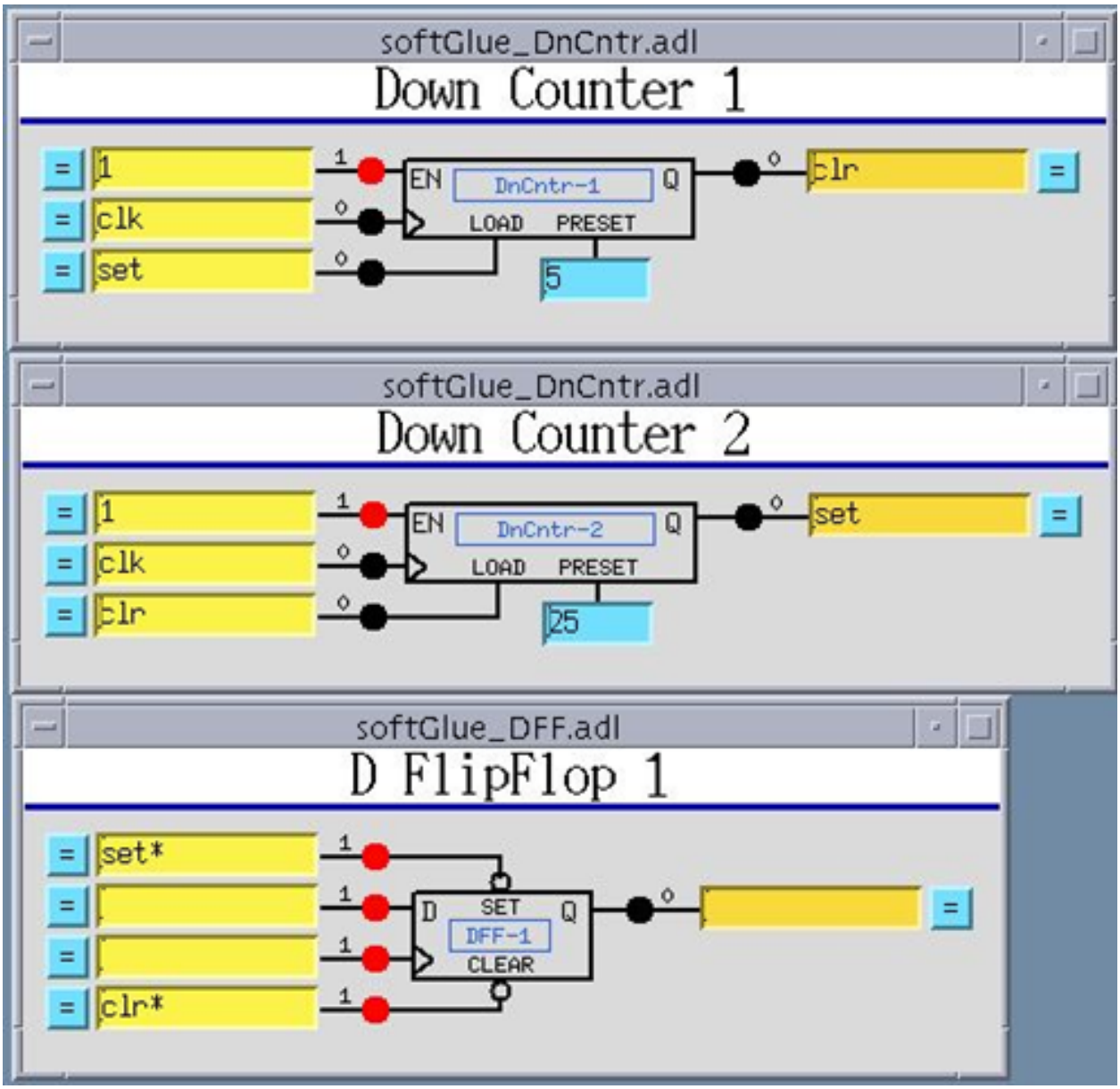

Figure 1: the figure caption says “Three MEDM screens”

This table is actually a Figure!	
Dff Q output:	

- Time resolution set by clock frequency (clk).
- Down Counter 1 PRESET programs On Time.
- Down Counter 2 PRESET programs Off Time.

Contents:

CHAPTER

ONE

COACHING ON THE USE OF RESTRUCTUREDTEXT

Note: Web documentation available at: https://subversion.xor.aps.anl.gov/bcdaext/pulse_train_doc/build/html/index.html

This is a just an example of writing the documentation using sphinx. [1] It is easy to edit the documentation since it is text. You can find the built html documentation in `build/html/index.html`. To build the documentation, you need to be in the `sphinxdoc` (or whatever you name it) directory, then type:

```
make html
```

It may be useful, sometimes, to completely rebuild the documentation. To do that, type:

```
make clean
make html
```

You can get PDF documentation, as well. To do that, type:

```
make latexpdf
```

and then pick that up in `build/latex/pulse_train.pdf`. [2]

1.1 SVN export this example documentation

You can pull this example from its subversion repo and add it to your project by going to the desired directory (perhaps the TOP directory for your support) and exporting from this subversion repository:

```
svn export https://subversion.xor.aps.anl.gov/bcdaext/pulse_train_doc sphinxdoc
```

1.2 Example 1

Here is some more text.

> This text is an inset.

[1] Sphinx uses Python. You may want to build this on an APS SunOS or linux computer. If so, you'll need to make sure that the `/APSshare/epd/{architecture_choice}/bin` directory is on your executable path.

[2] You can change a lot of options in the `source/conf.py` file.

1.3 Example 2

Tell about example 2.

1.3.1 inline code, external code, and other literal examples

Use a different underline symbol for each section level. To use `literal text`, surround test with double backticks or end a paragraph with a double colon:

```
place a blank line
then indent the text to be made to look like a program
```

It is possible to include all or even part of code files in any accessible directory.

```
# this is some example C code
for (i=10; i; i--)  i*i;
```

```
.. $Id: index.rst 867 2012-06-05 07:37:30Z jemian $

==========================================
Documentation of Programmable pulse train
==========================================

.. figure:: adl_screens.png

   the figure caption says "Three MEDM screens"

.. this is a bit fancier for a figure, using a table
   to get a fancier title bar since the figure caption
   above looks very plain.

+-----------------+------------------------------+
| This table is actually a Figure!               |
+=================+==============================+
|  Dff Q output:  |  .. image:: square_wave.png  |
+-----------------+------------------------------+

* Time resolution set by clock frequency (clk).
* Down Counter 1 PRESET programs On Time.
* Down Counter 2 PRESET programs Off Time.



Contents:

.. toctree::
   :maxdepth: 3
   :glob:

   coaching*

Indices and tables
==================

* :ref:`genindex`
* :ref:`search`
```

Note: More help is available from the sphinx link (http://sphinx.pocoo.org/) at the bottom of this web page.

1.3.2 UNIX Makefile

```
# Makefile for Sphinx documentation
#

# You can set these variables from the command line.
SPHINXOPTS    =
SPHINXBUILD   = sphinx-build
PAPER         =
BUILDDIR      = build

# Internal variables.
PAPEROPT_a4     = -D latex_paper_size=a4
PAPEROPT_letter = -D latex_paper_size=letter
ALLSPHINXOPTS   = -d $(BUILDDIR)/doctrees $(PAPEROPT_$(PAPER)) $(SPHINXOPTS) source
# the i18n builder cannot share the environment and doctrees with the others
I18NSPHINXOPTS  = $(PAPEROPT_$(PAPER)) $(SPHINXOPTS) source

.PHONY: help clean html dirhtml singlehtml pickle json htmlhelp qthelp devhelp epub latex latexpdf te

help:
        @echo "Please use \`make <target>' where <target> is one of"
        @echo "  html       to make standalone HTML files"
        @echo "  dirhtml    to make HTML files named index.html in directories"
        @echo "  singlehtml to make a single large HTML file"
        @echo "  pickle     to make pickle files"
        @echo "  json       to make JSON files"
        @echo "  htmlhelp   to make HTML files and a HTML help project"
        @echo "  qthelp     to make HTML files and a qthelp project"
        @echo "  devhelp    to make HTML files and a Devhelp project"
        @echo "  epub       to make an epub"
        @echo "  latex      to make LaTeX files, you can set PAPER=a4 or PAPER=letter"
        @echo "  latexpdf   to make LaTeX files and run them through pdflatex"
        @echo "  text       to make text files"
        @echo "  man        to make manual pages"
        @echo "  texinfo    to make Texinfo files"
        @echo "  info       to make Texinfo files and run them through makeinfo"
        @echo "  gettext    to make PO message catalogs"
        @echo "  changes    to make an overview of all changed/added/deprecated items"
        @echo "  linkcheck  to check all external links for integrity"
        @echo "  doctest    to run all doctests embedded in the documentation (if enabled)"

clean:
        -rm -rf $(BUILDDIR)/*

html:
        $(SPHINXBUILD) -b html $(ALLSPHINXOPTS) $(BUILDDIR)/html
        @echo
        @echo "Build finished. The HTML pages are in $(BUILDDIR)/html."

dirhtml:
        $(SPHINXBUILD) -b dirhtml $(ALLSPHINXOPTS) $(BUILDDIR)/dirhtml
        @echo
```

```
52          @echo "Build finished. The HTML pages are in $(BUILDDIR)/dirhtml."
53
54  singlehtml:
55          $(SPHINXBUILD) -b singlehtml $(ALLSPHINXOPTS) $(BUILDDIR)/singlehtml
56          @echo
57          @echo "Build finished. The HTML page is in $(BUILDDIR)/singlehtml."
58
59  pickle:
60          $(SPHINXBUILD) -b pickle $(ALLSPHINXOPTS) $(BUILDDIR)/pickle
61          @echo
62          @echo "Build finished; now you can process the pickle files."
63
64  json:
65          $(SPHINXBUILD) -b json $(ALLSPHINXOPTS) $(BUILDDIR)/json
66          @echo
67          @echo "Build finished; now you can process the JSON files."
68
69  htmlhelp:
70          $(SPHINXBUILD) -b htmlhelp $(ALLSPHINXOPTS) $(BUILDDIR)/htmlhelp
71          @echo
72          @echo "Build finished; now you can run HTML Help Workshop with the" \
73                ".hhp project file in $(BUILDDIR)/htmlhelp."
74
75  qthelp:
76          $(SPHINXBUILD) -b qthelp $(ALLSPHINXOPTS) $(BUILDDIR)/qthelp
77          @echo
78          @echo "Build finished; now you can run "qcollectiongenerator" with the" \
79                ".qhcp project file in $(BUILDDIR)/qthelp, like this:"
80          @echo "# qcollectiongenerator $(BUILDDIR)/qthelp/pulse_train.qhcp"
81          @echo "To view the help file:"
82          @echo "# assistant -collectionFile $(BUILDDIR)/qthelp/pulse_train.qhc"
83
84  devhelp:
85          $(SPHINXBUILD) -b devhelp $(ALLSPHINXOPTS) $(BUILDDIR)/devhelp
86          @echo
87          @echo "Build finished."
88          @echo "To view the help file:"
89          @echo "# mkdir -p $$HOME/.local/share/devhelp/pulse_train"
90          @echo "# ln -s $(BUILDDIR)/devhelp $$HOME/.local/share/devhelp/pulse_train"
91          @echo "# devhelp"
92
93  epub:
94          $(SPHINXBUILD) -b epub $(ALLSPHINXOPTS) $(BUILDDIR)/epub
95          @echo
96          @echo "Build finished. The epub file is in $(BUILDDIR)/epub."
97
98  latex:
99          $(SPHINXBUILD) -b latex $(ALLSPHINXOPTS) $(BUILDDIR)/latex
100         @echo
101         @echo "Build finished; the LaTeX files are in $(BUILDDIR)/latex."
102         @echo "Run \'make' in that directory to run these through (pdf)latex" \
103               "(use \'make latexpdf' here to do that automatically)."
104
105 latexpdf:
106         $(SPHINXBUILD) -b latex $(ALLSPHINXOPTS) $(BUILDDIR)/latex
107         @echo "Running LaTeX files through pdflatex..."
108         $(MAKE) -C $(BUILDDIR)/latex all-pdf
109         @echo "pdflatex finished; the PDF files are in $(BUILDDIR)/latex."
```

```
text:
	$(SPHINXBUILD) -b text $(ALLSPHINXOPTS) $(BUILDDIR)/text
	@echo
	@echo "Build finished. The text files are in $(BUILDDIR)/text."

man:
	$(SPHINXBUILD) -b man $(ALLSPHINXOPTS) $(BUILDDIR)/man
	@echo
	@echo "Build finished. The manual pages are in $(BUILDDIR)/man."

texinfo:
	$(SPHINXBUILD) -b texinfo $(ALLSPHINXOPTS) $(BUILDDIR)/texinfo
	@echo
	@echo "Build finished. The Texinfo files are in $(BUILDDIR)/texinfo."
	@echo "Run \'make' in that directory to run these through makeinfo" \
	      "(use \'make info' here to do that automatically)."

info:
	$(SPHINXBUILD) -b texinfo $(ALLSPHINXOPTS) $(BUILDDIR)/texinfo
	@echo "Running Texinfo files through makeinfo..."
	make -C $(BUILDDIR)/texinfo info
	@echo "makeinfo finished; the Info files are in $(BUILDDIR)/texinfo."

gettext:
	$(SPHINXBUILD) -b gettext $(I18NSPHINXOPTS) $(BUILDDIR)/locale
	@echo
	@echo "Build finished. The message catalogs are in $(BUILDDIR)/locale."

changes:
	$(SPHINXBUILD) -b changes $(ALLSPHINXOPTS) $(BUILDDIR)/changes
	@echo
	@echo "The overview file is in $(BUILDDIR)/changes."

linkcheck:
	$(SPHINXBUILD) -b linkcheck $(ALLSPHINXOPTS) $(BUILDDIR)/linkcheck
	@echo
	@echo "Link check complete; look for any errors in the above output " \
	      "or in $(BUILDDIR)/linkcheck/output.txt."

doctest:
	$(SPHINXBUILD) -b doctest $(ALLSPHINXOPTS) $(BUILDDIR)/doctest
	@echo "Testing of doctests in the sources finished, look at the " \
	      "results in $(BUILDDIR)/doctest/output.txt."
```

Indices and tables

- *genindex*
- *search*

CHAPTER

TWO

INDICES AND TABLES

- *genindex*
- *search*

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