MPA1000 sw-master Doxygen documentation

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Main points.

 1) Analysis of theoretical material

 2) Creating a doxyfile configuration file

 3) Adding comments directly to the project codes.
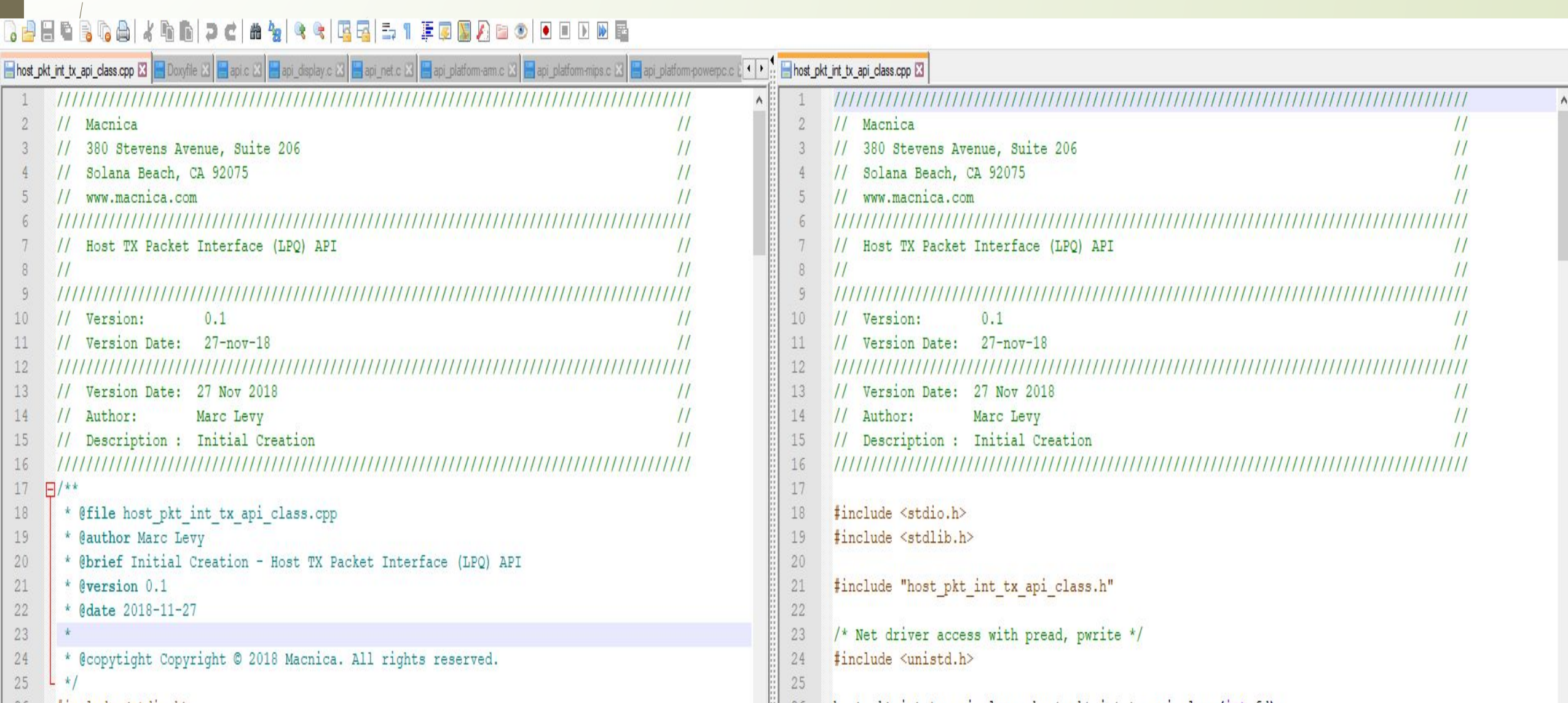
Analysis of theoretical material

Creating a doxyfile configuration file

Tag	Appointment	Default
DOXYFILE_ENCODING	The encoding used for all characters in this settings file	UTF-8
OUTPUT_LANGUAGE	Sets the language in which the documentation will be generated	English
PROJECT_NAME	Project name, which can be a single word or a sequence of words (if you are editing outside of Doxywizard, the sequence of words must be enclosed in double quotes)	My Project
PROJECT_NUMBER	This tag can be used to indicate the project number or version	—
PROJECT_BRIEF	A short one-line project description, which is placed at the top of each page and gives an overview of the purpose of the project	—
OUTPUT_DIRECTORY	An absolute or relative path where the documentation will be generated	Текущая директория
INPUT	A space-separated list of files and / or directories that contain the source code of the project	Текущая директория
RECURSIVE	Used when you need to scan source codes in subfolders of specified directories	NO

Adding comments directly to the project codes.

Adding comments directly to the project codes.

```
150
151    /**
152     * @brief Reset function
153     * @return 0 No error, 1 if Hardware I/O Failure, 2 if Hardware check fail, or module not initi
154     */
155    int host_pkt_int_tx_api_class::host_rst(bool rst)
156    {
157        int err;
158        unsigned int u1;
159
160        if (!hw_check_done)
161        {
162            return 2;
163        }
164
165        u1 = (unsigned int) rst;
166
167        err = write_reg(HOST_PKT_INT_TX_CTRL, u1);
168
169        if (err)
170        {
171            err = 1;
172        }
173
174        return err;
175    }
176
```

```
141
142    // Reset function
143    // Return Values:
144    // 0: No error
145    // 1: Hardware I/O Failure
146    // 2: Hardware check fail, or module not initialized
147    int host_pkt_int_tx_api_class::host_rst(bool rst)
148    {
149        int err;
150        unsigned int u1;
151
152        if (!hw_check_done)
153        {
154            return 2;
155        }
156
157        u1 = (unsigned int) rst;
158
159        err = write_reg(HOST_PKT_INT_TX_CTRL, u1);
160
161        if (err)
162        {
163            err = 1;
164        }
165
166        return err;
167    }
```

Command	Meaning
\authors	Indicates the author or authors
\version	Used to indicate version
\date	Designed to indicate the development date
\bug	List of known bugs
\warning	Warning for use
\copyright	Used license
\example	The command added to the comment to provide a link to the source with the example (added after the command)
\todo	Command used to describe the changes that need to be made (TODO).
\param	\param [<direction>] <name_param> {param_description}
\return	{return_value_description}

Used literature

- 1) https://www.doxygen.nl/index.html

- 2) https://habr.com/ru/post/252101/

- 3) https://cutt.ly/hhjlFXE

Thank you for you attention!