

Code_generator

Generated by Doxygen 1.8.12

Contents

1	Namespace Index	1
1.1	Packages	1
2	Class Index	3
2.1	Class List	3
3	Namespace Documentation	5
3.1	Package common	5
3.1.1	Detailed Description	5
3.2	Package xmlParser	5
3.2.1	Detailed Description	6
4	Class Documentation	7
4.1	common.ErrorCode Enum Reference	7
4.1.1	Member Data Documentation	7
4.1.1.1	NO_ERROR	7
4.2	common.Features Class Reference	7
4.2.1	Detailed Description	8
4.2.2	Member Data Documentation	8
4.2.2.1	DEBUG	8
4.2.2.2	VERBOSE	8
4.3	xmlParser.Pin Class Reference	8
4.3.1	Detailed Description	10

4.3.2	Constructor & Destructor Documentation	10
4.3.2.1	Pin()	10
4.3.3	Member Function Documentation	11
4.3.3.1	getAdc()	11
4.3.3.2	getClock()	11
4.3.3.3	getFeat_adc()	11
4.3.3.4	getFeat_clock()	11
4.3.3.5	getFeat_i2c()	12
4.3.3.6	getFeat_int()	12
4.3.3.7	getFeat_reset()	12
4.3.3.8	getFeat_spi()	12
4.3.3.9	getFeat_timer()	13
4.3.3.10	getFeat_uart()	13
4.3.3.11	getFunc_gnd()	13
4.3.3.12	getFunc_gpio()	13
4.3.3.13	getFunc_vcc()	14
4.3.3.14	getI2c()	14
4.3.3.15	getInt()	14
4.3.3.16	getName()	14
4.3.3.17	getNumber()	15
4.3.3.18	getPort()	15
4.3.3.19	getReset()	15
4.3.3.20	getSpi()	15
4.3.3.21	getTimer()	16
4.3.3.22	getUart()	16
4.3.3.23	setAdc()	16
4.3.3.24	setClock()	16
4.3.3.25	setFeat_adc()	17

4.3.3.26	setFeat_clock()	17
4.3.3.27	setFeat_i2c()	17
4.3.3.28	setFeat_int()	17
4.3.3.29	setFeat_reset()	18
4.3.3.30	setFeat_spi()	18
4.3.3.31	setFeat_timer()	18
4.3.3.32	setFeat_uart()	18
4.3.3.33	setFunc_gnd()	19
4.3.3.34	setFunc_gpio()	19
4.3.3.35	setFunc_vcc()	19
4.3.3.36	setI2c()	19
4.3.3.37	setInt()	20
4.3.3.38	setName()	20
4.3.3.39	setNumber()	20
4.3.3.40	setPort()	20
4.3.3.41	setReset()	21
4.3.3.42	setSpi()	21
4.3.3.43	setTimer()	21
4.3.3.44	setUart()	21
4.3.4	Member Data Documentation	22
4.3.4.1	DEF_FEATURE	22
4.3.4.2	DEF_FEATURE_AV	22
4.3.4.3	DEF_FUNCTION	22
4.3.4.4	DEF_NAME	22
4.3.4.5	DEF_NUMBER	22
4.3.4.6	DEF_PORT	22
4.3.4.7	DISABLE	22
4.3.4.8	ENABLE	23
4.4	xmlParser.TestMain Class Reference	23
4.4.1	Detailed Description	23
4.4.2	Member Function Documentation	23
4.4.2.1	main()	23
4.5	xmlParser.XmlOpener Class Reference	24
4.5.1	Detailed Description	24
4.5.2	Constructor & Destructor Documentation	24
4.5.2.1	XmlOpener()	24
4.5.3	Member Function Documentation	24
4.5.3.1	OpenFile()	24

Chapter 1

Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

common	5
xmlParser	5

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

common.ErrorCode	7
common.Features	7
xmlParser.Pin	8
xmlParser.TestMain	23
xmlParser.XmlOpener	24

Chapter 3

Namespace Documentation

3.1 Package common

Classes

- enum [ErrorCode](#)
- class [Features](#)

3.1.1 Detailed Description

Common information that needs to be accessed across all the project

Author

Miguel Diaz

Version

0.1

3.2 Package xmlParser

Classes

- class [Pin](#)
- class [TestMain](#)
- class [XmlOpener](#)

3.2.1 Detailed Description

XML parser for microcontroller information and project settings

Author

Miguel Diaz

Version

0.1

Chapter 4

Class Documentation

4.1 common.ErrorCode Enum Reference

Public Attributes

- [NO_ERROR](#)

4.1.1 Member Data Documentation

4.1.1.1 NO_ERROR

`common.ErrorCode.NO_ERROR`

No error message

The documentation for this enum was generated from the following file:

- `src/common/ErrorCode.java`

4.2 common.Features Class Reference

Static Public Attributes

- static final boolean [DEBUG](#) = true
- static final boolean [VERBOSE](#) = true

4.2.1 Detailed Description

Class that includes all project features

Author

Miguel Diaz

Version

0.1

4.2.2 Member Data Documentation

4.2.2.1 DEBUG

```
final boolean common.Features.DEBUG = true [static]
```

Enables debug functions

4.2.2.2 VERBOSE

```
final boolean common.Features.VERBOSE = true [static]
```

Enables console messages

The documentation for this class was generated from the following file:

- `src/common/Features.java`

4.3 xmlParser.Pin Class Reference

Public Member Functions

- [Pin](#) ()
- void [setFunc_vcc](#) (boolean funcState)
- boolean [getFunc_vcc](#) ()
- void [setFunc_gnd](#) (boolean funcState)
- boolean [getFunc_gnd](#) ()
- void [setFunc_gpio](#) (boolean funcState)
- boolean [getFunc_gpio](#) ()
- void [setFeat_int](#) (boolean featState)
- boolean [getFeat_int](#) ()
- void [setFeat_adc](#) (boolean featState)
- boolean [getFeat_adc](#) ()

- void [setFeat_uart](#) (boolean featState)
- boolean [getFeat_uart](#) ()
- void [setFeat_i2c](#) (boolean featState)
- boolean [getFeat_i2c](#) ()
- void [setFeat_spi](#) (boolean featState)
- boolean [getFeat_spi](#) ()
- void [setFeat_clock](#) (boolean featState)
- boolean [getFeat_clock](#) ()
- void [setFeat_timer](#) (boolean featState)
- boolean [getFeat_timer](#) ()
- void [setFeat_reset](#) (boolean featState)
- boolean [getFeat_reset](#) ()
- void [setInt](#) (String feature)
- String [getInt](#) ()
- void [setAdc](#) (String feature)
- String [getAdc](#) ()
- void [setUart](#) (String feature)
- String [getUart](#) ()
- void [setI2c](#) (String feature)
- String [getI2c](#) ()
- void [setSpi](#) (String feature)
- String [getSpi](#) ()
- void [setClock](#) (String feature)
- String [getClock](#) ()
- void [setReset](#) (String feature)
- String [getReset](#) ()
- void [setTimer](#) (String feature)
- String [getTimer](#) ()
- void [setName](#) (String pinName)
- String [getName](#) ()
- void [setNumber](#) (int pinNum)
- int [getNumber](#) ()
- void [setPort](#) (String pinPort)
- String [getPort](#) ()

Static Public Attributes

- static final boolean [ENABLE](#) = true
- static final boolean [DISABLE](#) = false
- static final boolean [DEF_FUNCTION](#) = DEF_BOOLEAN
- static final boolean [DEF_FEATURE_AV](#) = DEF_BOOLEAN
- static final String [DEF_FEATURE](#) = DEF_STRING
- static final String [DEF_NAME](#) = DEF_STRING
- static final int [DEF_NUMBER](#) = DEF_INT
- static final String [DEF_PORT](#) = DEF_STRING

4.3.1 Detailed Description

Basic pin object.

- [Pin](#) necessary characteristics:
 - Name
 - Number
- [Pin](#) optional characteristics:
 - Port
- [Pin](#) main functions:
 - VCC
 - GND
 - GPIO
- [Pin](#) features:
 - Interruption
 - ADC
 - UART
 - I2C
 - SPI
 - Clock
 - Reset

Author

Miguel Diaz

Version

0.1

4.3.2 Constructor & Destructor Documentation

4.3.2.1 `Pin()`

```
xmlParser.Pin.Pin ( )
```

Initialize all pin's characteristics and features to their default values

4.3.3 Member Function Documentation

4.3.3.1 getAdc()

```
String xmlParser.Pin.getAdc ( )
```

Get the pin's ADC name

Returns

Pin's ADC

4.3.3.2 getClock()

```
String xmlParser.Pin.getClock ( )
```

Get the pin's clock name

Returns

Pin's clock

4.3.3.3 getFeat_adc()

```
boolean xmlParser.Pin.getFeat_adc ( )
```

See if the pin has an ADC

Returns

Feature availability

4.3.3.4 getFeat_clock()

```
boolean xmlParser.Pin.getFeat_clock ( )
```

See if the pin supports a clock

Returns

Feature availability

4.3.3.5 getFeat_i2c()

```
boolean xmlParser.Pin.getFeat_i2c ( )
```

See if the pin has I2C

Returns

Feature availability

4.3.3.6 getFeat_int()

```
boolean xmlParser.Pin.getFeat_int ( )
```

See if the pin has an interruption

Returns

Feature availability

4.3.3.7 getFeat_reset()

```
boolean xmlParser.Pin.getFeat_reset ( )
```

See if the pin has a reset feature

Returns

Feature availability

4.3.3.8 getFeat_spi()

```
boolean xmlParser.Pin.getFeat_spi ( )
```

See if the pin has SPI

Returns

Feature availability

4.3.3.9 getFeat_timer()

```
boolean xmlParser.Pin.getFeat_timer ( )
```

See if the pin supports a timer

Returns

Feature availability

4.3.3.10 getFeat_uart()

```
boolean xmlParser.Pin.getFeat_uart ( )
```

See if the pin has a UART

Returns

Feature availability

4.3.3.11 getFunc_gnd()

```
boolean xmlParser.Pin.getFunc_gnd ( )
```

See if the pin is GND

Returns

Function availability

4.3.3.12 getFunc_gpio()

```
boolean xmlParser.Pin.getFunc_gpio ( )
```

See if the pin is GPIO

Returns

Function availability

4.3.3.13 `getFunc_vcc()`

```
boolean xmlParser.Pin.getFunc_vcc ( )
```

See if the pin is Vcc

Returns

Function availability

4.3.3.14 `getI2c()`

```
String xmlParser.Pin.getI2c ( )
```

Get the pin's I2C name

Returns

[Pin's I2C](#)

4.3.3.15 `getInt()`

```
String xmlParser.Pin.getInt ( )
```

Get the pin's interruption name

Returns

[Pin's interruption](#)

4.3.3.16 `getName()`

```
String xmlParser.Pin.getName ( )
```

Get the pin's name

Returns

[Pin's name](#)

4.3.3.17 `getNumber()`

```
int xmlParser.Pin.getNumber ( )
```

Get the pin's number

Returns

Pin's number

4.3.3.18 `getPort()`

```
String xmlParser.Pin.getPort ( )
```

Get the pin's port

Returns

Pin's port

4.3.3.19 `getReset()`

```
String xmlParser.Pin.getReset ( )
```

Get the pin's reset name

Returns

Pin's reset

4.3.3.20 `getSpi()`

```
String xmlParser.Pin.getSpi ( )
```

Get the pin's SPI name

Returns

Pin's SPI

4.3.3.21 `getTimer()`

```
String xmlParser.Pin.getTimer ( )
```

Get the pin's timer name

Returns

[Pin's timer](#)

4.3.3.22 `getUart()`

```
String xmlParser.Pin.getUart ( )
```

Get the pin's UART name

Returns

[Pin's UART](#)

4.3.3.23 `setAdc()`

```
void xmlParser.Pin.setAdc (
    String feature )
```

Set the pin's ADC

Parameters

<i>feature</i>	Pin's ADC
----------------	---------------------------

4.3.3.24 `setClock()`

```
void xmlParser.Pin.setClock (
    String feature )
```

Set the pin's clock

Parameters

<i>feature</i>	Pin's clock
----------------	-----------------------------

4.3.3.25 setFeat_adc()

```
void xmlParser.Pin.setFeat_adc (
    boolean featState )
```

Set the pin's ADC feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.26 setFeat_clock()

```
void xmlParser.Pin.setFeat_clock (
    boolean featState )
```

Set the pin's Clock feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.27 setFeat_i2c()

```
void xmlParser.Pin.setFeat_i2c (
    boolean featState )
```

Set the pin's I2C feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.28 setFeat_int()

```
void xmlParser.Pin.setFeat_int (
    boolean featState )
```

Set the pin's interruption feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.29 setFeat_reset()

```
void xmlParser.Pin.setFeat_reset (
    boolean featState )
```

Set the pin's reset feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.30 setFeat_spi()

```
void xmlParser.Pin.setFeat_spi (
    boolean featState )
```

Set the pin's SPI feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.31 setFeat_timer()

```
void xmlParser.Pin.setFeat_timer (
    boolean featState )
```

Set the pin's timer feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.32 setFeat_uart()

```
void xmlParser.Pin.setFeat_uart (
    boolean featState )
```

Set the pin's UART feature

Parameters

<i>featState</i>	Feature availability
------------------	----------------------

4.3.3.33 setFunc_gnd()

```
void xmlParser.Pin.setFunc_gnd (
    boolean funcState )
```

Set the pin to GND status

Parameters

<i>funcState</i>	Function availability
------------------	-----------------------

4.3.3.34 setFunc_gpio()

```
void xmlParser.Pin.setFunc_gpio (
    boolean funcState )
```

Set the pin to GPIO status

Parameters

<i>funcState</i>	Function availability
------------------	-----------------------

4.3.3.35 setFunc_vcc()

```
void xmlParser.Pin.setFunc_vcc (
    boolean funcState )
```

Set the pin to Vcc status

Parameters

<i>funcState</i>	Function availability
------------------	-----------------------

4.3.3.36 setI2c()

```
void xmlParser.Pin.setI2c (
    String feature )
```

Set the pin's I2C

Parameters

<i>feature</i>	Pin's I2C
----------------	-----------

4.3.3.37 `setInt()`

```
void xmlParser.Pin.setInt (
    String feature )
```

Set the pin's interruption

Parameters

<i>feature</i>	Pin's interruption
----------------	--------------------

4.3.3.38 `setName()`

```
void xmlParser.Pin.setName (
    String pinName )
```

Set the pin's name

Parameters

<i>pinName</i>	Pin's name
----------------	------------

4.3.3.39 `setNumber()`

```
void xmlParser.Pin.setNumber (
    int pinNum )
```

Set the pin's number

Parameters

<i>pinNum</i>	Pin's number
---------------	--------------

4.3.3.40 `setPort()`

```
void xmlParser.Pin.setPort (
    String pinPort )
```

Set the pin's port

Parameters

<i>pinPort</i>	Pin's port
----------------	------------

4.3.3.41 setReset()

```
void xmlParser.Pin.setReset (  
    String feature )
```

Set the pin's reset

Parameters

<i>feature</i>	Pin's reset
----------------	-------------

4.3.3.42 setSpi()

```
void xmlParser.Pin.setSpi (  
    String feature )
```

Set the pin's SPI

Parameters

<i>feature</i>	Pin's SPI
----------------	-----------

4.3.3.43 setTimer()

```
void xmlParser.Pin.setTimer (  
    String feature )
```

Set the pin's timer

Parameters

<i>feature</i>	Pin's timer
----------------	-------------

4.3.3.44 setUart()

```
void xmlParser.Pin.setUart (  
    String feature )
```

Set the pin's UART

Parameters

<i>feature</i>	Pin's UART
----------------	------------

4.3.4 Member Data Documentation

4.3.4.1 DEF_FEATURE

```
final String xmlParser.Pin.DEF_FEATURE = DEF_STRING [static]
```

Default value for pin's feature as not available

4.3.4.2 DEF_FEATURE_AV

```
final boolean xmlParser.Pin.DEF_FEATURE_AV = DEF_BOOLEAN [static]
```

Default value for pin's feature availability as not available

4.3.4.3 DEF_FUNCTION

```
final boolean xmlParser.Pin.DEF_FUNCTION = DEF_BOOLEAN [static]
```

Default value for pin's function as not enabled

4.3.4.4 DEF_NAME

```
final String xmlParser.Pin.DEF_NAME = DEF_STRING [static]
```

Default value for pin's name

4.3.4.5 DEF_NUMBER

```
final int xmlParser.Pin.DEF_NUMBER = DEF_INT [static]
```

Default value for pin's number

4.3.4.6 DEF_PORT

```
final String xmlParser.Pin.DEF_PORT = DEF_STRING [static]
```

Default value for pin's port

4.3.4.7 DISABLE

```
final boolean xmlParser.Pin.DISABLE = false [static]
```

Disable value for features and functions

4.3.4.8 ENABLE

```
final boolean xmlParser.Pin.ENABLE = true [static]
```

Enable value for features and functions

The documentation for this class was generated from the following file:

- src/xmlParser/Pin.java

4.4 xmlParser.TestMain Class Reference

Static Public Member Functions

- static void [main](#) (String[] openOption)

4.4.1 Detailed Description

Dummy main class for testing the other classes

Author

Miguel Diaz

4.4.2 Member Function Documentation

4.4.2.1 main()

```
static void xmlParser.TestMain.main (  
    String [] openOption ) [static]
```

Main without GUI

Parameters

<i>openOption</i>	Options include:
-------------------	---------------------

The documentation for this class was generated from the following file:

- src/xmlParser/TestMain.java

4.5 xmlParser.XmlOpener Class Reference

Public Member Functions

- [XmlOpener\(\)](#)
- [ErrorCode OpenFile](#) (String fileName)

4.5.1 Detailed Description

Author

H112943

Version

0.1

4.5.2 Constructor & Destructor Documentation

4.5.2.1 XmlOpener()

```
xmlParser.XmlOpener.XmlOpener ( )
```

Constructor

4.5.3 Member Function Documentation

4.5.3.1 OpenFile()

```
ErrorCode xmlParser.XmlOpener.OpenFile (
    String fileName )
```

Open the XML file

Parameters

<i>fileName</i>	Complete path and name of XML file
-----------------	------------------------------------

Returns

Error code

The documentation for this class was generated from the following file:

- src/xmlParser/XmlOpener.java

Index

- common, [5](#)
- common.ErrorCode, [7](#)
- common.Features, [7](#)
- common::ErrorCode
 - NO_ERROR, [7](#)
- common::Features
 - DEBUG, [8](#)
 - VERBOSE, [8](#)
- DEBUG
 - common::Features, [8](#)
- DEF_FEATURE_AV
 - xmlParser::Pin, [22](#)
- DEF_FEATURE
 - xmlParser::Pin, [22](#)
- DEF_FUNCTION
 - xmlParser::Pin, [22](#)
- DEF_NAME
 - xmlParser::Pin, [22](#)
- DEF_NUMBER
 - xmlParser::Pin, [22](#)
- DEF_PORT
 - xmlParser::Pin, [22](#)
- DISABLE
 - xmlParser::Pin, [22](#)
- ENABLE
 - xmlParser::Pin, [22](#)
- getAdc
 - xmlParser::Pin, [11](#)
- getClock
 - xmlParser::Pin, [11](#)
- getFeat_adc
 - xmlParser::Pin, [11](#)
- getFeat_clock
 - xmlParser::Pin, [11](#)
- getFeat_i2c
 - xmlParser::Pin, [11](#)
- getFeat_int
 - xmlParser::Pin, [12](#)
- getFeat_reset
 - xmlParser::Pin, [12](#)
- getFeat_spi
 - xmlParser::Pin, [12](#)
- getFeat_timer
 - xmlParser::Pin, [12](#)
- getFeat_uart
 - xmlParser::Pin, [13](#)
- getFunc_gnd
 - xmlParser::Pin, [13](#)
- getFunc_gpio
 - xmlParser::Pin, [13](#)
- getFunc_vcc
 - xmlParser::Pin, [13](#)
- getI2c
 - xmlParser::Pin, [14](#)
- getInt
 - xmlParser::Pin, [14](#)
- getName
 - xmlParser::Pin, [14](#)
- getNumber
 - xmlParser::Pin, [14](#)
- getPort
 - xmlParser::Pin, [15](#)
- getReset
 - xmlParser::Pin, [15](#)
- getSpi
 - xmlParser::Pin, [15](#)
- getTimer
 - xmlParser::Pin, [15](#)
- getUart
 - xmlParser::Pin, [16](#)
- main
 - xmlParser::TestMain, [23](#)
- NO_ERROR
 - common::ErrorCode, [7](#)
- OpenFile
 - xmlParser::XmlOpener, [24](#)
- Pin
 - xmlParser::Pin, [10](#)
- setAdc
 - xmlParser::Pin, [16](#)
- setClock
 - xmlParser::Pin, [16](#)
- setFeat_adc
 - xmlParser::Pin, [16](#)

setFeat_clock
 xmlParser::Pin, 17
 setFeat_i2c
 xmlParser::Pin, 17
 setFeat_int
 xmlParser::Pin, 17
 setFeat_reset
 xmlParser::Pin, 18
 setFeat_spi
 xmlParser::Pin, 18
 setFeat_timer
 xmlParser::Pin, 18
 setFeat_uart
 xmlParser::Pin, 18
 setFunc_gnd
 xmlParser::Pin, 19
 setFunc_gpio
 xmlParser::Pin, 19
 setFunc_vcc
 xmlParser::Pin, 19
 setI2c
 xmlParser::Pin, 19
 setInt
 xmlParser::Pin, 20
 setName
 xmlParser::Pin, 20
 setNumber
 xmlParser::Pin, 20
 setPort
 xmlParser::Pin, 20
 setReset
 xmlParser::Pin, 21
 setSpi
 xmlParser::Pin, 21
 setTimer
 xmlParser::Pin, 21
 setUart
 xmlParser::Pin, 21

 VERBOSE
 common::Features, 8

 XmlOpener
 xmlParser::XmlOpener, 24
 xmlParser, 5
 xmlParser.Pin, 8
 xmlParser.TestMain, 23
 xmlParser.XmlOpener, 24
 xmlParser::Pin
 DEF_FEATURE_AV, 22
 DEF_FEATURE, 22
 DEF_FUNCTION, 22
 DEF_NAME, 22
 DEF_NUMBER, 22
 DEF_PORT, 22
 DISABLE, 22
 ENABLE, 22
 getAdc, 11
 getClock, 11
 getFeat_adc, 11
 getFeat_clock, 11
 getFeat_i2c, 11
 getFeat_int, 12
 getFeat_reset, 12
 getFeat_spi, 12
 getFeat_timer, 12
 getFeat_uart, 13
 getFunc_gnd, 13
 getFunc_gpio, 13
 getFunc_vcc, 13
 getI2c, 14
 getInt, 14
 getName, 14
 getNumber, 14
 getPort, 15
 getReset, 15
 getSpi, 15
 getTimer, 15
 getUart, 16
 Pin, 10
 setAdc, 16
 setClock, 16
 setFeat_adc, 16
 setFeat_clock, 17
 setFeat_i2c, 17
 setFeat_int, 17
 setFeat_reset, 18
 setFeat_spi, 18
 setFeat_timer, 18
 setFeat_uart, 18
 setFunc_gnd, 19
 setFunc_gpio, 19
 setFunc_vcc, 19
 setI2c, 19
 setInt, 20
 setName, 20
 setNumber, 20
 setPort, 20
 setReset, 21
 setSpi, 21
 setTimer, 21
 setUart, 21
 xmlParser::TestMain
 main, 23
 xmlParser::XmlOpener
 OpenFile, 24
 XmlOpener, 24