

Arduino NBduino Library

Generated by Doxygen 1.8.14

Contents

1	Class Index	1
1.1	Class List	1
2	File Index	3
2.1	File List	3
3	Class Documentation	5
3.1	NBduino Class Reference	5
3.1.1	Detailed Description	5
3.1.2	Constructor & Destructor Documentation	5
3.1.2.1	NBduino() [1/3]	5
3.1.2.2	NBduino() [2/3]	6
3.1.2.3	NBduino() [3/3]	6
3.1.3	Member Function Documentation	7
3.1.3.1	begin()	7
3.1.3.2	publish()	7
3.1.3.3	reqIMEI()	8
3.1.3.4	setAPN()	8
3.1.3.5	sleep()	9
3.1.3.6	wakeup()	9
4	File Documentation	11
4.1	D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.cpp File Reference	11
4.1.1	Detailed Description	11
4.2	D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.h File Reference	11
4.2.1	Detailed Description	12
	Index	13

Chapter 1

Class Index

1.1 Class List

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

NBduino	5
-----------------------------------	-------------------

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/ NBduinoLibrary.cpp	
NBduino class methods implementation. This class can be used to ease the programming of an Arduino sketch using the TopView NBduino shield	11
D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/ NBduinoLibrary.h	
NBduino class definition and the include file that the class implementation needs	11

Chapter 3

Class Documentation

3.1 NBduino Class Reference

Public Member Functions

- [NBduino](#) ()
- [NBduino](#) (const String mqttServer, const int mqttPort, const String mqttUser, const String mqttPassword)
- [NBduino](#) (const String mqttServer, const int mqttPort, const String mqttUser, const String mqttPassword, unsigned long timeToConn)
- [setAPN](#) (String APN)
- bool [begin](#) ()
- [wakeup](#) ()
- [sleep](#) ()
- String [reqIMEI](#) ()
- [publish](#) (const String topic, const String value)

3.1.1 Detailed Description

Definition at line 17 of file NBduinoLibrary.h.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 NBduino() [1/3]

```
NBduino::NBduino ( )
```

This method is a constructor for the [NBduino](#) class

Usage example:
`NBduino NBiot ();`

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 27 of file NBduinoLibrary.cpp.

3.1.2.2 NBduino() [2/3]

```
NBduino::NBduino (
    const String mqttServer,
    const int mqttPort,
    const String mqttUser,
    const String mqttPassword )
```

This method is a constructor for the [NBduino](#) class

Usage example:
[NBduino](#) NBiot("54.76.137.235", 18224, "test", "test");

Parameters

<i>mqttServer</i>	The name or the IP address of the MQTT broker (String)
<i>mqttPort</i>	The port number of the MQTT broker (Int)
<i>mqttUser</i>	The username enabeled to access the MQTT broker (String)
<i>mqttPassword</i>	The password to autenticate the userto access the MQTT broker (String).

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 45 of file NBduinoLibrary.cpp.

3.1.2.3 NBduino() [3/3]

```
NBduino::NBduino (
    const String mqttServer,
    const int mqttPort,
    const String mqttUser,
    const String mqttPassword,
    unsigned long timeToConn )
```

This method is a constructor for the [NBduino](#) class

Usage example:
[NBduino](#) NBiot("54.76.137.235", 18224, "test", "test", 60000);

Parameters

<i>mqttServer</i>	The name or the IP address of the MQTT broker (String)
<i>mqttPort</i>	The port number of the MQTT broker (Int)
<i>mqttUser</i>	The username enabeled to access the MQTT broker (String)
<i>mqttPassword</i>	The password to autenticate the userto access the MQTT broker (String)
<i>timeToConn</i>	The timeout in ms in connection phase (unsigned long)

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 69 of file NBduinoLibrary.cpp.

3.1.3 Member Function Documentation

3.1.3.1 begin()

```
bool NBduino::begin ( )
```

This method must be called at beginning before any publish, subscribe, wakeup and sleep call.

Usage example:

```
bool status
status=NBiot.begin();
```

Returns

true if [NBduino](#) correctly initiated - false otherwise

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 138 of file NBduinoLibrary.cpp.

3.1.3.2 publish()

```
NBduino::publish (
    const String topic,
    const String value )
```

This method publish a string to the MQTT broker.

Usage example:

```
NBiot.publish("topic001", "Hello World!");
```

Parameters

<i>topic</i>	The topic name for publishing (String)
<i>value</i>	The string to publish (String)

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 213 of file NBduinoLibrary.cpp.

3.1.3.3 reqIMEI()

```
String NBduino::reqIMEI ( )
```

This method return the NBduno IMEI string (String).

```
Usage example:  
String IMEI  
IMEI=NBiot.reqIMEI();
```

Returns

The string contains IMEI

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 271 of file NBduinoLibrary.cpp.

3.1.3.4 setAPN()

```
NBduino::setAPN (  
    String APN )
```

This method set the APN

```
Usage example:  
NBiot.setAPN("broker.iotthingsware.com");
```

Parameters

<i>APN</i>	The name of the APN (String)
------------	------------------------------

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 89 of file NBduinoLibrary.cpp.

3.1.3.5 sleep()

```
NBduino::sleep ( )
```

This method asleep the [NBduino](#) shield.

```
Usage example:  
NBiot.sleep();
```

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 194 of file NBduinoLibrary.cpp.

3.1.3.6 wakeup()

```
NBduino::wakeup ( )
```

This method wakeup the [NBduino](#) shield.

```
Usage example:  
NBiot.wakeup();
```

Author

Antonio Cafiero

Date

14/12/2018

Definition at line 176 of file NBduinoLibrary.cpp.

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

- D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/[NBduinoLibrary.h](#)
- D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/[NBduinoLibrary.cpp](#)

Chapter 4

File Documentation

4.1 D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.cpp File Reference

contains the [NBduino](#) class methods implementation. This class can be used to ease the programming of an Arduino sketch using the TopView [NBduino](#) shield.

```
#include <arduino.h>
#include <NBduinoLibrary.h>
```

4.1.1 Detailed Description

contains the [NBduino](#) class methods implementation. This class can be used to ease the programming of an Arduino sketch using the TopView [NBduino](#) shield.

Author

Antonio Cafiero

Date

14/12/2018

4.2 D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.h File Reference

contains the [NBduino](#) class definition and the include file that the class implementation needs.

```
#include <SoftwareSerial.h>
```

Classes

- class [NBduino](#)

4.2.1 Detailed Description

contains the [NBduino](#) class definition and the include file that the class implementation needs.

Author

Antonio Cafiero

Date

14/12/2018

Index

begin

NBduino, [7](#)

D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.cpp, [11](#)

D:/arduino-1.8.5/Portable/sketchbook/libraries/NBduinoLibrary/src/NBduinoLibrary.h, [11](#)

NBduino, [5](#)

begin, [7](#)

NBduino, [5](#), [6](#)

publish, [7](#)

reqIMEI, [8](#)

setAPN, [8](#)

sleep, [9](#)

wakeup, [9](#)

publish

NBduino, [7](#)

reqIMEI

NBduino, [8](#)

setAPN

NBduino, [8](#)

sleep

NBduino, [9](#)

wakeup

NBduino, [9](#)