stamp.peripheral.memory.eeprom

Class MC24LC256

```
java.lang.Object
  |
  +--stamp.peripheral.memory.eeprom.MC24LC256
```

public class **MC24LC256**
extends Object

This class will record a value onto an external Microchip 24LC256 eeprom. You may use up to 8 eeproms, each one will have it's own unique address. For technical specifications on wiring the chip for a unique address refer to Microchip's website: www.microchip.com.

Constructor requires data pin and clock pin as parameters. Device numbers in read and write methods refer to the unique address of the target 24LC256 chip (numbered 0-7). The class is based on the Parallax I2C class (v1.1) for bus communication.

```
Revision History:
10/21/02 Ver 1.1 - Final class submission to Parallax Inc. from John Cole.
```

Constructor Summary

MC24LC256(int sdaPin, int sclPin)	Constructor requiring CPU.pins for data and clock pins

Method Summary

static int	**readNext**(int dev)

	Method to read a single byte from the external eeprom at the current address
static int	**readRandom**(int dev, int add) Method to read a single byte from the external eeprom at a random address
static boolean	**writeOne**(int dev, int add, byte vals) Method to write a single byte to the external eeprom.
static boolean	**writePage**(int dev, int add, byte[] vals) Method to write an array of bytes to the external eeprom using the page write functions.
static boolean	**writeVerify**(int dev, int add, byte vals) Method to write a single byte to the external eeprom and verify that it was written correctly

Methods inherited from class java.lang.Object
equals

Constructor Detail

MC24LC256

```
public MC24LC256(int sdaPin,
                 int sclPin)
```

Constructor requiring CPU.pins for data and clock pins

Parameters:
sdaPin - data pin from stamp
sclPin - clock pin from stamp

Method Detail

writePage

```
public static boolean writePage(int dev,
                                int add,
                                byte[] vals)
```

Method to write an array of bytes to the external eeprom using
the page write functions.
This method will catch any 'roll over' to the start of the
next page if you go beyond a page boundary (64 bytes).

Parameters:
dev - device number for external eeprom
add - address on the device
vals - byte array of values to be written
Returns:
-1 if error occurs 1 otherwise

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writeOne

```
public static boolean writeOne(int dev,
                               int add,
                               byte vals)
```

Method to write a single byte to the external eeprom.

Parameters:
dev - device number for external eeprom
add - address on the device

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writeVerify

```
public static boolean writeVerify(int dev,
                                  int add,
                                  byte vals)
```

Method to write a single byte to the external eeprom
and verify that it was written correctly

Parameters:
dev - device number for external eeprom
add - address on the device
Returns:
boolean value verifying correct value written

readNext

public static int **readNext**(int dev)

Method to read a single byte from the external eeprom at
the current address

Parameters:
dev - device number for external eeprom
Returns:
read value

readRandom

public static int **readRandom**(int dev,
int add)
throws MC24LC256BadReadException

Method to read a single byte from the external eeprom at
a random address

Parameters:
dev - device number for external eeprom
add - address on the device
MC24LC256BadReadException