Easy TellI2C

Documentation of the rich-in-possibilities TellI2C, www.didel.com/diduino/DiTellb.pdf, is not so easy to follow. This document add a lib above Wire lib or the more efficient I2CTwi.h lib and makes the writing of programs using TellI2C easy.

The 4-digit display is linked to a 4-byte word and convert to show that information under 4 modes.

Hexa	Decimal	Ascii	Segments

This mean we just need few functions to display what we need. There are possibilities with a Mode register to pass from one representation to another one, consider the four bytes numbers as 2 16-bit words that can be independantly represented as hex or decimal numbers. See the full doc for that.

Hex (v16); Display an **int** variable in hexadecimal
Dec (v16); Display an **int** variable in decimal
Text (c1,c2,c3,c4); Display bytes c1 c2 c3 c4 as ascii characters (41, 0x31 or "a")
Seg (c1,c2,c3,c4); Display bits of c1 c2 c3 c4 on the 7 segments and the dots
Scroll (c); Shift left the existing text and insert c right.

These functions are available within include files, and we provide 3 solutions:
TellWire.h The Arduino heavy solution
Tell.h and I2CTwi.h A much more efficient solution using AVR328 TWI
Tell.h and I2Cbb.h Same performance on any 2 pins.
Doc on Github is planned

Program examples – get them from www.didel.com/TestTell.zip
Note that there is no message if DgTell is not present.

TestTellWire.ino uses the 5 functions and calls **<Wire.h>** and **"TellWire.h"**
    Needs 2.974 bytes of code and 218 variables

TestTellTwi.ino uses the 5 functions and calls "**I2Ctwi.h**" and **"TellTwi.h"**
    Needs 1230 bytes of code and 11 variables -- ! 8.bit address

TestTellBitBang.ino uses the 5 functions and calls "**I2Cbb.h**" and **"TellBb.h"**
    Needs 1368 bytes of code and 10 variables
    The 2 pins must be in the same Port, 5 lines to declare according to wiring

You see the test programs are the same except the include files and the set-up.
The Mode (); function is not demonstrated. Test by yourself, and ask questions if the doc is not clear enough.

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