ITDB02_Touch - Arduino library support for ITDB02 Touch function

You can find the latest version of the library at http://www.henningkarlsen.com/electronics

This library has been made for the 2.4" TFT LCD Screen Module: “ITDB02-2.4”, the 3.2" TFT LCD Screen Module: “ITDB02-3.2” and the 3.2" Wide-screen module “ITDB02-3.2WC” by ITead studio.

If you make any modifications or improvements to the code, I would appreciate that you share the code with me so that I might include it in the next release. I can be contacted through http://www.henningkarlsen.com/electronics/contact.php

Version:	1.0	Sep 13 2010	initial release
	1.01	Sep 18 2010	Added example: ITDB02_Touch_ButtonTest
	1.1	Oct 7 2010	Fixed incompatibility with ITDB02-3.2
	1.2	Oct 12 2010	Added support for ITDB02-3.2WC
	1.21	Mar 27 2011	Updated some of the examples to be compatible with ITDB02_Graph(16) v4.0

Defined Literals:

Orientation

For use with InitTouch()

PORTRAIT:	0
LANDSCAPE:	1

Precision

For use with setPrecision()

PREC_LOW:	1
PREC_MEDIUM:	2
PREC_HI:	3
PREC_EXTREME:	4

Functions:

ITDB02_Touch(TCLK, TCS, TDIN, TDOUT, IRQ);

The main class of the interface.

Parameters:	TCLK: Arduino pin for Touch Clock TCS: Arduino pin for Touch Chip Select TDIN: Arduino pin for Touch Data input TDOUT: Arduino pin for Touch Data output IRQ: Arduino pin for Touch IRQ
Usage:	ITDB02_Touch myTouch(15,10,14,9,8); // Start an instance of the ITDB02_Touch class

InitTouch(orientation);

Initialize the touch screen and set display orientation. If the library is used together with the ITDB02_Graph(16) the orientation should be set to the same orientation for both libraries.

Parameters:	orientation: PORTRAIT (default) LANDSCAPE
Returns:	Nothing
Usage:	myTouch.InitTouch();// Initialize the touch screen

dataAvailable();

Check to see if new data from the touch screen is waiting.

Parameters:	None
Returns:	Boolean: true means data is waiting, otherwise false
Usage:	check = myTouch.dataAvailable() // See if data is waiting

read();

Read waiting data from the touch screen. This function should be called if dataAvailable() is true. Use getX() and getY() to get the coordinates.

Parameters:	None
Returns:	Nothing
Usage:	myTouch.read(); // Read data from touch screen
Notes:	After calling read(), raw data from the touch screen is available in the variables TP_X and TP_Y. Do not use these if you do not know how to handle the raw data. Use getX() and getY() instead.

getX();

Get the x-coordinate of the last position read from the touch screen.

Parameters:	None
Returns:	Integer
Usage:	x = myTouch.getX(); // Get the x-coordinate

getY();

Get the y-coordinate of the last position read from the touch screen.

Parameters:	None
Returns:	Integer
Usage:	y = myTouch.getY(); // Get the y-coordinate

setPrecision(precision);

Set the precision of the touch screen.

Parameters:	precision: **PREC_LOW, PREC_MEDIUM, PREC_HI, PREC_EXTREME**
Returns:	Nothing
Usage:	myTouch.setPrecision(PREC_MEDIUM); // Set precision to medium
Notes:	Higher precision data will take longer to read, so take care when using PREC_HI or PREC_EXTREME with fast-moving input.