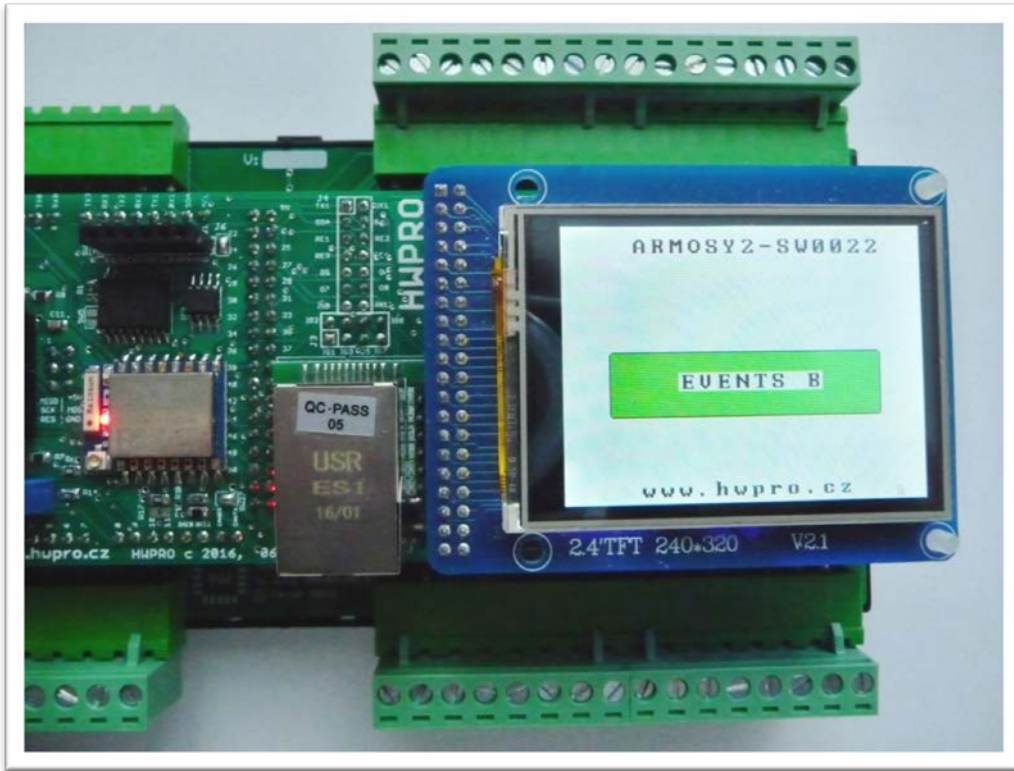


Example – SW0022

Touch UTFT, button



Universal Control System		ARMOSY-2			ARduino MOdule SYstem		
<p>ARM, 32 bit</p> <p>84MHz, 512k FLASH</p>	<p>Arduino DUE</p> <p>3.3V Technology</p>	<p>EEPROM, I2C</p> <p>256 kB</p>	<p>RTC, DS3231, I2C temper.compensation</p> <p>Battery CR2032</p>	<p>SD CARD, SPI</p> <p>Slot In TFT LCD</p>	<p>2.4" COLOR LCD</p> <p>240x320 px</p>	<p>NF amplifier, DAC</p> <p>Audio</p>	
<p>2x</p> <p>RS-232</p> <p>115 kbps</p>	<p>Two Wire</p> <p>RS-485</p> <p>115 kbps</p>	<p>OPTION</p> <p>Mini USB, FTB232</p> <p>USB</p> <p>1 Mbps</p>	<p>OPTION</p> <p>ESP8266, UART</p> <p>WiFi</p> <p>2 Mbps</p>	<p>OPTION</p> <p>W5500, SPI</p> <p>Ethernet</p> <p>10/100 Mb, 2 LED</p>	<p>OPTION</p> <p>GSM, UART</p> <p>GSM</p> <p>SIM800L</p>	<p>Two I2C BUS</p> <p>1Wire BUS</p>	
<p>8x</p> <p>INPUT</p> <p>Optocoupler 6 MODE</p>	<p>8x</p> <p>OUTPUT</p> <p>Optocoupler 3 MODE, PWM</p>	<p>8x</p> <p>IN / OUT</p> <p>Universal I/O Direct CPU</p>	<p>OPTION</p> <p>2x</p> <p>0 – 30A</p> <p>Current measurement</p>	<p>OPTION</p> <p>4x AD</p> <p>0 – 10V</p> <p>18b AD Converter</p>	<p>OPTION</p> <p>4x DA</p> <p>0 – 10V</p> <p>12b DA Converter</p>	<p>OPTION</p> <p>4x</p> <p>10A, 250V, AC</p>	
<p>POWER INPUT</p> <p>8V ~ 72V, 3W</p> <p>AC, DC, USB</p>	<p>Measurement System Voltage</p> <p>3.3V / 5V</p>	<p>OTHERS</p> <p>2x Buttons 2 x LED Buzzer</p>	<p>User Design PCB</p> <p>Size 10x4 cm</p>	<p>OPTION</p> <p>DIN</p> <p>12 modul</p>	<p>Programming</p> <p>Free Software</p>	<p>CZ, EN</p> <p>User manual Examples</p>	

```

/* ||||| ARMosY-2 Example |||||
Iniciale UTFT 2.4" 240x320px ILI9325D + TOUCH + BOTTON
Hardware: ARMOSY-2Version HW: 2.21Create: 28.01.2017*/

// | LIBRARY
#include <UTFT.h>
#include <UTouch.h>

// | DECLARATIONS
UTFT myGLCD(ITDB24,38,39,40,41); // RS, WR, CS, REST
UTouch myTouch(42,43,44,45,46); // D_CLK, D_CS, D_DIN, D_OUT, D_BUSY
extern uint8_t BigFont[]; // Type Font Big
int events = 0; // Events status

// | ||||| SETUP |||||

void setup()
{
  // | UTFT/TOUCH
  myGLCD.InitLCD(); // Initialization LCD
  myTouch.InitTouch(); // Inicialization TOUCH
  myTouch.setPrecision(PREC_HI); // Touch PREC_HI,LOW
  myGLCD.clrScr(); // Clear Screen
  myGLCD.fillScr(VGA_WHITE); // VGA Background Transparency
  myGLCD.setBackColor(255, 255, 255); // White Background
  myGLCD.setFont(BigFont); // Settings Size Fonts
  myGLCD.setColor(0, 0, 0); // Fond Black Colors (R, G, B) BLACK
  myGLCD.print("ARMOSY2-SW0022", 60, 10);
  myGLCD.print("www.hwpro.cz", CENTER, 220);
  Events_A (); // Print Button
}

// | ||||| MAIN |||||

void loop()
{
  // UTFT Touch, pri doteku na pozici provede akci
  int x, y; // pozice dotyku

  if (myTouch.dataAvailable())
  {
    myTouch.read();
    x=myTouch.getX();
    y=myTouch.getY();

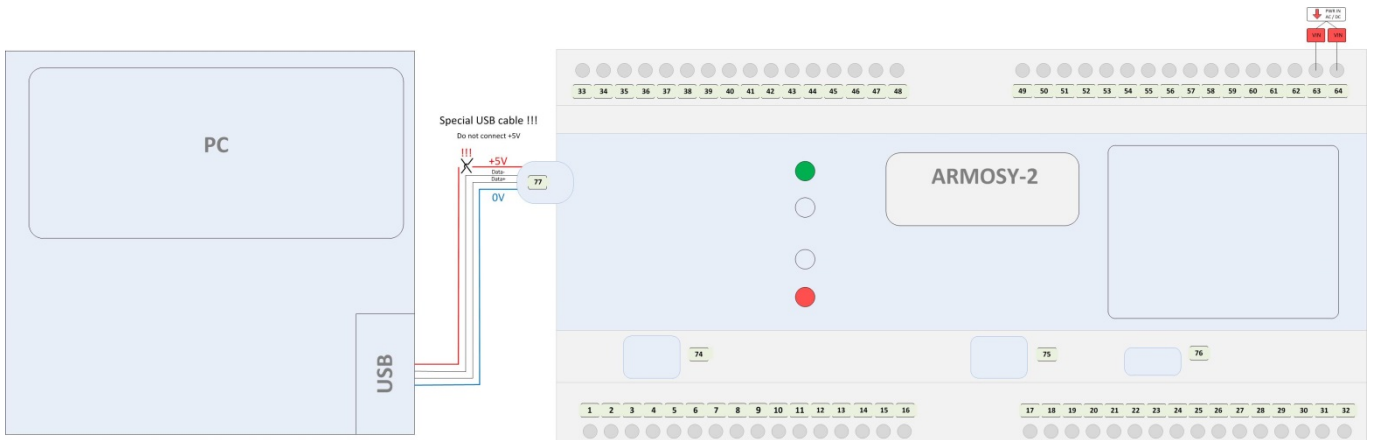
    if ((y>=110) && (y<=165) && ((x>=40) && (x<=280))) // Execute x,y
    {
      // Print Events A or B
      if (events==0) Events_B ();
      else Events_A ();
    }
  }
} // loop END


```

```
// | SUBROUTINE

// Print Events A,B
void Events_A ()
{
  myGLCD.setColor(255, 0, 0); // R,G,B podbarveni tlacitka
  myGLCD.fillRoundRect(40, 110, 280, 165); // objekt - pozice: L, H, R, D
  myGLCD.setColor(0, 0, 0); // obrys - RGB - cerna
  myGLCD.drawRoundRect(40, 110, 280, 165); // obrys tlacitka
  myGLCD.setBackgroundColor(255, 255, 255); // R,G,B podbarveni textu
  myGLCD.print("EVENTS A", 100, 128); // text, pozice z leva, pozice z vrchu
  events = 0; // nastaveni vyznaku udalosti A
  delay (200);
}

void Events_B ()
{
  myGLCD.setColor(0, 255, 0);
  myGLCD.fillRoundRect(40, 110, 280, 165);
  myGLCD.setColor(0, 0, 0);
  myGLCD.drawRoundRect(40, 110, 280, 165);
  myGLCD.setBackgroundColor(255, 255, 255);
  myGLCD.setColor(0, 0, 0);
  myGLCD.print("EVENTS B", 100, 128);
  events = 1;
  delay (200);
}
```





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