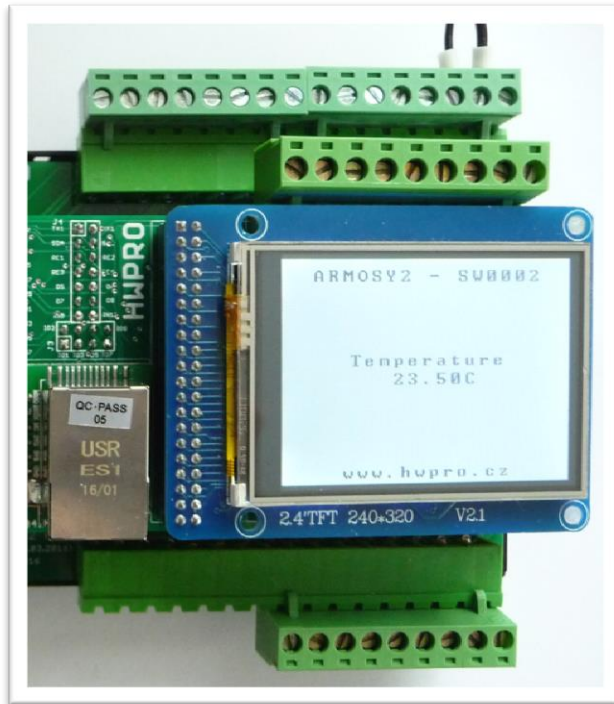


Example – SW0002

Display of temperature sensor DS18B20 on the LCD



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

```

/* ||||| ARMosY-2 Example |||||
Display of temperature sensor DS18B20 on the LCD
Hardware: ARMOSY-2
Version HW: 2.21
Create: 22.04.2016

||||| JUMPER ARMOSY PWR |||||
S12 - ON (1 WIRE)
S6 - ON (+3.3V)

||||| CONNECTION TERMINATOR |||||
62 - DS18B20 (GND)
61 - DS18B20 (VCC)
60 - DS18B20 (1W)*/

// | LIBRARY
#include <UTFT.h>
#include <OneWire.h>
#include <DallasTemperature.h>

// | DECLARATIONS
UTFT myGLCD(ITDB24, 38, 39, 40, 41); // RS, WR, CS, REST
extern uint8_t BigFont[]; // UTFT Fonds

#define DS18B20 5 // Pin 1W
OneWire ourWire(DS18B20);
DallasTemperature sensors(&ourWire);
char sensorPrintout[1]; // Char array to print to the screen
float TMP; // Temperature

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

void setup()
{
// | TOUCH, UTFT

myGLCD.InitLCD(); // Initialization LCD
myGLCD.clrScr(); // Clear Screen
myGLCD.fillScr(VGA_WHITE); // VGA Background Transparency
myGLCD.setColor(0, 0, 0); // Black Fonds
myGLCD.setBackColor(255, 255, 255); // White Background
myGLCD.setFont(BigFont); // Select Font

// | HEADER

myGLCD.print("ARMOSY2 - SW0002", CENTER, 10);
myGLCD.print("www.hwpro.cz", CENTER, 220);

// | 1 WIRE
sensors.begin();
sensors.setResolution(10); // Resolution 9-12 bit
}

```

```
// ||| MAIN |||

void loop()

{
  myGLCD.print("Temperature", CENTER, 100); // Text, position x, position y
  sensors.requestTemperatures(); // Send the command to get temperatures.
  String TMP = String(sensors.getTempCByIndex(0)); // Convert String Sensor 0
  TMP.toCharArray(sensorPrintout, 6); // Convert The Reading To a Char Array,
Field
  myGLCD.print(sensorPrintout, CENTER, 120); // Print Value Temperature
  myGLCD.print("C", 200, 120);
}
```

