

## MSP430-1121STK STARTERKIT DEVELOPMENT BOARD FOR MSP430F1121 MICROCONTROLLERS

### Features:

MSP430-1121STK is development board with following features:

- RS232 Tx, Rx interface
- JTAG connector
- Dallas iButton interface
- Frequency input with protection circuit
- Two red color LEDs
- Two buttons
- Piezzo buzzer
- 32768 Hz crystal
- NMI/TEST pull up/down resistors
- battery holder for 2x 1.5V AA batteries
- 0.1" (2.54 mm) extension headers
- Dimensions: 80x50 mm

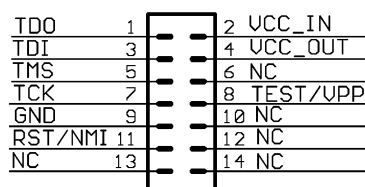
### Programming:

To program MSP430-1121STK you need MSP430 JTAG dongle (Olimex part # MSP430-JTAG) and MSP430 KickStart software. KickStart allow you to write and debug code in assembly language without any limitations and to write code in C with 2K limit. The latest release of KickStart software may be free download from TI web site: <http://www.ti.com/sc/msp430>

### JTAG interface:

The JTAG connector is 2x7 pin with 0,1" step and TI recommended JTAG layout. The PIN.1 is marked with square pad on bottom and arrow on top. JTAG signals are on port P1.4, P1.5, P1.6 and P1.7, which are not used for other functions.

JTAG TOP view PCB board layout:  
MSP430-JTAG



### Dallas iButton interface:

The iButton interface is connected to P1.3 port with protection circuit and allows DS19XX iButtons to be detected, read and write. Sample assembly routine for iButton presence detection

is included in the software for MSP430-1121STK in Olimex web page.

### Frequency input:

The Frequency input is connected to P1.0/TACLK with protection circuit.

### LEDs:

Two LEDs are connected to MSP430F1121. LED1 is placed left and connected to P2.3, LED2 is placed right and is connected to P2.4

### BUTTONS:

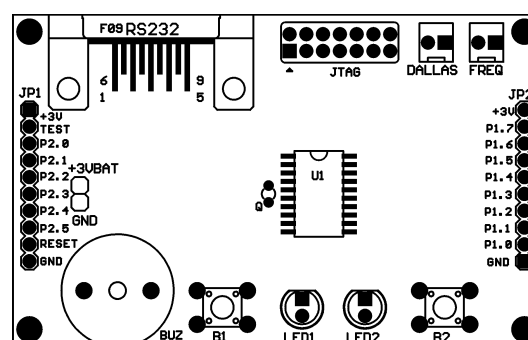
Two buttons are connected to MSP430F1121. B1 is placed left and connected to P2.1, B2 is placed right and is connected to P1.2

### BUZZER:

Piezzo buzzer is connected between P2.0 and P2.5 ports. When the voltage between P2.0 and P2.5 is reversed the buzzer will chirp.

### Extension headers:

The extension headers are 10 pin with 0.1" step. Left header signals up to down: +3V, TEST, P2.0, P2.1, P2.2, P2.3, P2.4, P2.5, RESET, GND. Right header signals up to down: +3V, P1.7, P1.6, P1.5, P1.4, P1.3, P1.2, P1.1, P1.0, GND.

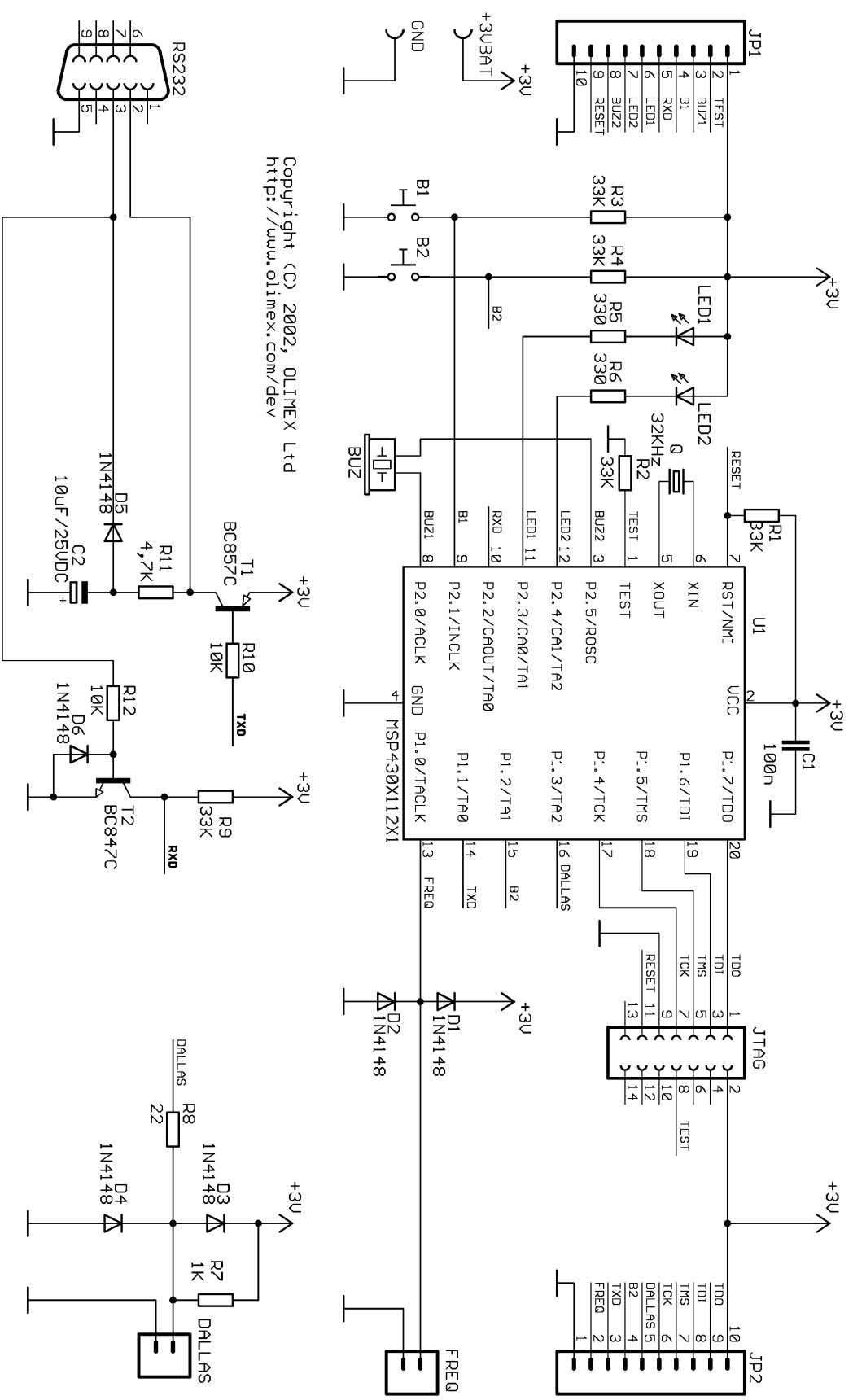


### Ordering codes:

MSP430-1121STK - assembled and tested

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