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# MSP430-LED8x8 BOOSTERPACK development board

## Users Manual



All boards produced by Olimex are ROHS compliant

Rev. Initial, September 2011

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## INTRODUCTION

**MSP430-LED8x8 BOOSTERPACK** is development board for MSP430-EXP430G2 LaunchPad from Texas Instruments. MSP430-LED8x8 BOOSTERPACK has 8x8 LED MATRIX, at which can be visualized captions or pictures. If you want to visualize longer captions, you can extend the board by connecting several MOD-LED8x8 boards to it. The board has also microphone for detecting sounds and buzzer for playing sounds.

## BOARD FEATURES

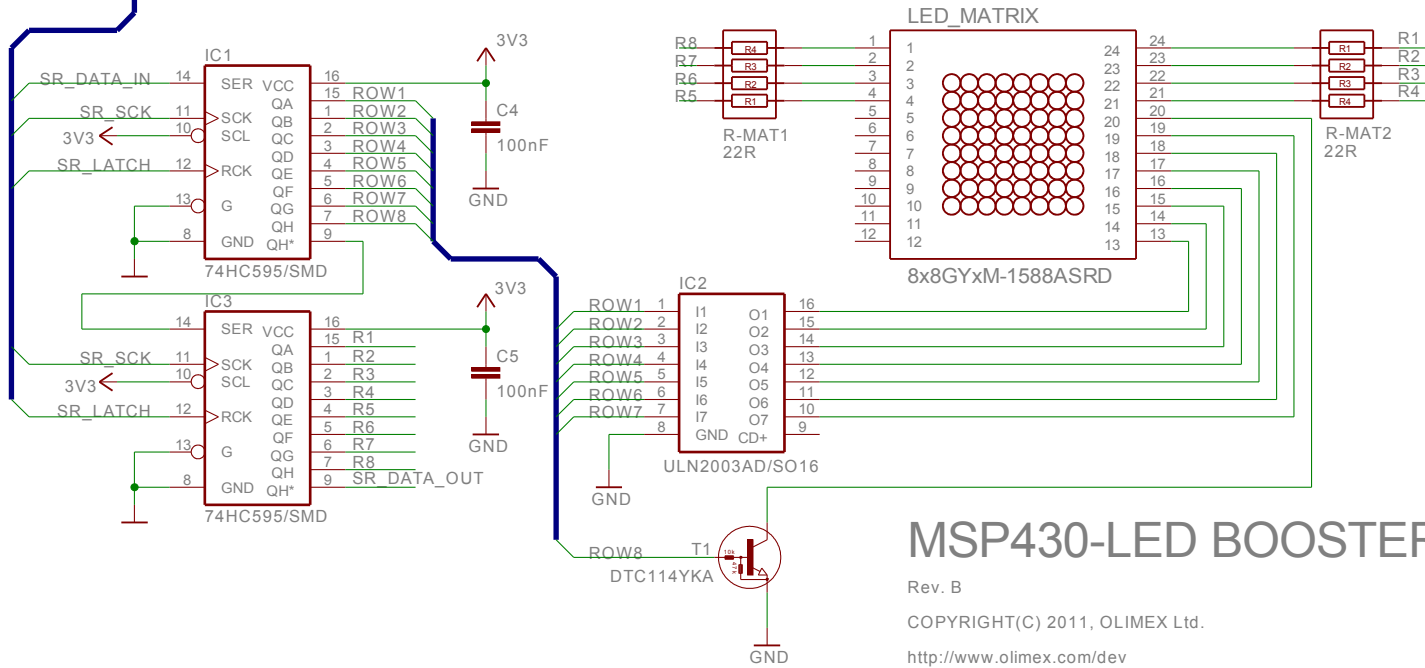
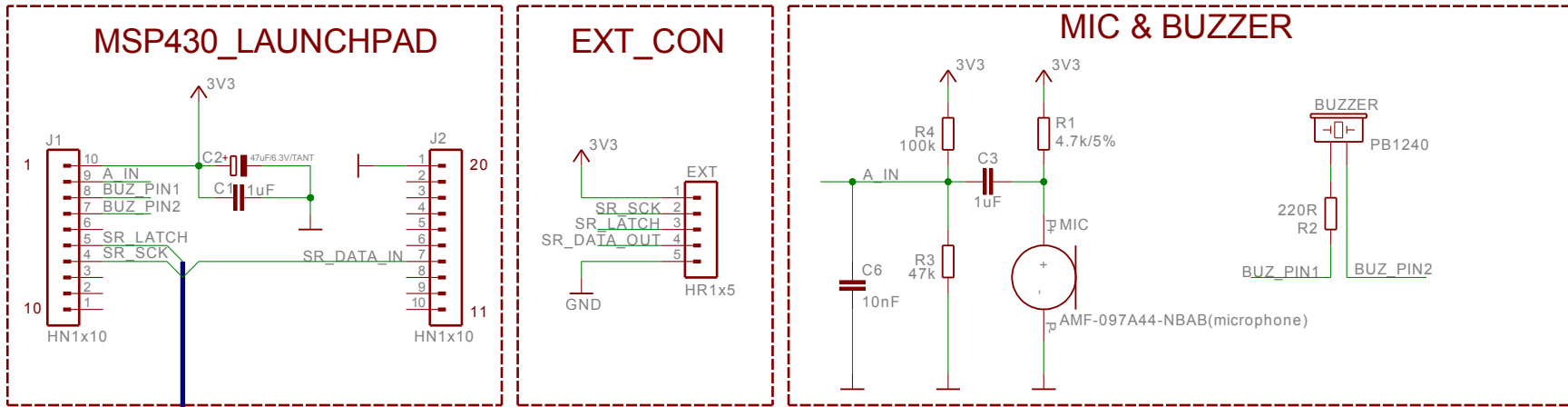
- LED MATRIX 8x8 51x51mm
- BUZZER
- Microphone
- Extension connector
- MSP430\_LAUNCHPAD connectors for connecting to MSP-EXP430G2 board
- PCB: FR-4, 1.5 mm (0,062"), solder mask, silkscreen component print
- Dimensions: 65.75x 51.00mm ( 2.59x 2.01")

## ELECTROSTATIC WARNING

The MSP430-LED8x8 BOOSTERPACK board is shipped in protective anti-static packaging. The board must not be subject to high electrostatic potentials. General practice for working with static sensitive devices should be applied when working with this board.

## BOARD USE REQUIREMENTS

**Hardware:** MSP430 LaunchPad (MSP-EXP430G2) from Texas Instruments; MOD-LED8x8



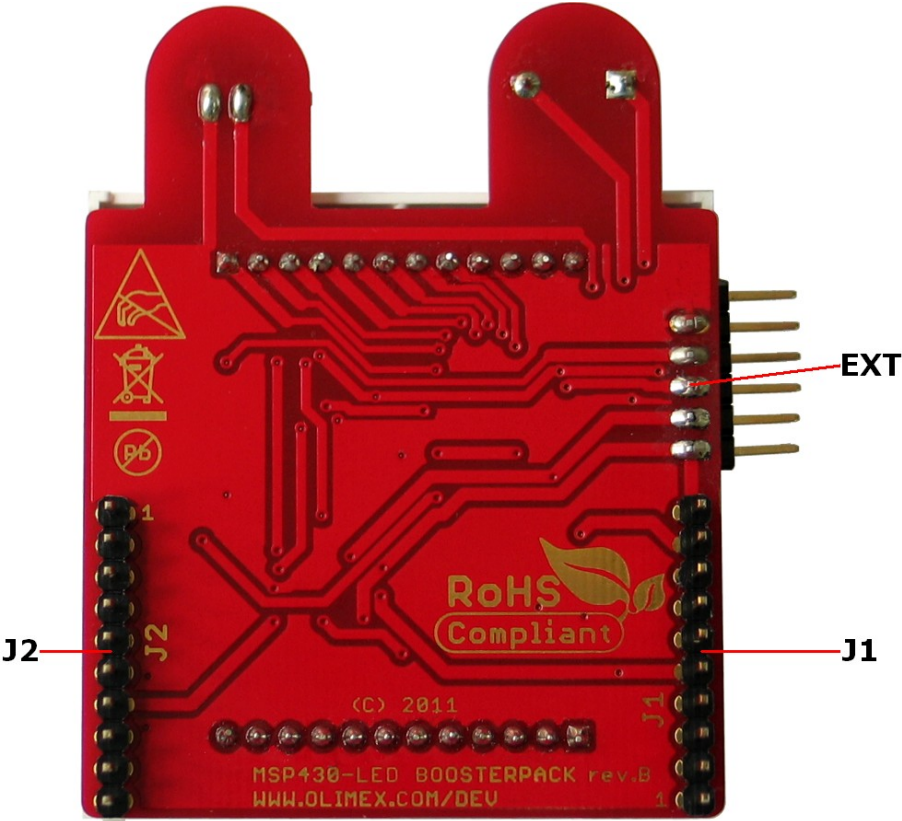
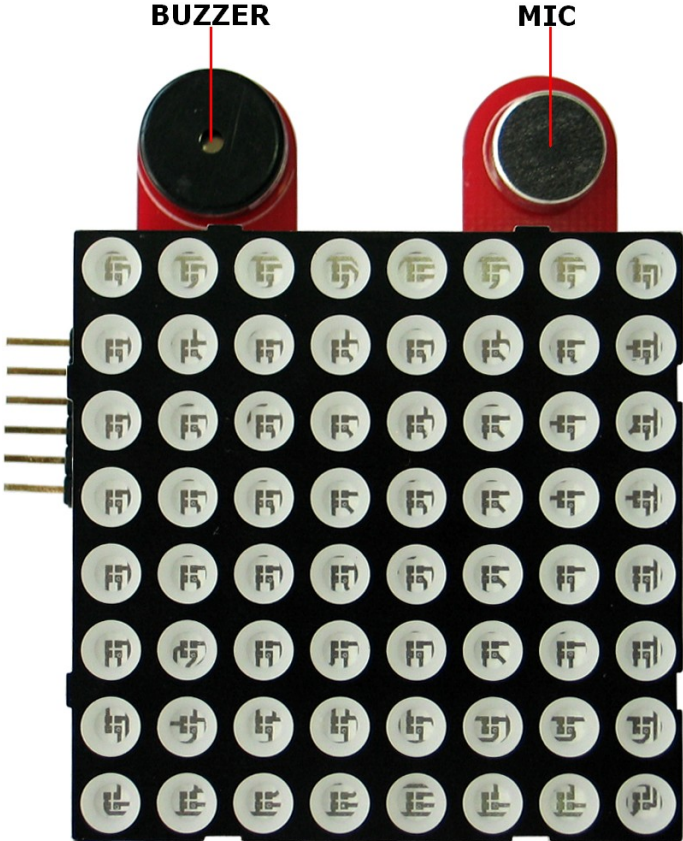
# MSP430-LED BOOSTERPACK

Rev. B

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<http://www.olimex.com/dev>

**BOARD LAYOUT**



## POWER SUPPLY CIRCUIT

**MSP430-LED8x8 BOOSTERPACK** can take power from MSP-EXP430G2 via J1 connector pin 10 (VCC) and J2 connector pin 1 (GND).

The board power consumption is: about 90 mA with all peripherals running at full speed.

## JUMPER DESCRIPTION

There are no jumpers on this board.

## Input/Output

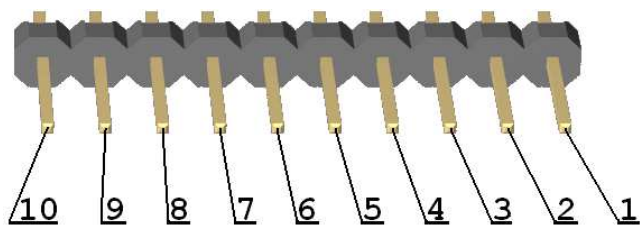
**LED MATRIX** 8x8 51x51mm

**BUZZER** - connected to J1 connector pins 7 (BUZ\_PIN2) and 8 (BUZ\_PIN1).

## CONNECTOR DESCRIPTIONS

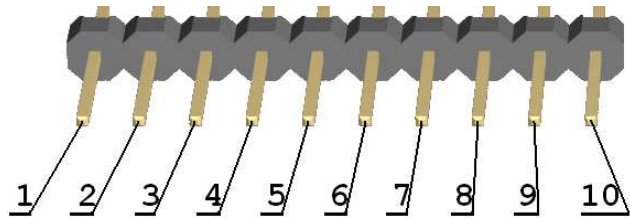
### J1

Pin #	Signal Name
1	Not Connected
2	Not Connected
3	Not Connected
4	SR_SCK
5	SR_LATCH
6	Not Connected
7	BUZ_PIN2
8	BUZ_PIN1
9	A_IN
10	VCC



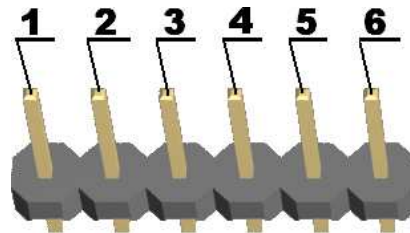
## J2

Pin #	Signal Name
1	GND
2	Not Connected
3	Not Connected
4	Not Connected
5	Not Connected
6	Not Connected
7	SR_DATA_IN
8	Not Connected
9	Not Connected
10	Not Connected



## EXT

Pin #	Signal Name
1	VCC
2	SR_SCK
3	SR_LATCH
4	SR_DATA_OUT
5	GND
6	Not Connected

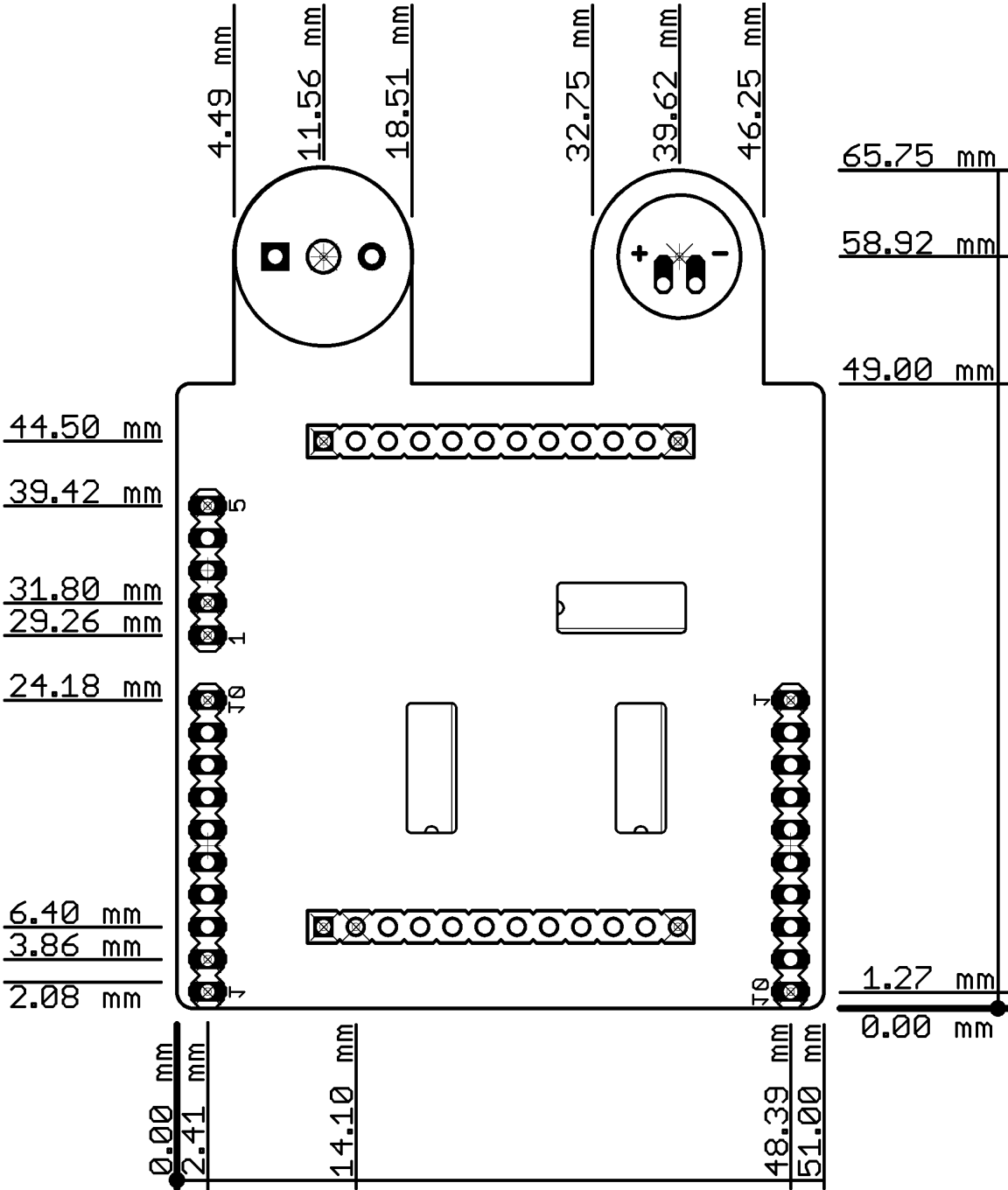


## MIC

Pin #	Signal Name
1	A_IN
2	GND



# MECHANICAL DIMENSIONS





## AVAILABLE DEMO SOFTWARE

- [MSP430-LED-BOOSTERPACK](#) - demonstrates reactions of the board to clapping with different violence by displaying several emoticons and playing sound.

## **ORDER CODE**

**MSP430-LED8x8 BOOSTERPACK** – assembled and tested (no kit, no soldering required)

How to order?

You can order to us directly or by any of our distributors.

Check our web [www.olimex.com/dev](http://www.olimex.com/dev) for more info.

### **Revision history:**

Board's Revision

- Rev. B created June 2011

Manual's Revision

- Rev. Initial created September 2011

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