

### **LEDs:**

GREEN LED stay in solid ON if MSP430-JTAG-ISO internal test is OK.

RED LED blinks occasionally during the communication between JTAG and MSP430.

## **STAND ALONE OPERATIONS**

### **WRITE**

Press RED button to program target MSP430 if there is valid code in internal JTAG memory.

If the internal memory contain code which is for MSP430 microcontroller different than the attached target MSP430 the GREEN LED will start blink for 5 seconds, if you want to program target MSP430 anyway you should press again any of the two buttons.

After successful programming GREEN LED will blink fast at the end of the programming for 3 seconds then switch to solid ON.

If the programming is done with error RED LED will show the error for 5 seconds:

- single blink: blank check error, write error or verify error;
- double blink: no target, target can't be identified or target fuse is blown;
- triple blink: internal memory have no valid code or other JTAG programming error;

### **READ**

When YELLOW button is pressed shortly the LEDs will show the current FUSE burn status for 5 seconds: if RED LED blinks next WRITE will program memory and burn the security fuse, if GREEN LED blinks next WRITE will program memory but not burn the security fuse. During the blinking you can change state by pressing the YELLOW button – change state to not burn the security fuse and RED button – change state to burn the security fuse by next WRITE.

When YELLOW button is pressed and hold for more than 5 seconds MSP430-JTAG-ISO will read the code from attached target and save to internal memory.

After successful read the green LED will blink fast at the end for 3 seconds then switch to solid ON.

If the reading is done with error RED LED will show the error for 5 seconds:

- single blink: target security fuse is blown and can't be read;
- double blink: no target or target can't be identified;
- triple blink: JTAG related error