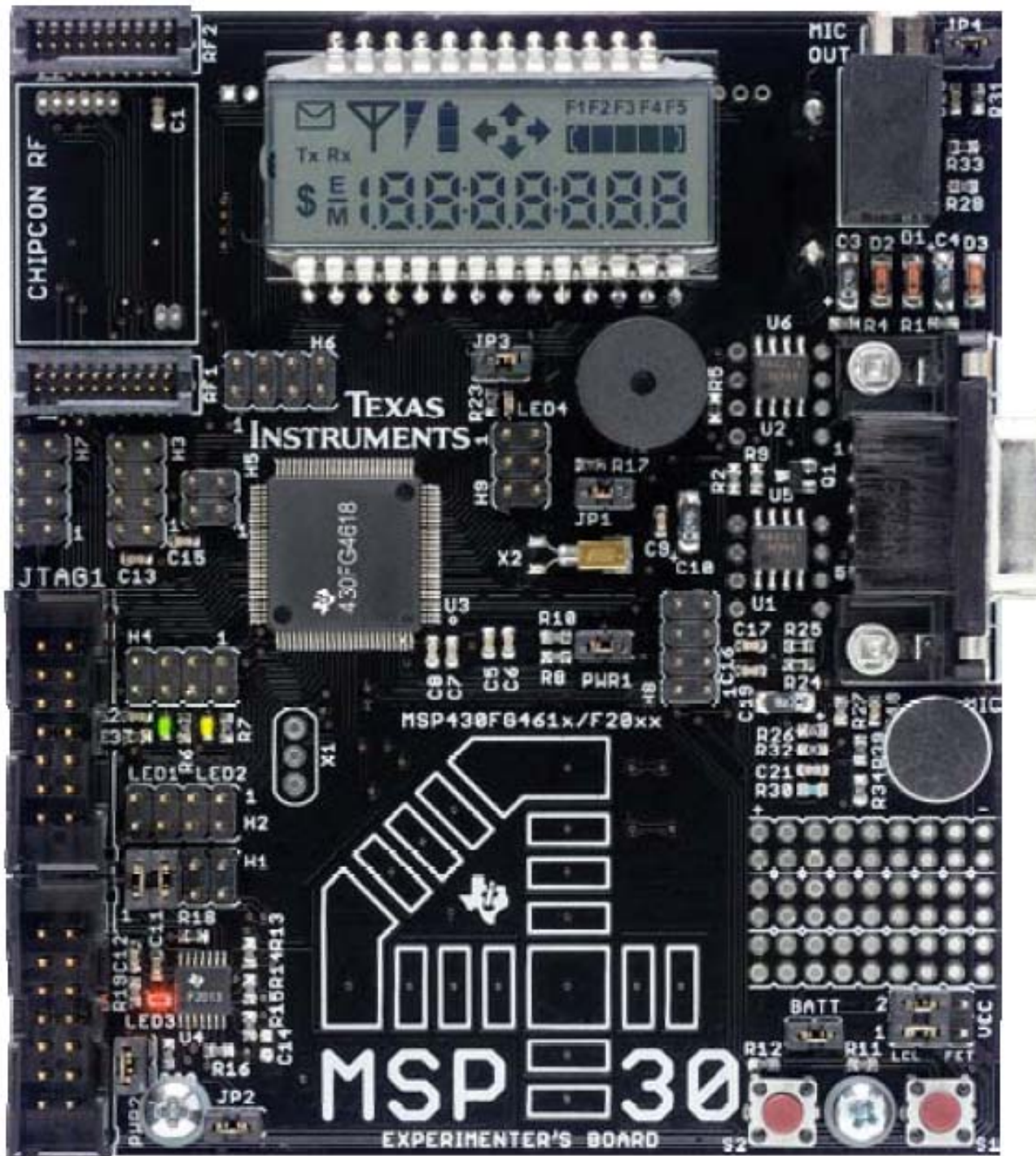




---

***MSP430FG4618/F2013 Experimenter's Board***

***User's Guide***

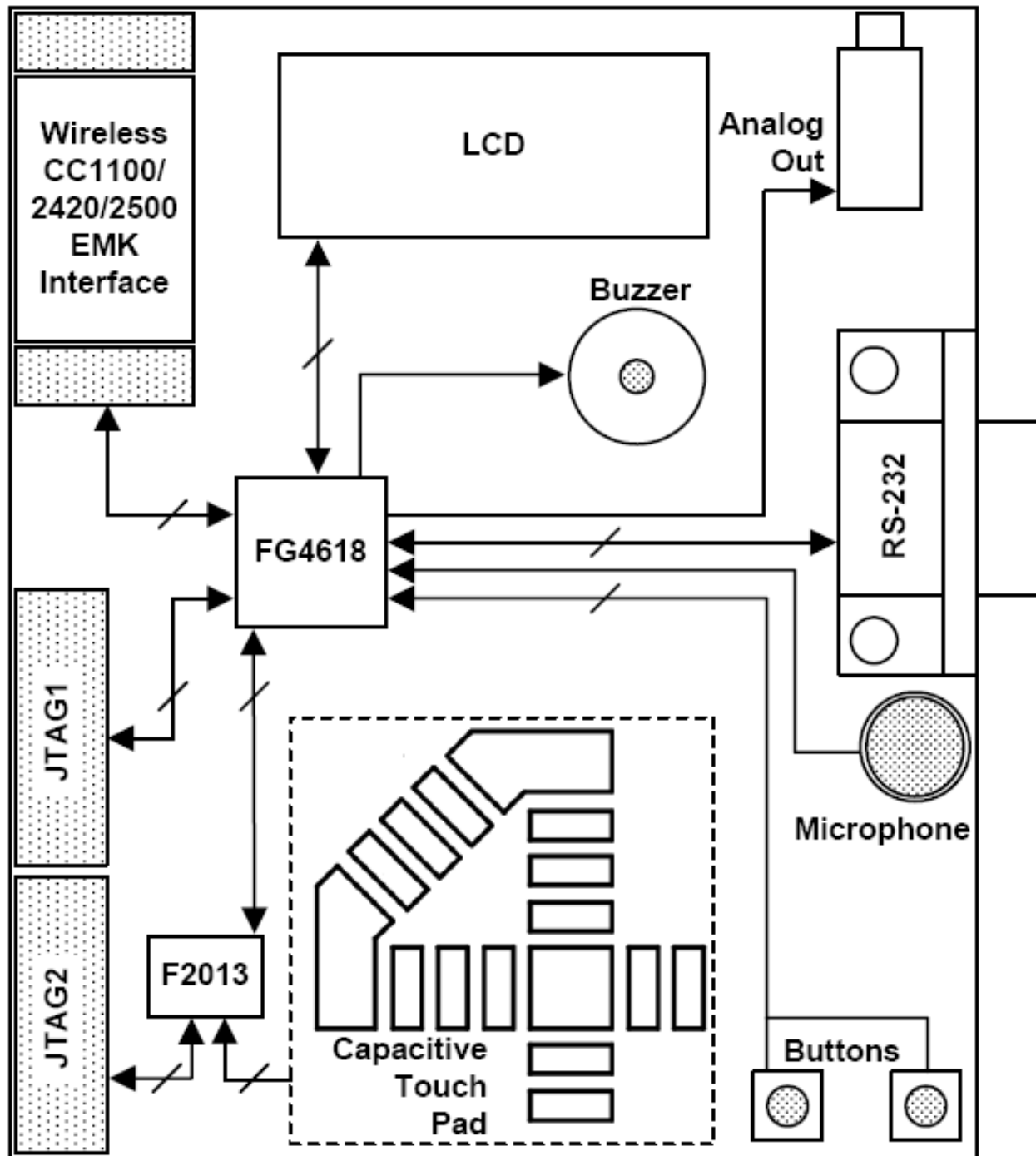


### MSP430FG4618

- 4-MUX LCD Display
- 2 Momentary Push Buttons
- 3 LEDs
- Buzzer
- Chipcon Wireless
- RS-232
- I2C/SPI
- Analog Signal Chain

### MSP430F2013

- 1 LED
- Touch pad
- I2C/SPI



# Power

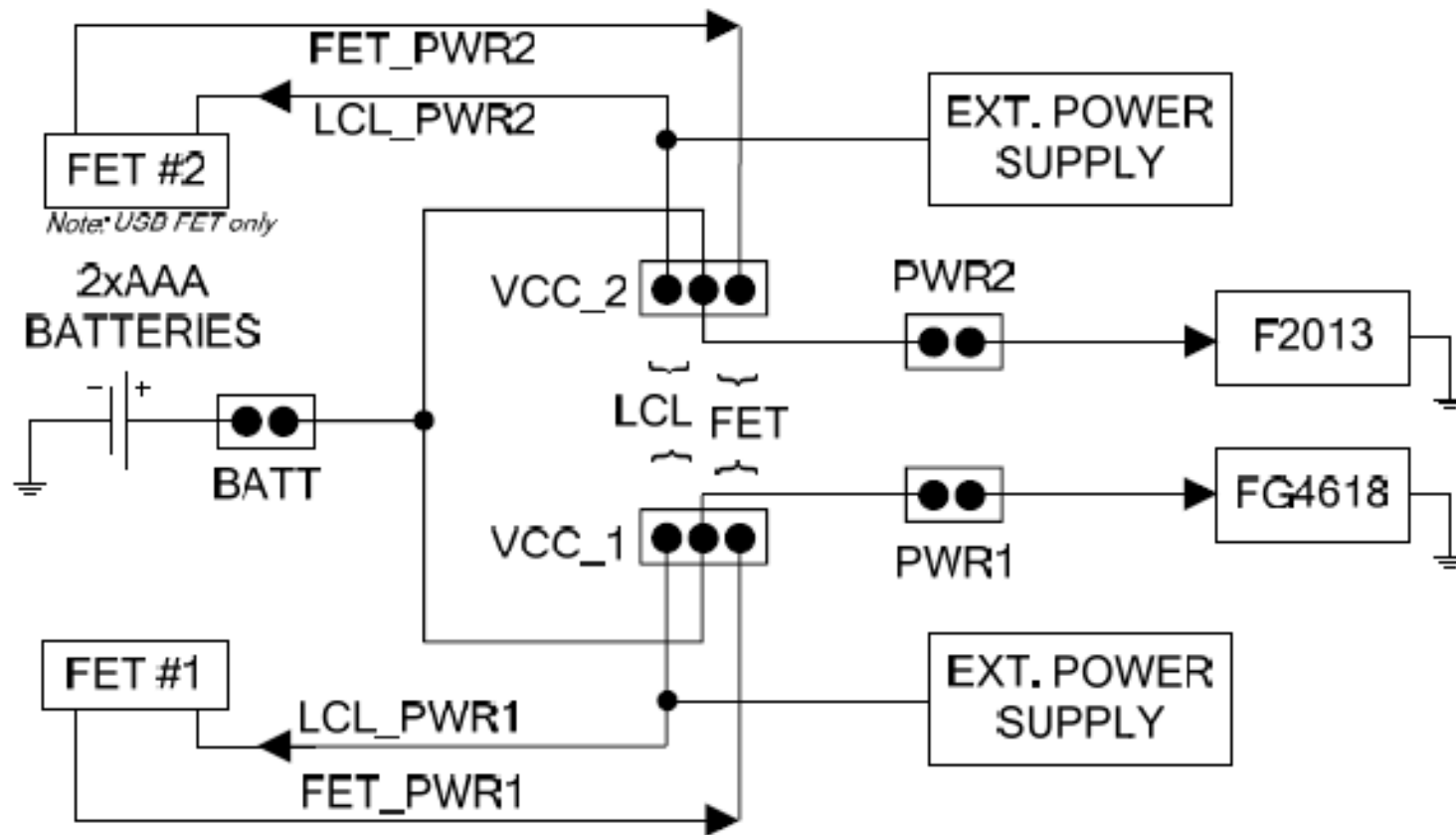
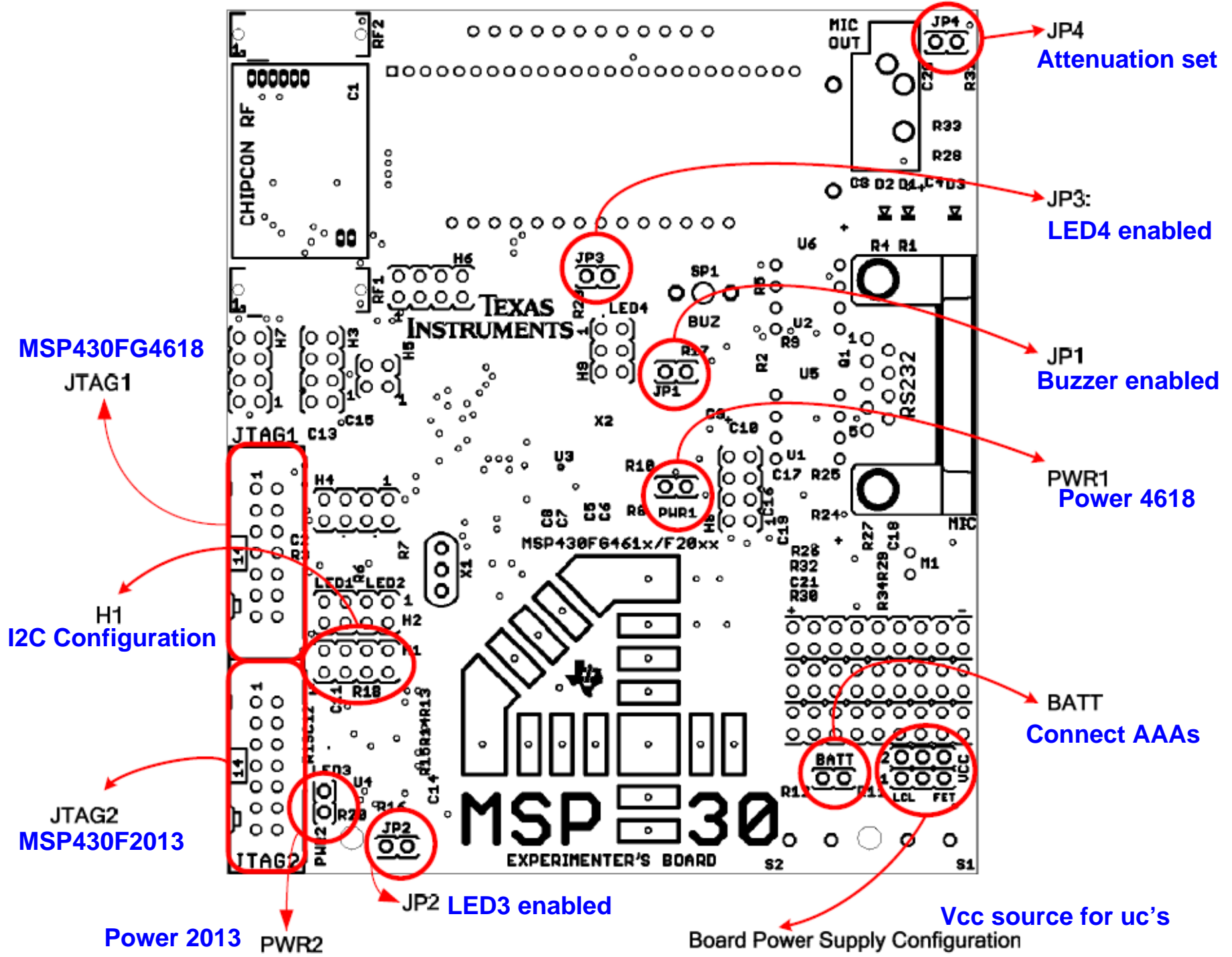
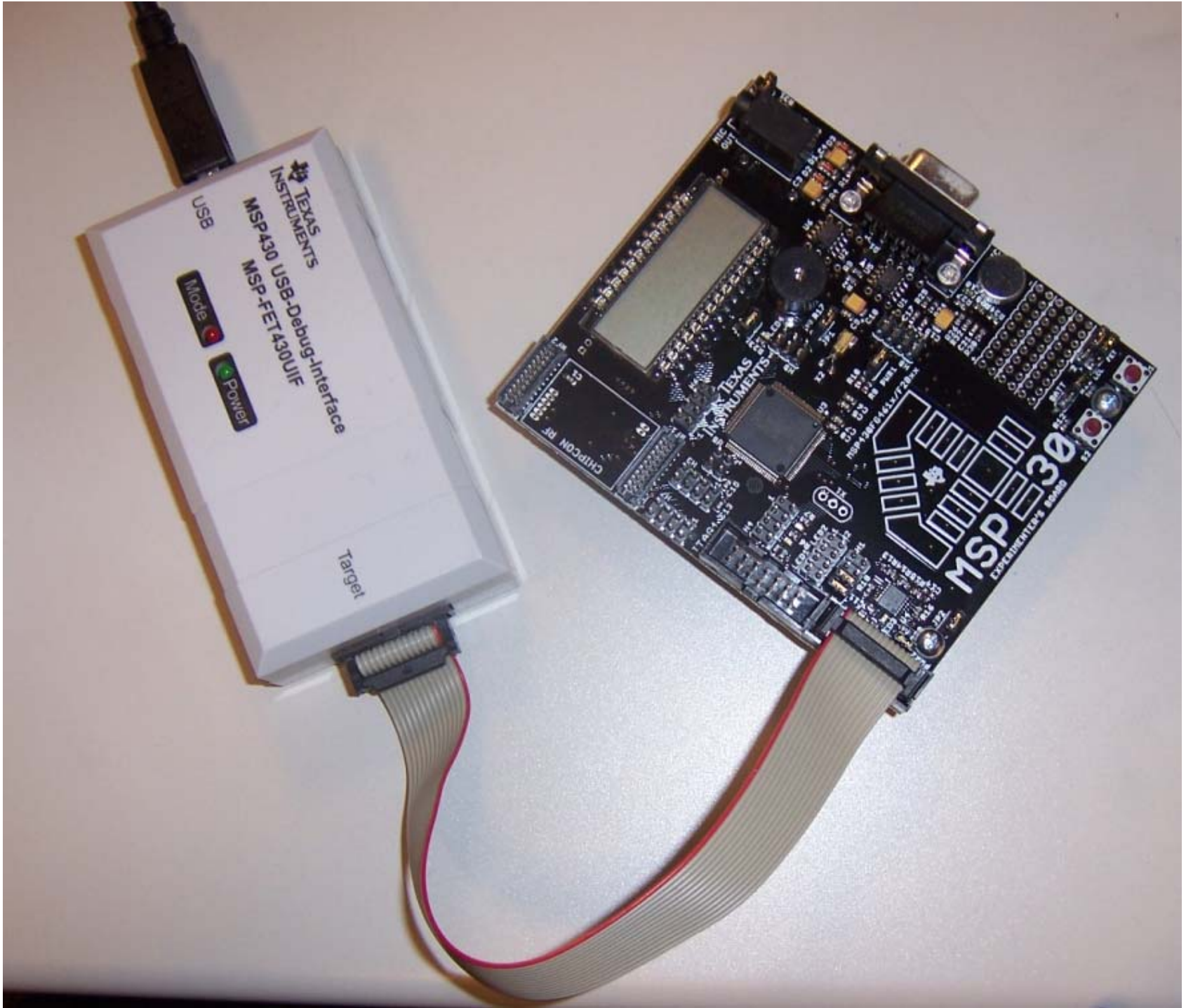


Figure 3: Jumper Settings for Power Selection





USB

TEXAS  
INSTRUMENTS

MSP430 USB-Debug-Interface  
MSP-FET430UIF

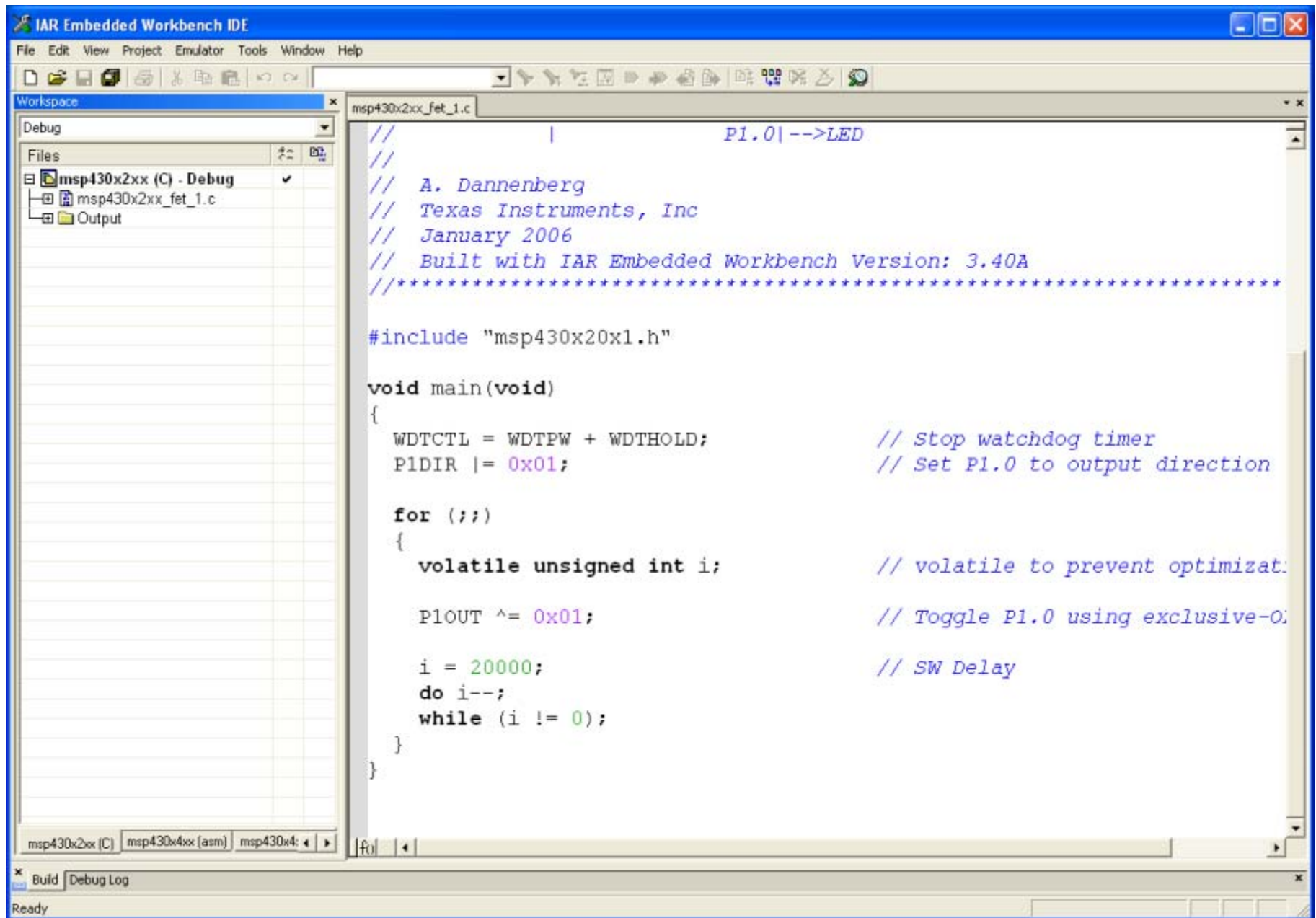
Mode

Power

Target

TEXAS  
INSTRUMENTS

MSP430  
EXPERIMENTAL BOARD



IAR Embedded Workbench IDE

File Edit View Project Debug Emulator Tools Window Help

Workspace: msp430x2xx\_fet\_1.c

```

//          |          P1.0|-->LED
//
// A. Dannenberg
// Texas Instruments, Inc
// January 2006
// Built with IAR Embedded Workbench Version: 3.40A
//*****

#include "msp430x20x1.h"

void main(void)
{
    WDTCTL = WDTPW + WDTHOLD;           // Stop watchdog timer
    P1DIR |= 0x01;                      // Set P1.0 to output

    for (;;)
    {
        volatile unsigned int i;      // volatile to prevent compiler optimization

        P1OUT ^= 0x01;                // Toggle P1.0 output

        i = 20000;                     // SW Delay
        do i--;
        while (i != 0);
    }
}

```

Disassembly

Go to: Memory

```

?cstart_end:
main:
00F812 8321
    WDTCTL = WDTPW + WDT
00F814 40B2 5A80 01
    P1DIR |= 0x01;
00F81A D3D2 0022
    P1OUT ^= 0x01;
00F81E E3D2 0021
    i = 20000;
00F822 40B1 4E20 00
    do i--;
00F828 53B1 0000
    while (i != 0);
00F82C 9381 0000
00F830 23FB
00F832 3FF5
exit:
00F834 4030 F800
00F838 FFFF FFFF
00F83C FFFF FFFF
00F840 FFFF FFFF
00F844 FFFF FFFF
00F848 FFFF FFFF
00F84C FFFF FFFF
00F850 FFFF FFFF
00F854 FFFF FFFF
00F858 FFFF FFFF

```

Log

```

Thu Jan 31 14:35:20 2008: Interface dll version 2.1.8.0
Thu Jan 31 14:35:21 2008: Device : MSP430F20x3
Thu Jan 31 14:35:21 2008: External voltage : 0.0 V
Thu Jan 31 14:35:21 2008: VCC voltage : 3.0 V
Thu Jan 31 14:35:23 2008: Download completed.
Thu Jan 31 14:35:24 2008: Loaded debugger: C:\Program Files\IAR Systems\Embedded Workbench 4.0\430\FET_examples\msp430x2xx\C-source\Debug\Exe\msp430x2xx (C).d43
Thu Jan 31 14:35:24 2008: Target reset

```

Debug Log Build

Ready