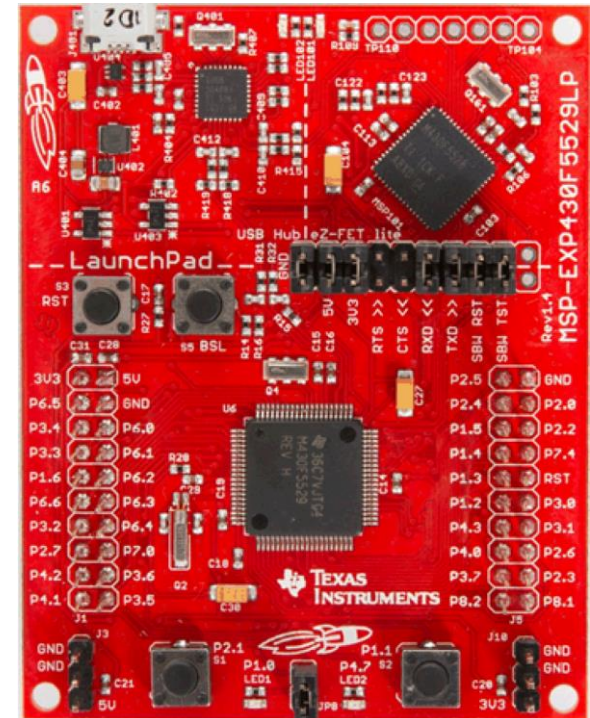


# ALP + MSP430 LaunchPad

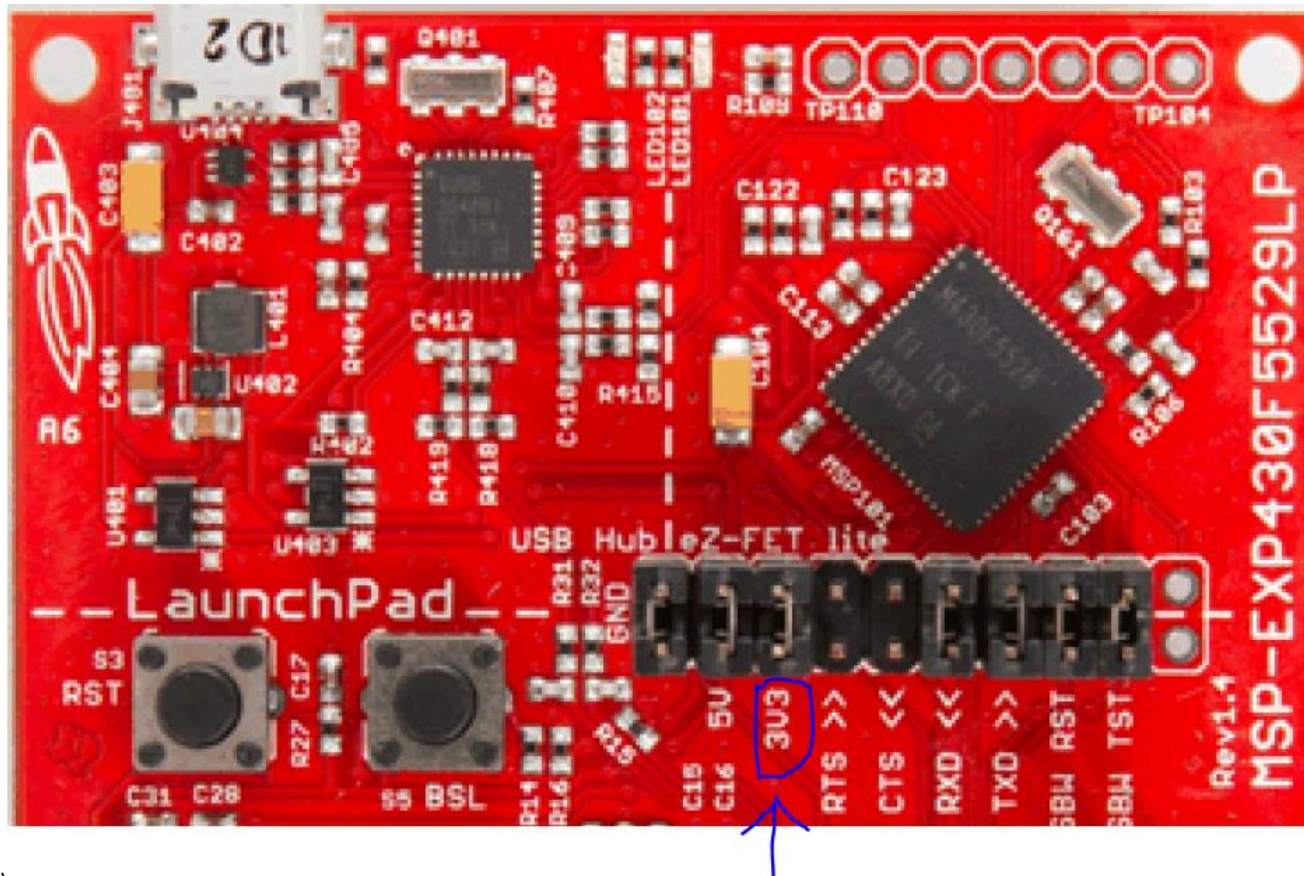
# MSP430F5529 LaunchPad

- MSP430 LaunchPad Documentation and Ordering Link
  - [MSP430F5529 LaunchPad kit](#)
- Why MSP430 LaunchPad?
  - Allows 1.8V operation of MSP430
    - 3.3V supply to MSP430 can be disconnected and external 1.8V supply can be provided
    - So LaunchPad can support 1.8V GPIOs while USB2ANY only supports 3.3V GPIOs
  - MSP430 LaunchPad supports higher number of GPIOs compared to USB2ANY
- MSP430 LaunchPad uses the same MSP430 micro as USB2ANY
- USB2ANY firmware is ported to LaunchPad so ALP can work in the same way on both using exactly same I2C and GPIO pins



# Enabling MSP430 1.8V GPIOs

- Remove 3V3 jumper shown below and connect bench 1.8V supply to the 3V3 pin. Also, update firmware as explained in next page.



# MSP430 LaunchPad Firmware Update

- Following are the steps for LaunchPad Firmware Update:
  - Go to <http://www.ti.com/tool/MSP430USBDEVPACK>
  - Download latest "Python based Firmware Upgrade Example" zip file and extract
  - Find "Python\_Firmware\_UpgradeGUI.exe" in the zip file extract folder and double click
  - To set device in BSL mode, hold BSL switch S5 down and reconnect usb cable
  - Select "File >> Rescan HID Bus..." in the tool and you should see "Ready" message.
  - Then select "File >> Open User Firmware..." and select the firmware file "USB2ANY\_LP\_1.8V\_v2.7.txt" in the following ALP install folder C:\Program Files (x86)\Texas Instruments\Analog LaunchPADv1.57.0010\Drivers\i2c\_controllers\msp430f5529\_launchpad
  - Note: "USB2ANY\_LP\_1.8V\_v2.7.txt" firmware sets up MSP430 operation at 1.8V.
  - If MSP430 operation at 3.3V is required use "USB2ANY\_LP\_3.3V\_v2.7.txt". In this case, no need to remove 3V3 jumper (see previous slide) and LaunchPad is working like USB2ANY module.



# ALP + MSP430

