The chipKIT™ Development Platforms are based off the PIC32 Microcontroller. These are 32-bit products that bring unprecedented features to the Arduino™ community. In order to maintain compatibility with existing hardware/software while maintaining user accessibility to these advanced features, additional jumpers and row headers are provided. This document describes the functionality of the jumpers listed in figure 1.

Figure 1: chipKIT™ UNO32 Jumpers

<table>
<thead>
<tr>
<th>Jumper</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP2</td>
<td>POWER SELECT: Used to connect/bypass on-board 5V regulator when using a power supply connected to J4</td>
</tr>
</tbody>
</table>

- J4 supply is regulated (i.e. 5V will be present on 5V pin)  
- J4 supply bypasses regulator (i.e. Supply voltage will be present on 5V pin)

Note: A 3.3V on-board regulator will always be enable regardless of JP2 settings to protect the PIC32 MCU

Not sure what this does? Play it safe and keep JP2 on the two right-most pins. (i.e. J4 supply is regulated)
### JP4

**PWM/DIGITAL SELECT:** Configures pin 10 on J5 to be used as a PWM output or a Digital Input/Output.

- **Pin 10 configured as a Digital Input/Output**
- **Pin 10 configured as a PWM output**

### JP5/JP7

**SPI SELECT:** Used to configure the chipKIT™ as either a Master or Slave when using the SPI (Serial Peripheral Interface). The chipKIT™ board can be connected to another device or even another chipKIT™ through the SPI connector (J8).

- **chipKIT™ configured as a SPI Master**
- **chipKIT™ configured as a SPI Slave**

For more information on SPI, please visit Wikipedia’s SPI page at: [http://en.wikipedia.org/wiki/Serial_Peripheral_Interface_Bus#Mode_Numbers](http://en.wikipedia.org/wiki/Serial_Peripheral_Interface_Bus#Mode_Numbers)

### JP6/JP8

**I2C/ANALOG PIN SELECT:** Used to configure A4 and A5 for functionality as an Analog input or to be used as I2C communication pins.

- **A4 and A5 on J7 are configured to be used as analog inputs**
- **A4 and A5 are configured to be used as I2C communication lines (A4 – SDA, A5 – SCL)**