**STM32F405R, STM32F446R compatibility**

Either f405R or f446 processors can be used, however a few hardware configuration differences.

Pin 30 capacitor CP2

f405 = PB11

f446 = VCAP\_1 = 2.2u by-pass cap

Pin 31 capacitor CP3

f405 = VCAP\_1 = 2.2u by-pass cap

f446 = VSS = zero ohm

Pin 47 capacitor CP1

f405 = VCAP\_2 = 2.2 u by-pass cap

f446 = VSS = zero ohm

Since PB11 is not available on the f446, the I2C2-SDA for the header is from the alternate on PC12. PC12, however, also is routed to a thru-hole pad for possible use with the SD card interface. If the I2C header is used, then the SD card interface cannot be used.

**I2C bus - Header JP3**

Pin1- gnd

Pin2 - +5

Pin3 – I2C2-SDA with 3.3K pullup

Pin4 – I2C2-SDA !!!!!!!!