# XBIB-U-SP Reference Guide

# **Programming Header**

Header used to program XBee Programmable modules

#### **Self Power Module**

Advanced users only – will void warranty. R31 must be depopulated to power module using V+ and GND from J2 and J5. Sense lines can be connected to S+ and S- for sensing power supplies. **CAUTION:** Voltage not regulated. Applying incorrect voltage can cause fire and serious injury. See Note 1.

### **Current Testing**

Depopulating R31 allows a current probe to be inserted across P6 terminals. The current though P6/R31 powers the module only. Other supporting circuitry is powered by a different trace.

# **Loopback Jumper**

Populating P8 with a loopback jumper causes transmissions both from the module and from the USB to loopback.

# DC barrel plug: 6-20V

Module can be powered by the USB or DC supply. When plugged in simultaneously the DC supply powers the board.

#### 20 Pin Header

CLIPI

Maps to standard through hole XBEE pins and corresponding SMT pads

**SMT XBee Pads** 

E2

#### **RPSMA Connector**

For use with SMT modules with RF pad out

# Indicator LEDs

DS5: ON/ SLEEP

DS2: DIO12 DS3: DIO11

DS4: DIO4

#### SPI

Only used for SMT modules

#### **SPI Power**

Connect to power board from 3.3V

Reset button

#### **User Buttons**

Connected to DIO lines for user implementation

# **LED Indicator**

Yellow: UART Tx, RF Rx Green: UART Rx, RF Tx

Red: Associate

**RSSI Indicator** 

**USB** 

**NOTE 1:** Powering board with J2 and J5 without R31 removed can cause shorts if USB or barrel plug power is connected. Applying too high of a voltage will destroy electronic circuitry in the module and other board components and/or cause injury.