



```
' ----- Really Simple XBee Stamp Receive -----'
```

```
' {$STAMP BS2}
' {$PBASIC 2.5}
```

```
' ----- Assignments -----'
```

```
baud CON 84
```

```
rx PIN 15
tx PIN 14
rts PIN 11
```

```
DataIn VAR Byte
```

```
' ----- Main Program -----'
```

```
DEBUG "Program Start", CR           ' Operator notification
PAUSE 500
```

```
GOSUB init
```

```
DEBUG "Awaiting Data...", CR       ' Status prompt
```

```
PAUSE 500
```

```
DO
SERIN rx\rts,baud,[STR DataIn\4]   ' Input from XBee 4 Chars
DEBUG "Data Received is ",STR DataIn,CR ' Input Rcvd data on Stamp Console
SEROUT tx,baud,["Data RCVD ",STR DataIn] ' Send Rcvd data back for confirmation
LOOP
```

```
' ----- SubRoutines -----'
```

```
init:
```

```
PAUSE 500
DEBUG CR,CR,"Configuring XBee...",CR
PAUSE 200           ' Guard Time
SEROUT Tx,Baud,["+++"]           ' Command Mode sequence
PAUSE 200           ' Guard Time
SEROUT tx,baud,["ATD6 1,CN",CR]  ' RTS enable (D6 1) Exit Command Mode (CN)
PAUSE 100
SEROUT tx,baud, ["Main Node Initialized"]
RETURN
```

```
END
```

XCTU

Radio Modules

Name: Stamp
Function: XBEE15.4
Port: COM5...- AT
MAC: 0013...62A8

Stamp - 0013A20040D562A8

AT Console Status: Connected Tx | Rx

Console log

```

COMS STARTED
Input was 3
Input was 5
Input was A
12123
  
```

Received from Main Node

Data Entered In XCTU Console

Send packets

Name	Data

Send a single packet

Send selected packet

Send sequence

Transmit interval (ms): 500

Repeat times 1

Loop infinitely

Start sequence

Not Displayed on Stamp

Displayed on Stamp

Debug Terminal

Com Port: COM7 Baud Rate: 9600 Parity: None Data Bits: 8 Flow Control: Off

```

Program Start
Configuring XBee...
Awaiting Data...
Data Received is
12
Data Received is 23
Data Received is ahd
  
```

Macros... Pause Clear Close

SimpleIDE Terminal

```

Wireless Coms Initialized
Input Data
3
You Input 3
Input Data
5
You Input 5
Input Data
A
You Input A
  
```

Data Entered On Main Node

```

}/*
Simple trials to get serial coms working.
*/

#include "simpletools.h" // Library include
#include "fdserial.h" // Serial Tool Library

/*+++++++*/
/* Variable Declarations */

serial *xbee; // XBee Adress Pointer

int rx = 9; // I/O pins for XBee
int tx = 8;
int rts = 7;
int baud = 9600;

char coms[4]; // Sting for 4 characters

/* Function Definitions */

void init();

/* Main Program */

int main()
{
/* This section provides program information */

print(" \nPROGRAM START\n\n"); // Operator Notification
pause(2000);
init(); // Initializes the XBee interface
while(1)
{
print( "Input Data\n"); // Input Prompt
scan("%s", &coms); // Keyboard input
print("\n You Input %s\n\n",coms); // Display input
dprint(xbee,"\nInput was ",coms); // Characters sent to remote
}
}

/*+++++++ FUNCTIONS ++++++*/
/* This section initializes the LED Flash Rate */

void init()
{
xbee = fdserial_open(rx, tx, 0, baud); // Opens com link to Xbee
writeChar(xbee, CLS); // Clear Screen
print("\n\n Wireless Coms Initialized\n\n "); // Operator notification
dprint(xbee,"\n COMS STARTED\n"); // Remote notification

```

C Program on Propeller