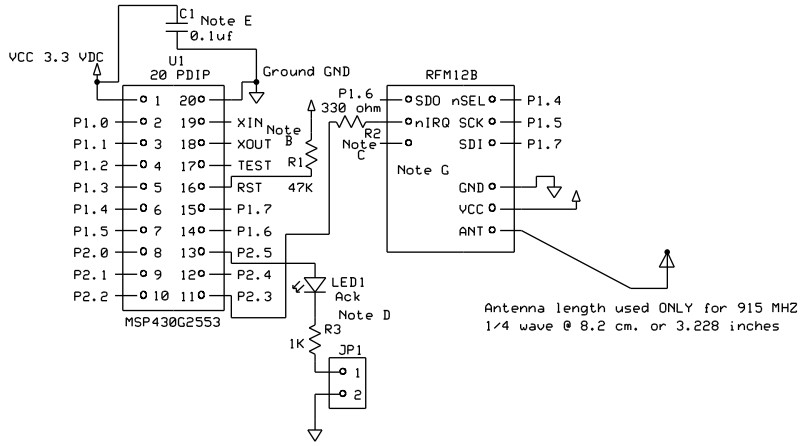
User Mini JeeNodeJR GPIO & Alternate uses (Note A)

P1.0 GPIO INPUT, OUTPUT, ANALOG #0
P1.1 GPIO INPUT, OUTPUT, ANALOG #1, HW RXD
P1.2 GPIO INPUT, OUTPUT, ANALOG #2, HW TXD
P1.3 GPIO INPUT, OUTPUT, ANALOG #3
P2.0 GPIO INPUT, OUTPUT
P2.1 GPIO INPUT, OUTPUT
P2.2 GPIO INPUT, OUTPUT
P2.4 GPIO INPUT, OUTPUT

Parts:

U1 - 20 pin socket & MSP430G2553 microcontroller
R1 47K 1/8w
R2 330 ohm 1/8w - current limit for nIRQ
R3 1 K 1/8w
LED1 - Hi eff T1 3mm Yel LED
C1 - Bypass cap. 0.1 uf 10 VDC
RFM12B - Proper MHZ in country used!
JP1 - 0.1 sp 0.025 sq. pins (2) with shunt jumper
Based PCB - 2 layer design

Mini JeeNodeJR Schematic



Notes:

A. See MSP430_Value_user_guide.pdf for other GPIO uses
B. Optional Crystal Pads and GND on board
   Crystal loading is done in software (12.pf max)
   QUAR25 from Microcrystal www.microctystal.com
C. 10K pullup not installed on board - not critical?
D. For ACK protocol testing remove JP1 to save power
E. Install bypass cap. across U1 pins 1 & 20 (top layer)
F. Maximum battery input voltage is 3.3 VDC
   Caution - There is NO reverse polarity protection!!!!
G. Elevate RFM12B above PCB using solid 22 guage wire

Component Placement on PCB

U1 socket and microcontroller on layer 2 (bottom layer)
JP1 and shunt on layer 2
R1 47K on layer 2 (bottom layer)
All other components mounted on layer 1 (top layer)

Company Name		
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