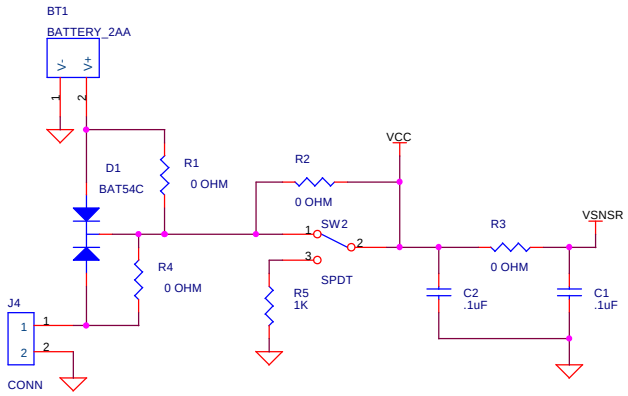

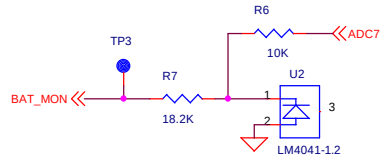

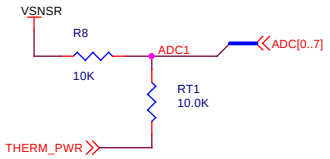

BOARD OPTIONS	
R1	INSTALL
R2	NOT INSTALLED
R4	NOT INSTALLED
R8	NOT INSTALLED
RT1	NOT INSTALLED

CROSSBOW TECHNOLOGY. INC.		
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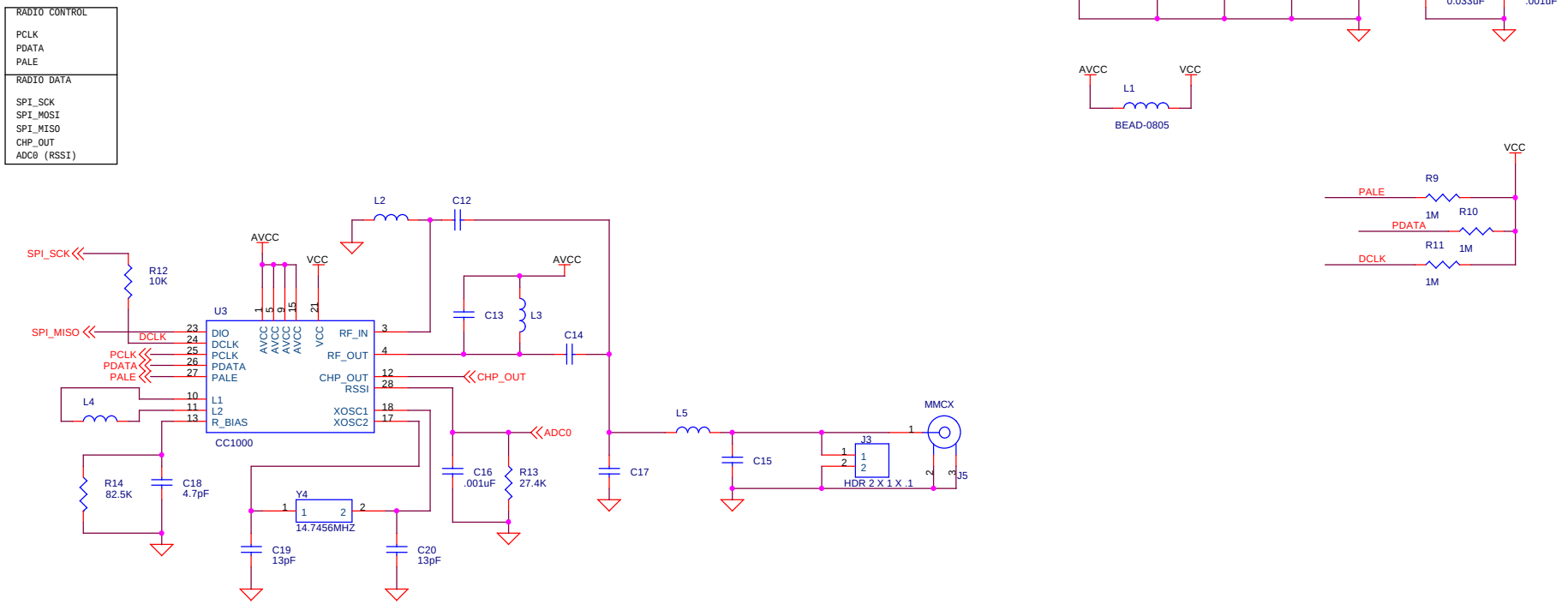

Title	MICA2 MPR410CB-433MHZ	
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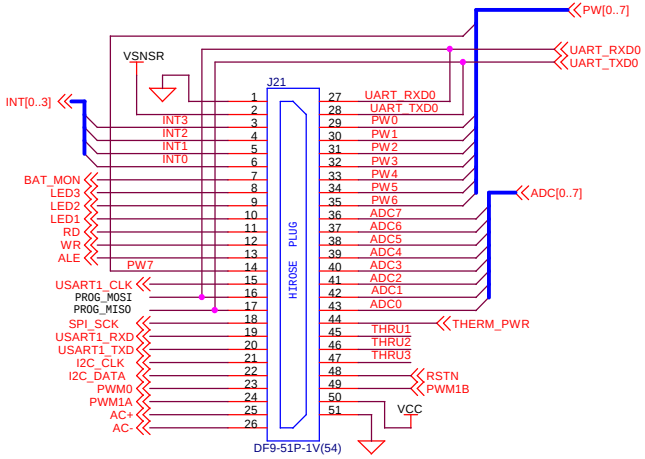

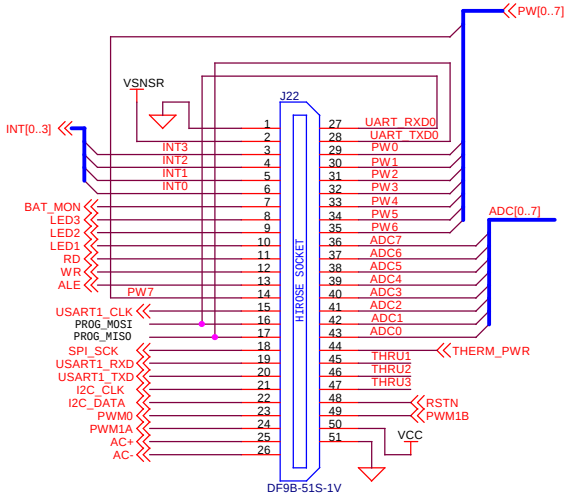

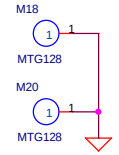

PIN	NAME	DESCRIPTION
1	GND	GROUND
2	VSNSR	SENSOR SUPPLY
3	INT3	GPIO
4	INT2	GPIO
5	INT1	GPIO
6	INT0	GPIO
7	BAT_MON	BATTERY VOLTAGE MONITOR ENABLE
8	LED3	LED3
9	LED2	LED2
10	LED1	LED1
11	RD	GPIO
12	WR	GPIO
13	ALE	GPIO
14	PW7	POWER CONTROL 7
15	USART1_CLK	USART1 CLOCK
16	PROG_MOSI	SERIAL PROGRAM MOSI
17	PROG_MISO	SERIAL PROGRAM MISO
18	SPI_SCK	SPI SERIAL CLOCK
19	USART1_RXD	USART1 RX DATA
20	USART1_TXD	USART1 TX DATA
21	I2C_CLK	I2C BUS CLOCK
22	I2C_DATA	I2C BUS DATA
23	PWM0	GPIO/PWM0
24	PWM1A	GPIO/PWM1A
25	AC+	GPIO/AC+
26	AC-	GPIO/AC-

PIN	NAME	DESCRIPTION
27	UART_RXD0	UART_0 RECEIVE
28	UART_TXD0	UART_0 TRANSMIT
29	PW0	POWER CONTROL 0
30	PW1	POWER CONTROL 1
31	PW2	POWER CONTROL 2
32	PW3	POWER CONTROL 3
33	PW4	POWER CONTROL 4
34	PW5	POWER CONTROL 5
35	PW6	POWER CONTROL 6
36	ADC7	ADC INPUT 7 - BATTERY MONITOR/JTAG TDI
37	ADC6	ADC INPUT 6 / JTAG TDO
38	ADC5	ADC INPUT 5 / JTAG TMS
39	ADC4	ADC INPUT 4 / JTAG TCK
40	ADC3	ADC INPUT 3
41	ADC2	ADC INPUT 2
42	ADC1	ADC INPUT 1
43	ADC0	ADC INPUT 0 / RSSI MONITOR
44	THERM_PWR	TEMP SENSOR ENABLE
45	THRU1	THRU CONNECT 1
46	THRU2	THRU CONNECT 2
47	THRU3	THRU CONNECT3
48	RSTN	RESET (NEG)
49	PWM1B	GPIO/PWM1B
50	VCC	DIGITAL SUPPLY
51	GND	GROUND

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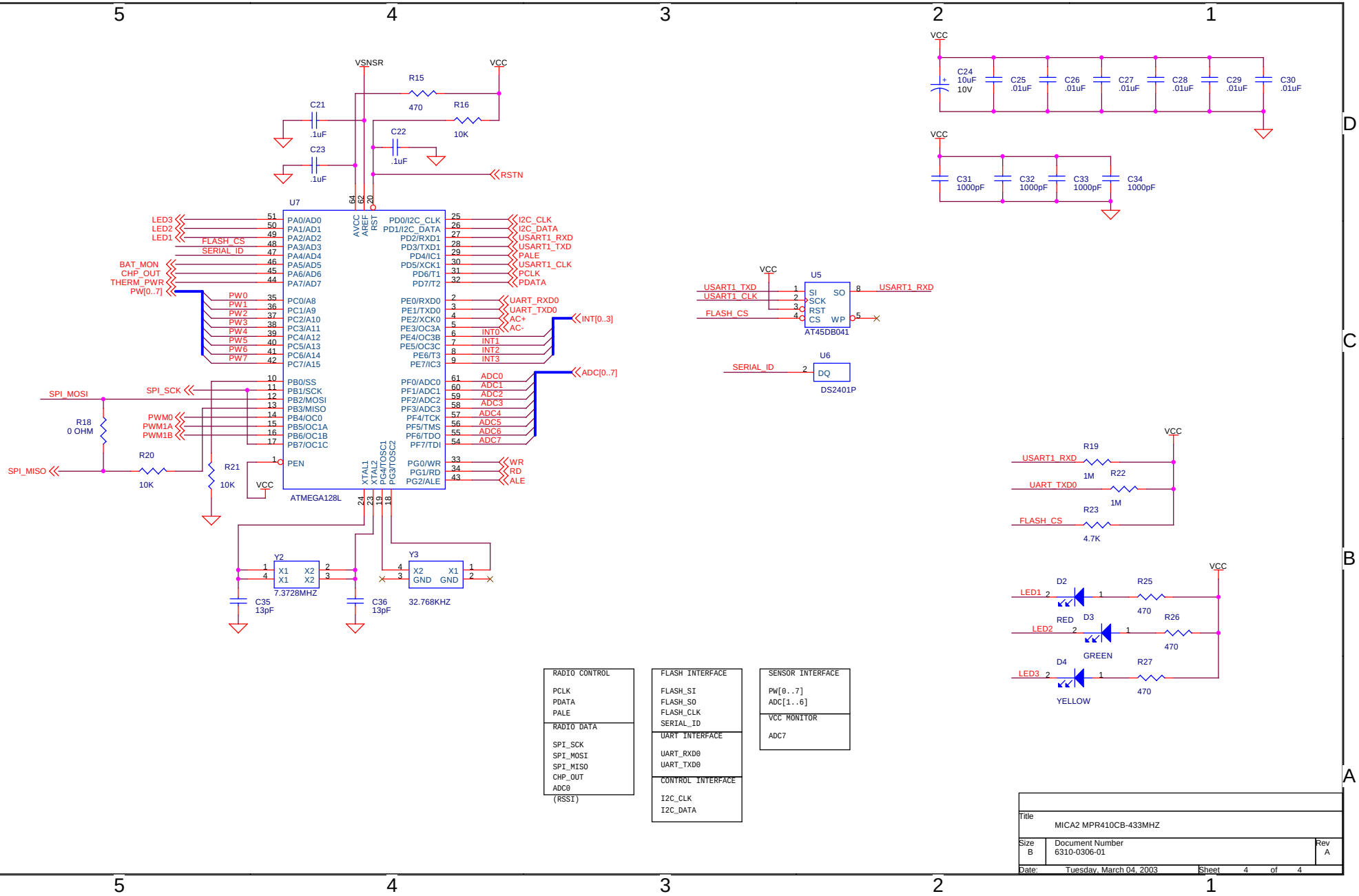
VSNSR
VCC
R15
470
R16
10K
C21
.1uF
C22
.1uF
C23
.1uF
RSTN
U7
ATMEGA128L
LED3
LED2
LED1
FLASH_CS
SERIAL_ID
BAT_MON
CHP_OUT
THERM_PWR
PW[0..7]
SPI_MOSI
SPI_SCK
SPI_MISO
PWM0
PWM1A
PWM1B
R18
0 OHM
R20
10K
R21
10K
PEN
Y2
7.3728MHZ
C35
13pF
C36
13pF
Y3
32.768KHZ
I2C_CLK
I2C_DATA
USART1_RXD
USART1_TXD
PALE
USART1_CLK
PCLK
PDATA
UART_RXD0
UART_TXD0
AC+
AC-
INT0
INT1
INT2
INT3
INT[0..3]
ADC0
ADC1
ADC2
ADC3
ADC4
ADC5
ADC6
ADC7
ADC[0..7]
WR
RD
ALE
C24
10uF
10V
C25
.01uF
C26
.01uF
C27
.01uF
C28
.01uF
C29
.01uF
C30
.01uF
C31
1000pF
C32
1000pF
C33
1000pF
C34
1000pF
U5
AT45DB041
U6
DS2401P
R19
1M
R22
1M
R23
4.7K
D2
RED
D3
GREEN
D4
YELLOW
R25
470
R26
470
R27
470
RADIO CONTROL
PCLK
PDATA
PALE
RADIO DATA
SPI_SCK
SPI_MOSI
SPI_MISO
CHP_OUT
ADC0
(RSSI)
FLASH INTERFACE
FLASH_SI
FLASH_SO
FLASH_CLK
SERIAL_ID
UART INTERFACE
UART_RXD0
UART_TXD0
CONTROL INTERFACE
I2C_CLK
I2C_DATA
SENSOR INTERFACE
PW[0..7]
ADC[1..6]
VCC MONITOR
ADC7
Title
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