Beach Day

Revision History		
Rev	**Date**	**Description**
XA	11 APR 18	1) Initial release.
XB	3 JULY 18	1) Added R38 thru R39; Changed R20 value; Swapped nets on LCD1-1 & LCD1-2

Schematic Page Description	
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03	Power
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Beach Day

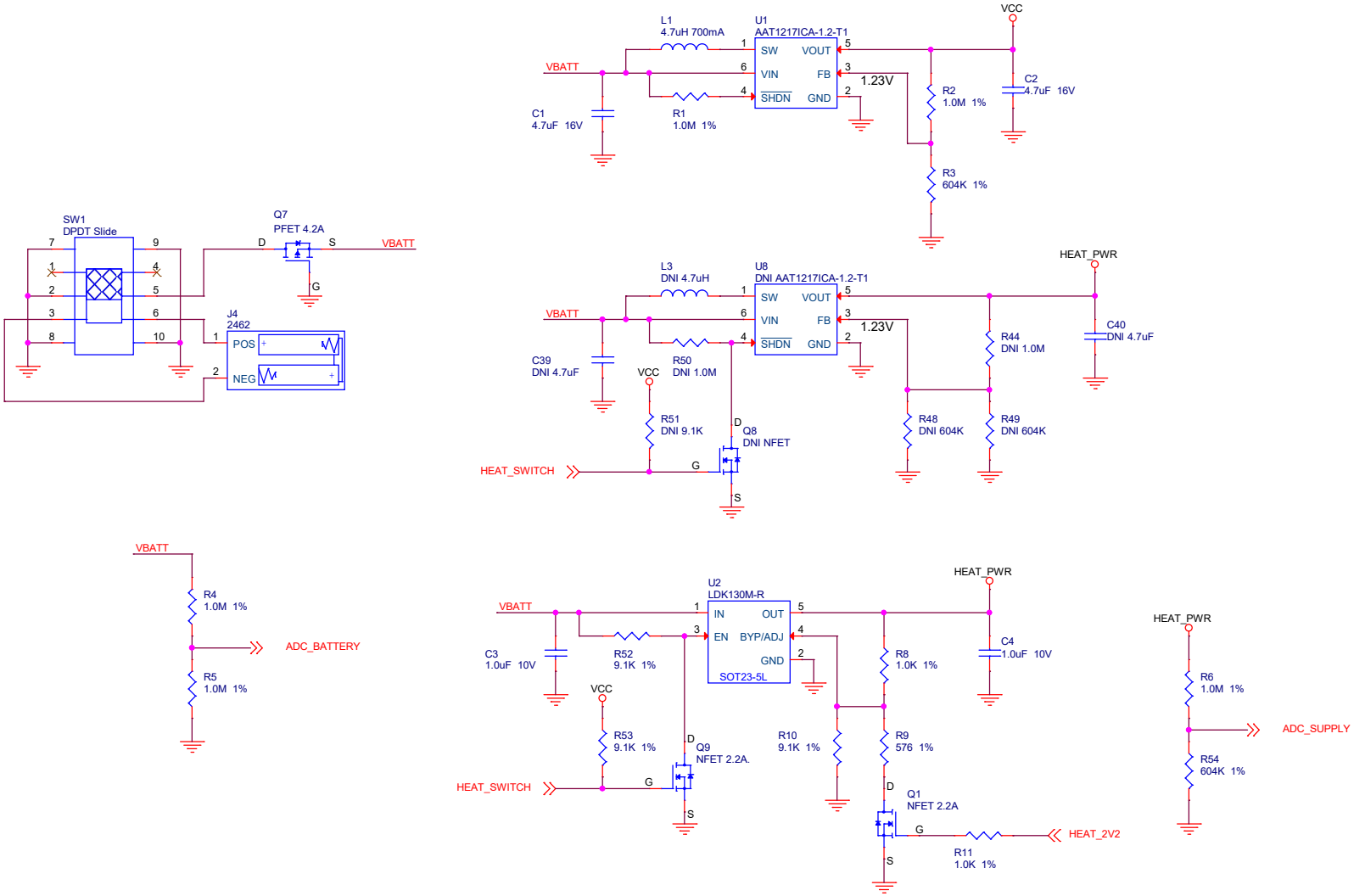
Cover Sheet

Date July 03, 2018 Sheet 1

Beach Day

Block Diagram

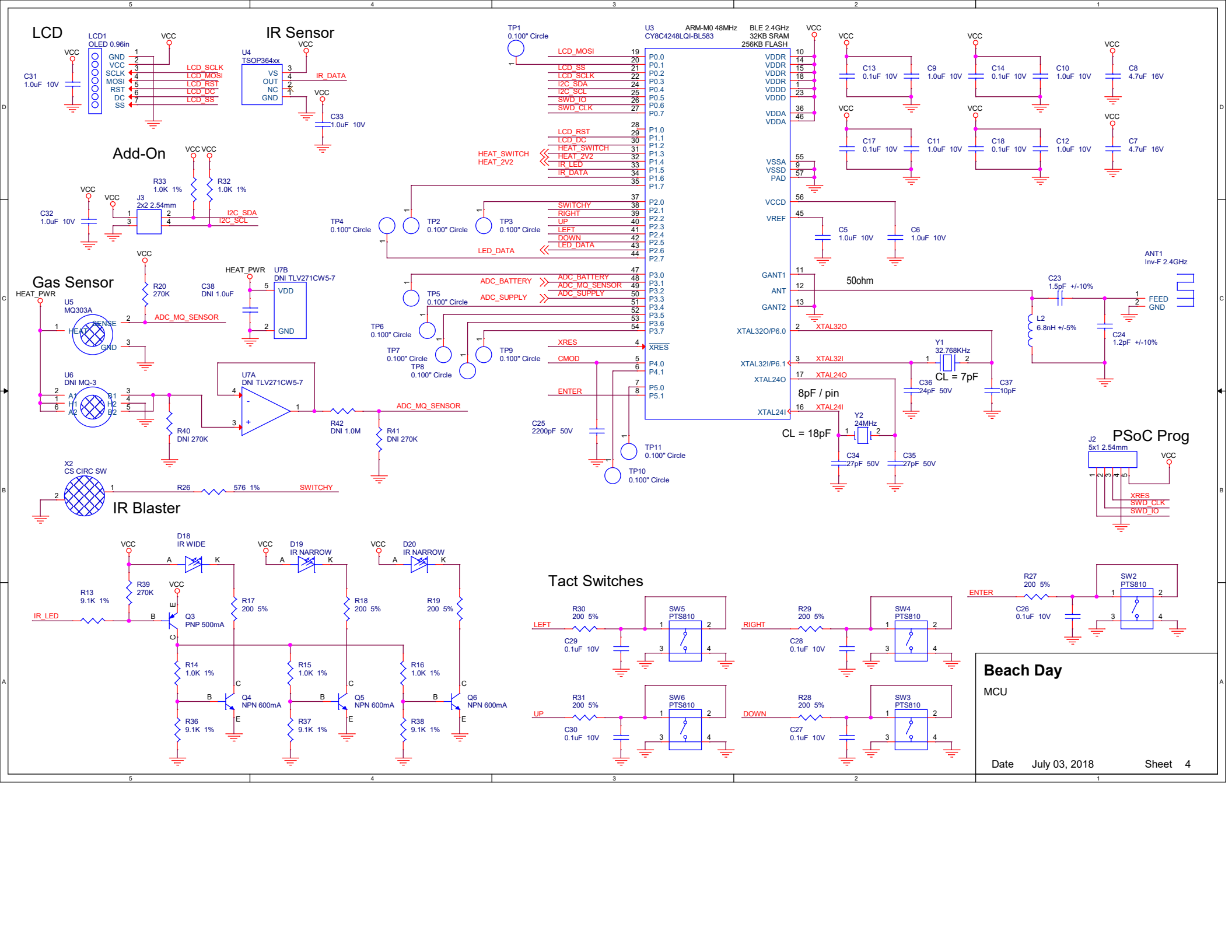
Date July 03, 2018 Sheet 2

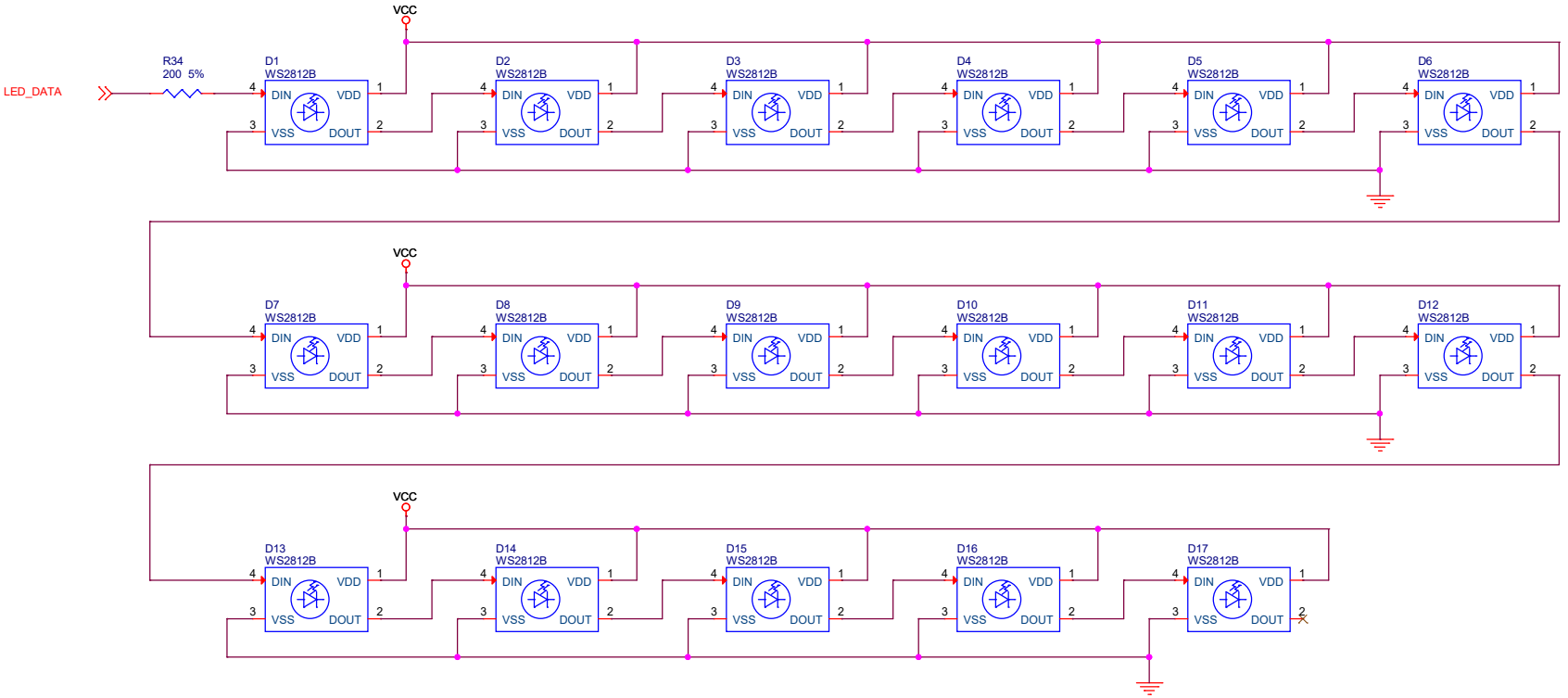


Beach Day

Power

Date July 03, 2018 Sheet 3


LCD
LCD1
OLED 0.96in
GND
VCC
SCLK
MOSI
RST
DC
SS
LCD_SCLK
LCD_MOSI
LCD_RST
LCD_DC
LCD_SS
C31
1.0uF 10V
IR Sensor
U4
TSOP364xx
VS
OUT
NC
GND
IR_DATA
C33
1.0uF 10V
Add-On
J3
2x2 2.54mm
R33
1.0K 1%
R32
1.0K 1%
I2C_SDA
I2C_SCL
C32
1.0uF 10V
Gas Sensor
U5
MQ303A
SENSE
HEAT
GND
R20
270K
ADC_MQ_SENSOR
HEAT_PWR
U7B
DNI TLV271CW5-7
VDD
GND
C38
DNI 1.0uF
U6
DNI MQ-3
U7A
DNI TLV271CW5-7
R40
DNI 270K
R42
DNI 1.0M
R41
DNI 270K
X2
CS CIRC SW
R26
576 1%
SWITCHY
IR Blaster
D18
IR WIDE
D19
IR NARROW
D20
IR NARROW
R39
270K
R13
9.1K 1%
IR_LED
Q3
PNP 500mA
R17
200 5%
R18
200 5%
R19
200 5%
R14
1.0K 1%
R15
1.0K 1%
R16
1.0K 1%
Q4
NPN 600mA
Q5
NPN 600mA
Q6
NPN 600mA
R36
9.1K 1%
R37
9.1K 1%
R38
9.1K 1%
TP1
0.100" Circle
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
U3
CY8C4248LQI-BL583
ARM-M0 48MHz
BLE 2.4GHz
32KB SRAM
256KB FLASH
LCD_MOSI
LCD_SS
LCD_SCLK
I2C_SDA
I2C_SCL
SWD_IO
SWD_CLK
LCD_RST
LCD_DC
HEAT_SWITCH
HEAT_2V2
IR_LED
IR_DATA
SWITCHY
RIGHT
UP
LEFT
DOWN
LED_DATA
ADC_BATTERY
ADC_MQ_SENSOR
ADC_SUPPLY
XRES
CMOD
ENTER
C25
2200pF 50V
VDDR
VDDD
VDDA
VSSA
VSSD
PAD
VCCD
VREF
C5
1.0uF 10V
C6
1.0uF 10V
C13
0.1uF 10V
C9
1.0uF 10V
C14
0.1uF 10V
C10
1.0uF 10V
C8
4.7uF 16V
C17
0.1uF 10V
C11
1.0uF 10V
C18
0.1uF 10V
C12
1.0uF 10V
C7
4.7uF 16V
GANT1
ANT
GANT2
50ohm
ANT1
Inv-F 2.4GHz
C23
1.5pF +/-10%
L2
6.8nH +/-5%
C24
1.2pF +/-10%
FEED
GND
XTAL32O/P6.0
XTAL32I/P6.1
XTAL24O
XTAL24I
Y1
32.768KHz
CL = 7pF
C36
24pF 50V
C37
10pF
8pF / pin
CL = 18pF
Y2
24MHz
C34
27pF 50V
C35
27pF 50V
PSoC Prog
J2
5x1 2.54mm
XRES
SWD_CLK
SWD_IO
Tact Switches
R30
200 5%
SW5
PTS810
LEFT
C29
0.1uF 10V
R29
200 5%
SW4
PTS810
RIGHT
C28
0.1uF 10V
R31
200 5%
SW6
PTS810
UP
C30
0.1uF 10V
R28
200 5%
SW3
PTS810
DOWN
C27
0.1uF 10V
R27
200 5%
SW2
PTS810
ENTER
C26
0.1uF 10V
Beach Day
MCU
Date July 03, 2018
Sheet 4



Beach Day

LEDs

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