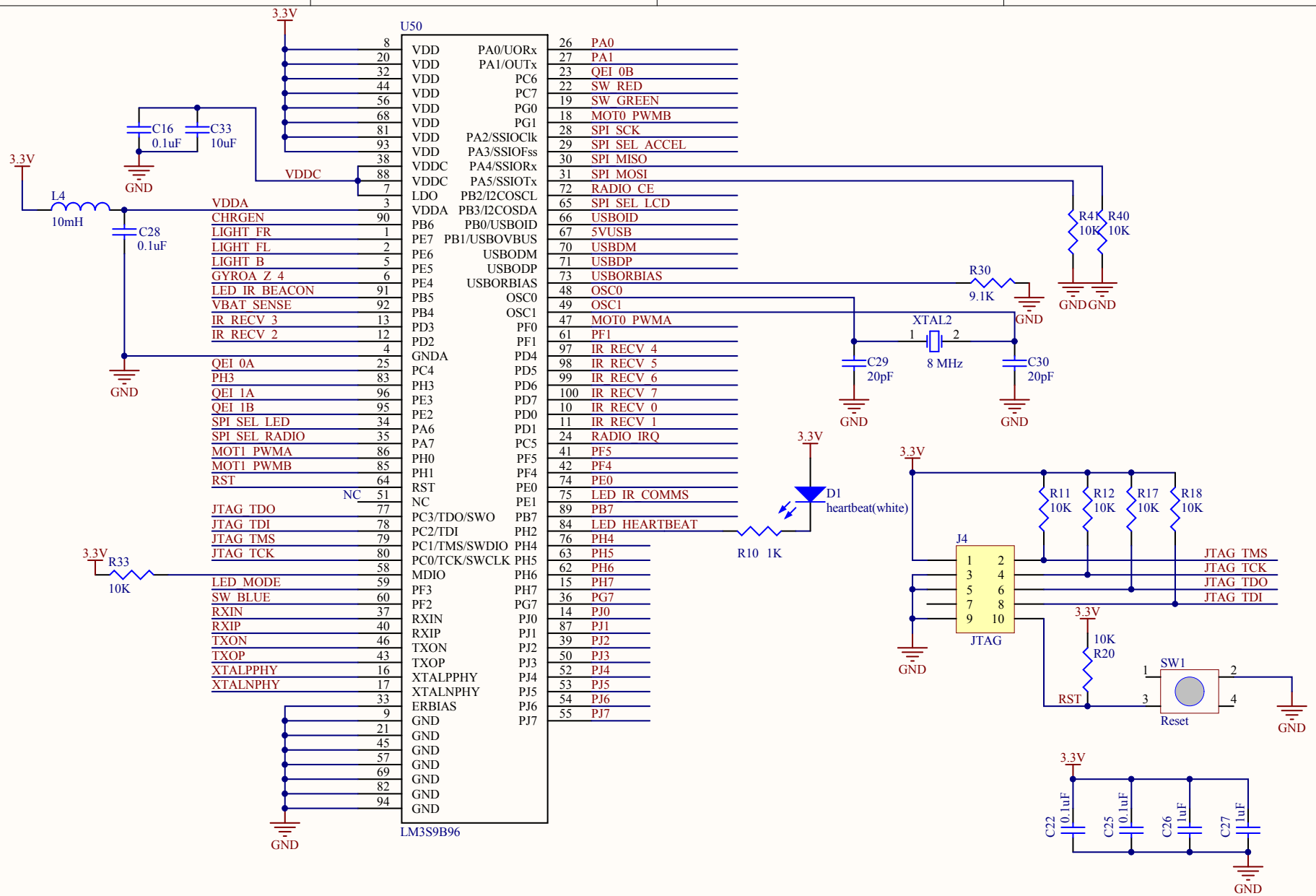

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Date: 5/19/2011		Sheet of
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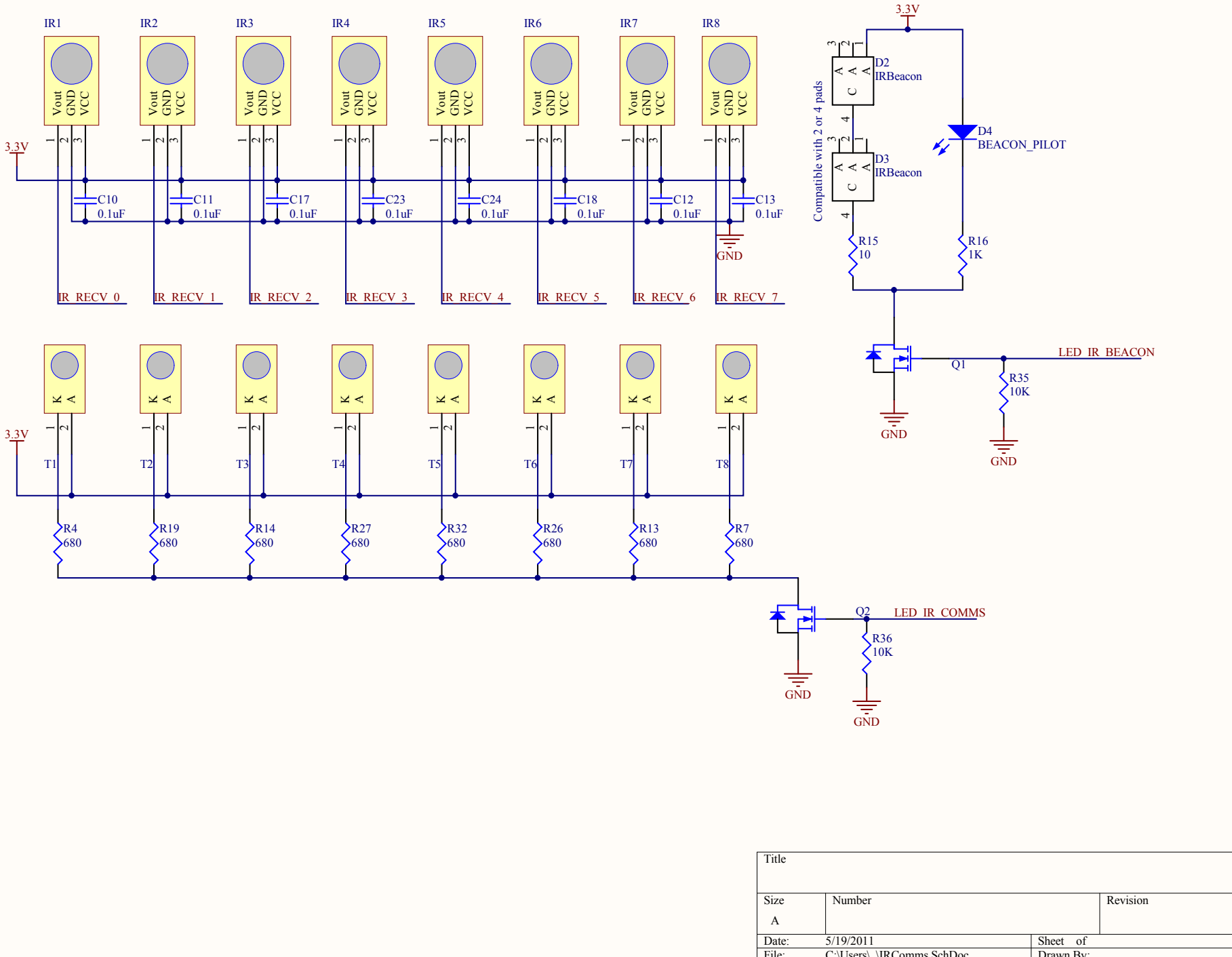
IR1
IR2
IR3
IR4
IR5
IR6
IR7
IR8
Vout
GND
VCC
3.3V
C10 0.1uF
C11 0.1uF
C17 0.1uF
C23 0.1uF
C24 0.1uF
C18 0.1uF
C12 0.1uF
C13 0.1uF
GND
IR_RECV_0
IR_RECV_1
IR_RECV_2
IR_RECV_3
IR_RECV_4
IR_RECV_5
IR_RECV_6
IR_RECV_7
3.3V
D2 IRBeacon
D3 IRBeacon
D4 BEACON_PILOT
Compatible with 2 or 4 pads
R15 10
R16 1K
Q1
LED_IR_BEACON
R35 10K
GND
GND
K
A
T1
T2
T3
T4
T5
T6
T7
T8
R4 680
R19 680
R14 680
R27 680
R32 680
R26 680
R13 680
R7 680
Q2
LED_IR_COMMS
R36 10K
GND
GND
Title
Size A
Number
Revision
Date: 5/19/2011
Sheet of
File: C:\Users\..\IRComms.SchDoc
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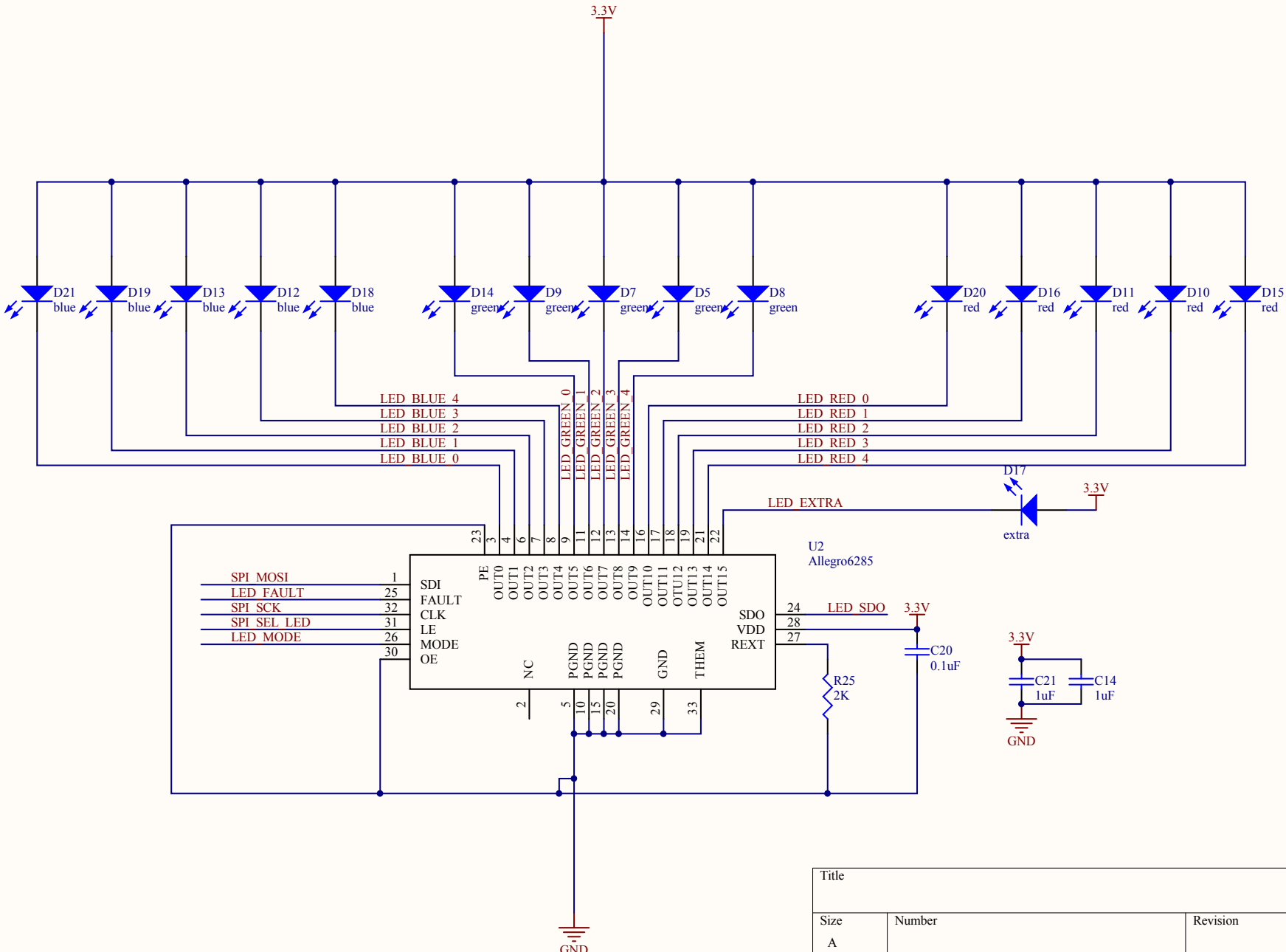
3.3V
D21 blue
D19 blue
D13 blue
D12 blue
D18 blue
D14 green
D9 green
D7 green
D5 green
D8 green
D20 red
D16 red
D11 red
D10 red
D15 red
LED_BLUE_4
LED_BLUE_3
LED_BLUE_2
LED_BLUE_1
LED_BLUE_0
LED_GREEN_0
LED_GREEN_1
LED_GREEN_2
LED_GREEN_3
LED_GREEN_4
LED_RED_0
LED_RED_1
LED_RED_2
LED_RED_3
LED_RED_4
D17
extra
3.3V
LED_EXTRA
U2
Allegro6285
SPI_MOSI 1
LED_FAULT 25
SPI_SCK 32
SPI_SEL_LED 31
LED_MODE 26
30
SDI
FAULT
CLK
LE
MODE
OE
PE
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
OUT7
OUT8
OUT9
OUT10
OUT11
OUT12
OUT13
OUT14
OUT15
SDO
VDD
REXT
24
28
27
LED_SDO
3.3V
C20
0.1uF
R25
2K
NC
PGND
PGND
PGND
PGND
GND
THEM
2
5
10
15
20
29
33
3.3V
C21
1uF
C14
1uF
GND
GND
Title
Size
A
Number
Revision
Date: 5/19/2011
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File: C:\Users\..\LEDs.SchDoc
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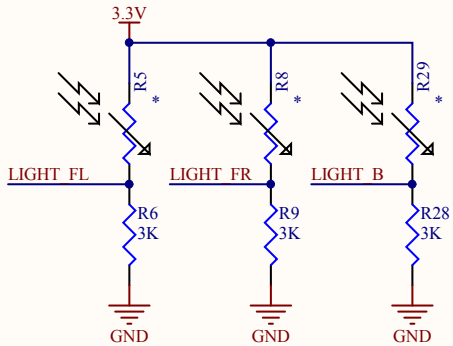

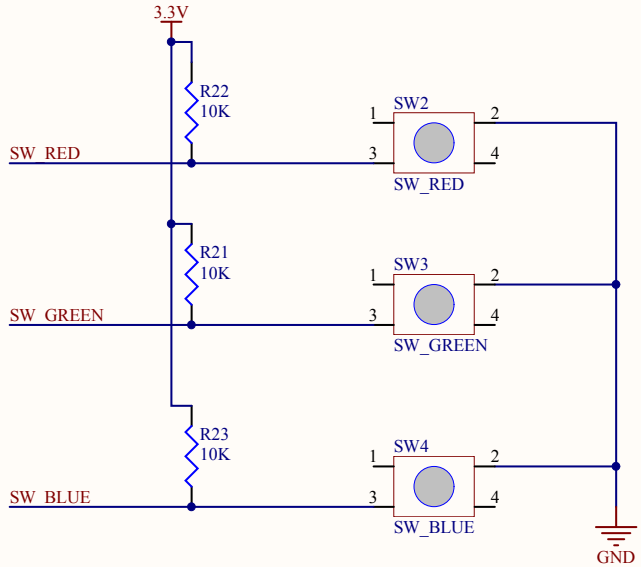

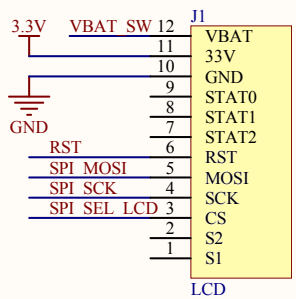

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Date: 5/19/2011	Sheet of	
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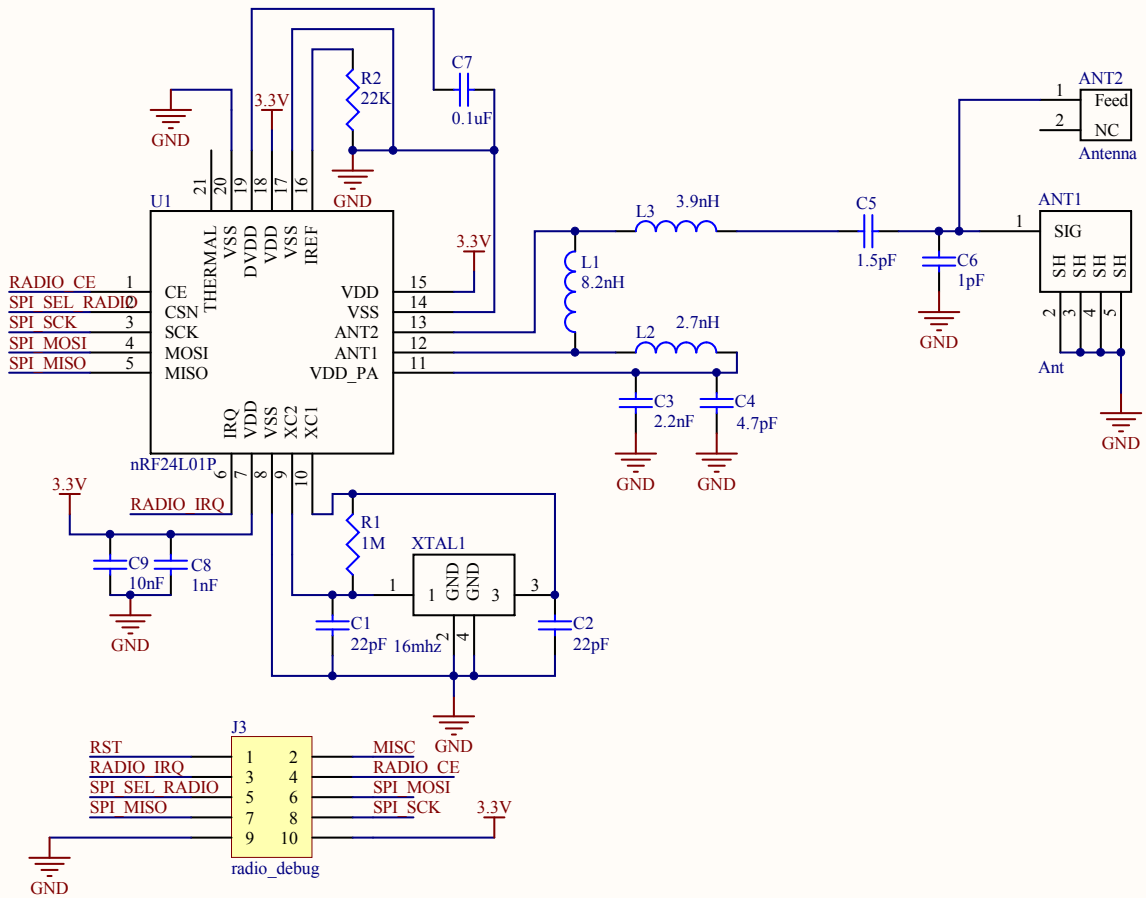

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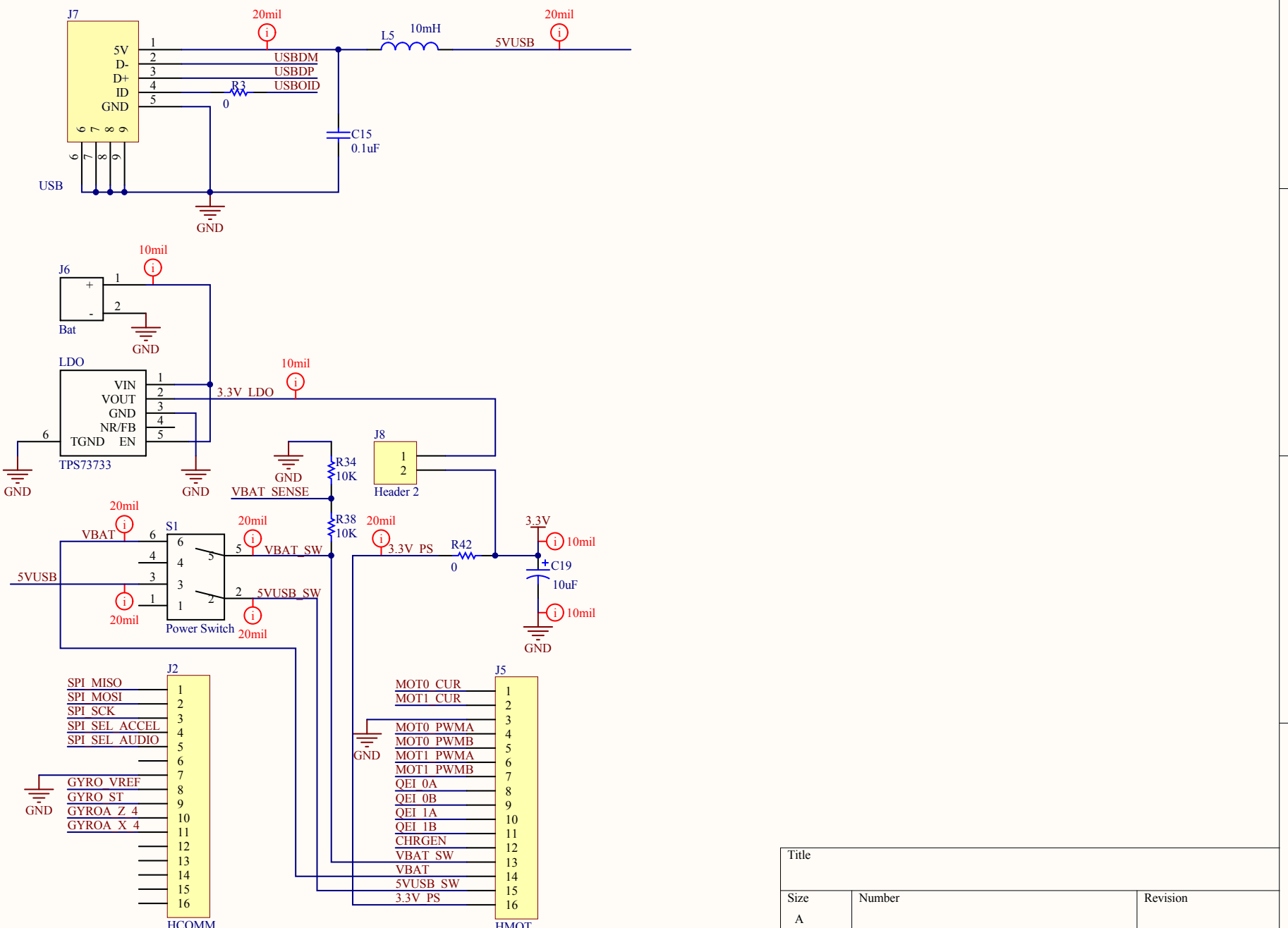

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Date: 5/19/2011		Sheet of
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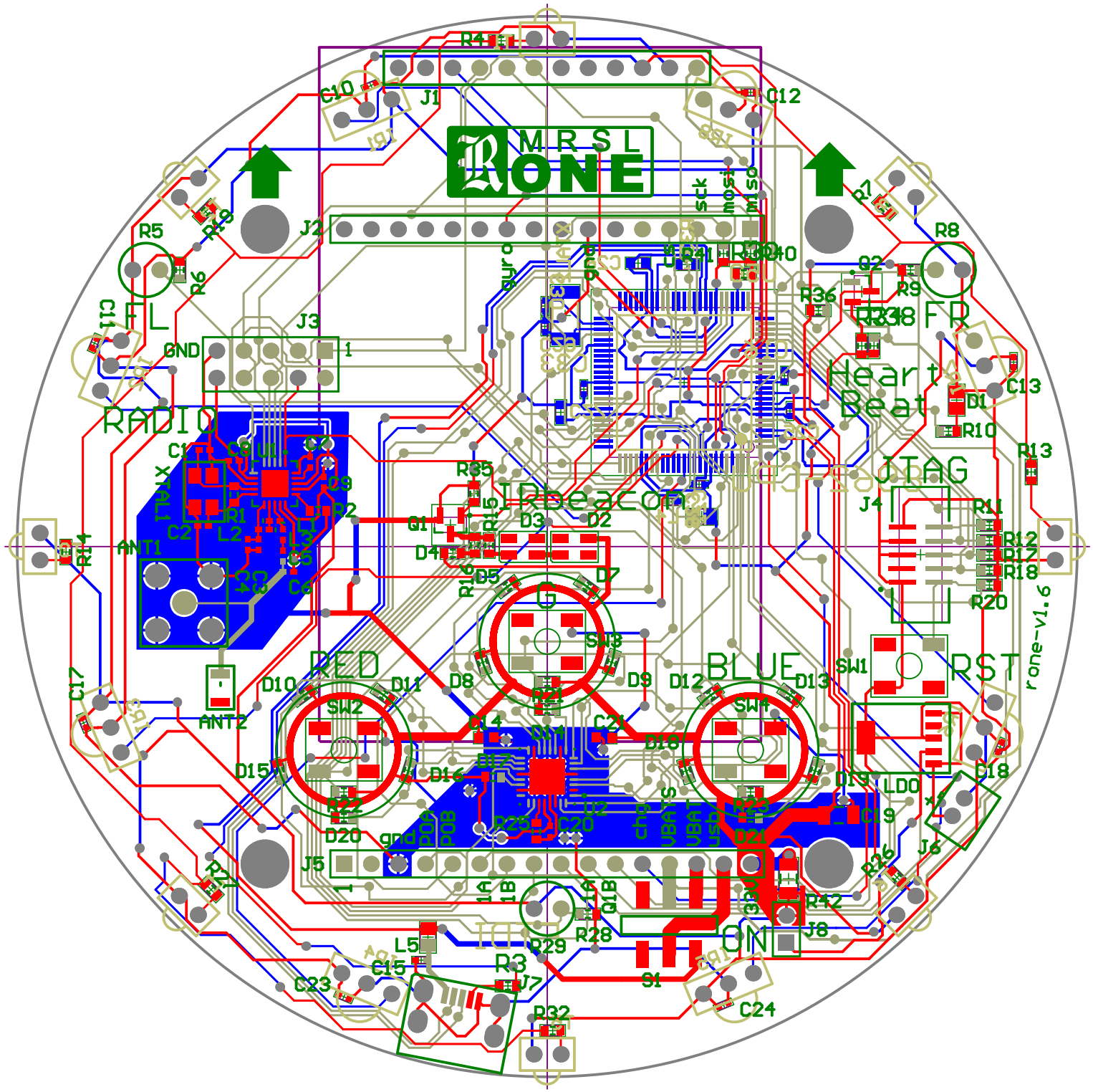
MRSL
RONE
FL
FR
RADIO
Heart
Beat
JTAG
IRbeacon
RED
BLUE
RST
ON
LDO
GND
ANT1
ANT2
J1
J2
J3
J4
J5
J6
J8
SW1
SW2
SW3
SW4
S1
rone-v1.6

Bill of Materials

<Parameter Title not found>

Source Data From: v7-9BProto-cpu.PrjPCB
Project: v7-9BProto-cpu.PrjPCB
Variant: None

Creation Date: 5/19/2011 3:12:01 PM
Print Date: 40682 40682.63342

Footprint	Comment	LibRef	Designator	Description	Quantity
AntennaSMA	Ant	AntennaConn	ANT1		1
antenna	Antenna	Antenna	ANT2		1
CAPC1005L	Cap Semi	Cap Semi	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C16, C17, C18, C20, C22, C23, C24, C25, C28, C29, C30, C33	Capacitor (Semiconductor SIM Model)	25
CAPC1608L	Cap Semi	Cap Semi	C14, C21, C26, C27	Capacitor (Semiconductor SIM Model)	4
CAPC1005L		Cap	C15	Capacitor	1
CAPC3216L	Cap Pol3	Cap Pol3	C19	Polarized Capacitor (Surface Mount)	1
INDC2012L	heartbeat(white)	LED2	D1	Typical RED, GREEN, YELLOW, AMBER GaAs LED	1
IRBeacon	IRBeacon	IRBeacon	D2, D3		2
SurfaceMount(603)	BEACON_PILOT	LED	D4		1
SurfaceMount(603)	green	LED	D5, D7, D8, D9, D14		5
SurfaceMount(603)	red	LED	D10, D11, D15, D16, D20		5
SurfaceMount(603)	blue	LED	D12, D13, D18, D19, D21		5
SurfaceMount(603)	extra	LED	D17		1
GP1UX31QS	GP1UX31QS	GP1UX31QS	IR1, IR2, IR3, IR4, IR5, IR6, IR7, IR8		8
LCD-6100breakout	LCD	LCD-NokiaBreakout	J1		1
HDR1X16	HCOMM	Header 16	J2	Header, 16-Pin	1
HDR2X5	radio_debug	Header 5X2	J3	Header, 5-Pin, Dual row	1
JTAG-10	JTAG	Header 5X2H	J4	Header, 5-Pin, Dual row, Right Angle	1
HDR1X16	HMOT	Header 16	J5	Header, 16-Pin	1
BatteryConnJST	Bat	BatteryConnJST	J6		1
USB Minib (thru-hole)	USB	USB-ConnTH	J7		1
HDR1X2	Header 2	Header 2	J8	Header, 2-Pin	1
INDC1005AL	Inductor	Inductor	L1, L2, L3	Inductor	3
INDC2012L	Inductor	Inductor	L4, L5	Inductor	2
SOT-223-5pin	TPS73733	LDO33-TI-TPS73733	LDO		1
SOT-23	Mosfet	Mosfet	Q1, Q2		2
RESC1608L	Res3	Res3	R1, R2, R4, R6, R7, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R25, R26, R27, R28, R30, R32, R33, R35, R36, R40, R41	Resistor	31
RESC1608L		Res1	R3, R34, R38	Resistor	3
photoresistor	photoresistor	photoresistor	R5, R8, R29		3
RESC3216L		Res1	R42	Resistor	1
DPDTSwitch	Power Switch	DPDTSwitch	S1		1
SwitchTall-TL330	Reset	Switch-TL330	SW1		1
SwitchTall-TL330	SW_RED	Switch-TL330	SW2		1
SwitchTall-TL330	SW_GREEN	Switch-TL330	SW3		1
SwitchTall-TL330	SW_BLUE	Switch-TL330	SW4		1
LN54	LN54	LN54	T1, T2, T3, T4, T5, T6, T7, T8		8
QFN-20	nRF24L01P	radio-nRF24L01P	U1		1
QFN-32	Allegro6285	Allegro6285	U2		1
LQFP-100	LM3S9B96	LM3S9B96	U50		1
RadioCrystal	RADIO CRYSTAL	RadioCrystal	XTAL1		1
RESC5025L	8 MHz	XTAL	XTAL2	Crystal Oscillator	1
					133

Approved	Notes	