RF + DCDC

T1
BAL/3
BAL/4
UNB
GND
HHM1595A1

12pF C1
12pF C2
RF_N
RF_P

U3
RFC RF1
V1   RF2
V2
V3
GND RF3
ANT_SEL1
ANT_SEL2
ANT_SEL3
SKY13317
RF1/2.3H
RF2/2.3H
RF3/2.3I
GND

U4
VIN VOUT
EN   GND
LXDC2HN18A
+3V3
+1V8
+3V3/2.3J
+1V8/2.3J
REG_EN
4.7uF C3
10uF C4
GND GND GND

DW1000

U2
VDDBAT   GPIO0
VDDIOA   GPIO1
VDDAON   GPIO2
VDDPA1   GPIO3
VDDPA2   GPIO4
VDDLNA   GPIO5
VDDLDOA   GPIO6
VDDLDOD   SYNC/GPIO7
VDDCLK   IRQ/GPIO8
VDDIF
VDDMS   RF_P
VDDSYN   RF_N
VDDVCO
VDDREG   CLKTUNE
VDDDIG
VDDIO/31   VCOTUNE
VDDIO/42
              RST
FORCEON   SPIMISO
WAKEUP   EXTON
SPICS
TESTMODE
XTAL1
XTAL2
SPIMOSI
SPICLK
VREF
VSSIO/32
VSSIO/43
GND
DW1000

+3V3
TP9
TP10
DW_IRQ
R8 100k
Pull-down for (DEEP)SLEEP
GND

DW_SYNC/2.3F
RF_P
RF_N
1.2pF C28
27pF C27
R2 16k
DW_RST
DW_SPI_MISO
REG_EN
820pF C26
18pF C29
R1 270
GND GND

+1V8/2.3J
VDDCLK
VDDIF
VDDMS
VDDSYN
VDDVCO
VDDDIG
VDDIO
GND
DW_WAKEUP
DW_SPI_CS
GND
DW_SPI_MOSI
DW_SPI_CLK
R3 11k

X1 38.4M
XTAL2 XTAL1
C30 12pF
C31 12pF
GND

STM32F091CC

U1
VBAT
VDDA
VDDIO2
VDD/24
VDD/48
PC13
PC14-OSC32_IN
PC15-OSC32_OUT
PF0-OSC_IN
PF1-OSC_OUT
PF11-BOOT0
RST
VSSA
VSS/23
VSS/35
VSS/47
PA0 PA1 PA2 PA3 PA4 PA5 PA6 PA7 PA8 PA9 PA10 PA11 PA12 PA13 PA14 PA15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
GND
STM32F091CC

+3V3
VBAT: No backup
INTERRUPT/2.3G
DW_SPI_CS
DW_SPI_CLK
DW_SPI_MISO
DW_SPI_MOSI
EXT_I2C_SCL/2.3E
EXT_I2C_SDA/2.3F
STM_SWDIO
STM_SWCLK
STM_RST
TP3
GPIO2
I2C: Pull-up resistor required
INTERRUPT: used both for waking up from STOP (USART2_TX) and STANDBY (WKUP4)

DW_RST
DW_WAKEUP
DW_IRQ
LED_GREEN
LED_BLUE
LED_RED
GPIO0 TP1
GPIO1 TP2
PC Test Points
ANT_SEL3
ANT_SEL2
ANT_SEL1
GPIO3 TP4

J2 / TC2030-JLINK-NL
SWDIO
SWCLK
SWO
VCC RESET
GND
+3V3
GND

11k R4
BOOT0: Main Flash
OSC_IN
OSC_OUT
STM_RST
GND
TP8

X2 16M
OSC_IN OSC_OUT
C32 12pF
C33 12pF
GND

VDD/24   VDD/48   VDDIO2   VDDA
+3V3/2.3J   +3V3/2.3J   +3V3/2.3J   +3V3/2.3J
C34 100nF C35 100nF   C36 100nF C37 4.7uF   C38 100nF C39 4.7uF   C40 10nF C41 1uF
GND

Pad Test Points
TP5 TP6 TP7
LED_RED
LED_GREEN
LED_BLUE
R5 1k R6 1k R7 1k
D1
R G B
SML-LX0404SIUPGUSB
LED
+3V3

+3V3/2.3J
C16 10pF C17 10pF C18 330pF C19 330pF C20 0.01uF C21 0.1uF C22 0.1uF C23 0.1uF C24 0.1uF C25 0.1uF C43 4.7uF
GND

VDDLDOA +1V8/2.3J
VDDDIG
VDDLDOD +1V8/2.3J
VDDMS
VDDCLK
VDDSYN
VDDIO
VDDIF
VDDVCO
C5 0.1uF C6 4.7uF   C7 0.1uF C8 0.1uF   C9 0.1uF C10 0.1uF C11 0.1uF C12 0.1uF C42 0.1uF C13 0.1uF C14 0.1uF C15 0.1uF
GND

	REV:
TriPoint	C
Author: Andreas Biri	
Date: 16.07.18 13:17	Sheet: 1/2

EXTERNAL SIGNALS

The following signals must be integrated into all designs using the design block:

EXT_I2C_SCL/1.5G
EXT_I2C_SDA/1.5G

Note: Additional I2C pull—up resistors required to +3V3

DW_SYNC/1.10C

INTERRUPT/1.5F

RF1/1.6A
RF2/1.6B
RF3/1.6C

+3V3/1.10K
+1V8/1.10N