RF + DCDC

T1 — HHM1595A1
- BAL/3, BAL/4, UNB, GND
- C1 12pF, C2 12pF
- RF_N, RF_P

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

U4 — LXDC2HN18A
- VIN, VOUT, EN, GND
- +3V3, +1V8
- C3 4.7uF, C4 10uF
- REG_EN

STM32F091CC

U1 — STM32F091CC
- 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–PA15
- PB0–PB15

VBAT: No backup
BOOT0: Main Flash

INTERRUPT: used both for waking up from STOP (USART2_TX) and STANDBY (WKUP4)
I2C: Pull-up resistor required

Signals: 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

PB0 DW_RST, PB1 DW_WAKEUP, PB2 DW_IRQ, PB3 LED_GREEN, PB4 LED_BLUE, PB5 LED_RED, PB6 GPIO0, PB7 GPIO1, PB10 GPIO2, PB11 GPIO3, PB13 ANT_SEL3, PB14 ANT_SEL2, PB15 ANT_SEL1

TP5, TP6, TP7
TP1, TP2 — PC Test Points
TP3, TP4 — Pad Test Points
TP8

J2 — TC2030-JLINK-NL
- SWDIO, SWDCLK, SWO, RESET, VCC, GND
- STM_RST
- +3V3

R4 11k, OSC_IN, OSC_OUT, STM_RST

X2 16M
- C32 12pF, C33 12pF
- OSC_IN, OSC_OUT

VDD: C34 100nF, C35 100nF, C36 100nF, C37 4.7uF, +3V3
VDDIO2: C38 100nF, C39 4.7uF, +3V3
VDDA: C40 10nF, C41 1uF, +3V3

LED
- R5 1k, R6 1k, R7 1k
- LED_RED, LED_GREEN, LED_BLUE
- D1 SML-LX0404SIUPGUSB
- +3V3

DW1000

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

+3V3, +1V8

VDDCLK, VDDIF, VDDMS, VDDSYN, VDDVCO, VDDDIG, VDDIO

DW_SYNC/2.3F, DW_IRQ
R8 100k — Pull-down for (DEEP)SLEEP

C28 1.2pF, R2 16k, C27 27pF
R1 270, C26 820pF, C29 18pF

DW_RST, DW_SPI_MISO, REG_EN
DW_WAKEUP, DW_SPI_CS, DW_SPI_MOSI, DW_SPI_CLK

R3 11k

X1 38.4M
- C30 12pF, C31 12pF
- XTAL1, XTAL2

Decoupling: 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, +3V3

VDDLDOA: C5 0.1uF, C6 4.7uF (+1V8)
VDDDIG: C7 0.1uF, C8 0.1uF
VDDLDOD: C9 0.1uF, C10 0.1uF (+1V8)
VDDMS: C11 0.1uF
VDDCLK: C12 0.1uF
VDDSYN: C42 0.1uF, C13 0.1uF
VDDIO: C14 0.1uF
VDDIF: C15 0.1uF
VDDVCO

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

DW_SYNC/1.11C

INTERRUPT/1.5F

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

TriPoint	REV: 3
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