

U1
STM32WB55CEU6TR

32MHz External
clk: required for RF

Y1

OSC_IN
OSC_OUT

BATT_LVL_9
PA0
X10 PA1
X11 PA2
LSM_INT1_12
PA3
LSM_INT0_13
PA4
BTN_1_14
PA5
BTN_2_15
PA6
BTN_3_16
PA7
X17 PA8
X18 PA9
X19 PA10
TPS_MODE_37
PA11
TPS_STOP_38
PA12
SWDIO_39
PA13
SWCLK_41
PA14
CS_42
PA15

NRST_7
RF1_21
NRST1
RF1

VBAT
VDD
VDDA
VDDUSB
VDD5VSHPS
VDDRF
VFB5VSHPS
VLX5VSHPS

C1
C13
C5
C6
C7
C2

100nF
100nF
100nF
100nF
100pF
100pF

+1V8
+1V8
GND
GND

Separate 0201 RF
Decoupling Cap

uC Power Wired for
Internal LD0 config:
see pg 27

AT0
AT1
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9

LSM_INT2
SCK
MISO
MOSI
LED_1

PC14-OSC32_IN
PC15-OSC32_OUT

PH3-BOOT0
BOOT0

EXP
VSSRF
VSS5VSHPS

GND

[illegible]

LED_Amber
LED_1

D1

R5
R=1K

GND

Backside LED
for testing | DNP

NRST TP4 Test_Point_SMD

SWDIO TP1 Test_Point_SMD

SWCLK TP2 Test_Point_SMD

BOOT0 TP3 Test_Point_SMD

+1V8 TP6 Test_Point_SMD

TP5 Test_Point_SMD

GND

BTN_0 TP9 Test_Point_SMD

BTN_1 TP10 Test_Point_SMD

BTN_2 TP11 Test_Point_SMD

BTN_3 TP12 Test_Point_SMD

TP13 Test_Point_SMD

+1V8

4x Button TP's –
Solder N/O Button
between 1V8 & it's pad

Integrated Passive Device (IPD)
Matching, Pi, LP Filter
AE1
MLPF-WB55-01E3

SMD Chip Antenna
U3
ANT016008LC52442MA2

RF1 3 IN 1 OUT 4 5 GND1 GND2 GND

Feed_point Radiator_electrode Dummy_pad Dummy_pad Dummy_pad Dummy_pad 6 5 3 2 X X X X

1 4 1 RAD_PLANE

Can be connected to any STM GPIO and used to wake from sleep mode via the EXTI interrupt