+3.3V_TGT

+3.3V_TGT

Pin	Signal		Signal	Pin	Net
1	GND		GND	40	
2	3V3		TGT_CTS	39	
3	5V-USB		TGT_RTS	38	
4	SWDIO		GP8	37	PC0
5	SWCLK		GP7/LCDCS	36	PB12
6	NRESET		GP6/LCD-RESET	35	PA4
7	TGT_TX		GP5/LCD-A0	34	PB10
8	TGT_RX		GP4	33	PC12
9	TX1		TX2	32	WL_GPIO1
10	RX1		RX2	31	WL_GPIO2
11	SDA1		SDA2	30	
12	SCL1		SCL2	29	
13	MOSI1/LCD/SD		MOSI2	28	
14	MISO1/LCD/SD		MISO2	27	
15	SCK1/LCD/SD		SCK2	26	
16	GP0/BUTTON		GP3/GROVE	25	PB2
17	GP1		GP2/SDCARD-CS/GROVE	24	PC5
18	AIN0/POT		PWM2/GREEN-LED	23	PC11
19	AIN1/GROVE		PWM1/BLUE-LED	22	PC4
20	AIN2/GROVE		PWM0/RED-LED	21	PA7

TGT_SWDIO — 4
TGT_SWCLK — 5
TGT_NRESET — 6
TGT_TX — 7
TGT_RX — 8

PB7 — 11
PB6 — 12
PC3 — 13
PC2 — 14
PB13 — 15
PB14 — 16
PC15 — 17
ADC1.9 — 18
ADC1.8 — 19
ADC1.5 — 20

+3.3V_TGT

TP1

LED1
RED

R1
1k

TP2

SWD-10

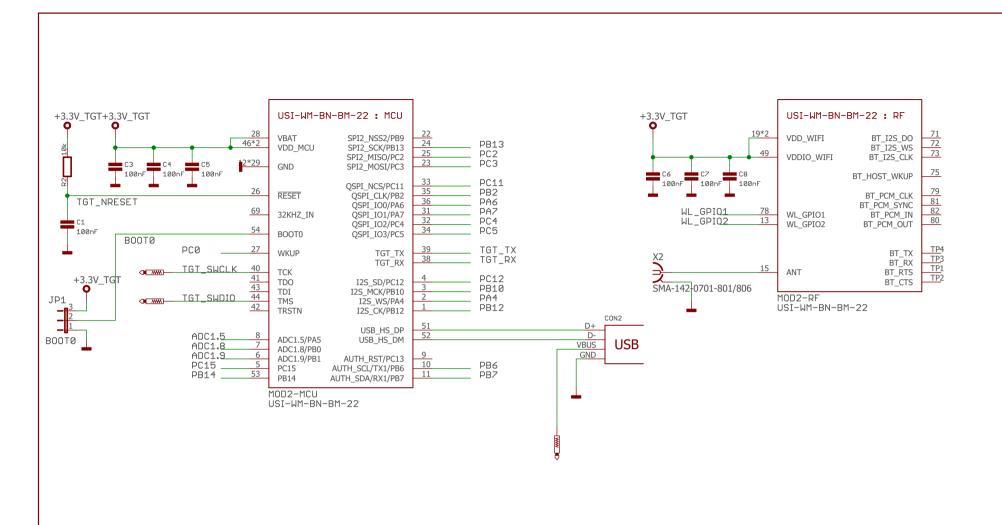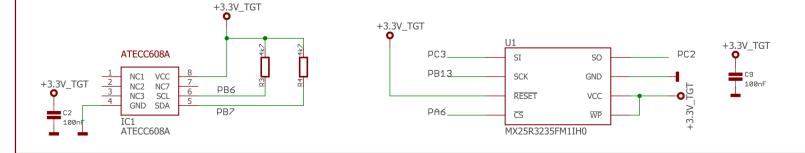| Pin	Signal		Signal	Pin	Net
1	VCC		SWDIO	2	TGT_SWDIO
3	GND		SWCLK	4	TGT_SWCLK
5	GND		SWO	6	
7	TGT_TX		TGT_RX	8	TGT_RX
9	GND		NRESET	10	TGT_NRESET

TGT_TX

CON1

mbed-HDK   Flossicorn

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mbed-HDK

USI-WM-BN-BM-22 : MCU

+3.3V_TGT +3.3V_TGT

R2 10k

C3 100nF C4 100nF C5 100nF

Pin	Signal		Signal	Pin	Net
28	VBAT		SPI2_NSS2/PB9	22	
46*2	VDD_MCU		SPI2_SCK/PB13	24	PB13
			SPI2_MISO/PC2	25	PC2
12*29	GND		SPI2_MOSI/PC3	23	PC3
26	RESET		QSPI_NCS/PC11	33	PC11
			QSPI_CLK/PB2	35	PB2
69	32KHZ_IN		QSPI_IO0/PA6	36	PA6
54	BOOT0		QSPI_IO1/PA7	31	PA7
27	WKUP		QSPI_IO2/PC4	32	PC4
			QSPI_IO3/PC5	34	PC5
40	TCK		TGT_TX	39	TGT_TX
41	TDO		TGT_RX	38	TGT_RX
43	TDI		I2S_SD/PC12	4	PC12
44	TMS		I2S_MCK/PB10	3	PB10
42	TRSTN		I2S_WS/PA4	2	PA4
			I2S_CK/PB12	1	PB12
8	ADC1.5/PA5		USB_HS_DP	51	
7	ADC1.8/PB0		USB_HS_DM	52	
6	ADC1.9/PB1		AUTH_RST/PC13	9	
5	PC15		AUTH_SCL/TX1/PB6	10	PB6
53	PB14		AUTH_SDA/RX1/PB7	11	PB7

MOD2-MCU
USI-WM-BN-BM-22

TGT_NRESET

C1 100nF

+3.3V_TGT

JP1
3
2
1
BOOT0

BOOT0

PC0

TGT_SWCLK

TGT_SWDIO

ADC1.5
ADC1.8
ADC1.9
PC15
PB14

USI-WM-BN-BM-22 : RF

+3.3V_TGT

C6 100nF C7 100nF C8 100nF

Pin	Signal		Signal	Pin
19*2	VDD_WIFI		BT_I2S_DO	71
49	VDDIO_WIFI		BT_I2S_WS	72
			BT_I2S_CLK	73
			BT_HOST_WKUP	75
78	WL_GPIO1		BT_PCM_CLK	79
13	WL_GPIO2		BT_PCM_SYNC	81
			BT_PCM_IN	82
			BT_PCM_OUT	80
15	ANT		BT_TX	TP4
			BT_RX	TP3
			BT_RTS	TP1
			BT_CTS	TP2

WL_GPIO1
WL_GPIO2

MOD2-RF
USI-WM-BN-BM-22

X2
SMA-142-0701-801/806

CON2
D+
D-
VBUS
GND
USB

ATECC608A

+3.3V_TGT

+3.3V_TGT

R3 4k7 R4 4k7

Pin	Signal		Signal	Pin
1	NC1		VCC	8
2	NC2		NC7	7
3	NC3		SCL	6
4	GND		SDA	5

PB6
PB7

IC1
ATECC608A

C2 100nF

+3.3V_TGT

U1

Signal		Signal
SI		SO
SCK		GND
RESET		VCC
CS		WP

PC3
PB13

PA6

MX25R3235FM1IH0

PC2

+3.3V_TGT

+3.3V_TGT

C9 100nF

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