Schematic Diagram

U1 — Micro Usb

Pin	Signal
1	VCC — 5V
2	D- — R1 22R USB D-
3	D+ — R2 22R USB D+
4	1D
5	GND

P2 — Header 6

Pin	Signal
1	3.3v
2	SWDIO
3	SWCLK
4	SWO
5	RESET
6	GND

Switches

S1 — BUTTON1 — SW-PB
S2 — BUTTON2 — SW-PB
S3 — SW-PB

Oscillator

C7 22pF — OSCIN
Y1 8MHz
C10 22pF — OSCOUT

Capacitors (3.3V)

C13 0.1uF, C14 0.1uF, C15 0.1uF, C16 0.1uF, C17 0.1uF, C18 2.2uF — GND

U2 — STM32F205RET6

Pin	Signal		Pin	Signal
14	PA0-WKUP		26	PB0 — OLED_DC
15	PA1		27	PB1 — OLED_RST
16	PA2		28	PB2/BOOT1
17	PA3		55	PB3/JTDO — SWO
20	PA4 — OLED_CS		56	PB4/JNTRST
21	PA5 — SPI_CLK		57	PB5
22	PA6		58	PB6
23	PA7 — SPI_DIN		59	PB7
41	PA8		61	PB8
42	PA9 — 5V		62	PB9
43	PA10		29	PB10
44	PA11 — USB D-		30	PB11
45	PA12 — USB D+		33	PB12
46	PA13/JTMS/SWDIO — SWDIO		34	PB13
49	PA14/JTCK/SWCLK — SWCLK		35	PB14
50	PA15/JTDI		36	PB15
5	OSC_IN/PD0 — OSCIN		8	PC0
6	OSC_OUT/PD1 — OSCOUT		9	PC1
54	PD2		10	PC2
60	BOOT0 — GND		11	PC3
7	NRST — RESET		24	PC4
			25	PC5
			37	PC6
			38	PC7
			39	PC8
			40	PC9
			51	PC10 — BUTTON2
			52	PC11 — BUTTON1
			53	PC12
			2	PC13-TAMPER-RTC
			3	PC14-OSC32_IN
			4	PC15-OSC32_OUT
1	VBAT		31	VSS_1
32	VDD_1 — 3.3V		47	VSS_2
48	VDD_2		63	VSS_3
64	VDD_3		18	VSS_4
19	VDD_4		12	VSSA
13	VDDA			

C11 2.2uF, C12 2.2uF — GND

P1 — OLED12864

Pin	Signal
30	NC
29	VLSS
28	VCC — C1 2.2uF
27	VCOM — C2 4.7uF
26	IREF — R3 390K
25	D7
24	D6
23	D5
22	D4
21	D3
20	D2
19	D1 — SPI_DIN — R4 0
18	D0 — SPI_CLK
17	E/RD
16	R/W
15	D/C — OLED_DC
14	RST — OLED_RST
13	CS — OLED_CS
12	BS2
11	BS1
10	BS0 — 3.3V
9	VDD — C3 1uF
8	VSS
7	VBAT — 3.3V
6	C1N — C4 1uF
5	C1P
4	C2N — C5 1uF
3	C2P
2	NC — C6 1uF
1	NC

U3 — MCP1703

Pin	Signal
3	VI — 5V
2	VO — 3.3V
1	GND

C8 1uF, C9 1uF — GND

S3 reset circuit

C19 0.1uF — GND
RESET — R5 0 — 3.3V

Bill of Materials

BDX-Hwallet_v1.0

Source Data From: **Bwallet.PrjPcb**

Project: **Bwallet.PrjPcb**

Variant: **None**

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Footprint	Comment	LibRef	Designator	Description	Quantity
1608[0603]	50V	Cap Semi	C1, C11, C12, C18	Capacitor (Semiconductor SIM Model)	4
1608[0603]	50V	Cap Semi	C2	Capacitor (Semiconductor SIM Model)	1
1608[0603]	50V	Cap Semi	C3, C4, C5, C6, C8, C9	Capacitor (Semiconductor SIM Model)	6
1608[0603]	50V	Cap Semi	C7, C10	Capacitor (Semiconductor SIM Model)	2
1608[0603]	50V	Cap Semi	C13, C14, C15, C16, C17, C19	Capacitor (Semiconductor SIM Model)	6
OLED96	OLED12864	OLED12864	P1		1
HEADER6-2.0	Header 6	Header 6	P2	Header, 6-Pin	1
J1-0603	0.1W	Res3	R1, R2	Resistor	2
J1-0603	0.1W	Res3	R3	Resistor	1
J1-0603	0.1W	Res3	R4, R5	Resistor	2
SW-SMT[4*4]	SW-PB	SW-PB	S1, S2	Switch	2
1608[0603]	SW-PB	SW-PB	S3	Switch	1
MICRO-USB[DIP]	Micro Usb	Micro-B	U1		1
LQFP64_N	STM32F205RE6	STM32F101R6T6	U2	STM32 ARM-based 32-bit MCU with 32 Kbytes Flash, 64-pin LQFP, Industrial Temperature	1
SOT-23B_N	MCP1703	MCP1703	U3		1
XTAL-SMT[3225]	8MHz	XTAL	Y1	Crystal Oscillator	1
					33

Approved   **Notes**