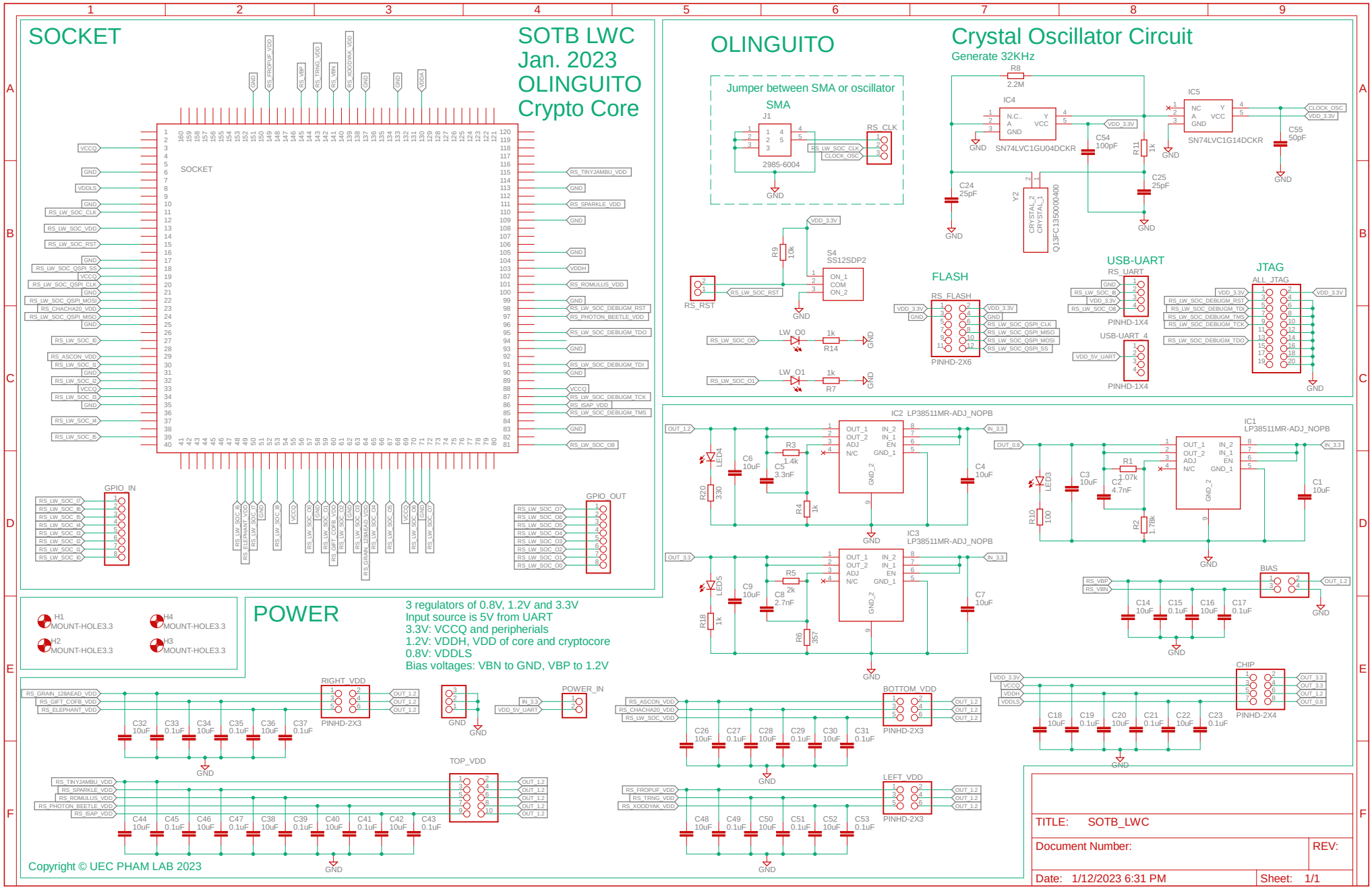
SOCKET
SOTB LWC
Jan. 2023
OLINGUITO
Crypto Core
OLINGUITO
Jumper between SMA or oscillator
SMA
J1
2985-6004
RS_CLK
RS_LW_SOC_CLK
CLOCK_OSC
GND
Crystal Oscillator Circuit
Generate 32KHz
R8
2.2M
IC4
SN74LVC1GU04DCKR
IC5
SN74LVC1G14DCKR
C54
100pF
R11
1k
C55
50pF
C24
25pF
C25
25pF
Y2
Q13FC13500000400
CRYSTAL_2
CRYSTAL_1
VDD_3.3V
CLOCK_OSC
S4
SS12SDP2
ON_1
COM
ON_2
R9
10k
RS_RST
RS_LW_SOC_RST
LW_O0
LW_O1
R14
R7
FLASH
RS_FLASH
PINHD-2X6
USB-UART
RS_UART
PINHD-1X4
USB-UART_4
JTAG
ALL_JTAG
IC2 LP38511MR-ADJ_NOPB
IC1
LP38511MR-ADJ_NOPB
IC3
LP38511MR-ADJ_NOPB
OUT_1
OUT_2
ADJ
N/C
IN_1
IN_2
EN
GND_1
GND_2
LED4
LED3
LED5
R20
330
R10
100
R18
1k
R3
1.4k
R4
1k
R5
2k
R6
357
R1
1.07k
R2
1.78k
C5
3.3nF
C8
2.7nF
C2
4.7nF
C6
10uF
C3
10uF
C9
10uF
C4
10uF
C1
10uF
C7
10uF
BIAS
C14
10uF
C15
0.1uF
C16
10uF
C17
0.1uF
CHIP
PINHD-2X4
C18
10uF
C19
0.1uF
C20
10uF
C21
0.1uF
C22
10uF
C23
0.1uF
GPIO_IN
GPIO_OUT
H1
MOUNT-HOLE3.3
H2
MOUNT-HOLE3.3
H4
MOUNT-HOLE3.3
H3
MOUNT-HOLE3.3
POWER
3 regulators of 0.8V, 1.2V and 3.3V
Input source is 5V from UART
3.3V: VCCQ and peripherials
1.2V: VDDH, VDD of core and cryptocore
0.8V: VDDLS
Bias voltages: VBN to GND, VBP to 1.2V
RIGHT_VDD
PINHD-2X3
POWER_IN
BOTTOM_VDD
TOP_VDD
LEFT_VDD
C32
10uF
C33
0.1uF
C34
10uF
C35
0.1uF
C36
10uF
C37
0.1uF
C26
10uF
C27
0.1uF
C28
10uF
C29
0.1uF
C30
10uF
C31
0.1uF
C44
10uF
C45
0.1uF
C46
10uF
C47
0.1uF
C38
10uF
C39
0.1uF
C40
10uF
C41
0.1uF
C42
10uF
C43
0.1uF
C48
10uF
C49
0.1uF
C50
10uF
C51
0.1uF
C52
10uF
C53
0.1uF
Copyright © UEC PHAM LAB 2023
TITLE: SOTB_LWC
Document Number:
REV:
Date: 1/12/2023 6:31 PM
Sheet: 1/1