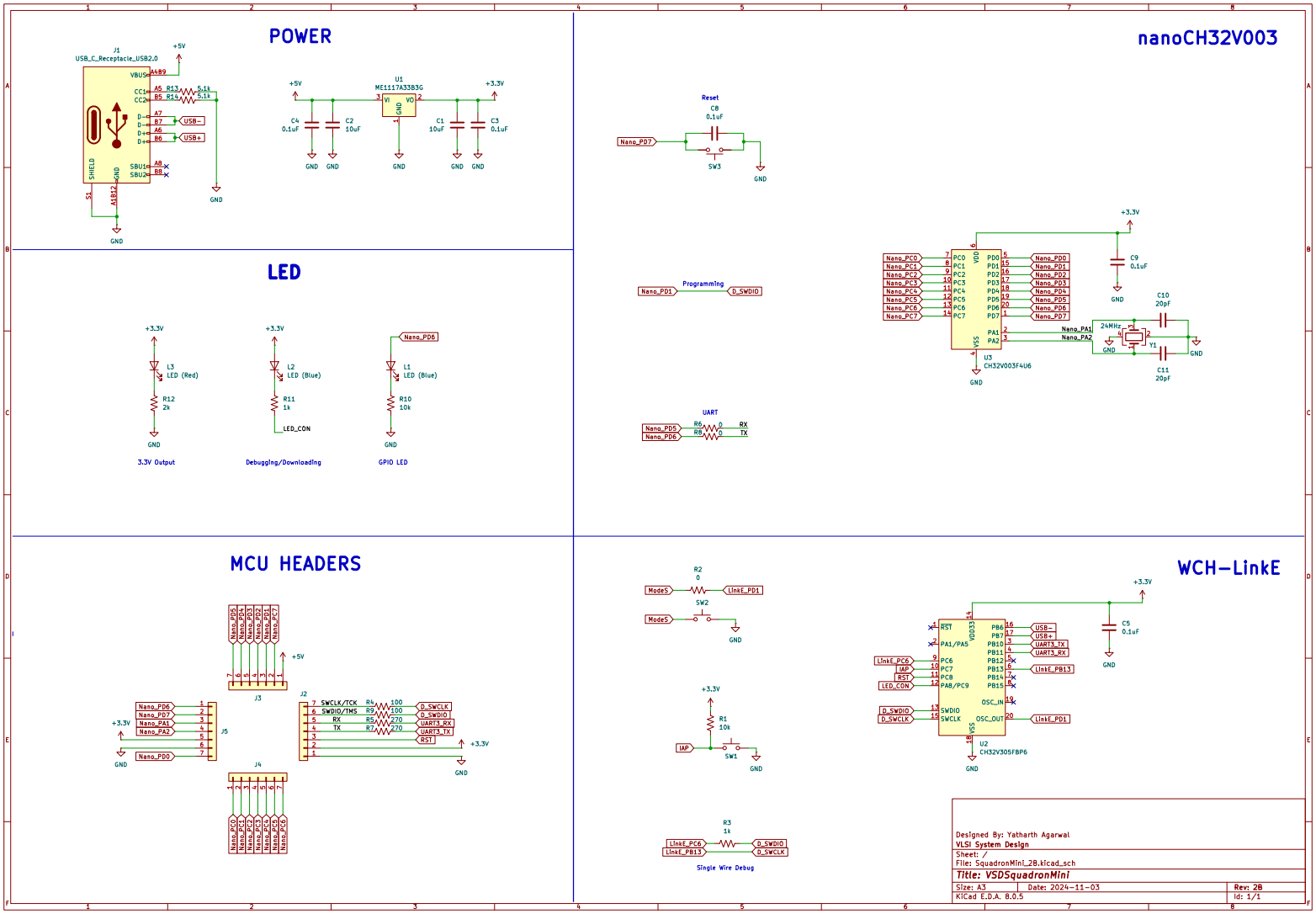
POWER
J1
USB_C_Receptacle_USB2.0
+5V
VBUS
A4B9
CC1
CC2
A5 R13 5.1k
B5 R14 5.1k
D-
D+
A7
B7
A6
B6
USB-
USB+
SHIELD
GND
SBU1
SBU2
A8
B8
S1
A1B12
GND
U1
ME1117A33B3G
VI
VO
GND
+3.3V
C4 0.1uF
C2 10uF
C1 10uF
C3 0.1uF
LED
L3 LED (Red)
R12 2k
3.3V Output
L2 LED (Blue)
R11 1k
LED_CON
Debugging/Downloading
Nano_PD6
L1 LED (Blue)
R10 10k
GPIO LED
MCU HEADERS
J3
Nano_PD5
Nano_PA1
Nano_PD3
Nano_PD2
Nano_PD4
Nano_PD7
J5
Nano_PD6
Nano_PD7
Nano_PA1
Nano_PA2
Nano_PD0
J2
SWCLK/TCK
SWDIO/TMS
RX
TX
R6 100
R9 100
R5 270
R7 270
D_SWCLK
D_SWDIO
UART3_RX
UART3_TX
RST
J4
Nano_PC0
Nano_PC1
Nano_PC2
Nano_PC3
Nano_PC4
Nano_PC5
Nano_PC6
nanoCH32V003
Reset
C8 0.1uF
Nano_PD7
SW3
Programming
Nano_PD1
D_SWDIO
UART
Nano_PD5
Nano_PD6
R6 0
R8 0
RX
TX
Nano_PC0
Nano_PC1
Nano_PC2
Nano_PC3
Nano_PC4
Nano_PC5
Nano_PC6
Nano_PC7
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
VDD
VSS
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PA1
PA2
Nano_PD0
Nano_PD1
Nano_PD2
Nano_PD3
Nano_PD4
Nano_PD5
Nano_PD6
Nano_PD7
Nano_PA1
Nano_PA2
C9 0.1uF
C10 20pF
24MHz
Y1
C11 20pF
U3
CH32V003F4U6
WCH-LinkE
R2 0
ModeS
LinkE_PD1
SW2
R1 10k
IAP
SW1
R3 1k
LinkE_PC6
LinkE_PB13
D_SWDIO
D_SWCLK
Single Wire Debug
RST
PA1/PA5
PC6
PC7
PC8
PA8/PC9
SWDIO
SWCLK
VDD33
VSS
PB6
PB7
PB10
PB11
PB12
PB13
PB14
PB15
OSC_IN
OSC_OUT
USB-
USB+
UART3_TX
UART3_RX
LED_CON
C5 0.1uF
U2
CH32V305FBP6
Designed By: Yatharth Agarwal
VLSI System Design
Sheet: /
File: SquadronMini_2B.kicad_sch
Title: VSDSquadronMini
Size: A3
Date: 2024-11-03
Rev: 2B
KiCad E.D.A. 8.0.5
Id: 1/1