Shanghai AisinoChip Electronics Technology Co., Ltd.

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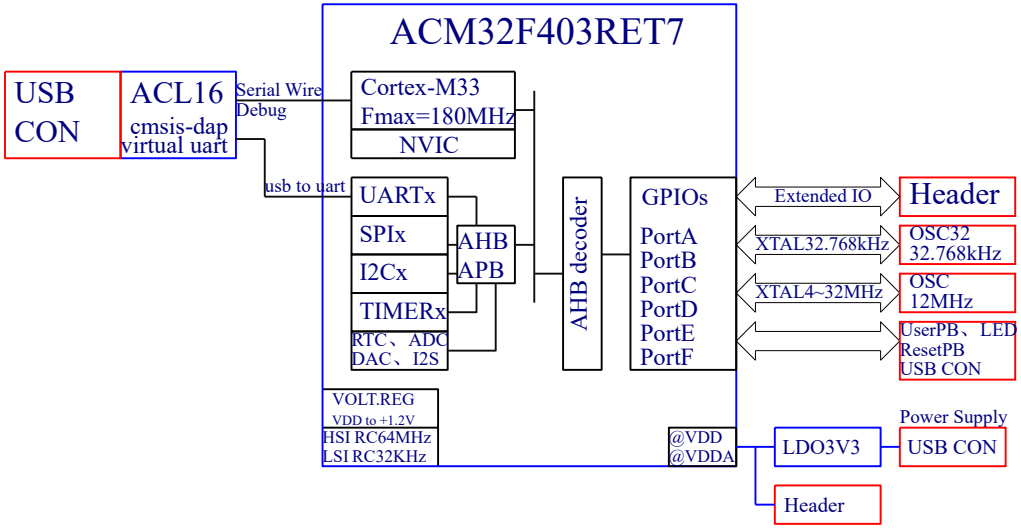
Powered By:

System Application dept.

AisinoChip Shanghai AisinoChip Electronics Technology Co., Ltd.	Title: F403RET7-NUCLEO
	Name: Cover Page
	Revision: 1.0
Drawn by:***	Date: 2020/12/28
Checked by:***	Size: A4
Approved by:***	Sheet: 1/5

ACM32F403RET7_NUCLEO FUNCTIONAL DIAGRAM



▶	Signal Direction
▭	IC or Moudle
▭	Connector or Switch
———	Power rail
⟺	Bus
———	Digital Signal
- - - - - - -	Analog Signal

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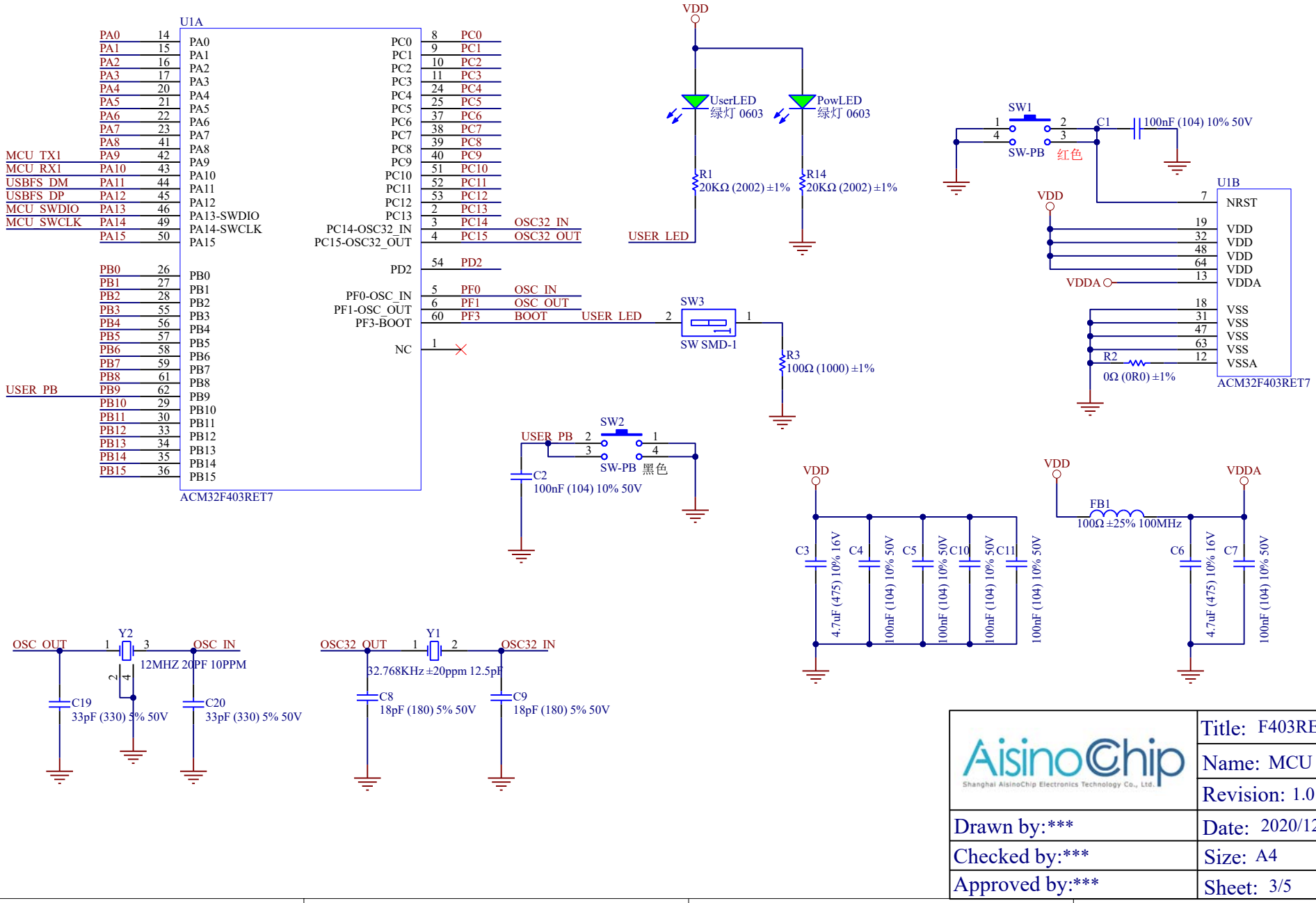
2.	Contents/Function Diagram
3.	MCU
4.	Cmsis-Dap
5.	Connector

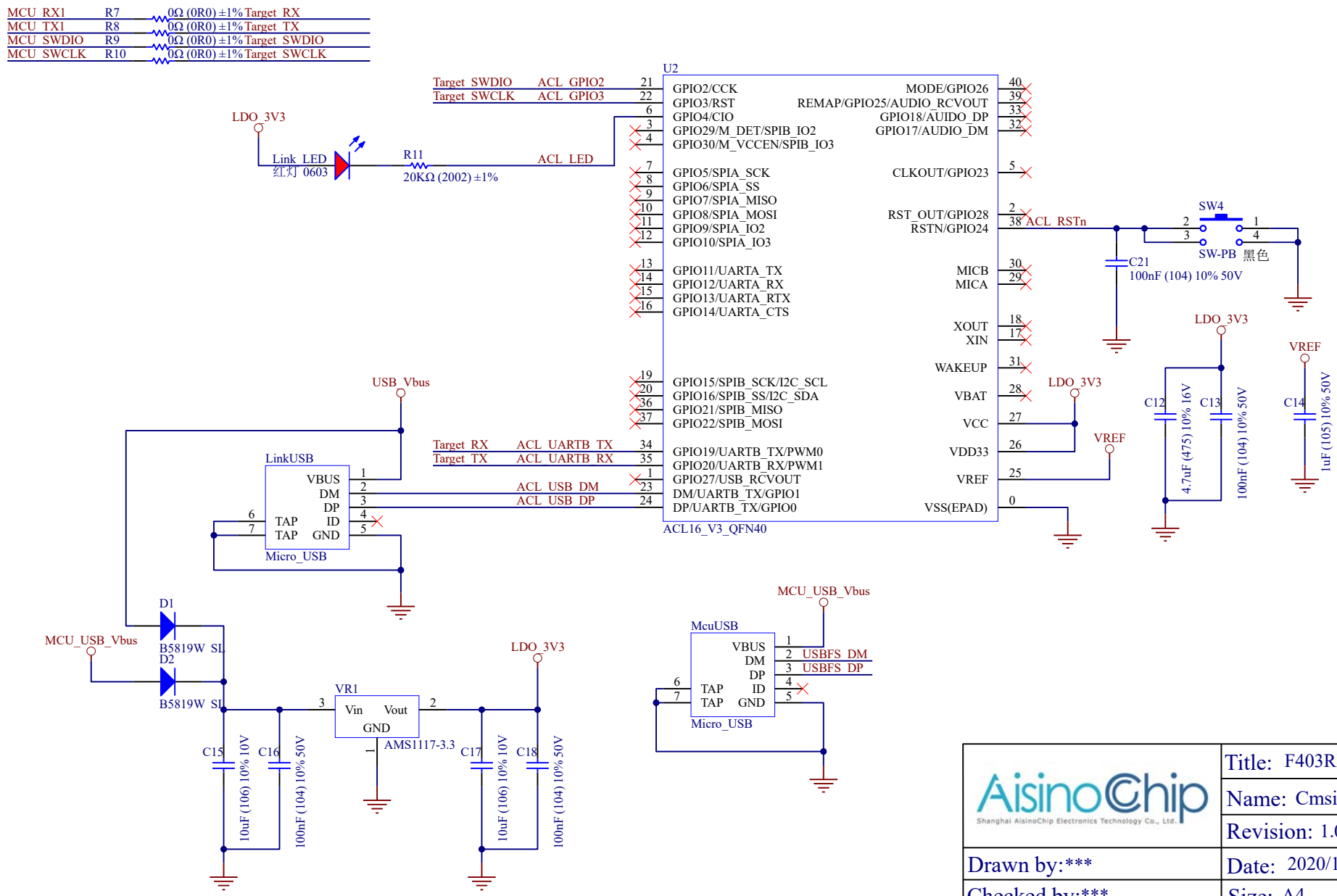
Revision History

Revision Number	Description	Revision Date
1.0	• Initial schematic	Dec 28,2020

AisinoChip Shanghai AisinoChip Electronics Technology Co., Ltd.	Title: F403RET7-NUCLEO
	Name: Funtional Diagram
	Revision: 1.0
Drawn by:***	Date: 2020/12/28
Checked by:***	Size: A4
Approved by:***	Sheet: 2/5



AisinoChip Shanghai AisinoChip Electronics Technology Co., Ltd.	Title: F403RET7-NUCLEO
	Name: MCU
	Revision: 1.0
Drawn by:***	Date: 2020/12/28
Checked by:***	Size: A4
Approved by:***	Sheet: 3/5


MCU_RX1 R7 0Ω (0R0) ±1% Target_RX
MCU_TX1 R8 0Ω (0R0) ±1% Target_TX
MCU_SWDIO R9 0Ω (0R0) ±1% Target_SWDIO
MCU_SWCLK R10 0Ω (0R0) ±1% Target_SWCLK
U2
Target_SWDIO ACL_GPIO2 21 GPIO2/CCK
Target_SWCLK ACL_GPIO3 22 GPIO3/RST
6 GPIO4/CIO
3 GPIO29/M_DET/SPIB_IO2
4 GPIO30/M_VCCEN/SPIB_IO3
7 GPIO5/SPIA_SCK
8 GPIO6/SPIA_SS
9 GPIO7/SPIA_MISO
10 GPIO8/SPIA_MOSI
11 GPIO9/SPIA_IO2
12 GPIO10/SPIA_IO3
13 GPIO11/UARTA_TX
14 GPIO12/UARTA_RX
15 GPIO13/UARTA_RTX
16 GPIO14/UARTA_CTS
19 GPIO15/SPIB_SCK/I2C_SCL
20 GPIO16/SPIB_SS/I2C_SDA
36 GPIO21/SPIB_MISO
37 GPIO22/SPIB_MOSI
Target_RX ACL_UARTB_TX 34 GPIO19/UARTB_TX/PWM0
Target_TX ACL_UARTB_RX 35 GPIO20/UARTB_RX/PWM1
1 GPIO27/USB_RCVOUT
ACL_USB_DM 23 DM/UARTB_TX/GPIO1
ACL_USB_DP 24 DP/UARTB_TX/GPIO0
ACL16_V3_QFN40
MODE/GPIO26 40
REMAP/GPIO25/AUDIO_RCVOUT 39
GPIO18/AUIDO_DP 33
GPIO17/AUDIO_DM 32
CLKOUT/GPIO23 5
RST_OUT/GPIO28 2
RSTN/GPIO24 38 ACL_RSTn
MICB 30
MICA 29
XOUT 18
XIN 17
WAKEUP 31
VBAT 28
VCC 27
VDD33 26
VREF 25
VSS(EPAD) 0
LDO_3V3
Link_LED
红灯 0603
R11
20KΩ (2002) ±1%
ACL_LED
SW4
SW-PB 黑色
C21
100nF (104) 10% 50V
LDO_3V3
C12
4.7uF (475) 10% 16V
C13
100nF (104) 10% 50V
VREF
C14
1uF (105) 10% 50V
USB_Vbus
LinkUSB
VBUS
DM
DP
TAP ID
TAP GND
Micro_USB
LDO_3V3
VREF
MCU_USB_Vbus
D1
B5819W SL
D2
B5819W SL
VR1
Vin Vout
GND
AMS1117-3.3
C15
10uF (106) 10% 10V
C16
100nF (104) 10% 50V
C17
10uF (106) 10% 10V
C18
100nF (104) 10% 50V
LDO_3V3
MCU_USB_Vbus
McuUSB
VBUS
DM
DP
TAP ID
TAP GND
USBFS_DM
USBFS_DP
Micro_USB
Title: F403RET7-NUCLEO
Name: Cmsis-Dap
Revision: 1.0
Drawn by:***
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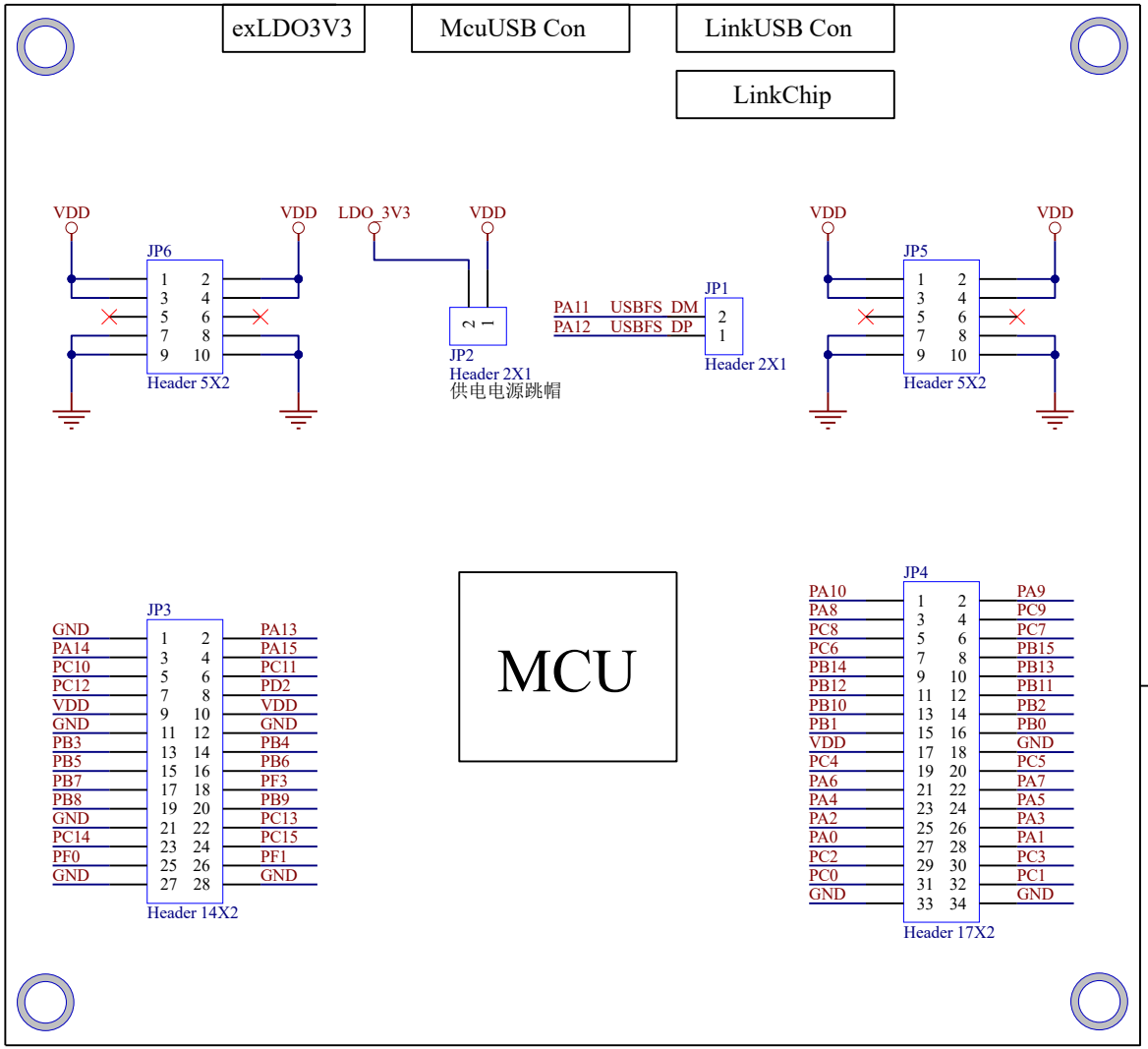

Board Outline

AisinoChip Shanghai AisinoChip Electronics Technology Co., Ltd.	Title: F403RET7-NUCLEO
	Name: CON
	Revision: 1.0
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