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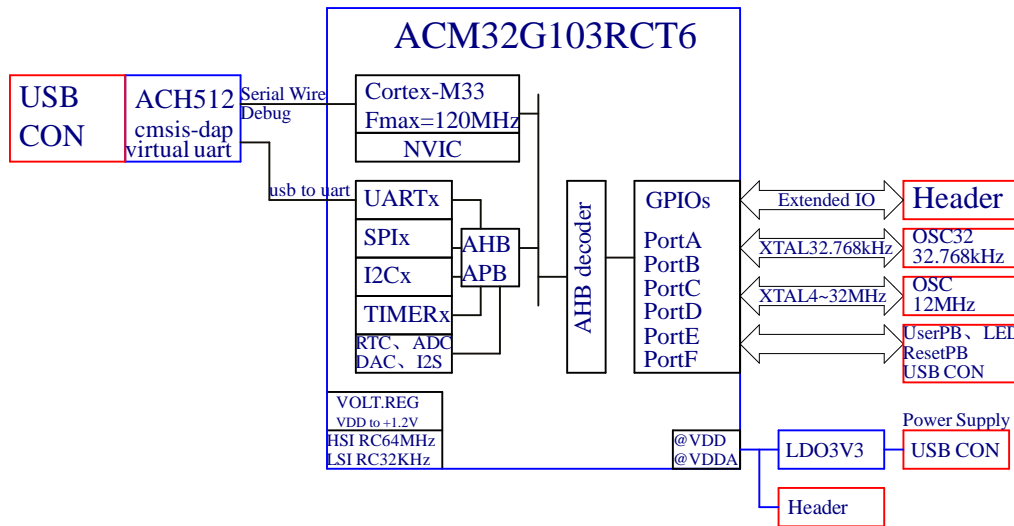
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System Application dept.

	Title: G103RCT6-CORE
	Name: Cover Page
Drawn by:***	Revision: 1.0
Checked by:***	Date: 2022/10/26
Approved by:***	Size: A4
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ACM32G103RCT6-CORE FUNCTIONAL DIAGRAM



	Signal Direction
	IC or Moudle
	Connector or Switch
	Power rail
	Bus
	Digital Signal
	Analog Signal

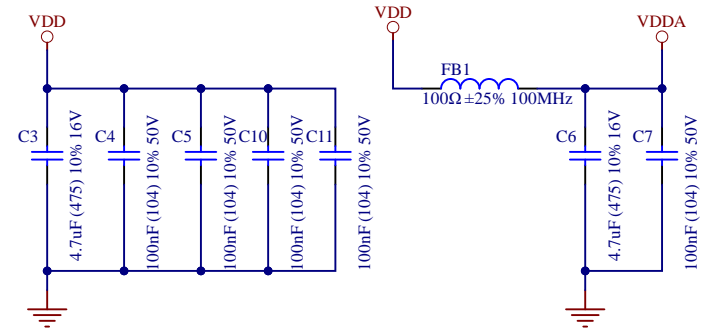
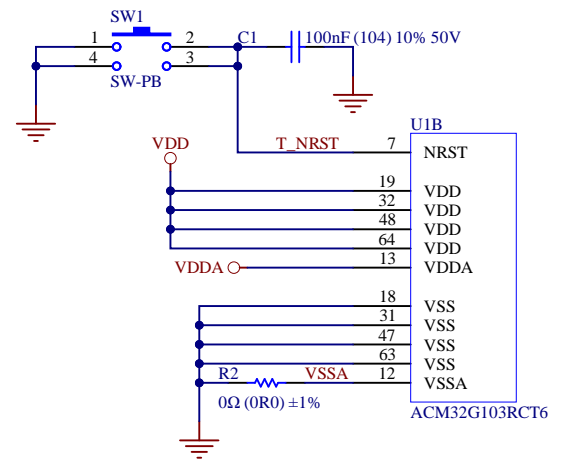
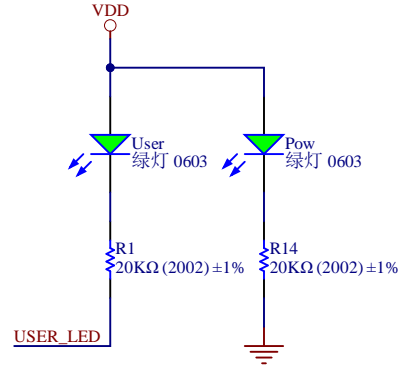
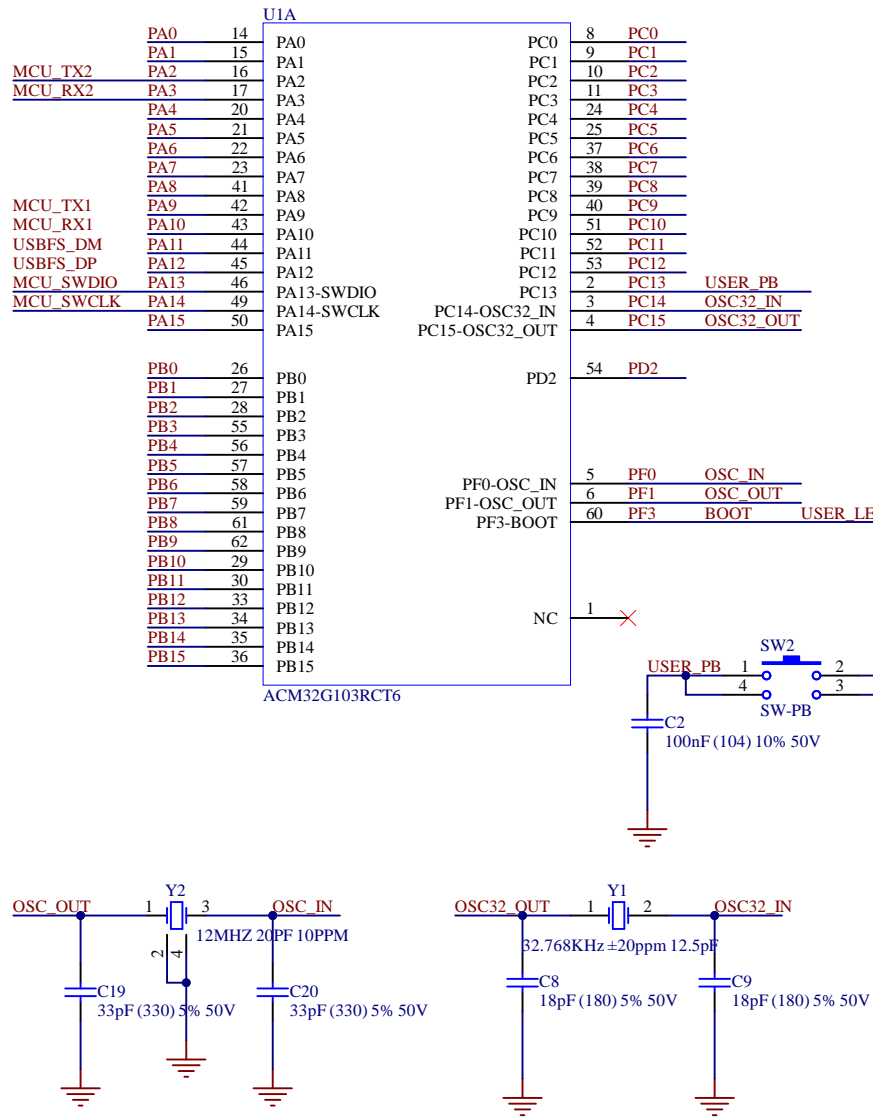
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4.	DAPLink(HS)
5.	Connector

Revision History

Revision Number	Description	Revision Date
1.0	• Initial schematic	Oct 28,2022

	Title: G103RCT6-CORE
	Name: Funtional Diagram
	Revision: 1.0
Drawn by:***	Date: 2022/10/26
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	Title: G103RCT6-CORE
	Name: MCU
Revision: 1.0	Date: 2022/10/26
Checked by:***	Size: A4
Approved by:***	Sheet: 3/5

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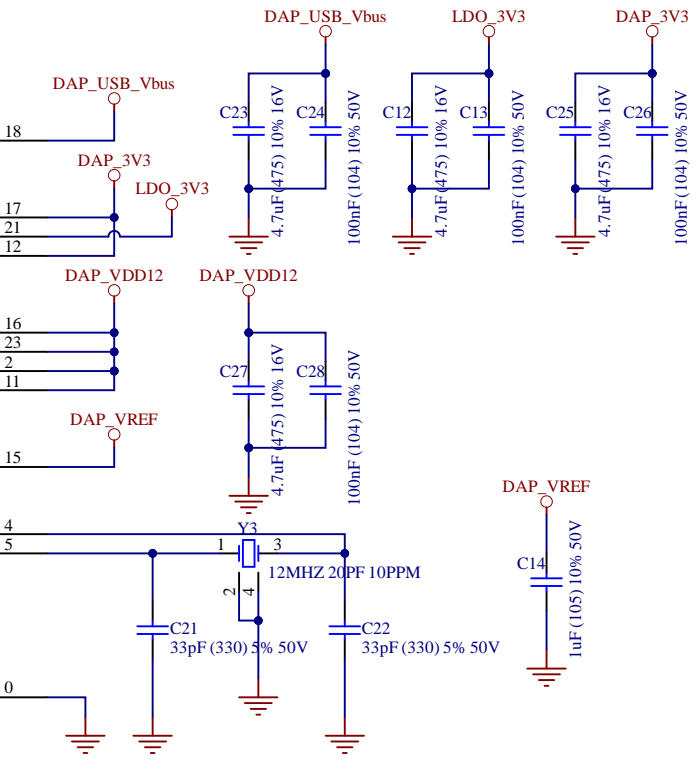
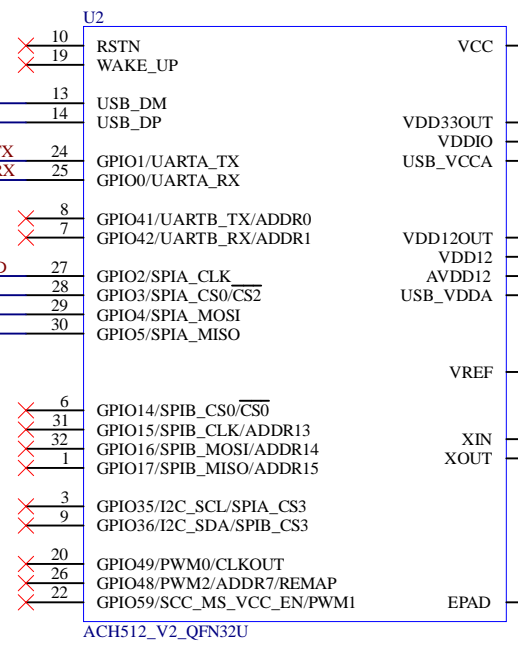
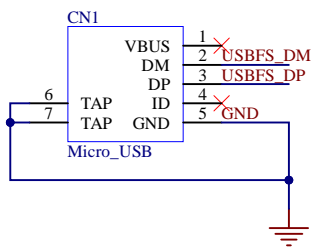
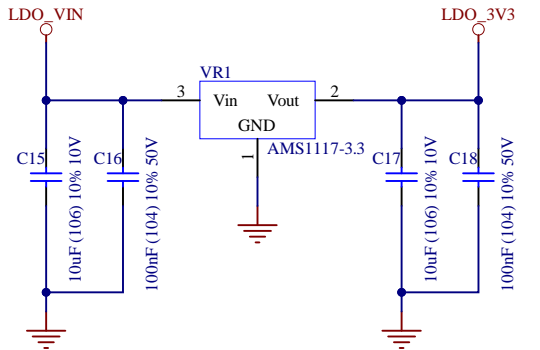
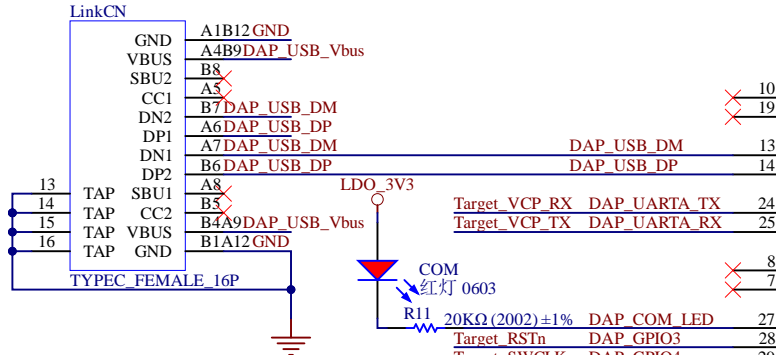
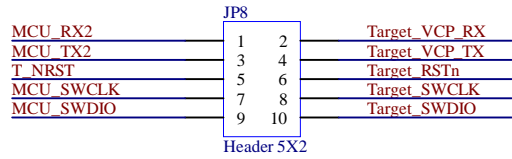
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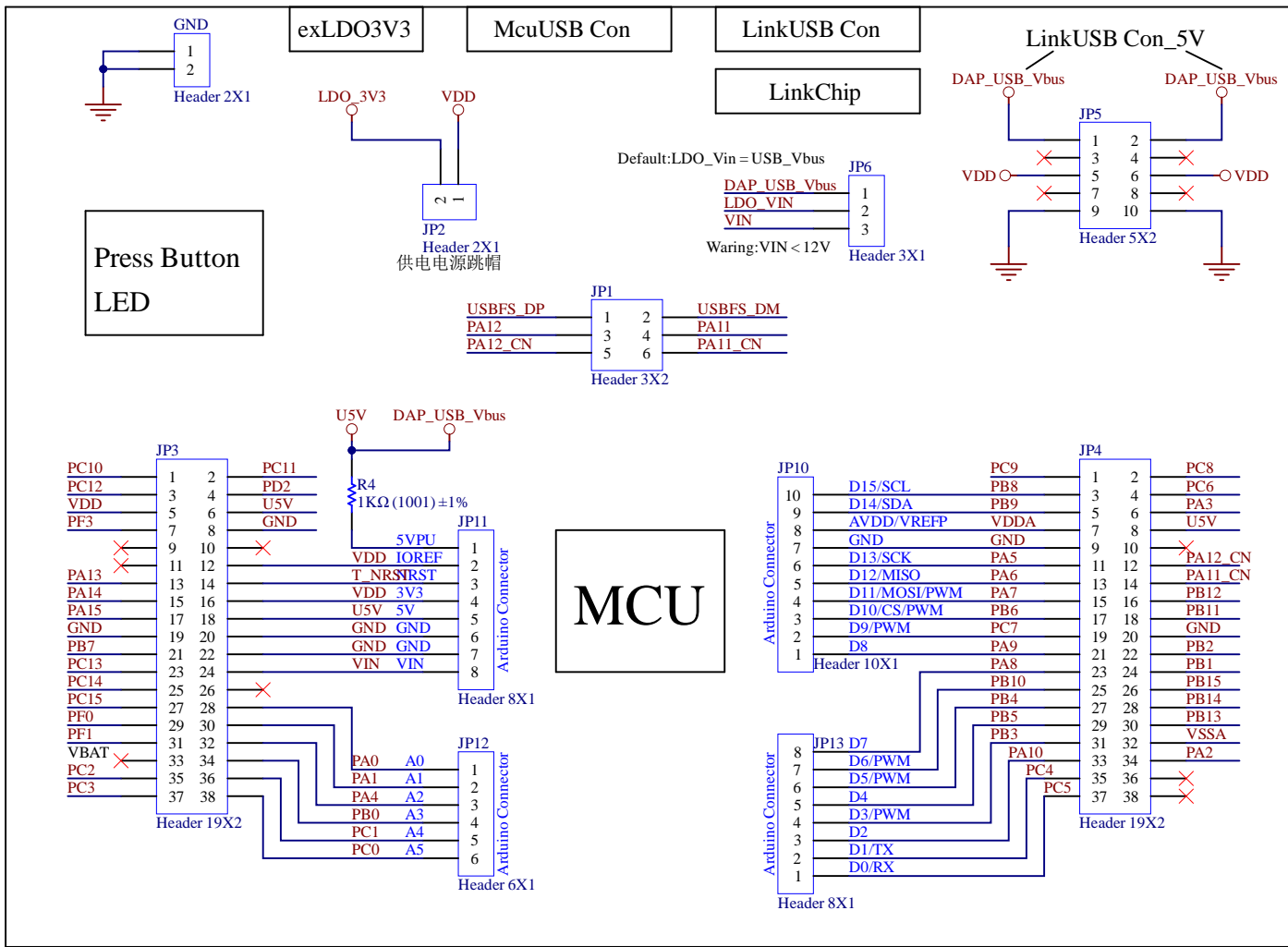
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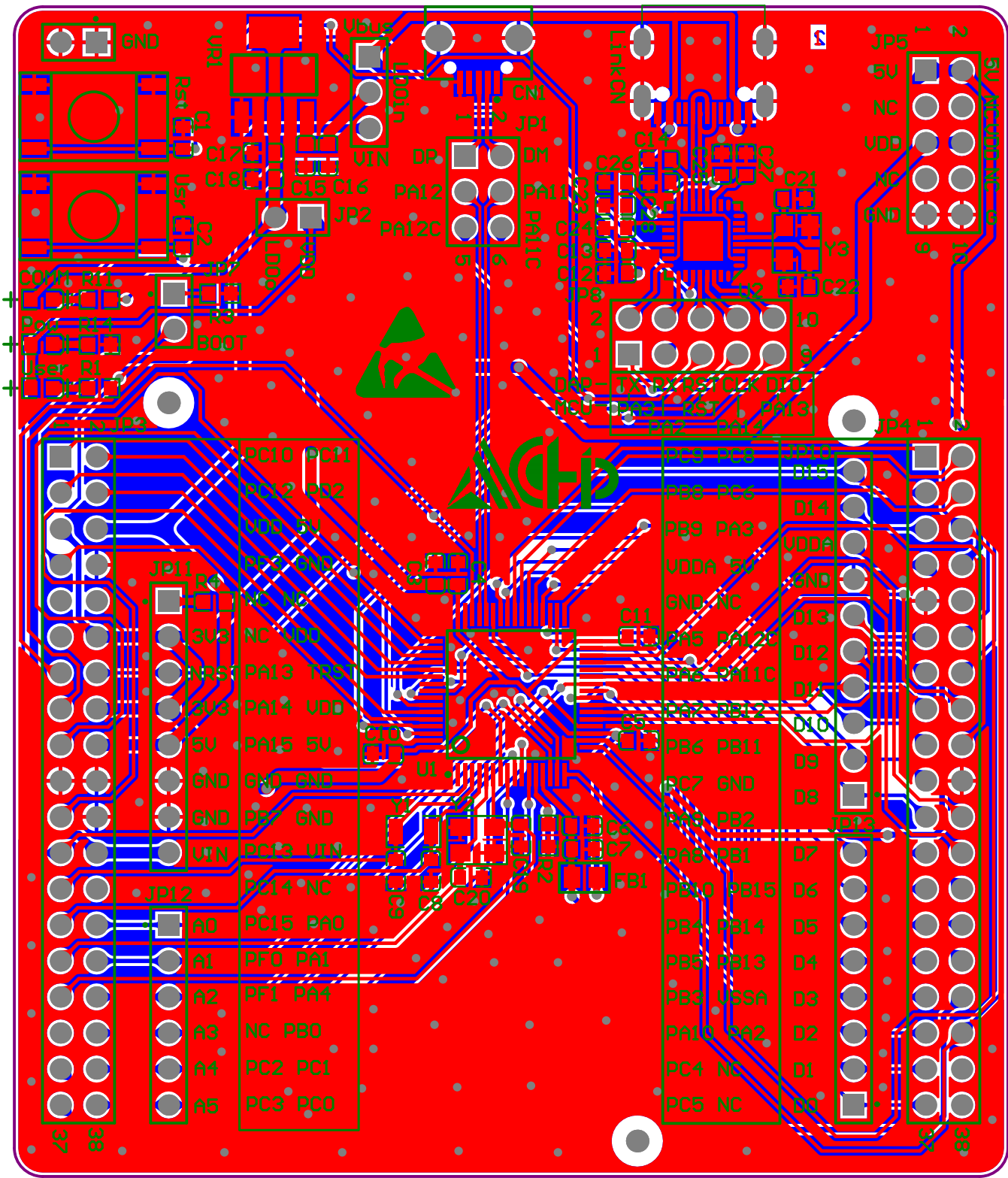


	Title: G103RCT6-CORE
	Name: DAPLink(HS)
	Revision: 1.0
Drawn by: ***	Date: 2022/10/26
Checked by: ***	Size: A4
Approved by: ***	Sheet: 4/5



Board Outline

	Title: G103RCT6-CORE
	Name: CON
Drawn by:***	Revision: 1.0
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PC10 PC11
PA12 PB2
VREF 5V
REF2 GND
R4 NC NC
3U3 NC VREF
PA13 PA14
3U3 PA14 UDD
5V PA15 5V
GND GND GND
GND PF7 GND
UTN PC13 UIN
PC14 NC



U1

FB1

Y1

Y2

PC4 PC5
PB8 PB3
UDDA 5V
GND NC
PA5 PA2C
PA6 PA11C
PB6 PB11
PC7 GND
PA8 PB2
PB10 PB15
PB4 PB14
PB5 PB13
PB9 USSA
PA15 PA2
PC4 NC
PC5 NC

UDDA

D9
D8
D7
D6
D5
D4
D3
D2
D1

D0

JP11
R4
NC NC
3U3
NC VREF
PA13 PA14
3U3 PA14 UDD
5V PA15 5V
GND GND GND
GND PF7 GND
UTN PC13 UIN
PC14 NC

U1

FB1

Y1

Y2

PC4 PC5
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UDDA 5V
GND NC
PA5 PA2C
PA6 PA11C
PB6 PB11
PC7 GND
PA8 PB2
PB10 PB15
PB4 PB14
PB5 PB13
PB9 USSA
PA15 PA2
PC4 NC
PC5 NC

UDDA

D9
D8
D7
D6
D5
D4
D3
D2
D1

D0

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PA8 PB2
PB10 PB15
PB4 PB14
PB5 PB13
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PA15 PA2
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D9
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D1

D0

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3U3 PA14 UDD
5V PA15 5V
GND GND GND
GND PF7 GND
UTN PC13 UIN
PC14 NC

U1

FB1

Y1

Y2

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38

Comment	ComponentLink1 URL	Description	Designator	Footprint	LibRef	Pins	Quantity	SuppliersPartNumber
100nF (104) 10% 50V	http://www.szlcs.com/product/details_15331.html	贴片电容	C1, C2, C4, C5, C7, C10, C11, C13, C16, C18, C24, C26, C28	0603_C	0603 100nF (104) 10% 50V	2	13	C14663
4.7uF (475) 10% 16V	http://www.szlcs.com/product/details_20375.html	贴片电容	C3, C6, C12, C23, C25, C27	0603_C	0603 4.7uF (475) 10% 16V	2	6	C19666
18pF (180) 5% 50V	http://www.szlcs.com/product/details_1999.html	贴片电容	C8, C9	0603_C	0603 18pF (180) 5% 50V	2	2	C1647
1uF (105) 10% 50V	http://www.szlcs.com/product/details_16531.html	贴片电容	C14	0603_C	0603 1uF (105) 10% 50V	2	1	C15849
10uF (106) 10% 10V	http://www.szlcs.com/product/details_20411.html	贴片电容	C15, C17	0603_C	0603 10uF (106) 10% 10V	2	2	C19702
33pF (330) 5% 50V	http://www.szlcs.com/product/details_2015.html	贴片电容	C19, C20, C21, C22	0603_C	0603 33pF (330) 5% 50V	2	4	C1663
Micro_USB		Type B、Type AB	CN1	USB_Micro/SM0.65-2H5A	Micro_USB	7	1	
红灯 0603	http://www.szlcs.com/product/details_2659.html	发光二极管	COM	0603_LED_S1	0603 红灯	2	1	C2286
100Ω ±25% 100MHz	http://www.szlcs.com/product/details_1367.html	贴片磁珠	FB1	0805_L	0805 100Ω 25% 100MHz	2	1	C1015
Header 2X1		Header, 2-Pin, Single row	GND, JP2, JP7	HDR1X2	Header 2X1	2	3	
Header 3X2		Header, 6-Pin, Dual row	JP1	HDR2X3	Header 3X2	6	1	
Header 19X2		Header, 38-Pin, Dual row	JP3, JP4	HDR2X19	Header 19X2	38	2	
Header 5X2		Header, 10-Pin, Dual row	JP5, JP8	HDR2X5	Header 5X2	10	2	
Header 3X1		Header, 3-Pin, Single row	JP6	HDR1X3	Header 3X1	3	1	
Header 10X1		Header, 10-Pin, Single row	JP10	HDR1X10	Header 10X1	10	1	
Header 8X1		Header, 8-Pin, Single row	JP11, JP13	HDR1X8	Header 8X1	8	2	
Header 6X1		Header, 6-Pin, Single row	JP12	HDR1X6	Header 6X1	6	1	
TYPEC_FEMALE_16P		Type C Female	LinkCN	TYPEC-FEMALE-16P	USB_TYPEC_FEMALE_16P	16	1	
绿灯 0603	http://www.szlcs.com/product/details_73152.html	发光二极管	Pow, User	0603_LED_S1	0603 绿灯	2	2	C72043
20KΩ (2002) ±1%	http://www.szlcs.com/product/details_4591.html	贴片电阻	R1, R11, R14	0603_R	0603 20KΩ (2002) 1%	2	3	C4184
0Ω (0R0) ±1%	http://www.szlcs.com/product/details_21903.html	贴片电阻	R2	0603_R	0603 0Ω (0R0) 1%	2	1	C21189
100Ω (1000) ±1%	http://www.szlcs.com/product/details_23502.html	贴片电阻	R3	0603_R	0603 100Ω (1000) 1%	2	1	C22775
1KΩ (1001) ±1%	http://www.szlcs.com/product/details_21904.html	贴片电阻	R4	0603_R	0603 1KΩ (1001) 1%	2	1	C21190
SW-PB		Switch	SW1, SW2	SW-PB-SMD(6x6)	SW-PB	4	2	
ACM32G103RCT6		Advanced ARM based 32-bit Cortex M33 MCU with 320 Kbytes Flash and 64 Kbytes of SRAM	U1	F-0FP10x10-G64/P.5N	ACM32G103RCT6	64	1	
ACH512_V2_OFN32U		ACH512_V2_OFN32U	U2	QFN 5X5-32/P.5	ACH512_V2_OFN32U	33	1	
AMS1117-3.3	http://www.szlcs.com/product/details_6652.html	低压差线性稳压 (LDO)	VR1	SOT-223	SOT-223 AMS1117-3.3	3	1	C6186
32.768KHz ± 20ppm 12.5pF	http://www.szlcs.com/product/details_33310.html	贴片晶振	Y1	SMD-3215_2P FC - 135	SMD-3215_2P 32.768KHz 20ppm 12.5pF	2	1	C32346
12MHZ 20PF 10PPM	http://www.szlcs.com/product/details_9522.html	贴片晶振	Y2, Y3	SMD-3225_4P	SMD-3225_4P 12MHZ 20PF 10PPM	4	2	C9002