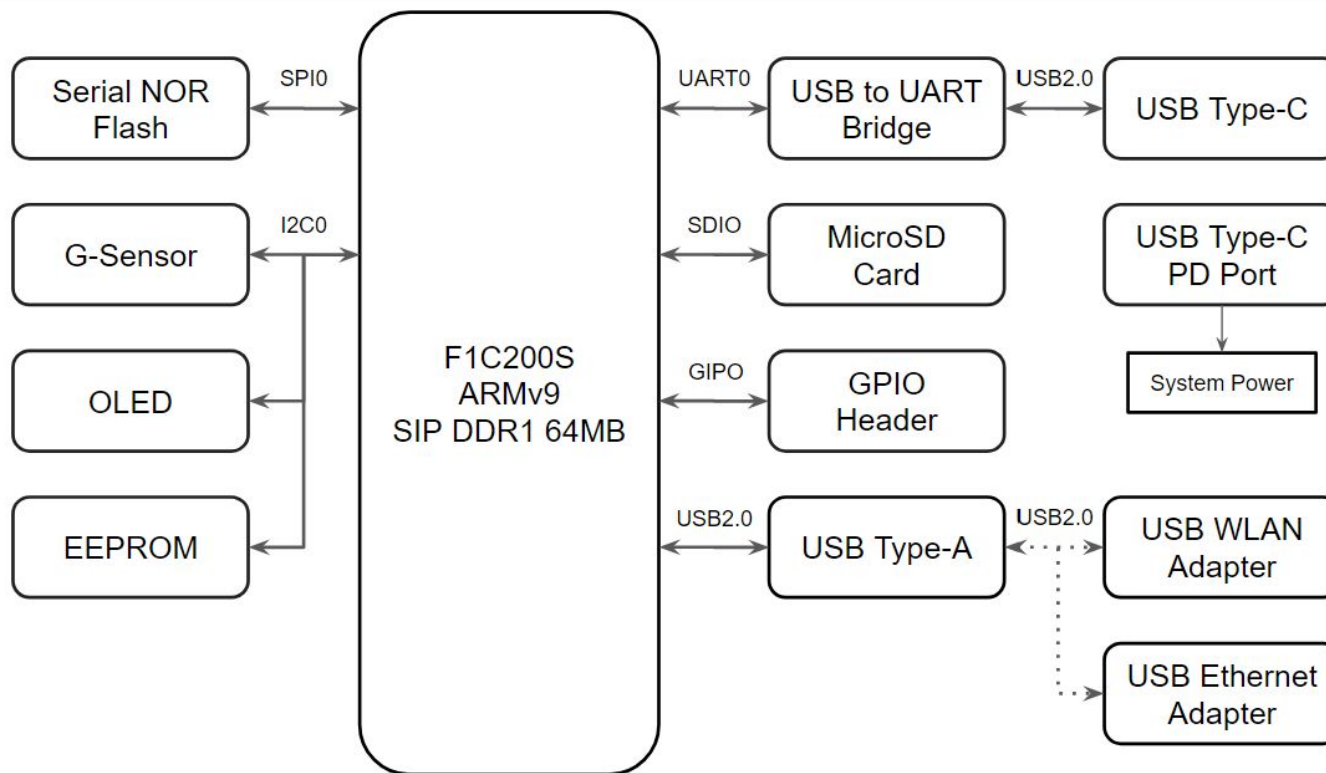
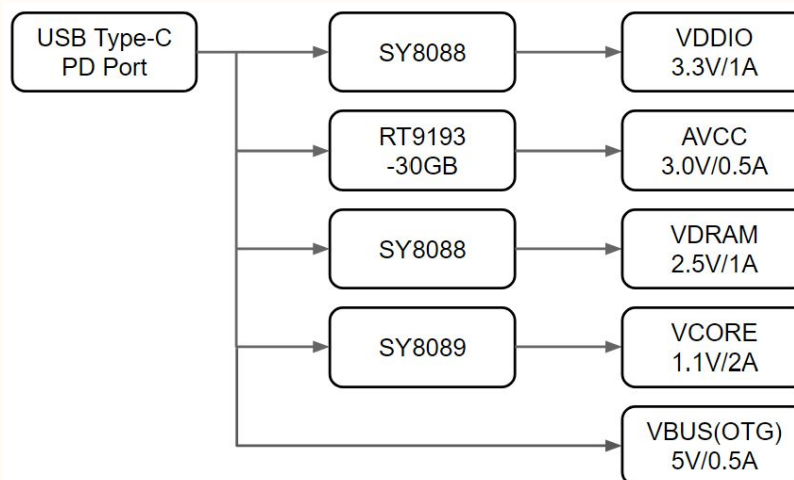


Block Diagram



Power Tree

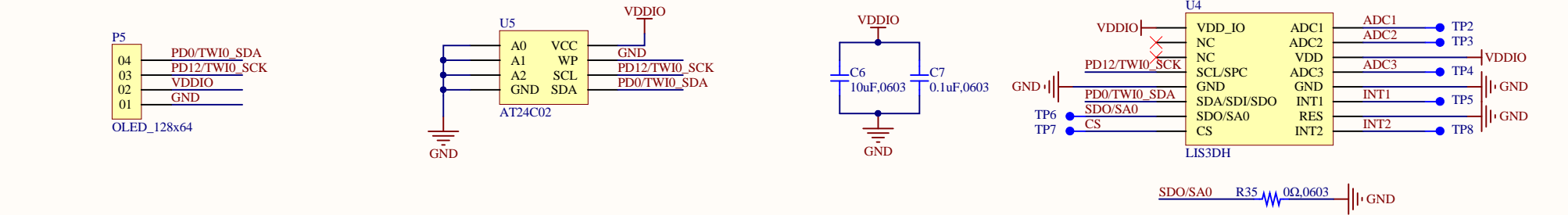


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Block Diagram and Power Tree		
Size	Number	Revision
A4		
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File:	G:\Z\...\Sheet1.SchDoc	Drawn By:

OLED Header

EEPROM

G-Sensor

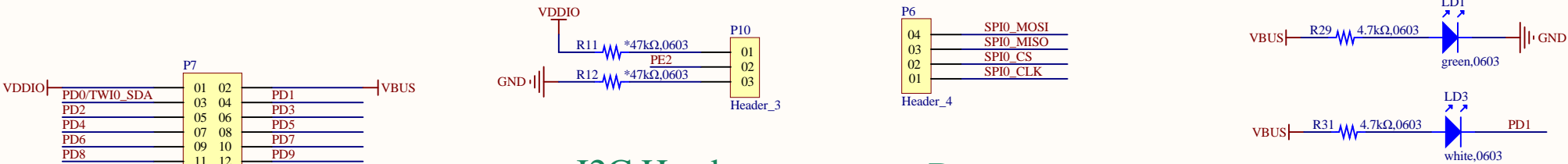


GPIO Header

USB OTG ID

SPI Header

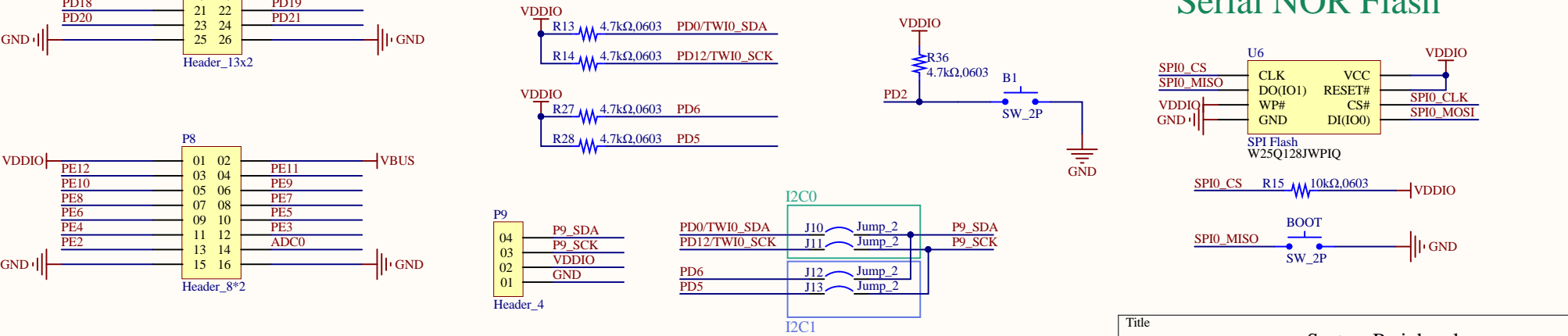
Power LED / User LED



I2C Header

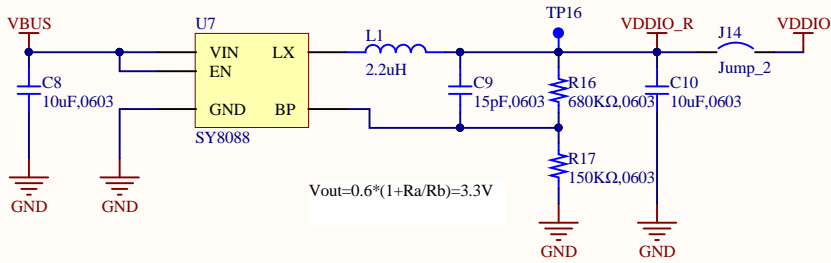
Button

Serial NOR Flash



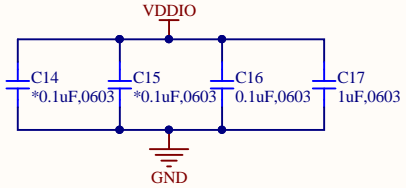
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System Peripherals		
Size	Number	Revision
A4		
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File:	G:\Z\...\Sheet3.SchDoc	Drawn By:

VDDIO

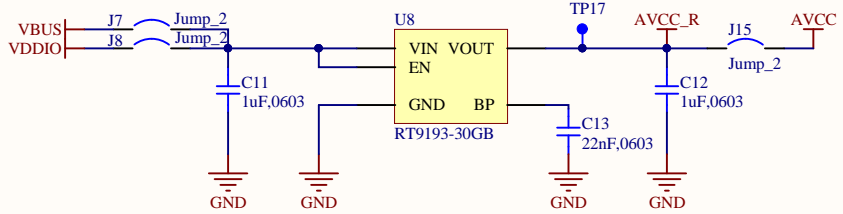


$V_{out} = 0.6 * (1 + R_a/R_b) = 3.3V$

SY8088 : Buck, 1.5MHz,
Input 2.5 to 5.5V, Out 3.3V,
continues 1A, peak 1.3A

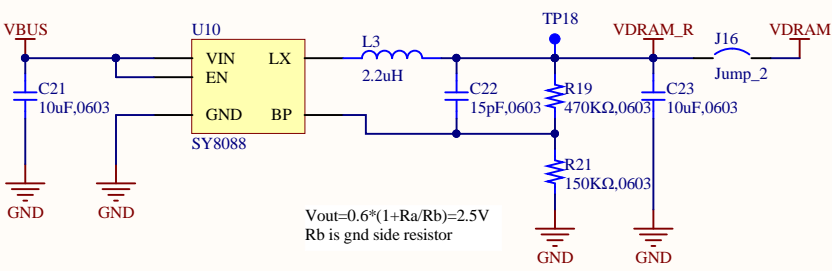


AVCC



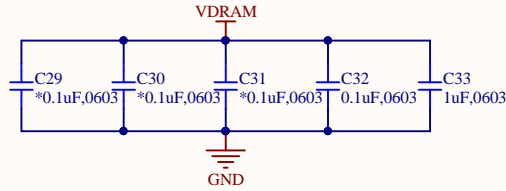
RT9013-30GB : LDO,
Input 2.2 to 5.5V, Out 3.0V,
continues 500mA, peak 850mA

VDRAM

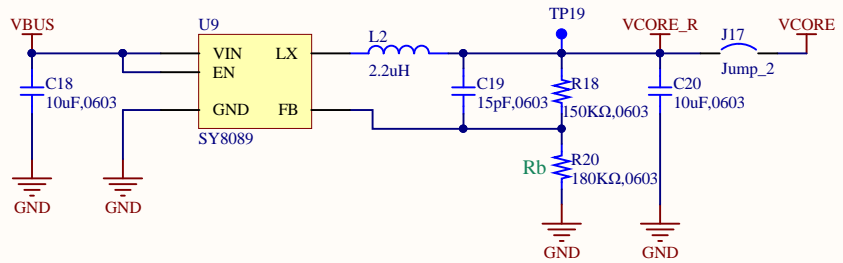


$V_{out} = 0.6 * (1 + R_a/R_b) = 2.5V$
Rb is gnd side resistor

SY8088 : Buck, 1.5MHz,
Input 2.5 to 5.5V, Out 2.5V,
continues 1A, peak 1.3A

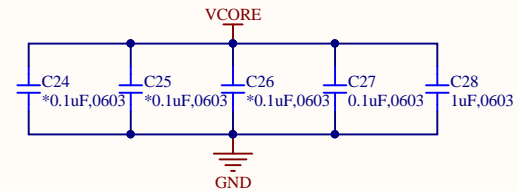


VCORE

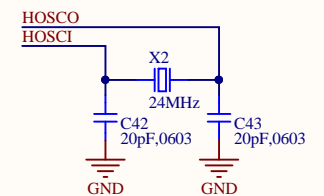
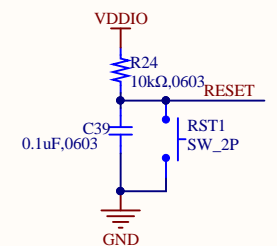
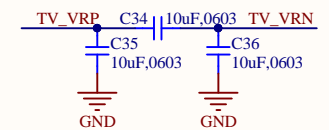
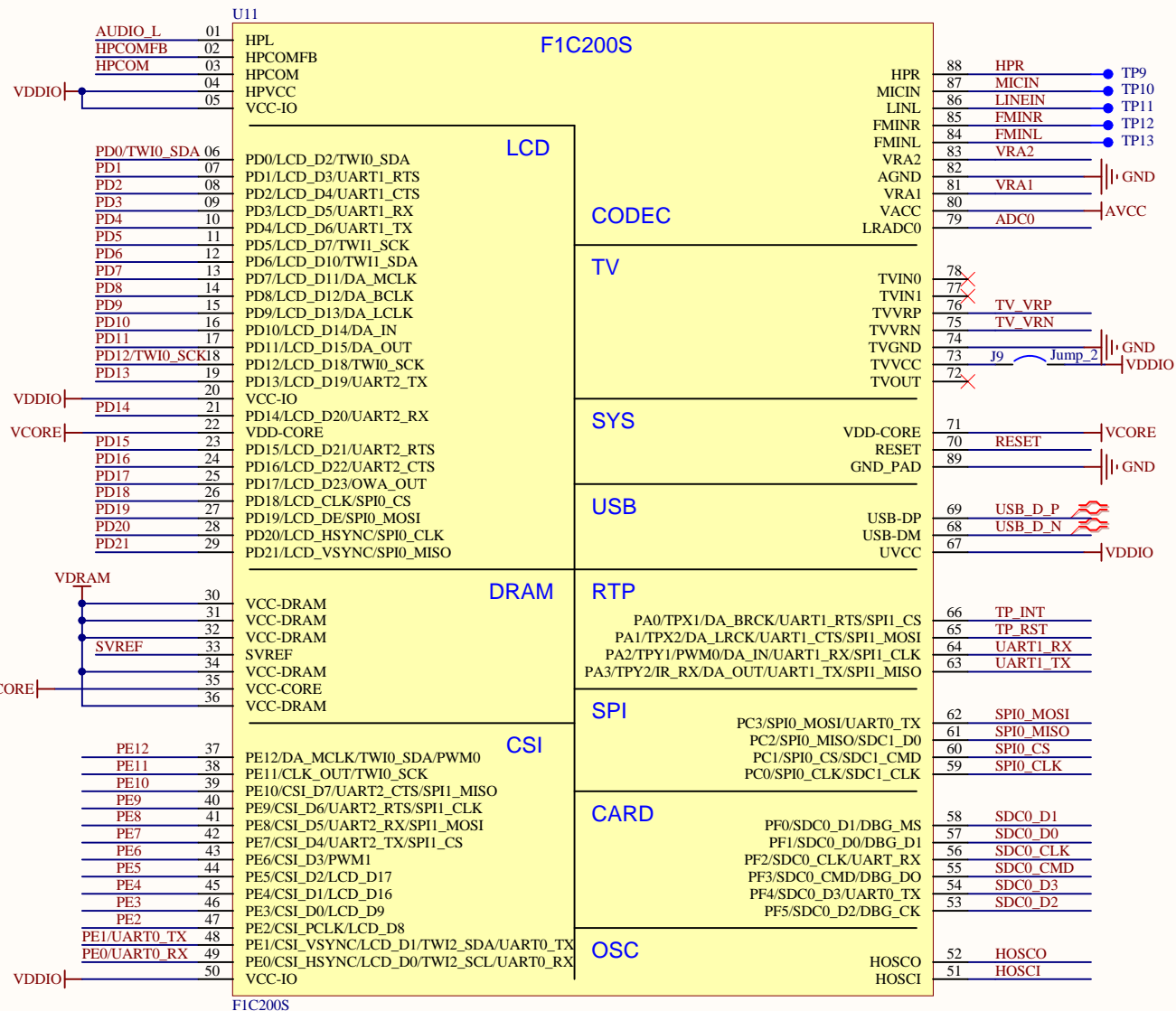
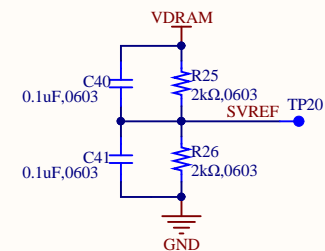
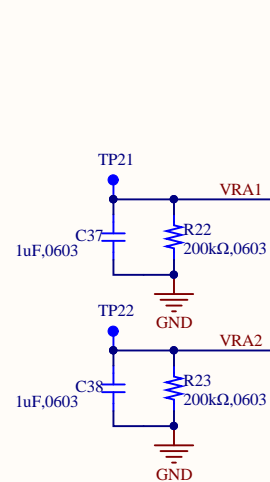


SY8089 : Buck, 1MHz,
Input 2.7 to 5.5V, Out 1.1V,
continues 2A, peak 3A

$V_{out} = 0.6 * (1 + R_a/R_b)$
Rb 200k = 1.05V
Rb 180k = 1.1V
Rb 150k = 1.2V



Title		
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Title			SoC		
Size	Number			Revision	
A4					
Date:	2023/5/28			Sheet of	
File:	G:\Z...Sheet5.SchDoc			Drawn By:	