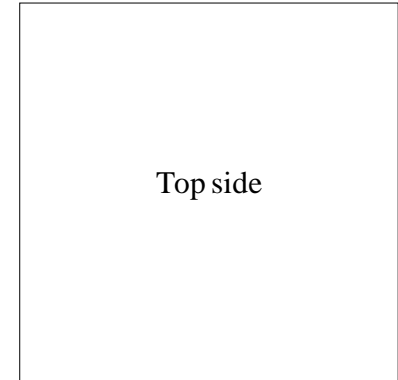


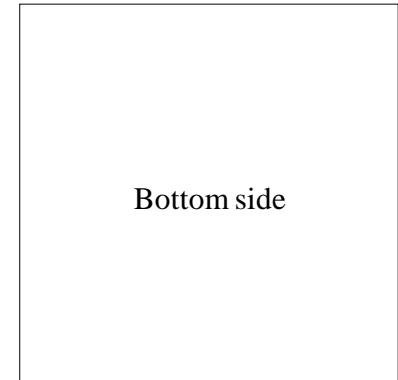
# Vanilla SCB

Page	Index
1	COVER PAGE
2	BLOCK DIAGRAM
3	CPU POWER
4	CPU SIGNAL
5	CPU IO
6	ETHERNET
7	USB

Page	Index
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Top side



Bottom side

## Design considerations


DESIGN NOTE  
Example text for informal design notes

DESIGN NOTE  
Example text for informal design notes

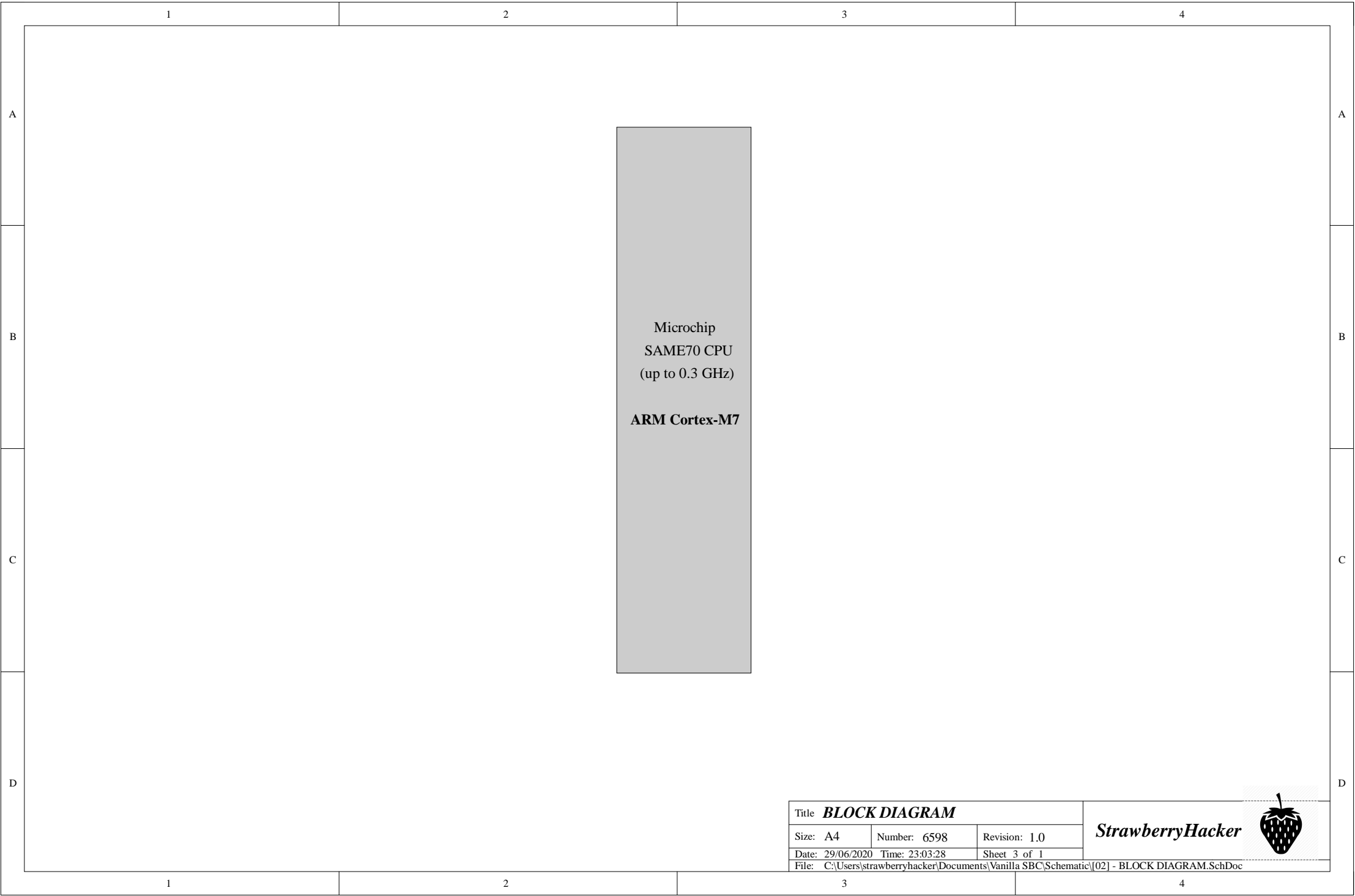
DEBUG NOTE  
Example text for informal design notes

LAYOUT NOTE  
Example text for informal design notes

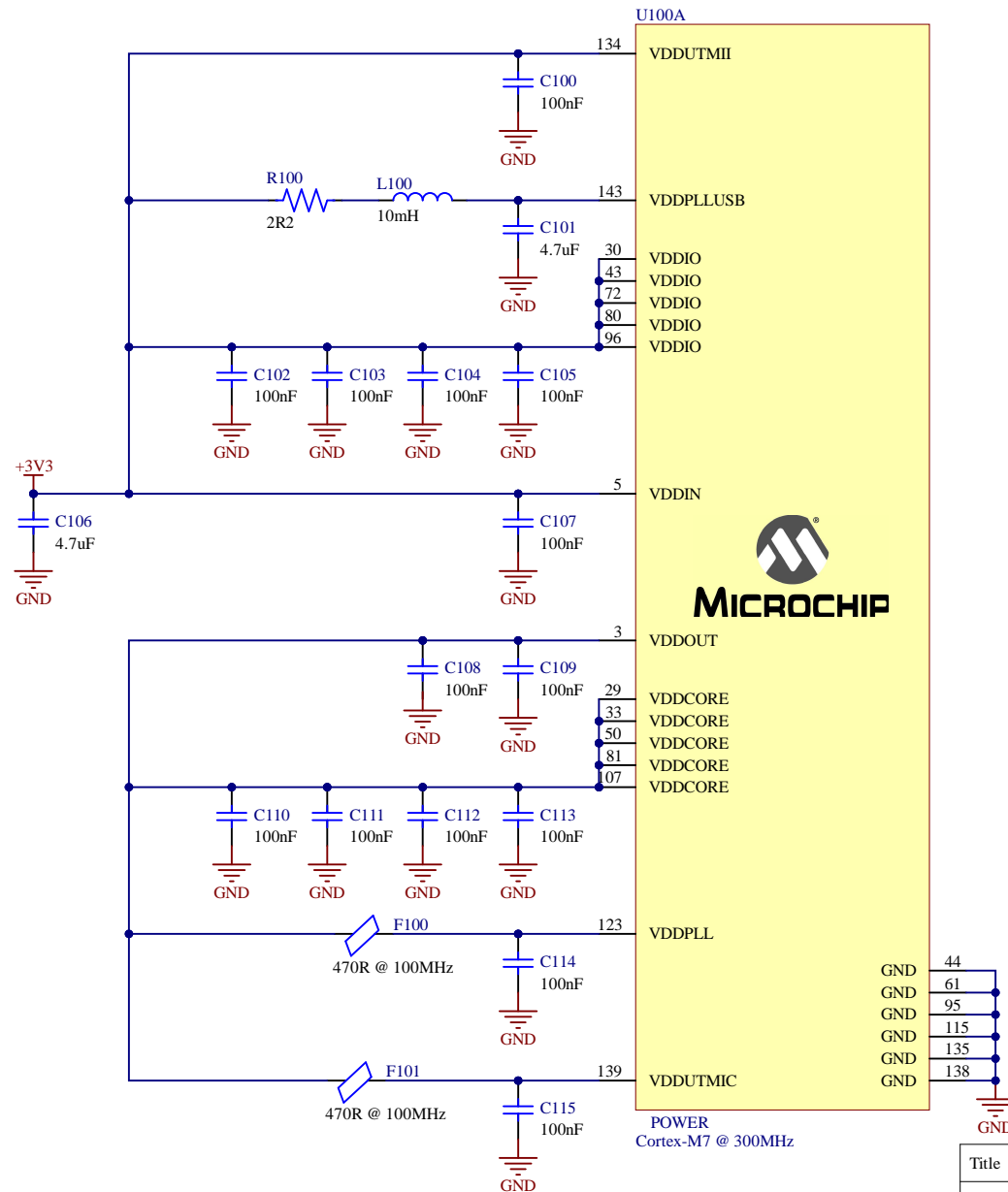
DESIGN NOTE  
Example text for informal design notes

Title <i><b>Vanilla SCB</b></i>			<i><b>StrawberryHacker</b></i>	
Size: A4	Number: 6598	Revision: 1.0		
Date: 29/06/2020	Time: 23:03:27	Sheet 2 of 1		
File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\01] - COVER PAGE.SchDoc				

**StrawberryHacker**



# CPU POWER



Title **CPU POWER**

Size: A4

Number: 6598

Revision: 1.0

Date: 29/06/2020 Time: 23:03:28

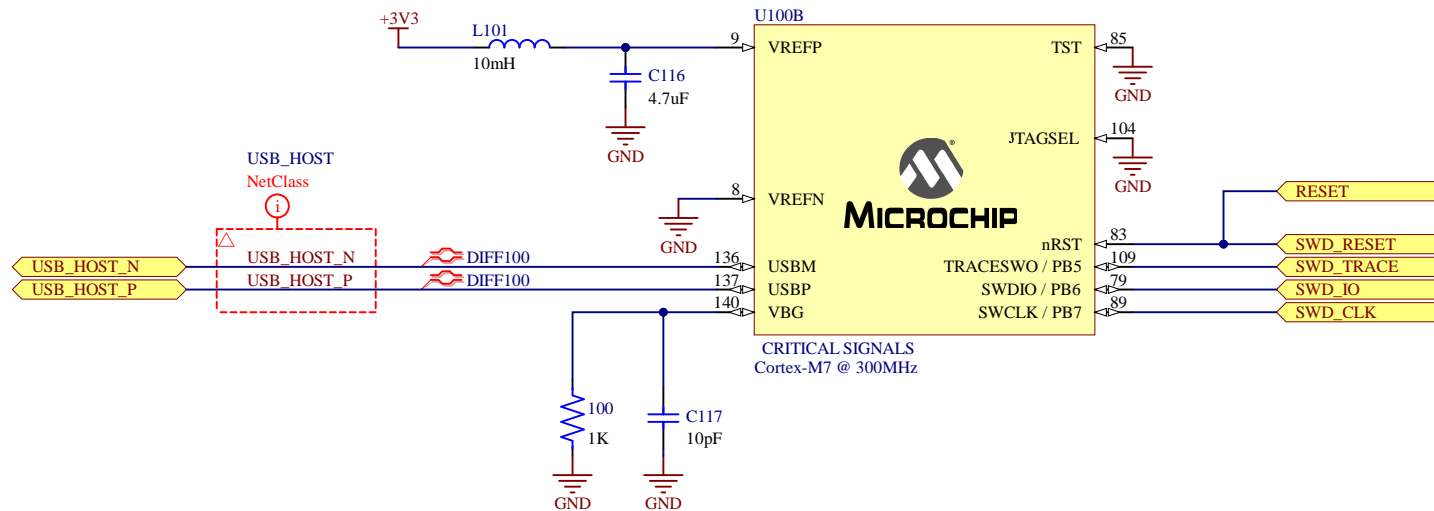
Sheet 4 of 1

File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\03] - CPU POWER.SchDoc


**StrawberryHacker**



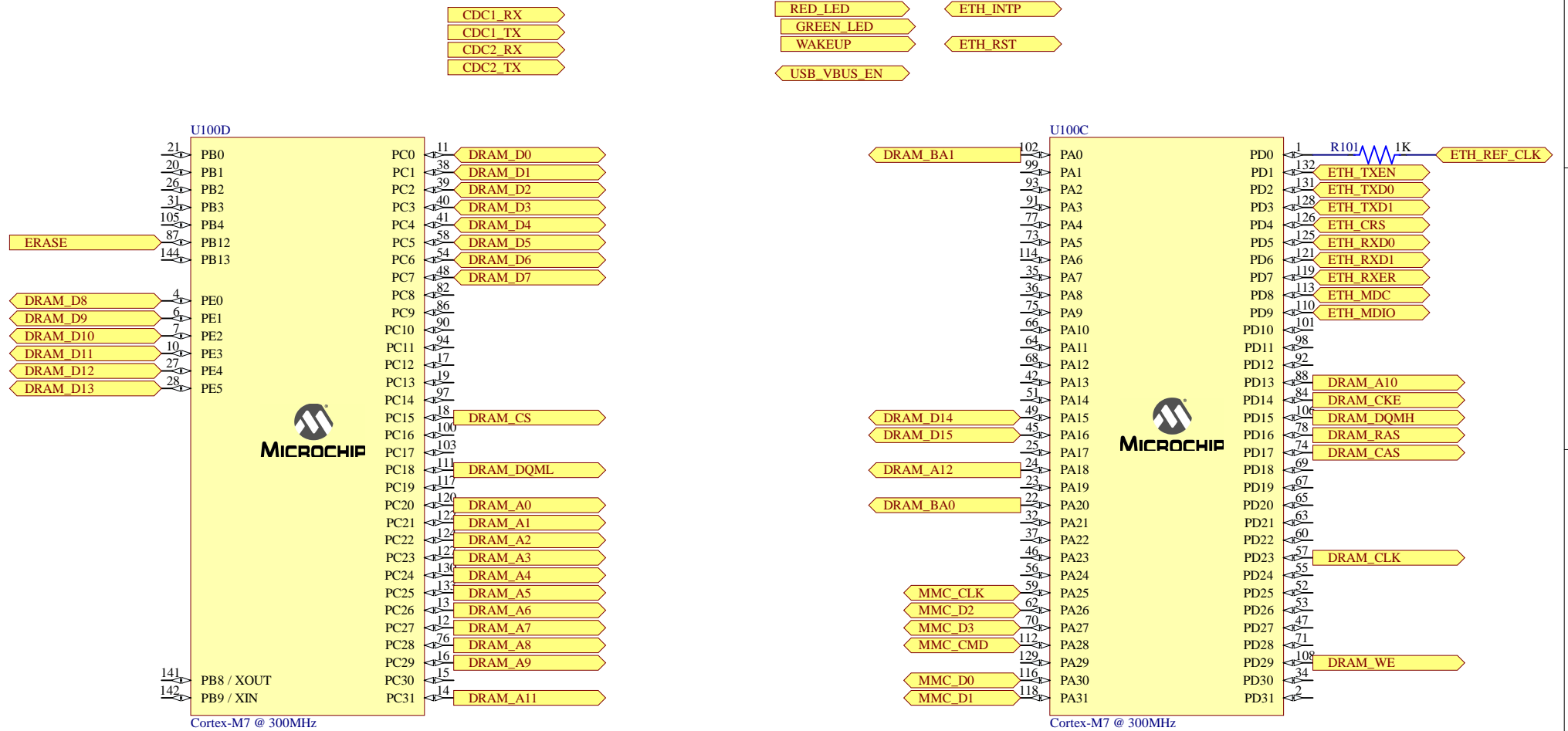
# CPU SIGNALS



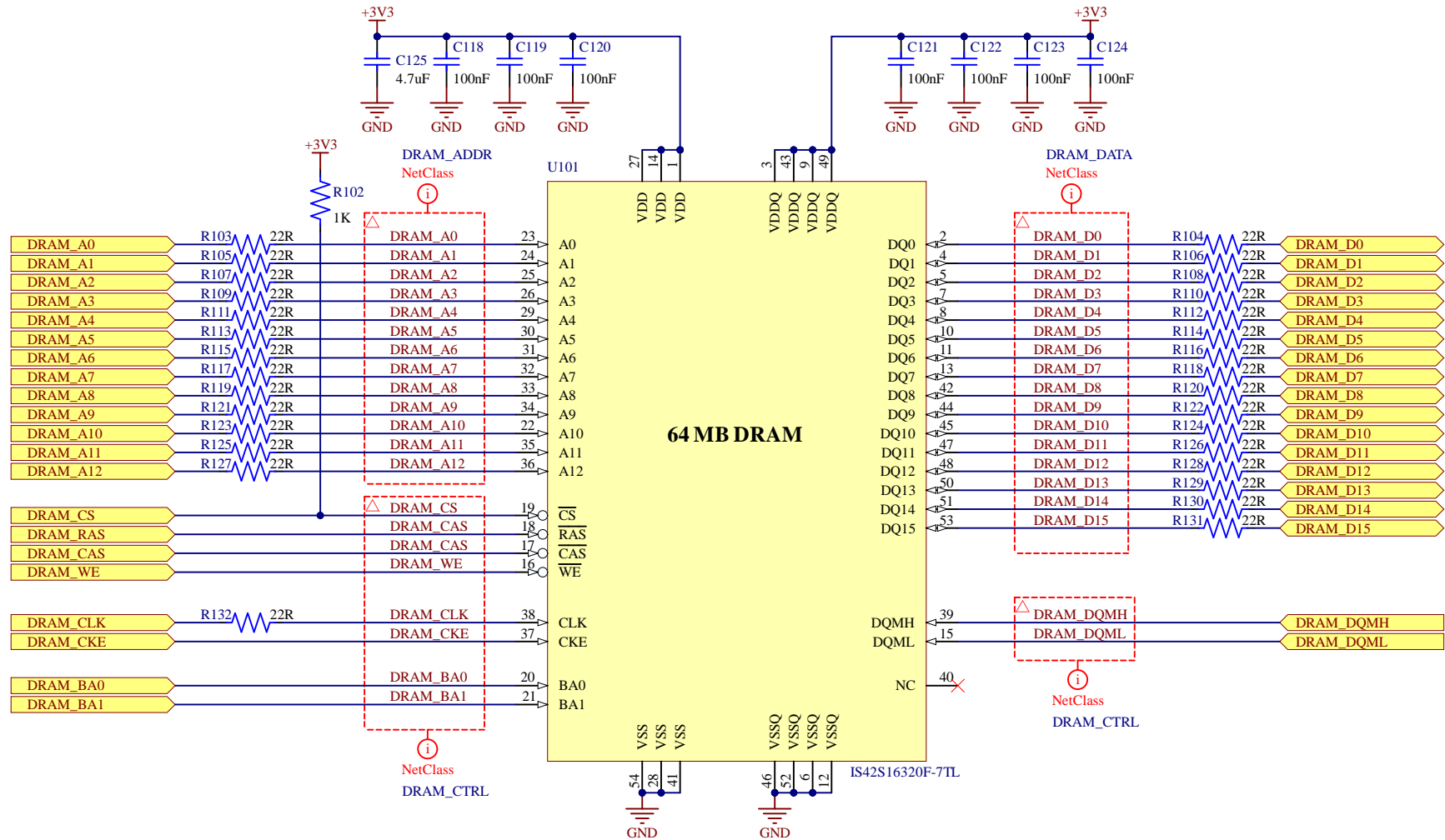
CRITICAL SIGNALS  
Cortex-M7 @ 300MHz

Title <i><b>CPU SIGNALS</b></i>			<i><b>StrawberryHacker</b></i> 
Size: A4	Number: 6598	Revision: 1.0	
Date: 29/06/2020	Time: 23:03:29	Sheet 5 of 1	
File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\04 - CPU SIGNALS.SchDoc			

# CPU IO



# DRAM



Title **DRAM**

Size: A4

Number: 6598

Revision: 1.0

Date: 29/06/2020 Time: 23:03:30

Sheet 7 of 1

File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\06] - DRAM.SchDoc

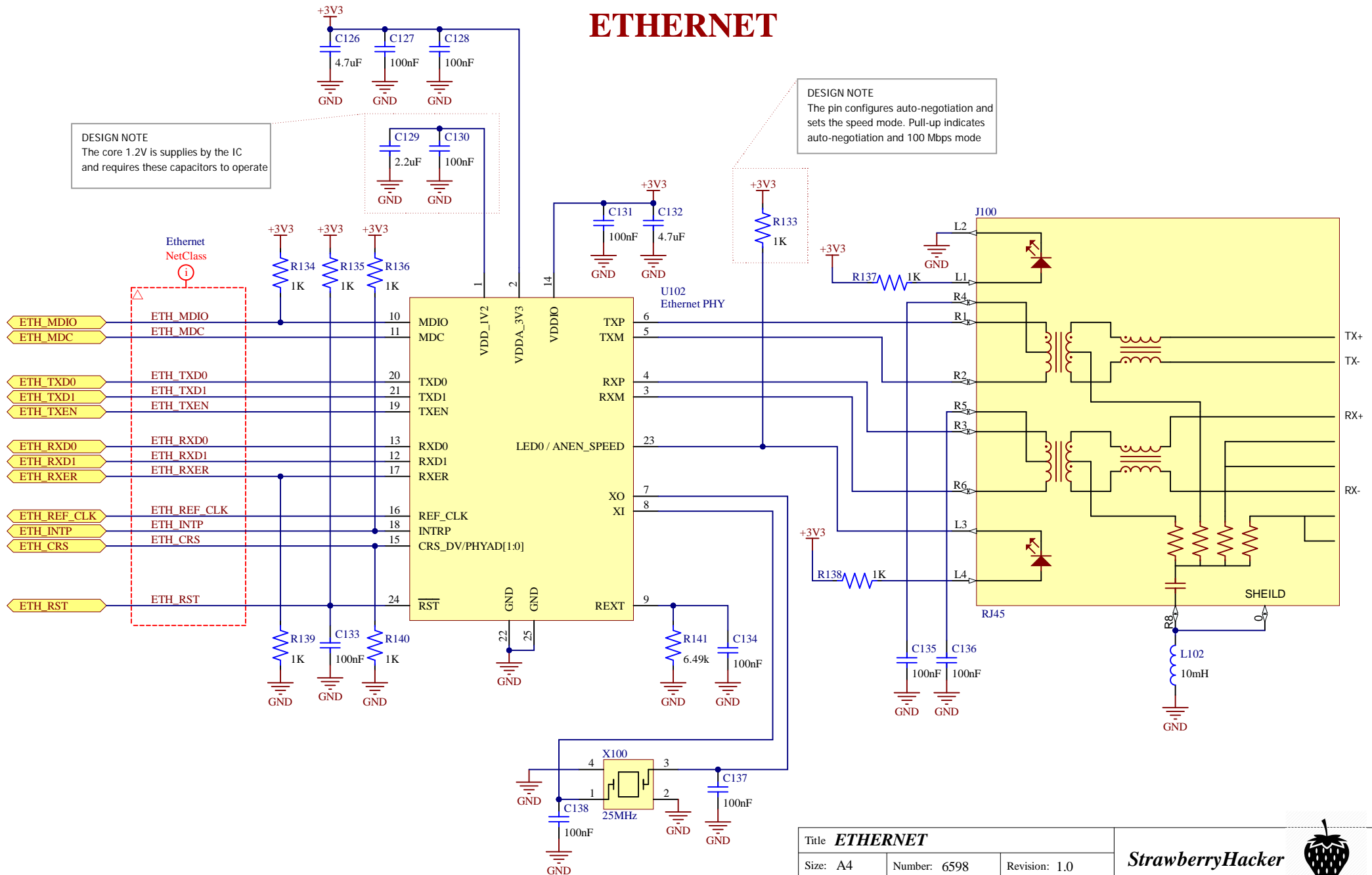
**StrawberryHacker**



# ETHERNET

**DESIGN NOTE**  
The core 1.2V is supplies by the IC and requires these capacitors to operate

**DESIGN NOTE**  
The pin configures auto-negotiation and sets the speed mode. Pull-up indicates auto-negotiation and 100 Mbps mode



Title **ETHERNET**

Size: A4

Number: 6598

Revision: 1.0

Date: 29/06/2020 Time: 23:03:31

Sheet 8 of 1

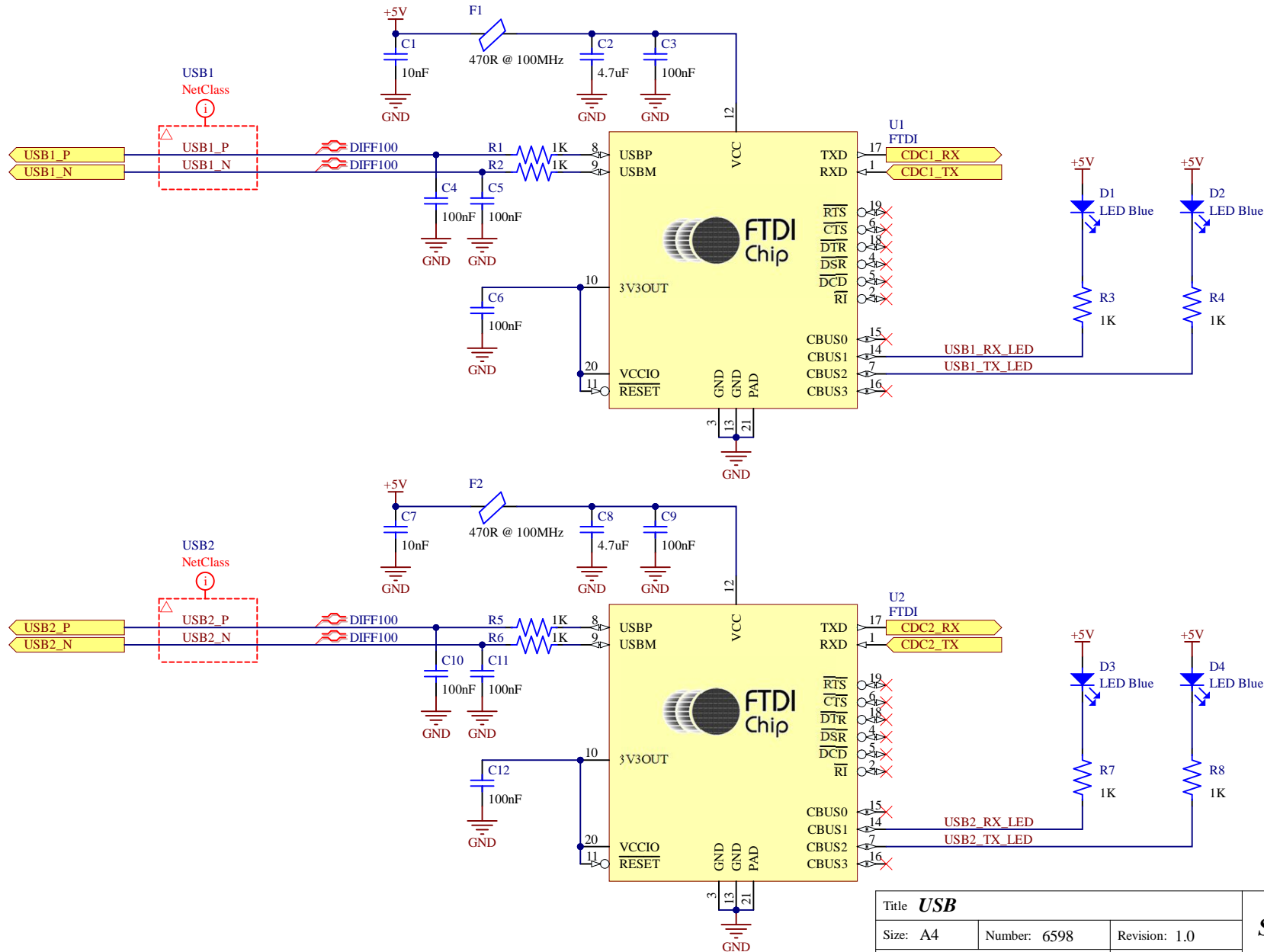
File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\07] - ETHERNET.SchDoc

**StrawberryHacker**





# USB



Title **USB**

Size: A4

Number: 6598

Revision: 1.0

Date: 29/06/2020 Time: 23:03:32

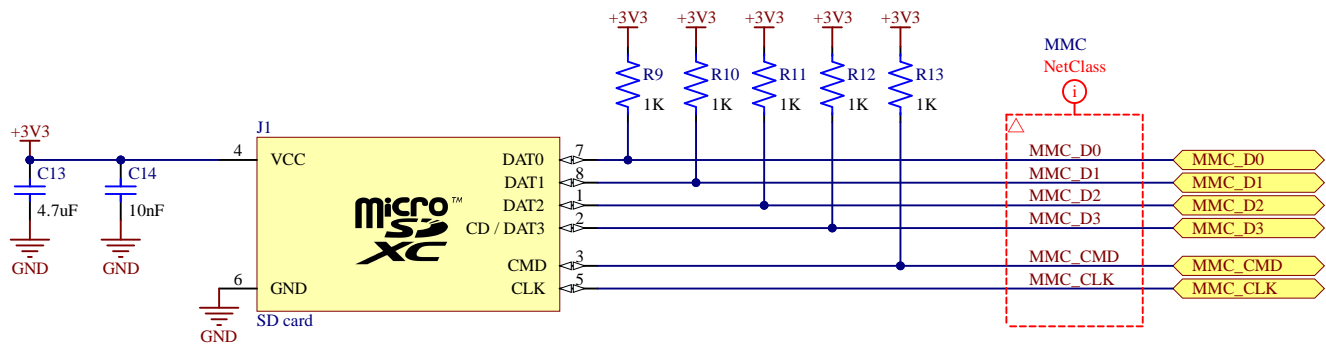
Sheet 9 of 1

File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\08] - USB.SchDoc

**StrawberryHacker**



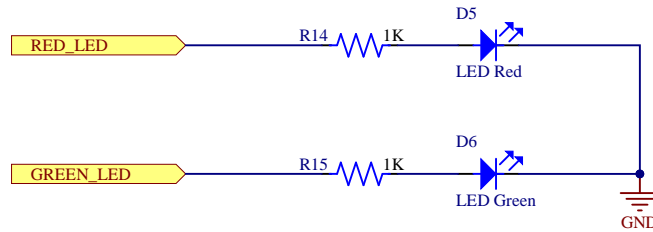
# SD CARD



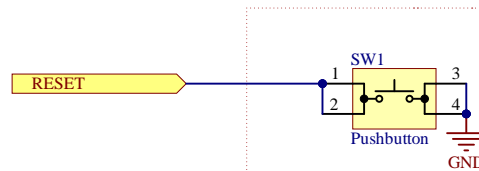
# LEDS, BUTTONS

DESIGN NOTE  
The red LED will indicate power to the and should allways be turned on by the software

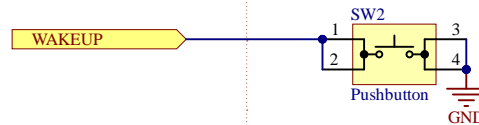
DESIGN NOTE  
The green LED will indical CPU load




DESIGN NOTE  
Resets the chip



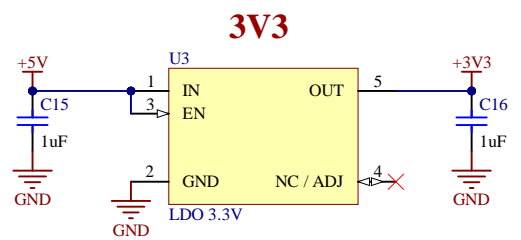
DESIGN NOTE  
Wakes the chip up from powerdown



DEBUG NOTE  
No filter is needed. If the button bounces, the gpio can be configured with internal filter

Title <b>LEDS, BUTTONS</b>			<b>StrawberryHacker</b> 
Size: A4	Number: 6598	Revision: 1.0	
Date: 29/06/2020	Time: 23:03:33	Sheet 11 of 1	
File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\10] - LEDS, BUTTONS.SchDoc			

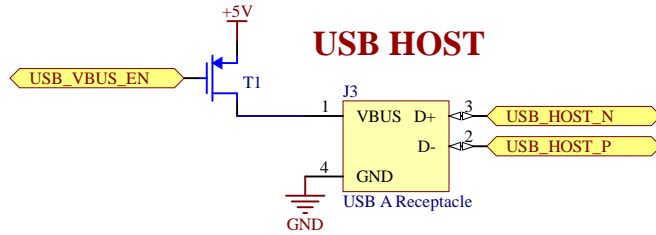
POWER



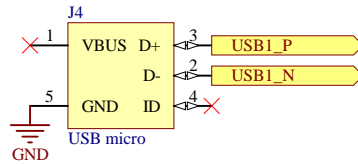
DESIGN NOTE  
3V3 LDO regulator able to supply up to  
450mA

# CONNECTORS

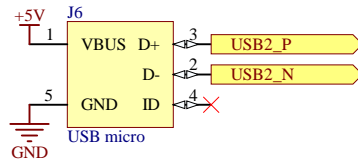
## USB HOST



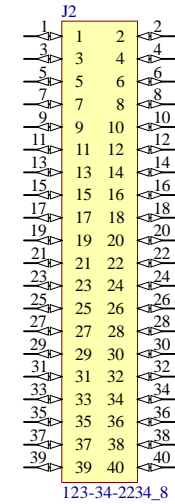
## USB CDC 1



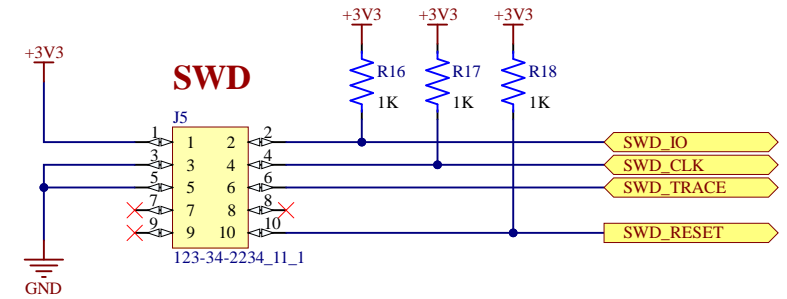
## USB CDC 2 / POWER



## GPIO



## SWD



Title **CONNECTORS**

Size: A4

Number: 6598

Revision: 1.0

Date: 29/06/2020 Time: 23:03:34

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File: C:\Users\strawberryhacker\Documents\Vanilla SBC\Schematic\12] - CONNECTORS.SchDoc

**StrawberryHacker**

