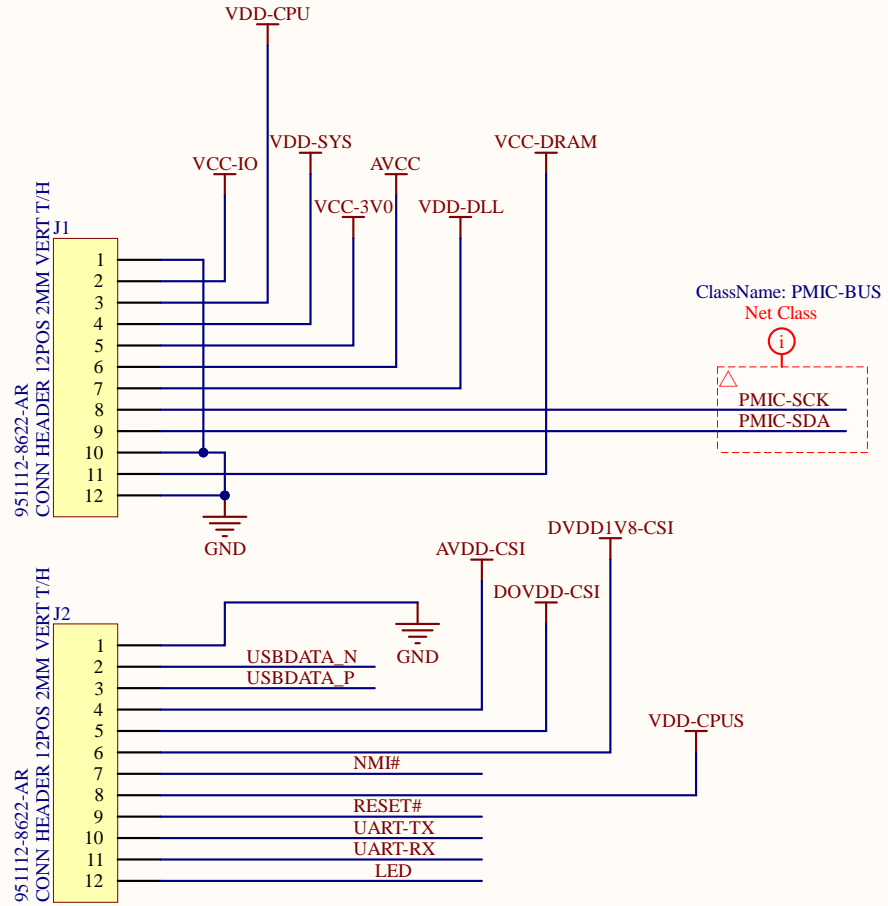
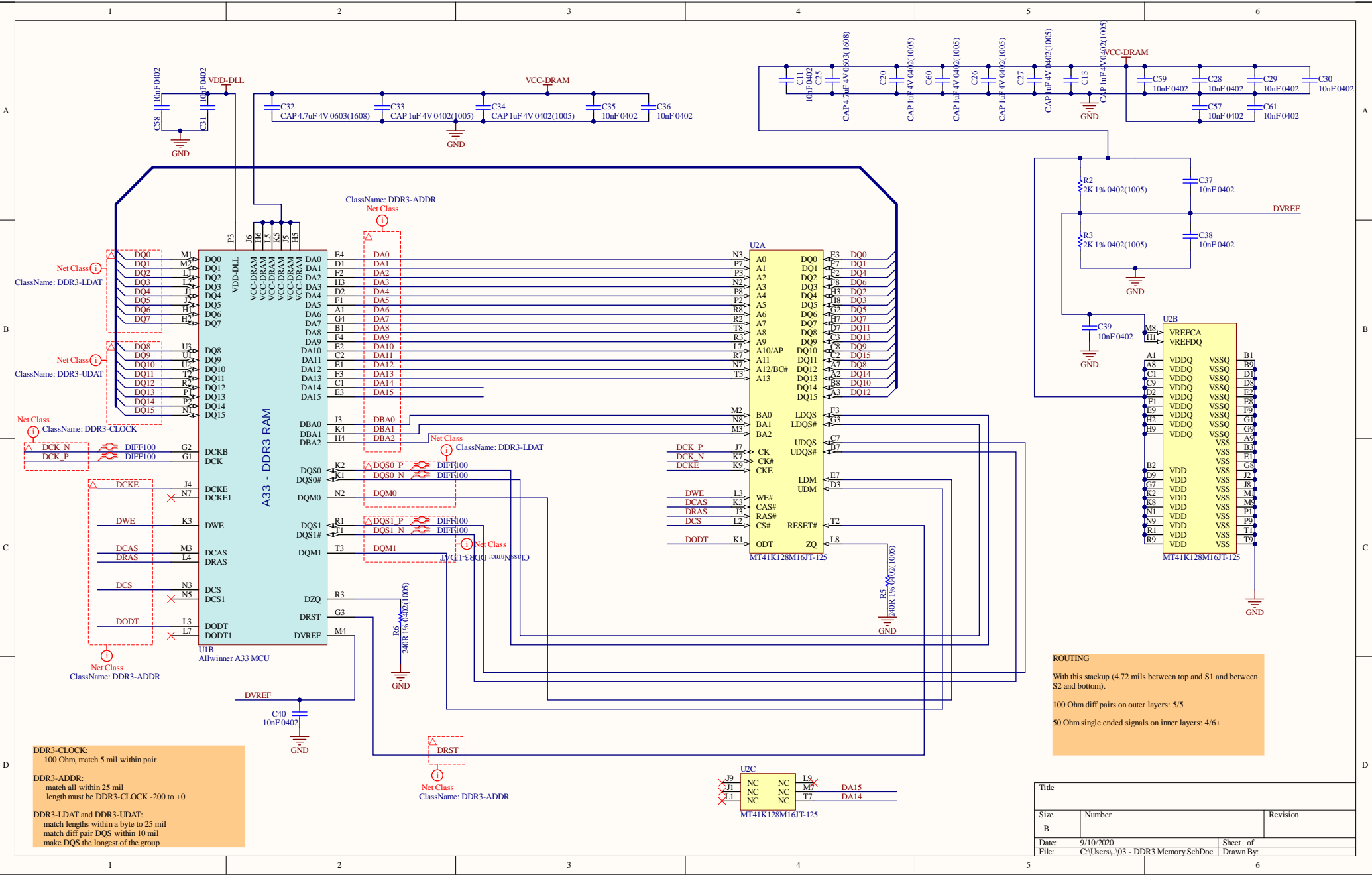


Bottom board: power, USB, UART

Top board: MCU, DDR, MicroSD, Camera



Title		
JeVois-A33 CPU Board		
Size	Number	Revision
A		
Date:	9/10/2020	Sheet of
File:	C:\Users\...\01 - Block Diagram.SchDoc	Drawn By:



Net Class
 Class Name: DDR3-LDAT
 Net Class
 Class Name: DDR3-UDAT
 Net Class
 Class Name: DDR3-CLOCK

Net Class
 Class Name: DDR3-ADDR
 Net Class
 Class Name: DDR3-ADDR
 Net Class
 Class Name: DDR3-ADDR

DDR3-CLOCK:
 100 Ohm, match 5 mil within pair

DDR3-ADDR:
 match all within 25 mil
 length must be DDR3-CLOCK -200 to +0

DDR3-LDAT and DDR3-UDAT:
 match lengths within a byte to 25 mil
 match diff pair DQS within 10 mil
 make DQS the longest of the group

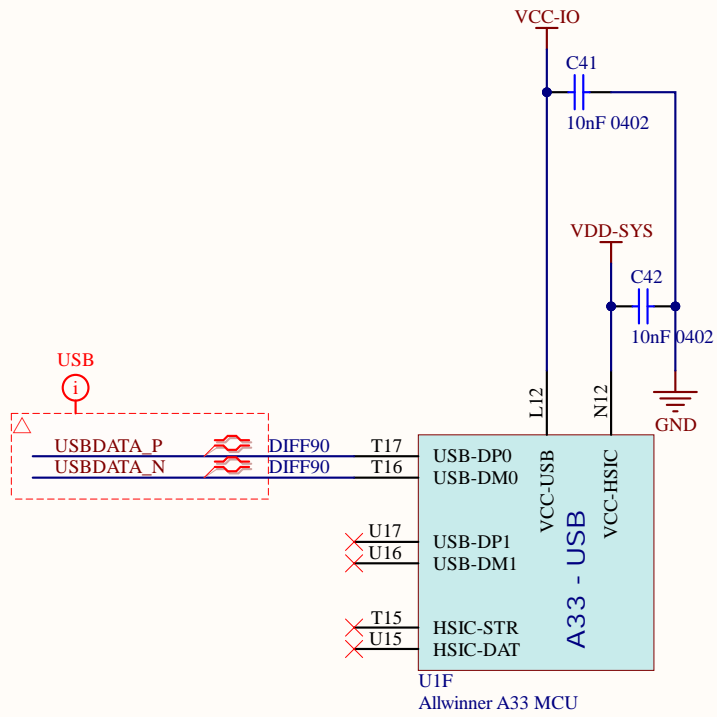
ROUTING

With this stackup (4.72 mils between top and S1 and between S2 and bottom).

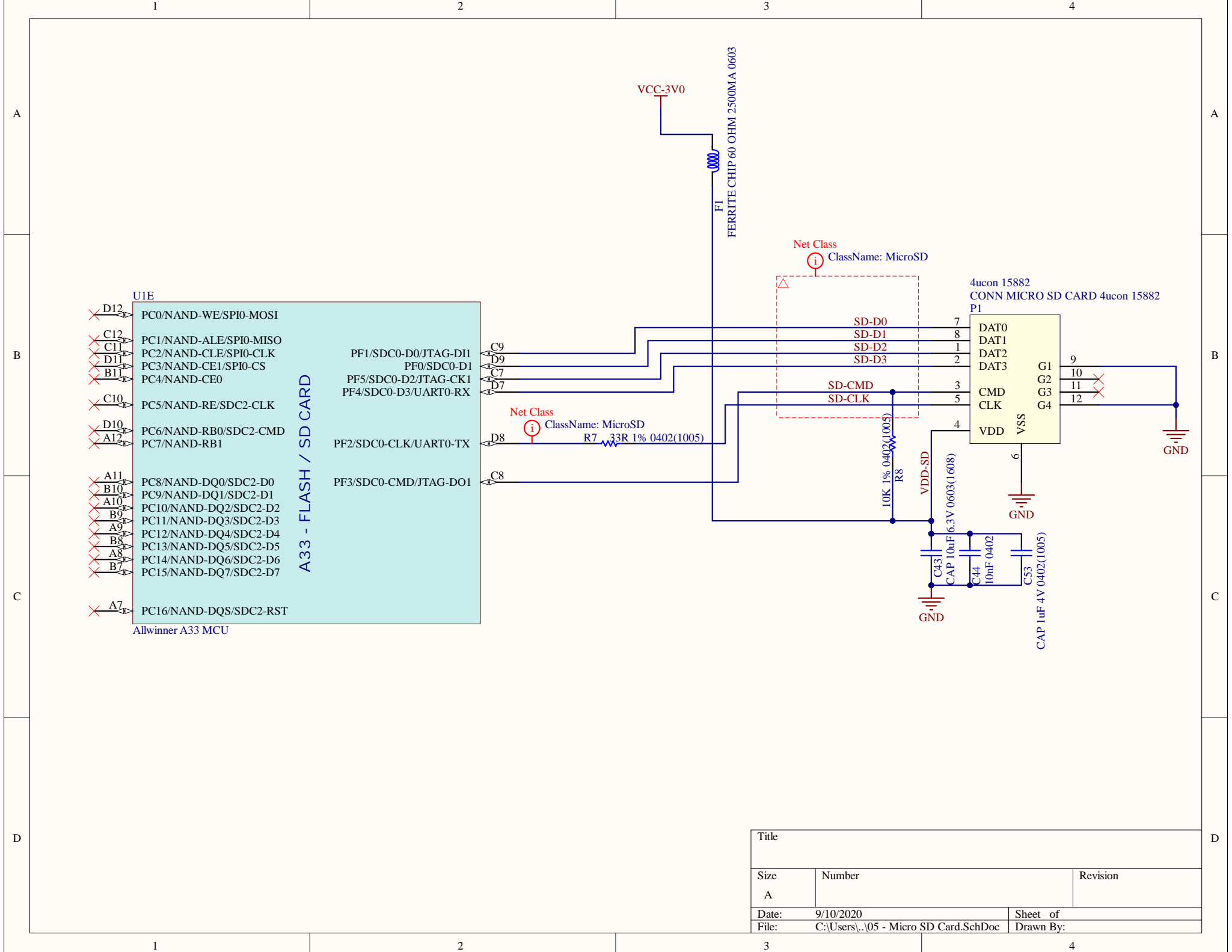
100 Ohm diff pairs on outer layers: 5/5

50 Ohm single ended signals on inner layers: 4/6+

Title		
Size	Number	Revision
B		
Date:	9/10/2020	Sheet of
File:	C:\Users\...03 - DDR3 Memory.SchDoc	Drawn By:



Title		
Size	Number	Revision
A		
Date:	9/10/2020	Sheet of
File:	C:\Users\...\04 - USB.SchDoc	Drawn By:



U1E

PC0/NAND-WE/SPI0-MOSI	PF1/SDC0-D0/JTAG-DI1	D12
PC1/NAND-ALE/SPI0-MISO	PF0/SDC0-D1	C12
PC2/NAND-CLE/SPI0-CLK	PF5/SDC0-D2/JTAG-CK1	C11
PC3/NAND-CE1/SPI0-CS	PF4/SDC0-D3/UART0-RX	D11
PC4/NAND-CE0		B11
PC5/NAND-RE/SDC2-CLK		C10
PC6/NAND-RB0/SDC2-CMD	PF2/SDC0-CLK/UART0-TX	D10
PC7/NAND-RB1		A12
PC8/NAND-DQ0/SDC2-D0	PF3/SDC0-CMD/JTAG-DO1	A11
PC9/NAND-DQ1/SDC2-D1		B10
PC10/NAND-DQ2/SDC2-D2		A10
PC11/NAND-DQ3/SDC2-D3		B9
PC12/NAND-DQ4/SDC2-D4		A9
PC13/NAND-DQ5/SDC2-D5		B8
PC14/NAND-DQ6/SDC2-D6		A8
PC15/NAND-DQ7/SDC2-D7		B7
PC16/NAND-DQS/SDC2-RST		A7

A33 - FLASH / SD CARD

Allwinner A33 MCU

VCC-3V0

F1
FERRITE CHIP 60 OHM 2500MA 0603

Net Class
ClassName: MicroSD

Net Class
ClassName: MicroSD
R7 33R 1% 0402(1005)

SD-D0
SD-D1
SD-D2
SD-D3
SD-CMD
SD-CLK

4ucon 15882
CONN MICRO SD CARD 4ucon 15882
P1

DAT0	7	G1	9
DAT1	8	G2	10
DAT2	1	G3	11
DAT3	2	G4	12
CMD	3		
CLK	5		
VDD	4		
VSS	6		

R8
10K 1% 0402(1005)

VDD-SD

C43
CAP 10uF 6.3V 0603(1608)

C44
10nF 0402

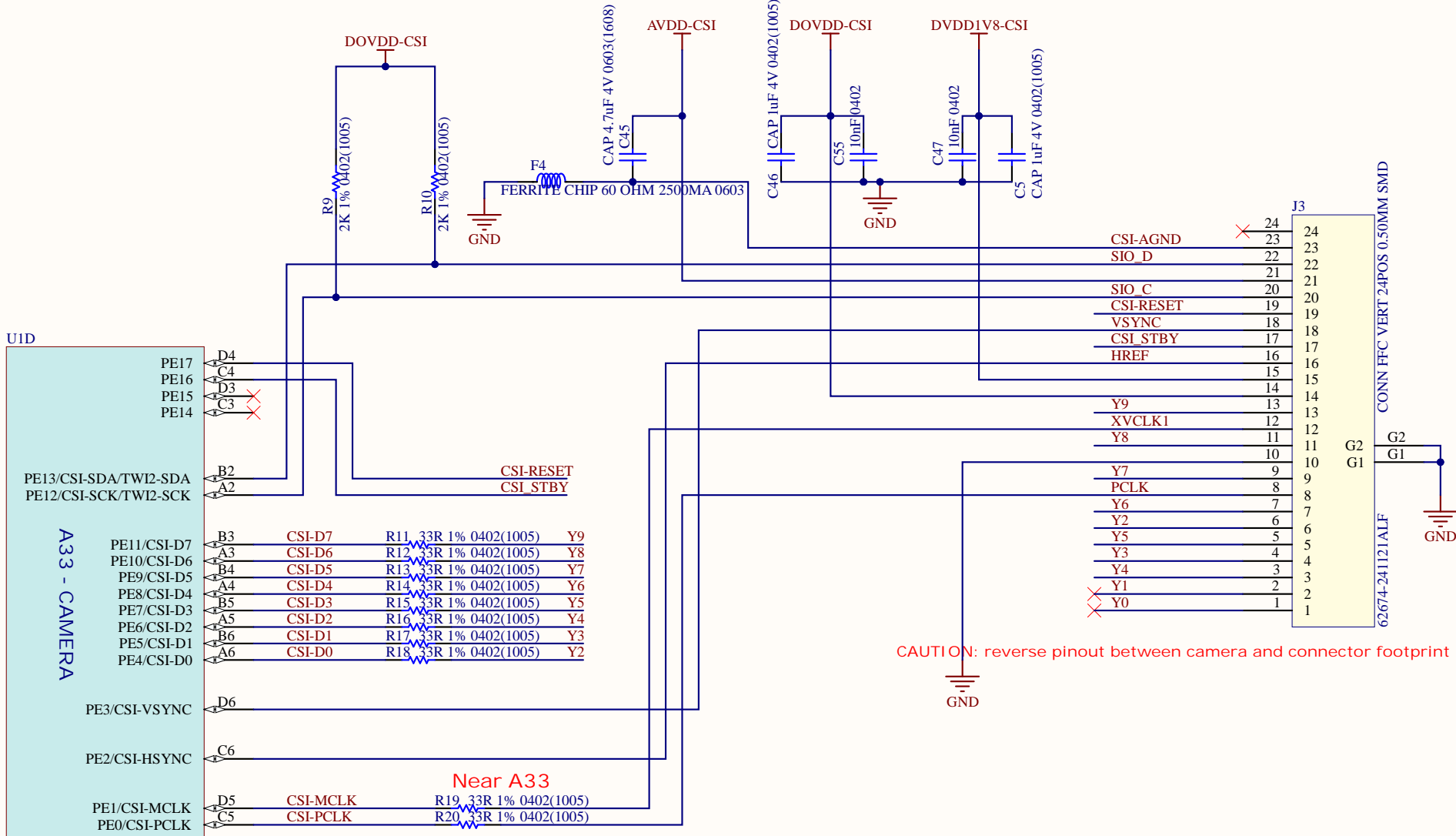
C53
CAP 1uF 4V 0402(1005)

GND

Title			
Size	Number	Revision	
A			
Date:	9/10/2020	Sheet of	
File:	C:\Users\...\05 - Micro SD Card.SchDoc	Drawn By:	

A33 - CAMERA

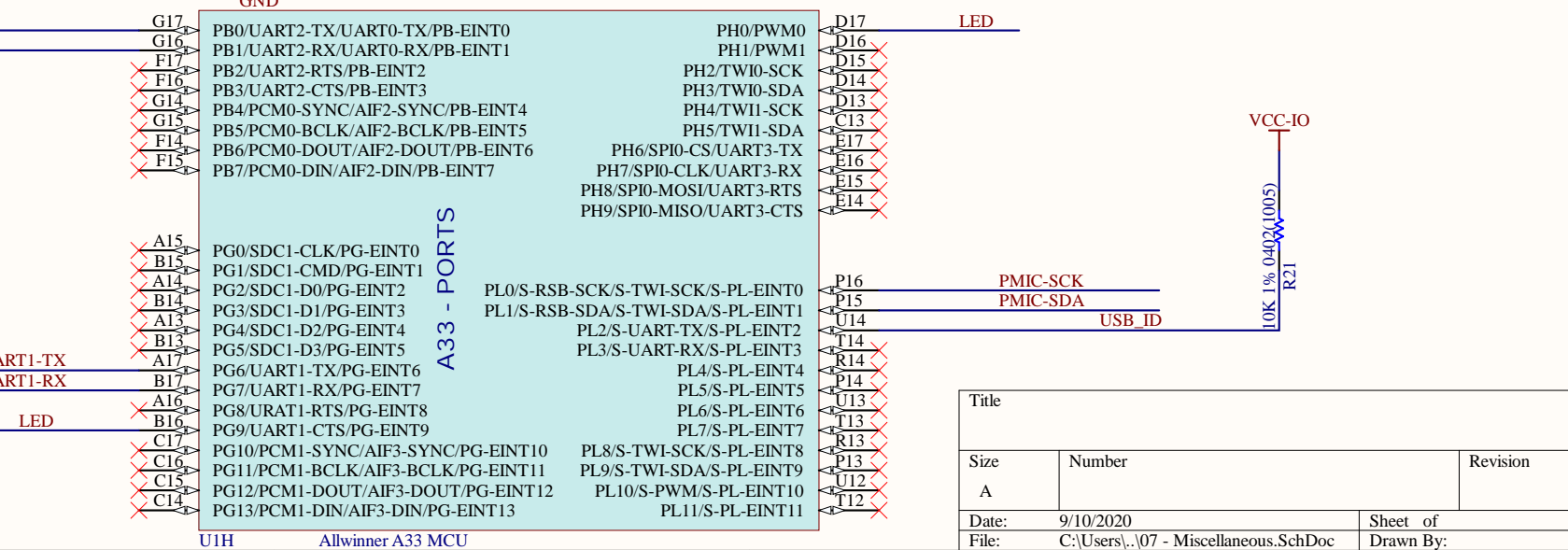
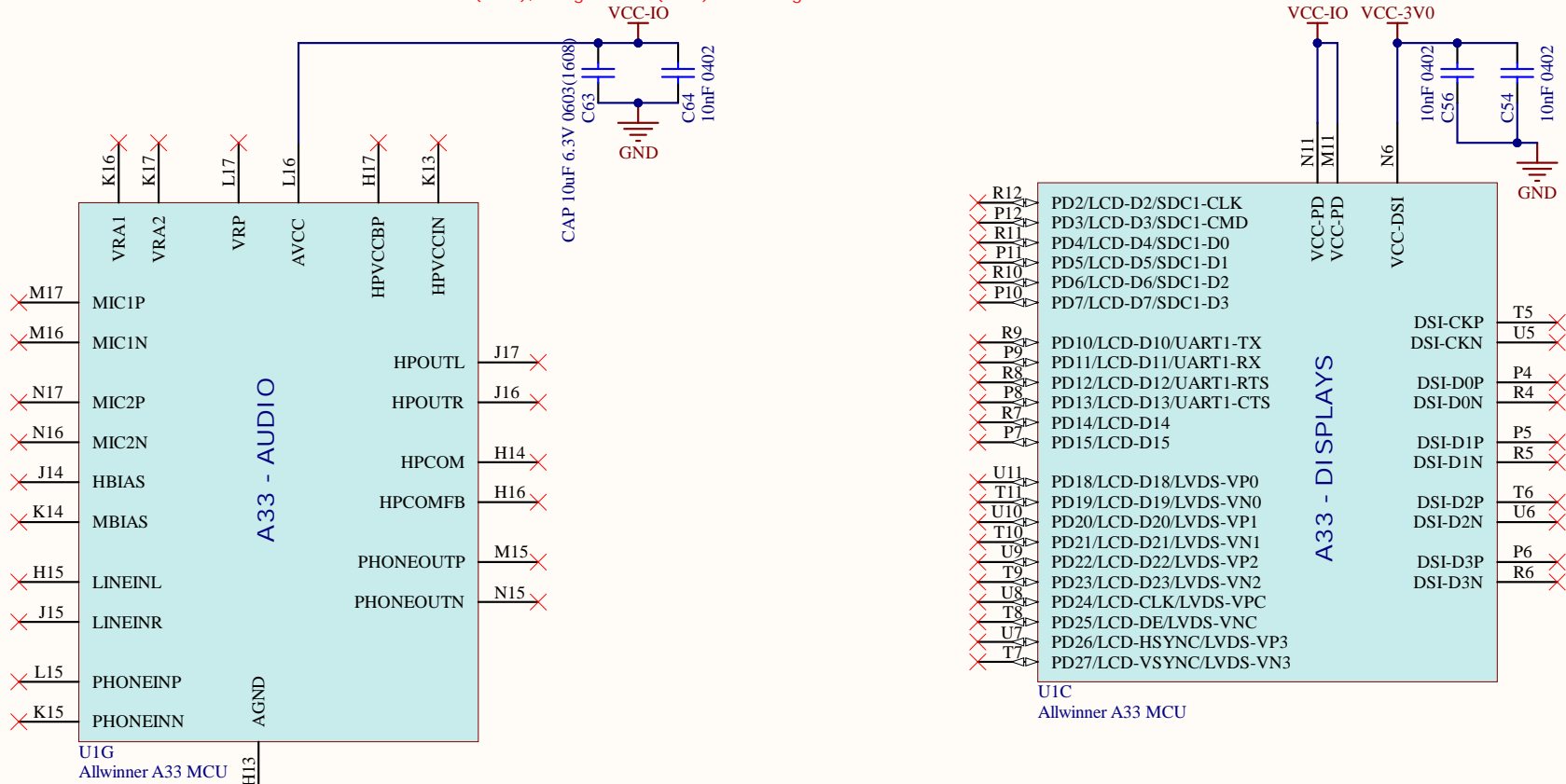
Allwinner A33 MCU



CAUTION: reverse pinout between camera and connector footprint

Title		
Size	Number	Revision
A		
Date:	9/10/2020	Sheet of
File:	C:\Users\...\06 - Camera.SchDoc	Drawn By:

should be AVCC (3.0V), using VCC-IO (3.0V) for routing ease



Title		
Size	Number	Revision
A		
Date:	9/10/2020	Sheet of
File:	C:\Users\...\07 - Miscellaneous.SchDoc	Drawn By: