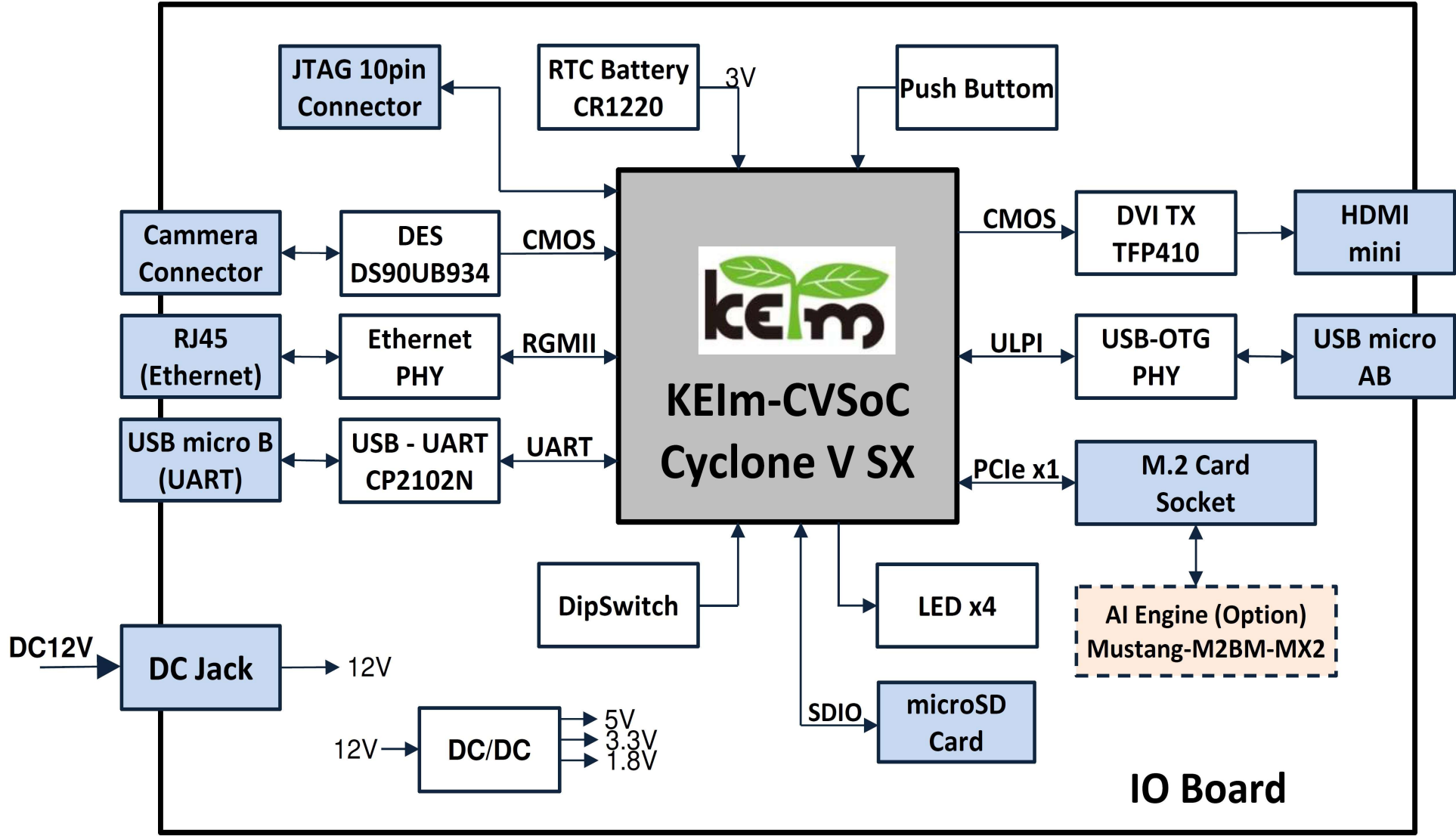


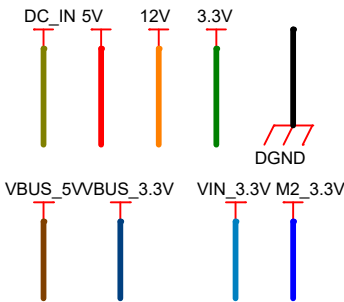
KEIm-CVSoC IO Board

REV	PAGES	DESCRIPTION	
1.0	all	RELEASE	
1.1	all Page 1 Page 2, 3,6,12 Page 11	Change Change Remove	Port address VCC,GND Wiring coloring Unnecessary wiring
		Remove	CN15 comment

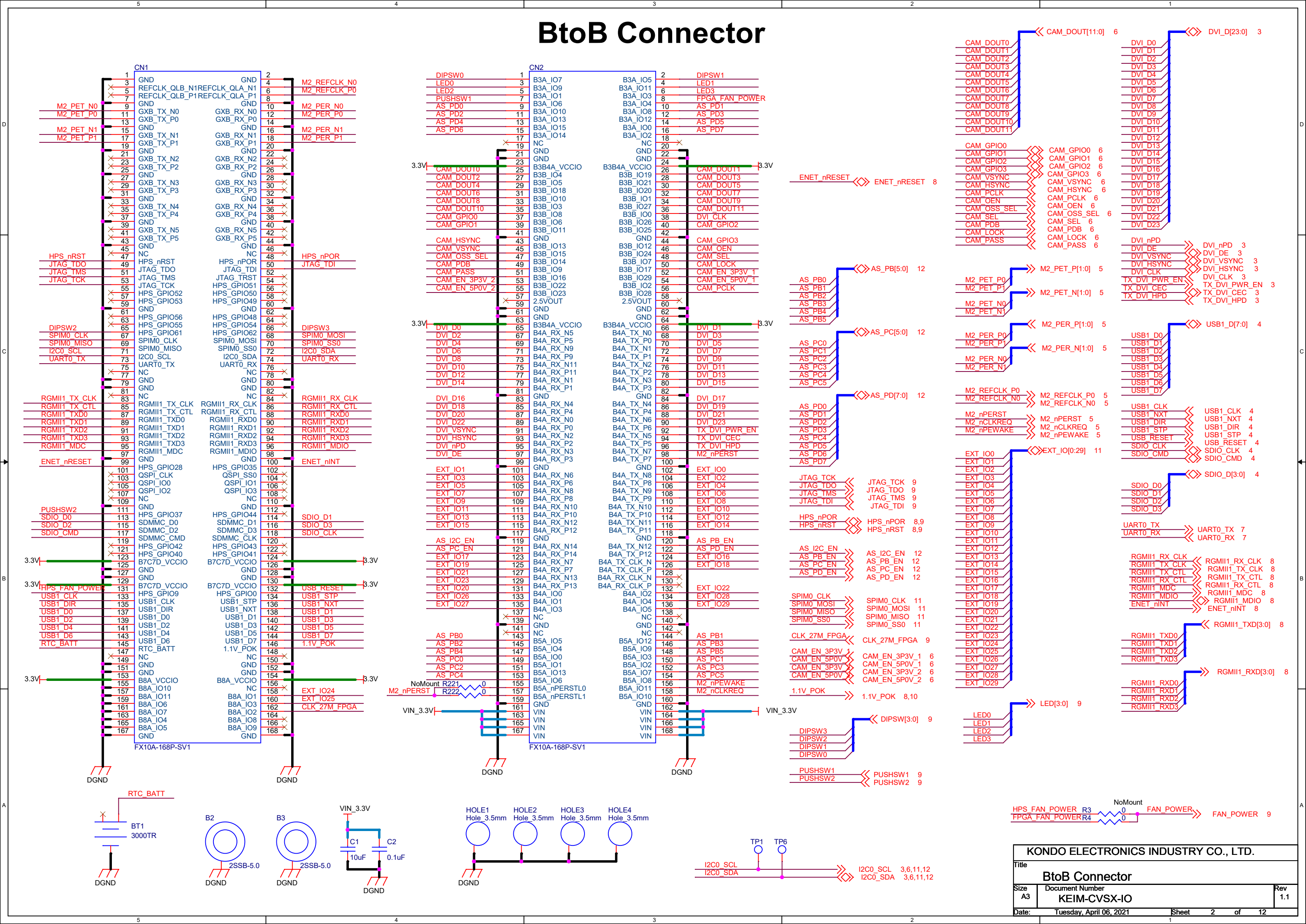
IO Block Diagram



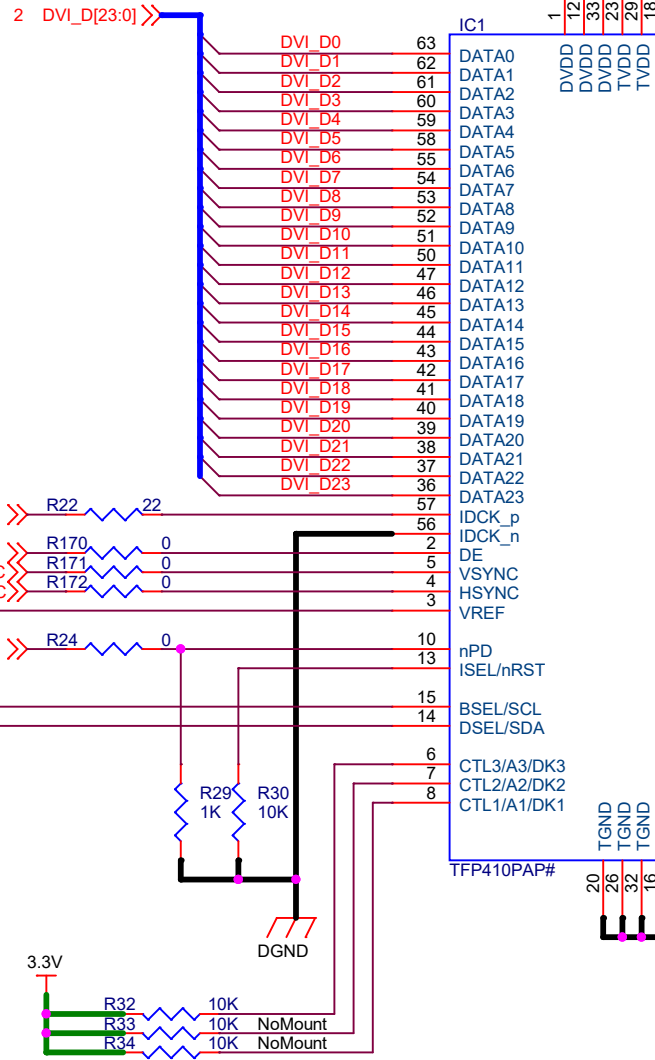
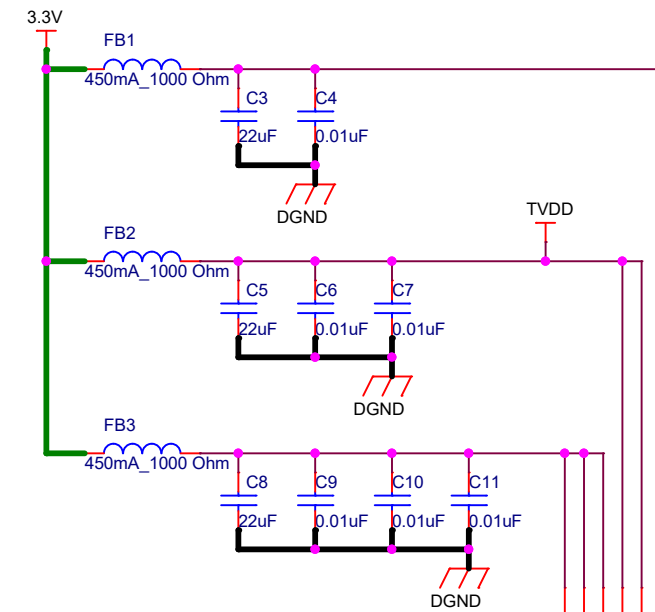
PAGE	DESCRIPTION
1	Cover
2	BtoB Connector
3	DVI
4	USB 2.0 OTG, Micro SD Card
5	M.2 Card
6	Camera
7	USB UART
8	10/100/1000 Ethernet - HPS
9	Peripheral
10	Power
11	PinHeader
12	Arduino Shield



# BtoB Connector



## DVI



default = 100

ISEL = L

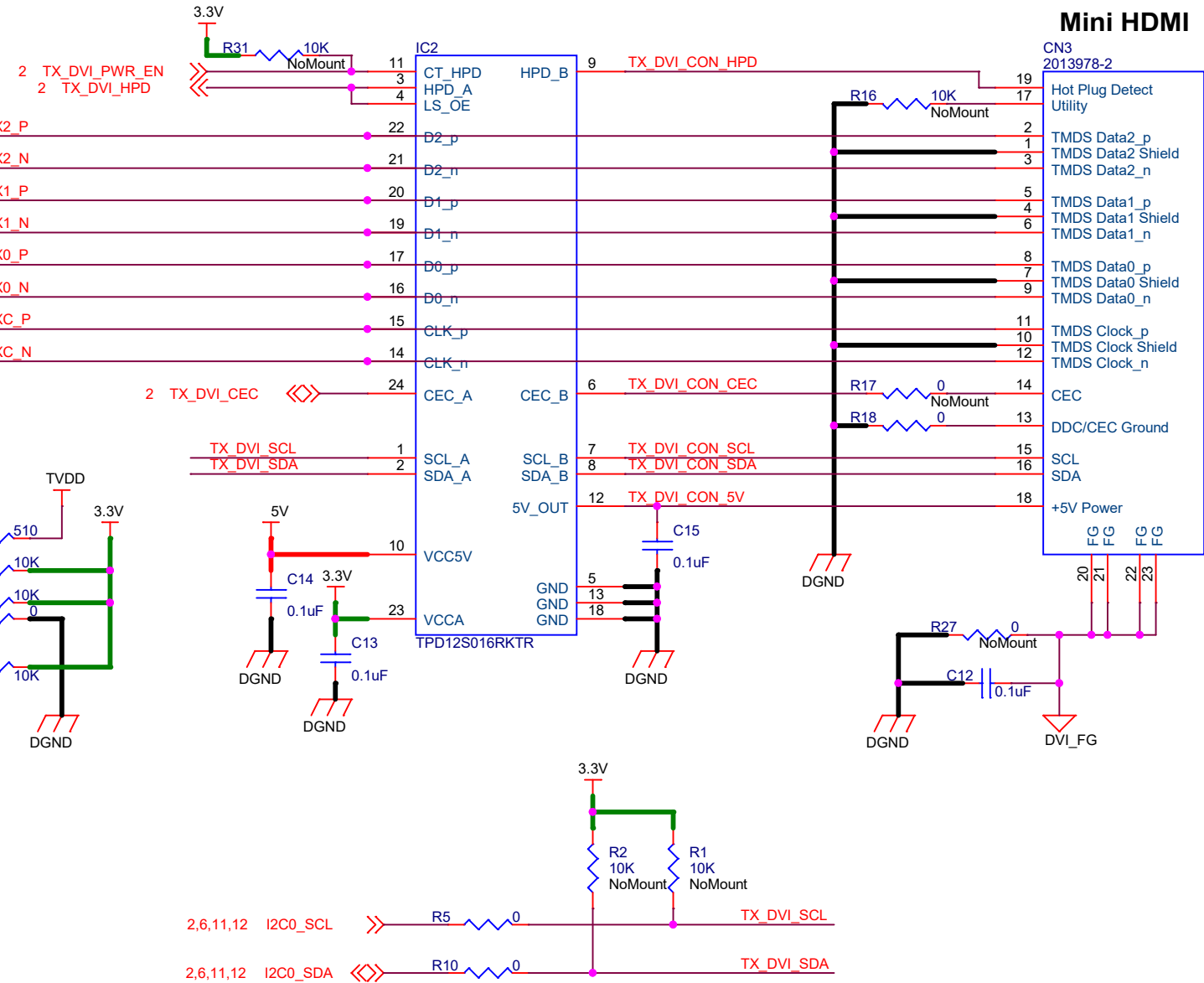
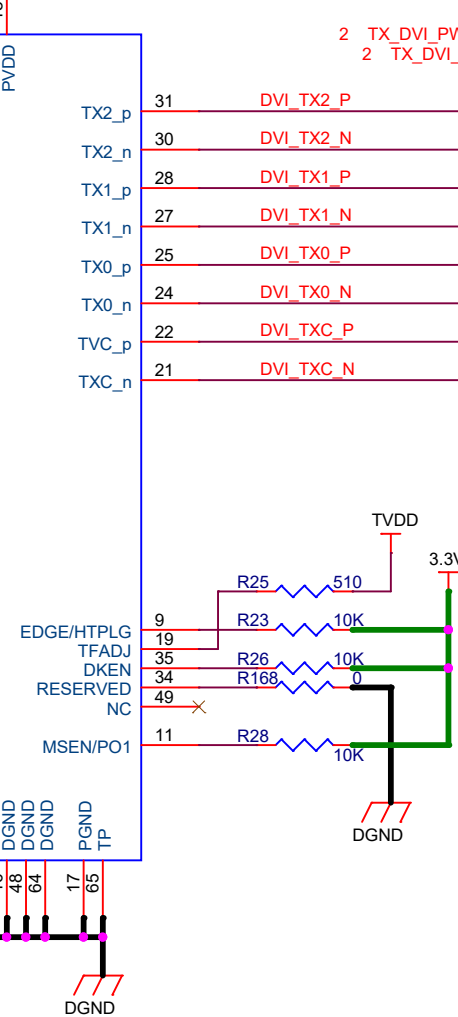
I2C disable

BSEL = high 24bit single edge input mode

DSEL = high      don't care

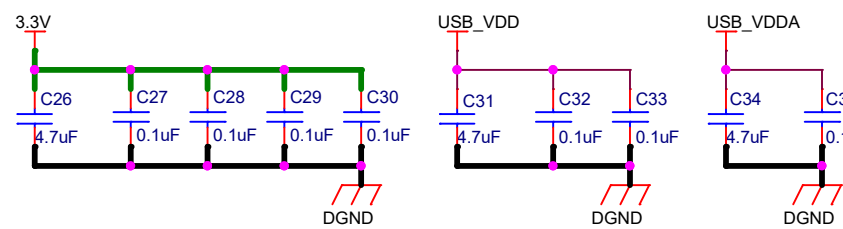
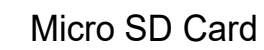
EDGE = high : latch to rising edge of the input clock IDCK+

DKEN = high : Data de-skew enable

$$V_{REF} = DVDD$$


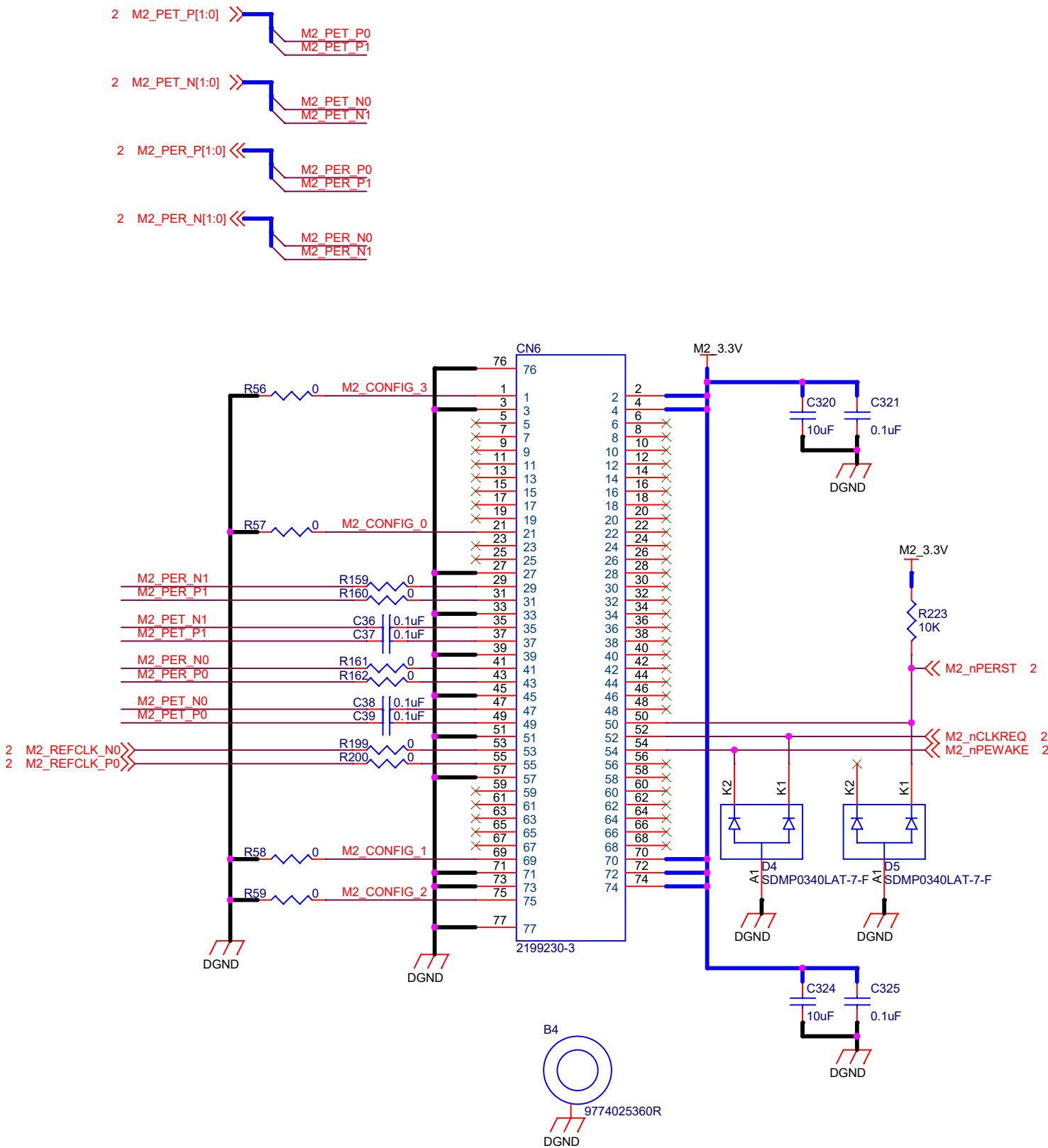
Type C

## USB 2.0 OTG





M.2 Card



M2BM-MX2  
M.2BM  
22x80  
TYPE-2280-XX-B-M

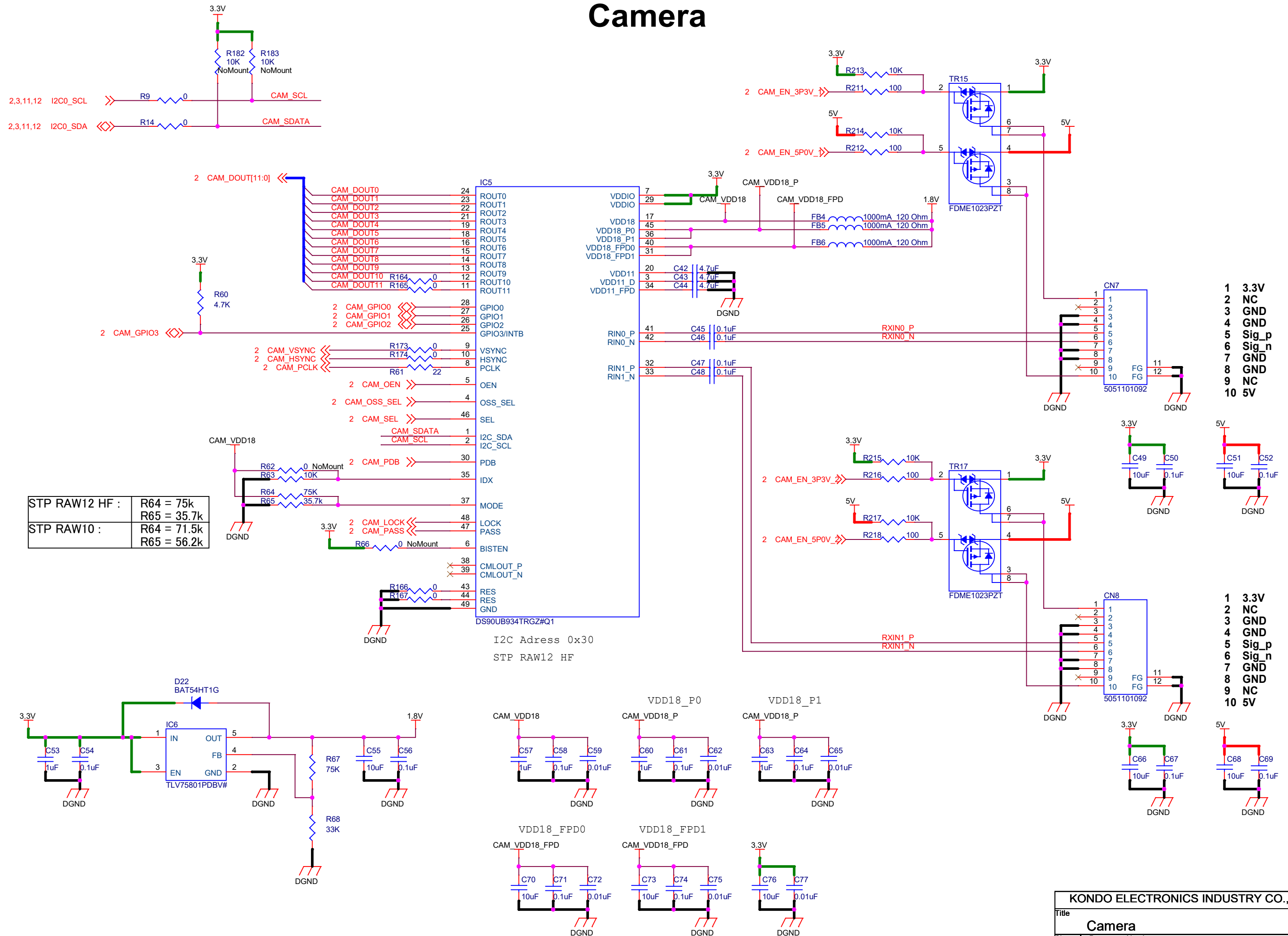
Number	Connector	Mustang
1	CONFIG_3	CONFIG_3=GND
3	GND	GND
5	N/C	N/C
7	N/C	N/C
9	N/C	N/C
11	N/C	N/C
13	Connector Key	Module Key
15	Connector Key	Module Key
17	Connector Key	Module Key
19	Connector Key	Module Key
21	CONFIG_0	CONFIG_0=GND
23	N/C	N/C
25	N/C	N/C
27	GND	GND
29	PERn1/USB3.0-Rx-/SSIC-RxN	N/C
31	PERp1/USB3.0-Rx+/SSIC-RxP	N/C
33	GND	GND
35	PETn1/USB3.0-Tx-/SSIC-TxN	N/C
37	PETp1/USB3.0-Tx+/SSIC-TxP	N/C
39	GND	GND
41	PERn0/SATA-B+	PETn0
43	PERp0/SATA-B-	PETp0
45	GND	GND
47	PETn0/SATA-A-	PERn0
49	PETp0/SATA-A+	PERp0
51	GND	GND
53	REFCLKn	REFCLKn
55	REFCLKp	REFCLKp
57	GND	GND
59	Connector Key	Module Key
61	Connector Key	Module Key
63	Connector Key	Module Key
65	Connector Key	Module Key
67	Connector Key	N/C
69	CONFIG_1	CONFIG_1=NC
71	GND	GND
73	GND	GND
75	CONFIG_2	CONFIG_2=GND

Number	Connector	Mustang
2	3.3V	3.3V
4	3.3V	3.3V
6	N/C	N/C
8	N/C	N/C
10	N/C	N/C
12	Connector Key	Module Key
14	Connector Key	Module Key
16	Connector Key	Module Key
18	Connector Key	Module Key
20	N/C	N/C
22	N/C	N/C
24	N/C	N/C
26	N/C	N/C
28	N/C	N/C
30	N/C	N/C
32	N/C	N/C
34	N/C	N/C
36	N/C	N/C
38	N/C	N/C
40	N/C	N/C
42	N/C	N/C
44	N/C	N/C
46	N/C	N/C
48	N/C	N/C
50	PERST# (O)(0/3.3V)	PERSET#(I)(0/3.3V)
52	CLKREQ# (I/O)(0/3.3V)	CLKREQ0#(I/O)(0/3.3V)
54	PEWAKE# (I/O)(0/3.3V)	PEWAKE0#(I/O)(0/3.3V)
56	N/C	N/C
58	N/C	N/C
60	Connector Key	Module Key
62	Connector Key	Module Key
64	Connector Key	Module Key
66	Connector Key	Module Key
68	N/C	N/C
70	3.3V	3.3V
72	3.3V	3.3V
74	3.3V	3.3V

KONDO ELECTRONICS INDUSTRY CO., LTD.

Title		
M.2 Card		
Size	Document Number	Rev
A3	KEIM-CVSX-IO	1.1
Date:	Tuesday, April 06, 2021	Sheet 5 of 12

# Camera



KONDO ELECTRONICS INDUSTRY CO., LTD.			
Title			
USB UART			
Size A3	Document Number KEIM-CVSX-IO		Rev 1.1
Date:	Tuesday, April 06, 2021	Sheet	7 of 12

2 ENET\_nRESET      R186      0      NoMount

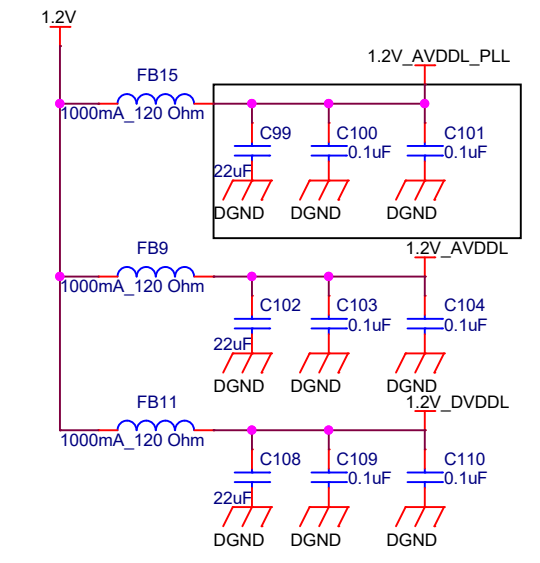
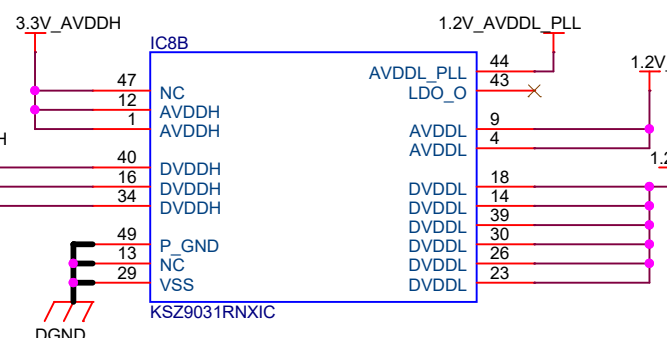
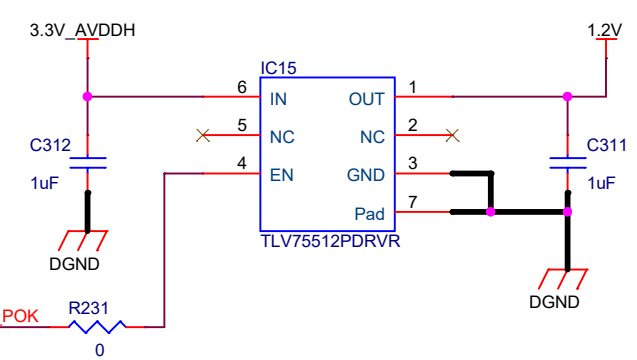
2,9 HPS\_nPOR      R187      0

2,9 HPS\_nRST      R188      0      NoMount

2 RGMII1\_MDC

2 RGMII1\_MDIO

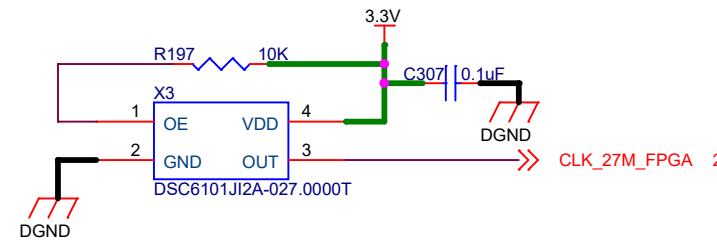
2 ENET\_nINT



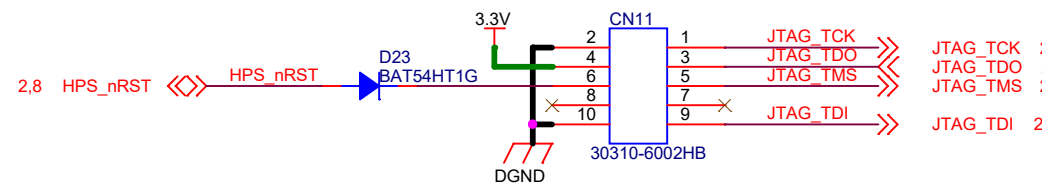
KONDO ELECTRONICS INDUSTRY CO., LTD.			
Title 10/100/1000 Ethernet - HPS			
Size A3	Document Number KEIM-CVSX-IO		Rev 1.1
Date:	Tuesday, April 06, 2021	Sheet	8 of 12



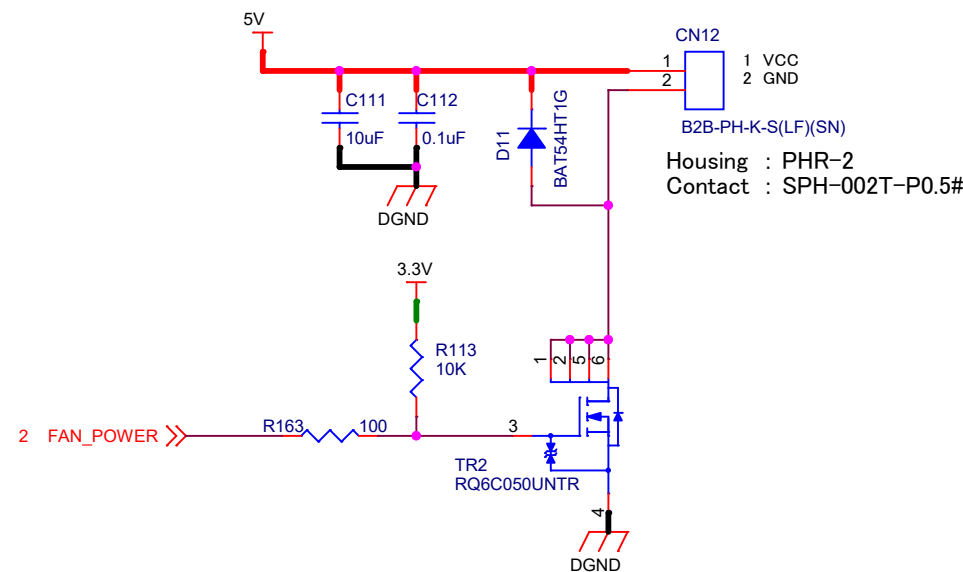
# Peripheral



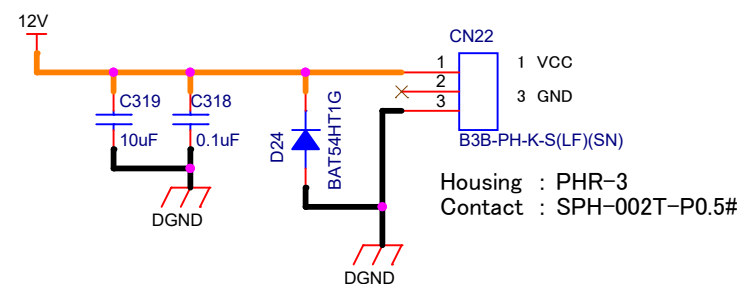
## JTAG



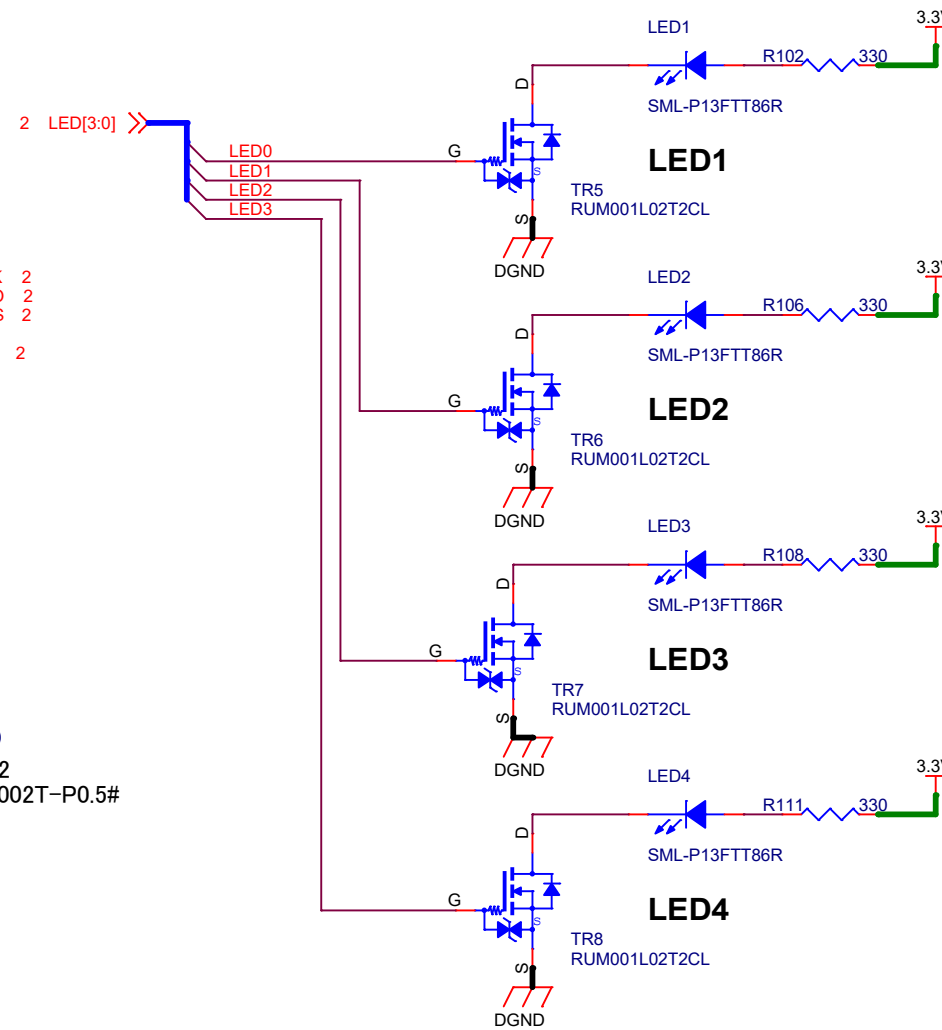
## FAN Connector



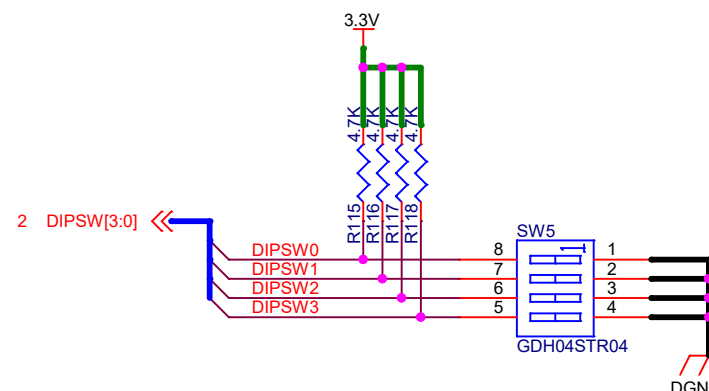
## FAN Connector



## LED(Green)



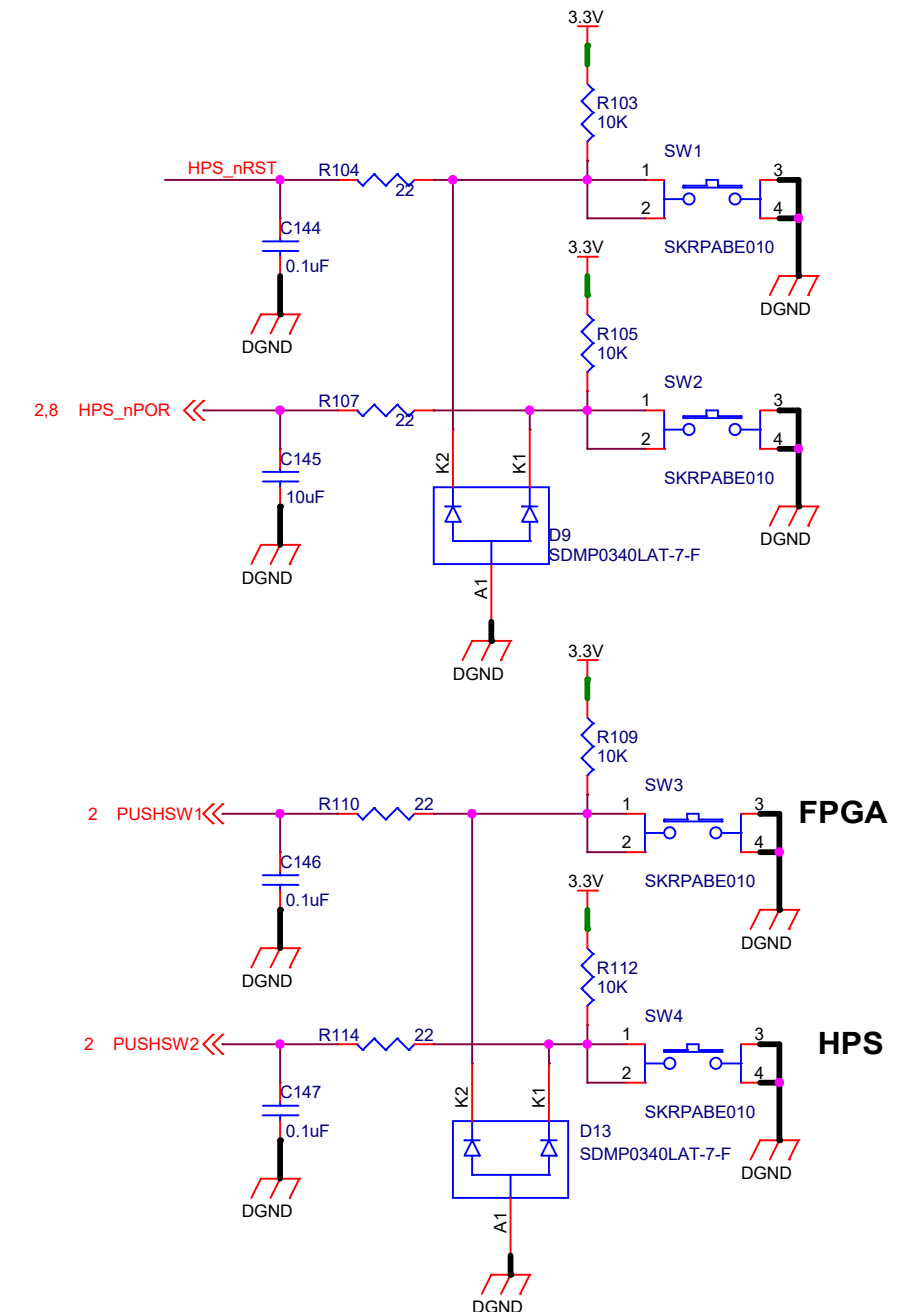
## DIPSW



※SW5-4 can't be used.  
Please set it to OFF before use.

DIPSW0	FPGA
DIPSW1	FPGA
DIPSW2	HPS
DIPSW3	HPS

## PUSHSW



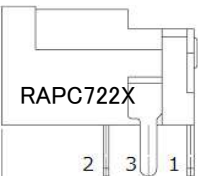
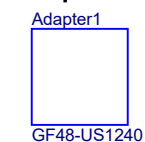
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Title		
Peripheral		
Size	Document Number	Rev
A3	KEIM-CVSX-IO	1.1
Date:	Tuesday, April 06, 2021	Sheet 9 of 12

# Power

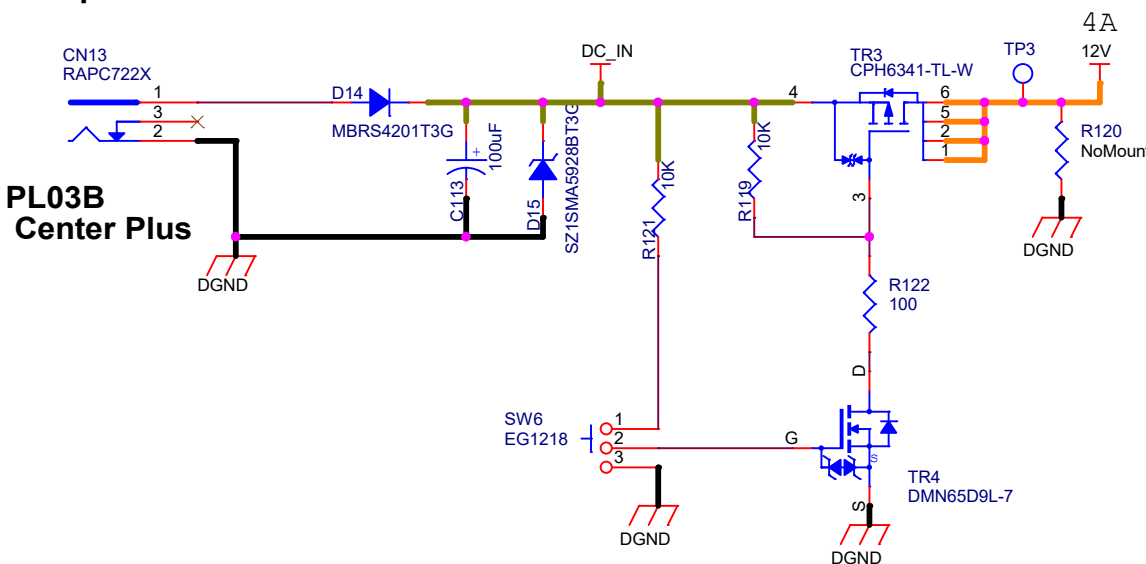
2,8 1.1V\_POK >> 1.1V\_POK

Adapter



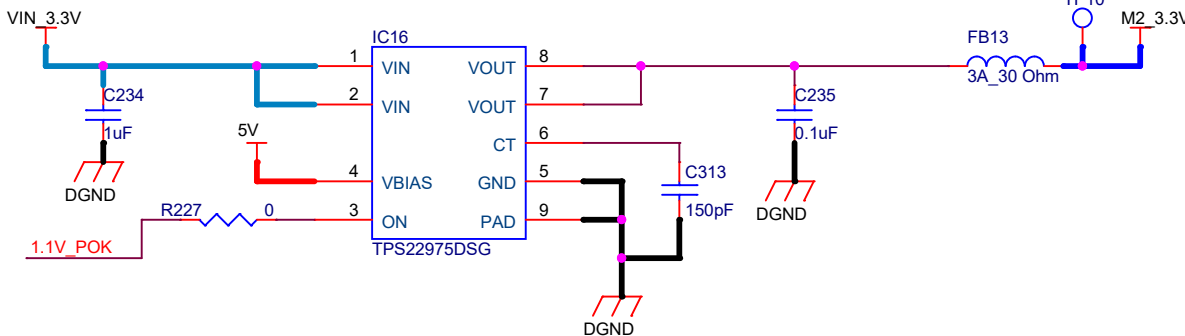
12V IN

DC power

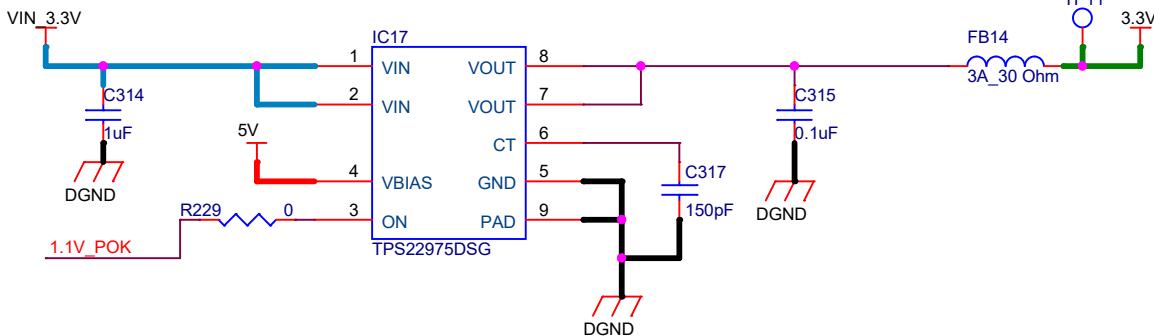


PL03B  
Center Plus

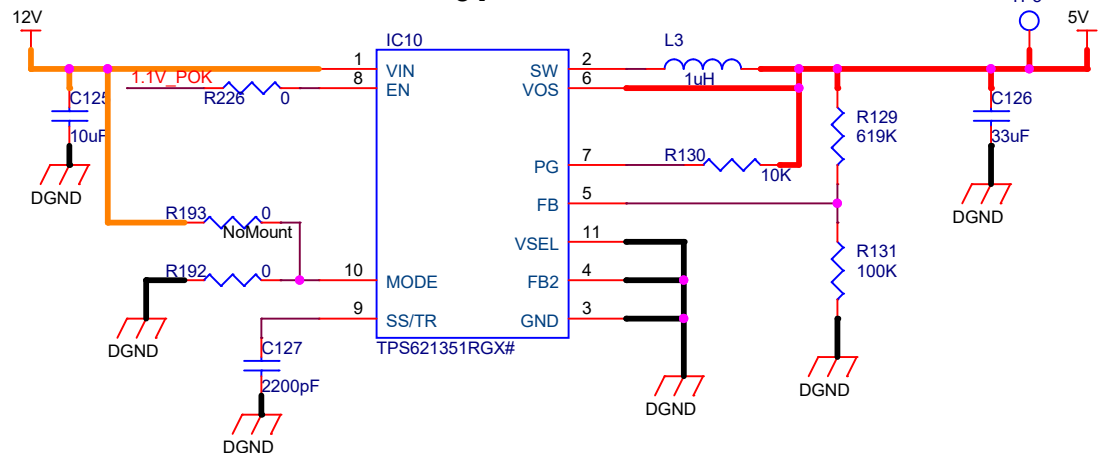
Load Switch



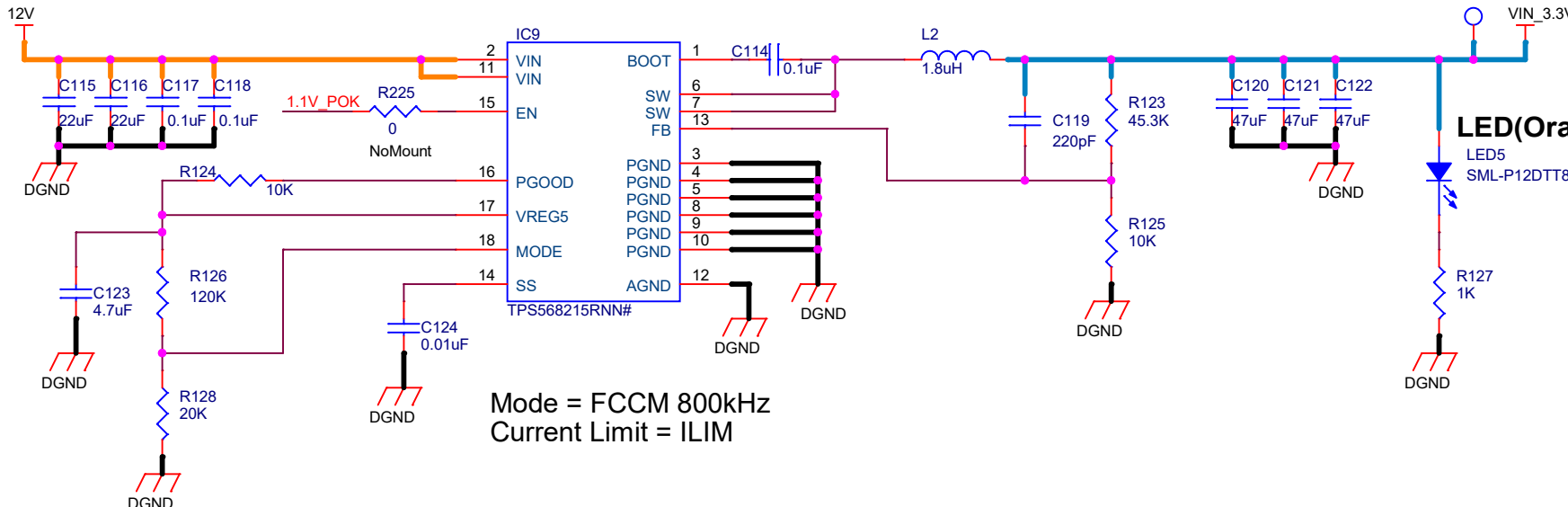
Load Switch



5V



3.3V



LED(Orange)

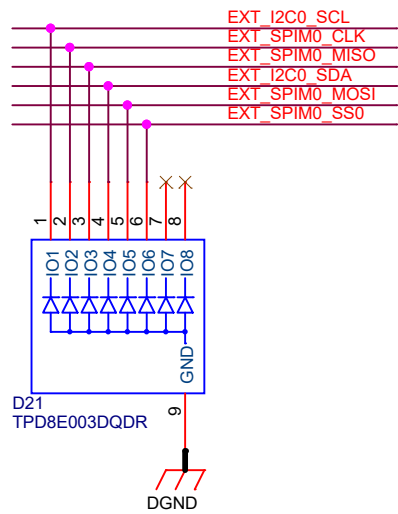
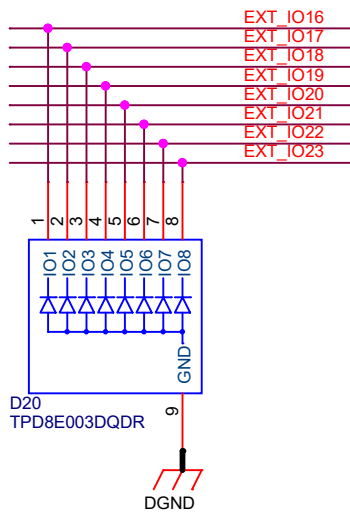
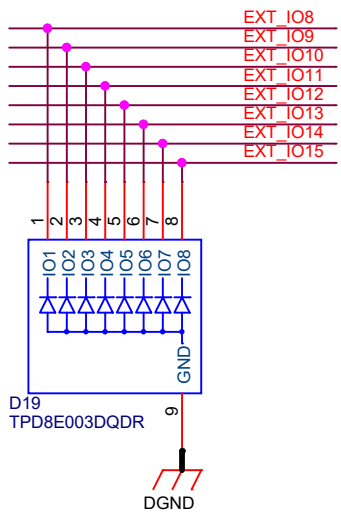
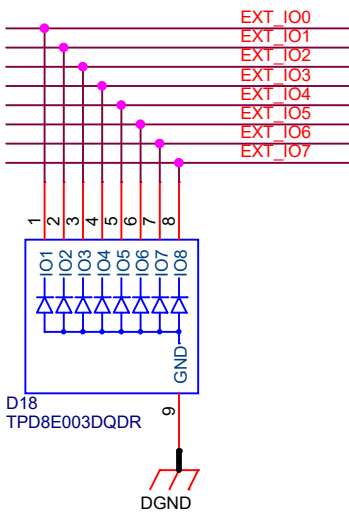
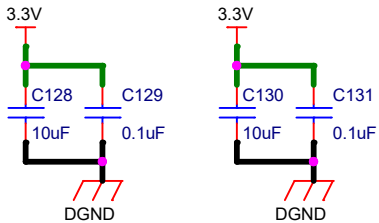
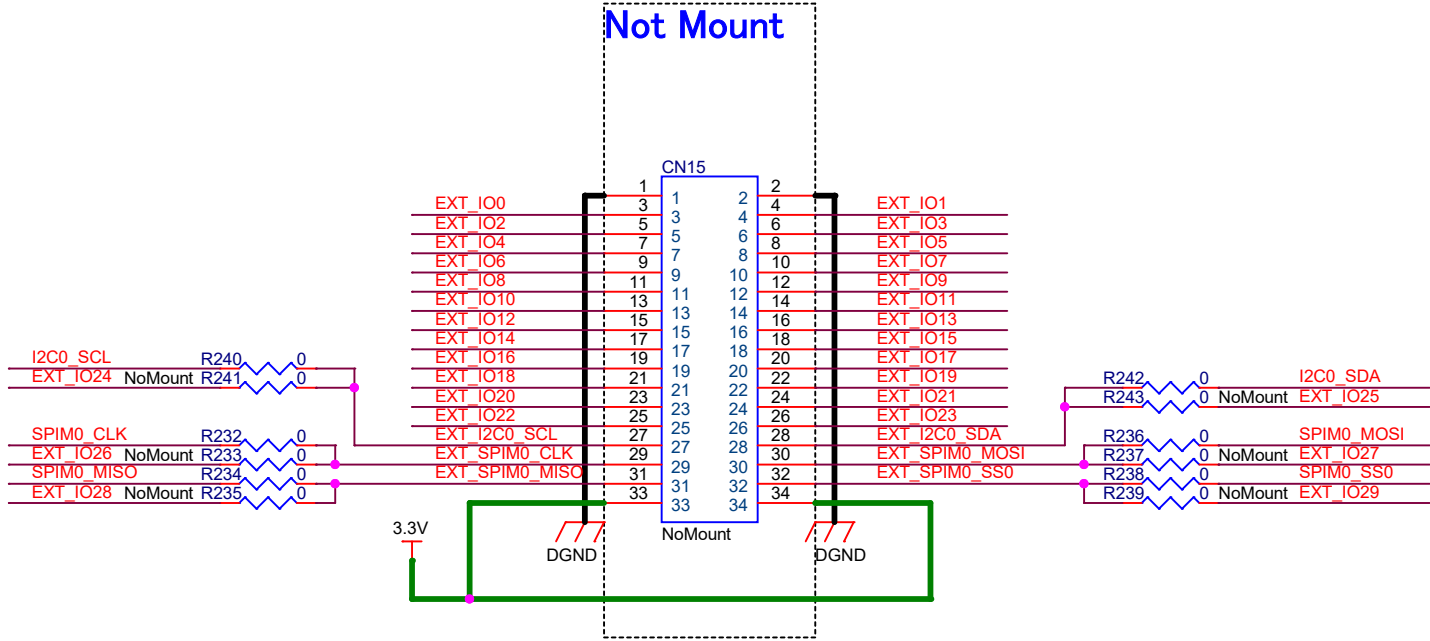
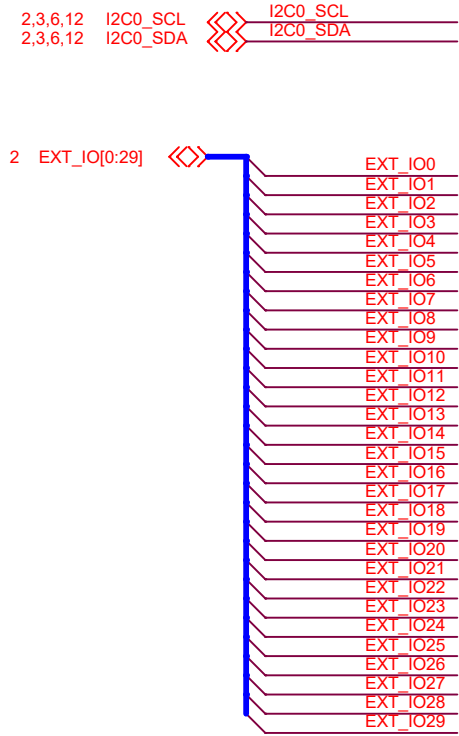
LED5  
SML-P12DTT86R

Mode = FCCM 800kHz  
Current Limit = ILIM

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Title		
Power		
Size	Document Number	Rev
A3	KEIM-CVSX-IO	1.1
Date:	Tuesday, April 06, 2021	Sheet 10 of 12

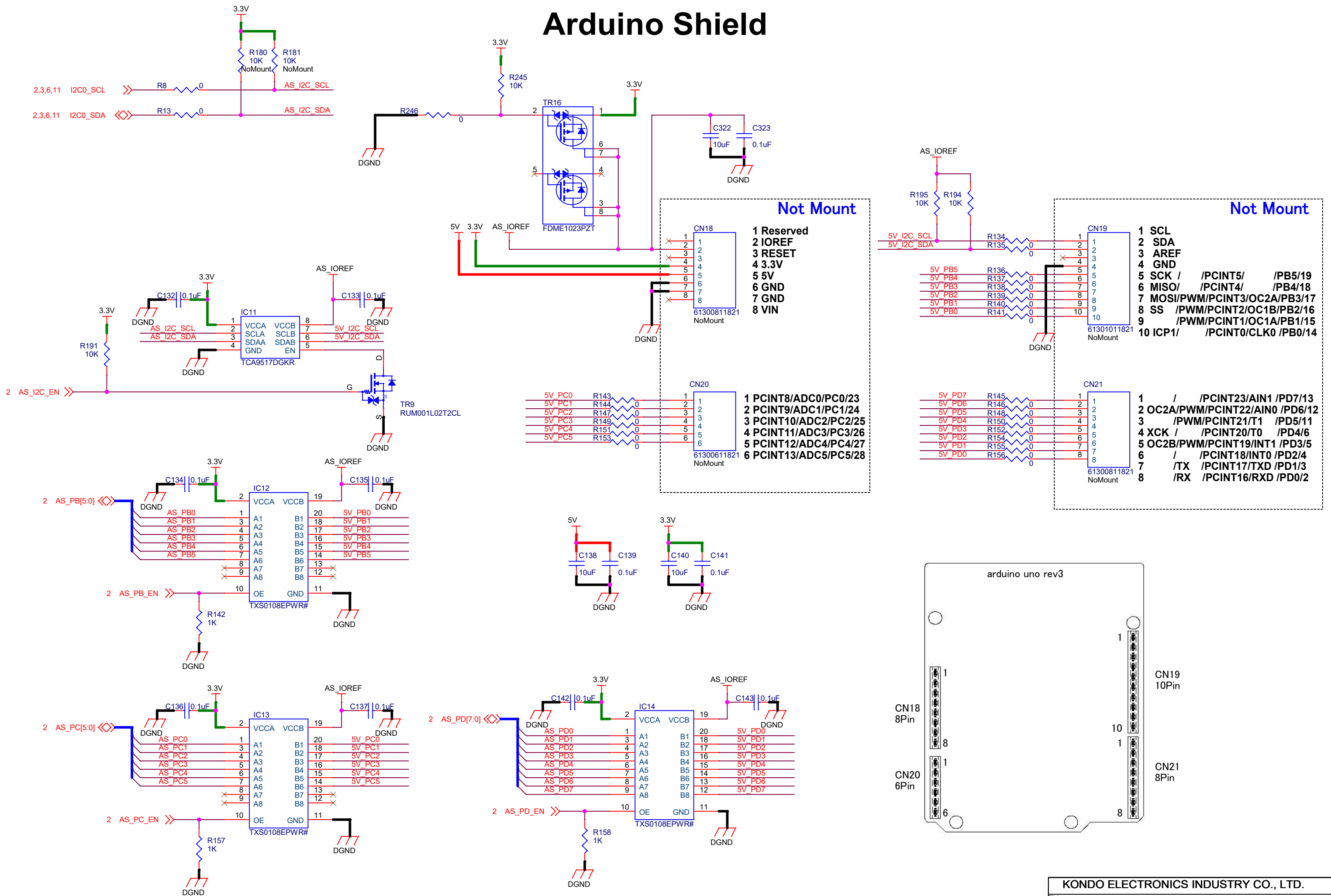
PinHeader



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Title		
PinHeader		
Size	Document Number	Rev
A3	KEIM-CVSX-IO	1.1
Date:	Tuesday, April 06, 2021	Sheet 11 of 12

# Arduino Shield



KONDO ELECTRONICS INDUSTRY CO., LTD.

Title

Arduino Shield

Size A3 Document Number KEIM-CVSX-IO Rev 1.1

Date: Tuesday, April 06, 2021 Sheet 12 of 12