


Layer: 8Layers

		Wiwynn 8F, 90, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 22102, Taiwan (R.O.C.) <i>H/W R&D Dept. II</i>	
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LIGHTNING M.2 ADAPTOR CARD

Approvals

REV	DATE	Reviewer	DESCRIPTION
0.1	2016/11/16	Eric YH Yang	First review
0.2	2016/12/29	Eric YH Yang	Second review

Contents

NET NAME

<Routing Class>_<Main-domain>_<Port>_<Sub-domain>_<{#}>Signal Name{DP/DN}>
Note that <Field> is ,andatory field, wheraeas {Field} is optional field

Field : Description on Field :

Routing Class : Define the impedance, single end
or differential, and the length tolerance to the net

Z50: 50 ohm impedance of single end signals

D85: 85 ohm impedance of differentail end signals

Main-domain:BMC and SOC's specific interface

PCIE : PCIE bus

SMB:SMBus

TEMP:Temperature Sensor

Port:Device Name

A:A Port(PCIE Port0 and Port1 from 8639)

B:B Port(PCIE Port2 and Port3 from 8639)


Sub-domain:BMC and SOC's specific interface

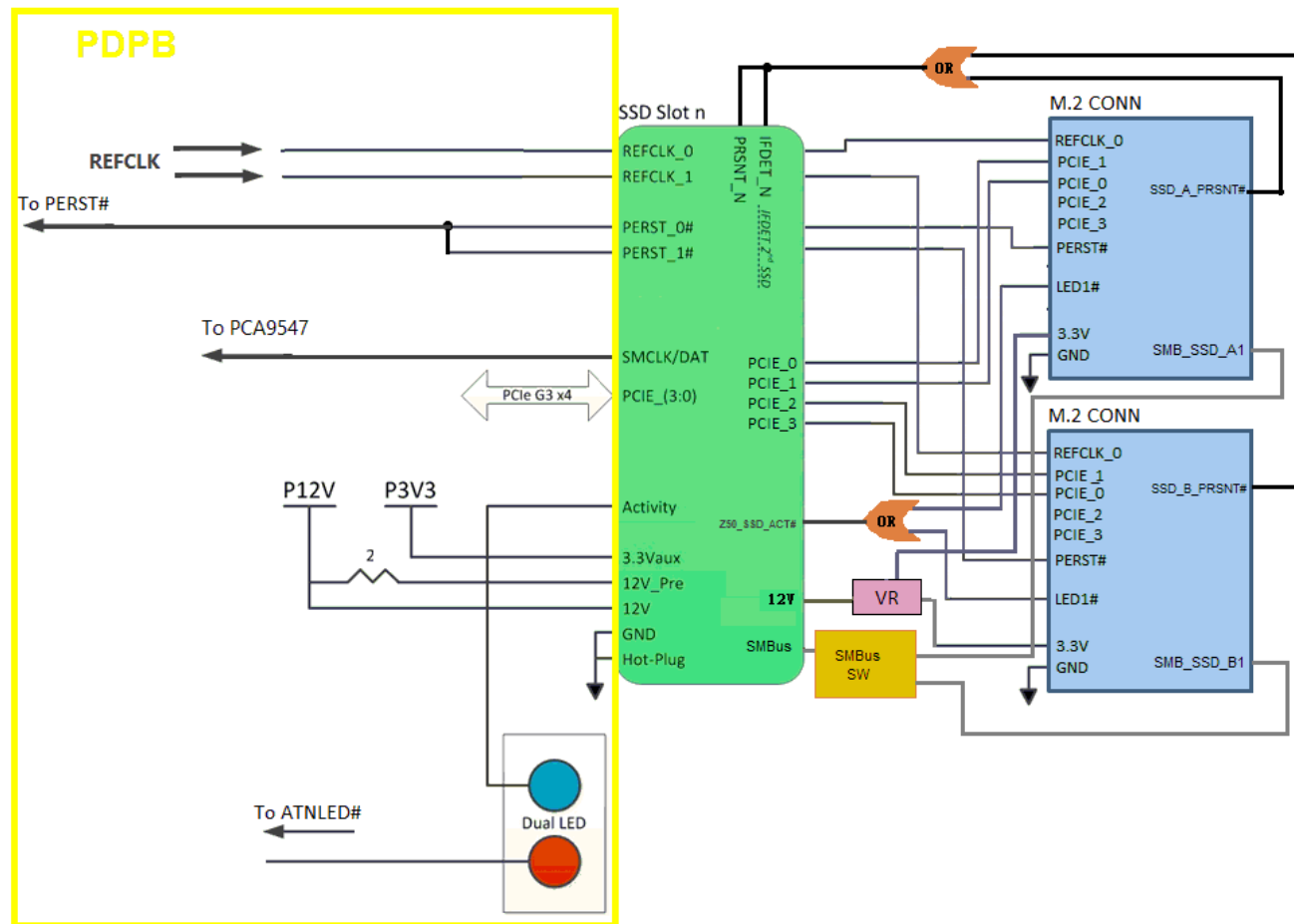
TX: Transmitter signal

RX: Receiver signal

{#} Signal Name{DP/DN} : '#' only for low-active signals

'DP/DN' only for differentail pairs

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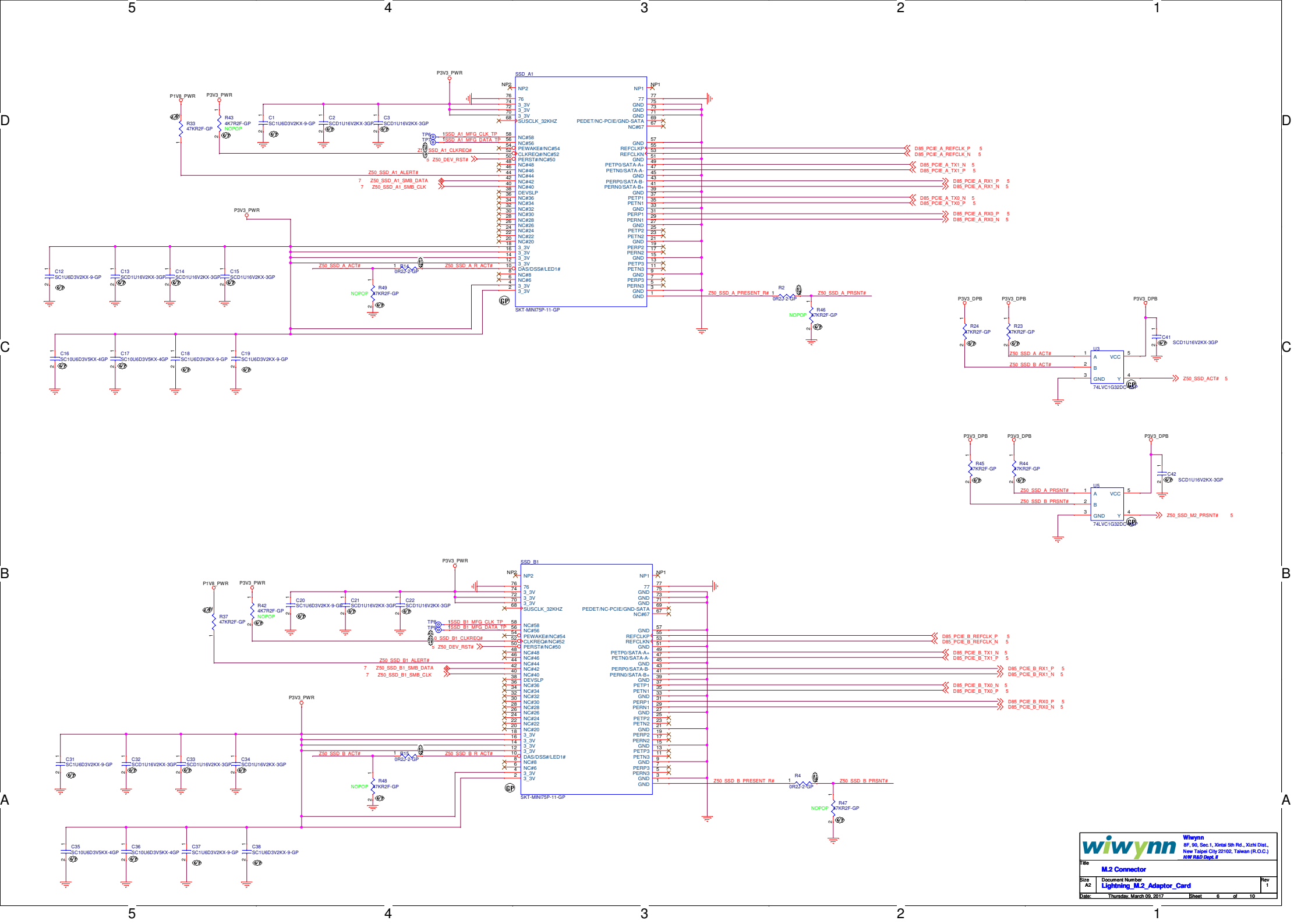


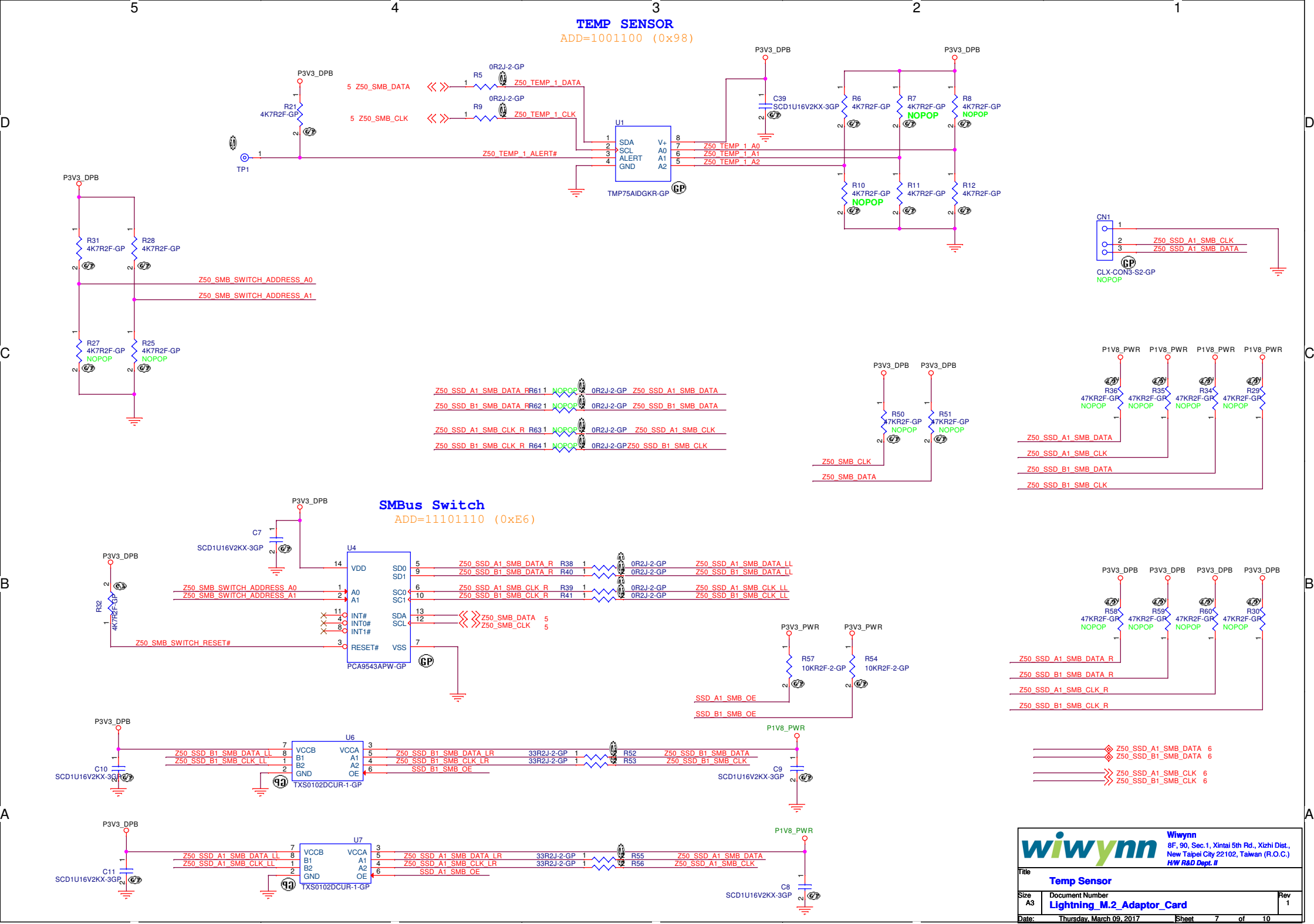
[illegible]

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SCD1U10V2KX-5GP
D1U = 0.1uF (2D2U means 2.2uF)
10Voltage (6D3V means 6.3V)
2 = size 0402, K tolerance
K=tolerance
[Wiwynn C code as below:]
G=2%
J=5%
K=10%
M=20%
X=temp characteristics
[Wiwynn C Series/Temp]
N=NPO
X=X7R/X5R
Y=Y5V
-5=different symbol/customer
GP= Green Part (RoHS)

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Power rail : P3V3_PWR
Controller : TPS53319 (Fswitching=500KHz)
TDC :8.502A
MAX: 8.502A
OCF : 11A

TDC (include pull up resistor):
M.2 Device*2=8.50281A

I _{VDD}	VDD Supply Current	VDD current, T _A =25°C, No Load, V _{EN} =5V, V _{FB} =0.630V	420	590	μA
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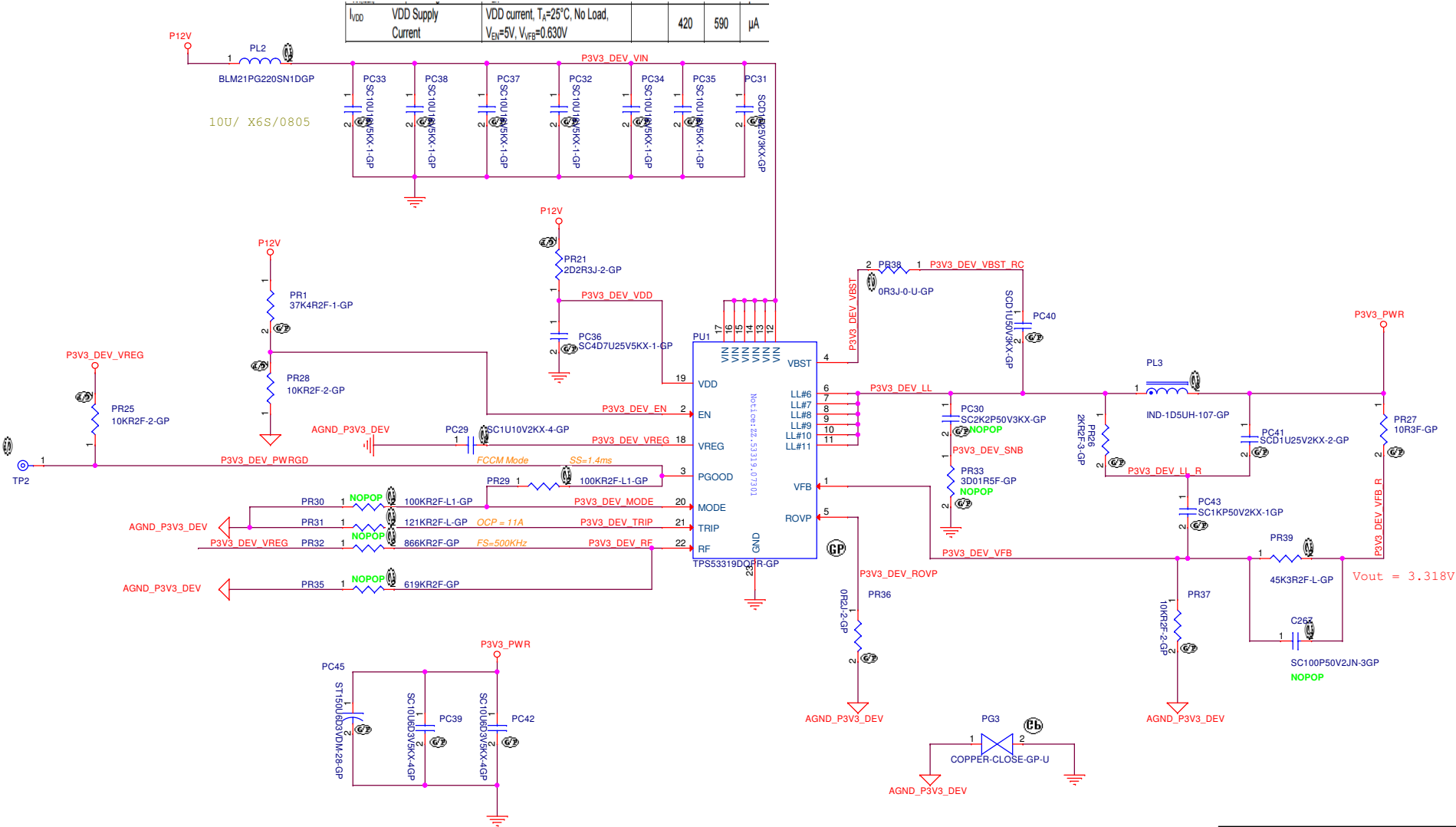


Table 41. Power Rating Table for the Various Modules Connector Keys

Key	Power Rail	Voltage Tolerance	Current Consumption Limit	Peak mA Max Avg @ 100 μs	Normal mA Max Avg @ 1 s
A	3.3 V	± 5%	2000		
B	3.3 V	± 5%	2500		
C	V _{BAT}	3.135 V ~ 4.4 V	2500		
D	RFU	RFU	RFU	RFU	RFU
E	3.3 V	± 5%	2000		
F	RFU	RFU	RFU	RFU	RFU
G	N/A	N/A	N/A	N/A	N/A
H	RFU	RFU	RFU	RFU	RFU
J	RFU	RFU	RFU	RFU	RFU
K	RFU	RFU	RFU	RFU	RFU
L	RFU	RFU	RFU	RFU	RFU
M	3.3 V	± 5%	2500		

Peak - The maximum highest averaged current value over any 100 μs period
Normal - The maximum highest averaged current value over any 1 s period

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TDC:
Pull-up resistor: $V/R = 1.8/4.7K \doteq 0.383mA$
Pull-up resistor * 4 $\doteq 1.53mA$

