

SOC POWER SUPPLY PMIC
TPS6521901 PMIC

D-Note :-
Show the back cap connection for each of the
DC/DC output separately
Add a 0.1 uF across the back cap
PVIN_B1_3, PVIN_B1_2 can share the same back cap

PMIC REGULATORS	VOLTAGE (mV)	CURRENT (mA)
BUCK_1	VCC_CORE(0.80V)	2100
BUCK_2	VCC_IV8	900
BUCK_3	VDD_IV2	930
LDO_1	VDDSHV_SDIO	50
LDO_2	VDD_IV2	110
LDO_3	VDDA1V8	200
LDO_4	VDD_IV5	300

D-Note :-
Verify the PMIC data sheet for the recommended caps
for the DC/DC and LDO outputs and provide the
recommended caps

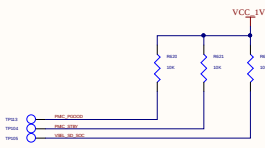
D-Note :-
Add a 0R resistor or Jumper at the output of
the DC/DC for isolation or testing

SLIK 448888
TAP1 - VCC_CORE (configured to 0.80V)
TAP2 - VCC_IV8
TAP3 - VDD_IV2
TAP4 - VDDSHV_SDIO
TAP5 - VDD_IV5

D-Note :-
No core interface 30 supply voltage switching (0.3V/1.0V)
is required to support higher speed data rates.
Refer SOC data sheet for supported rates and 30 voltage
levels

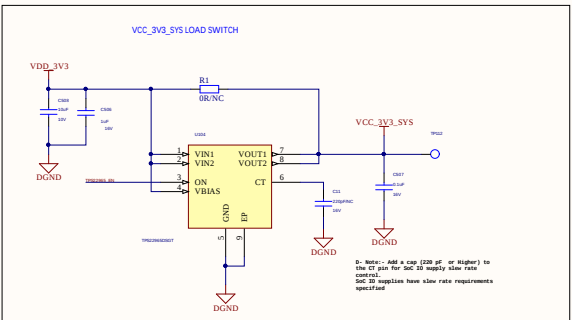
QAD Note:- Tie the feedback after the DC/DC output bulk caps

D-Note :-
Refer PMIC data sheet and
submission review checklist
for reviewing the
implementation of PMIC section



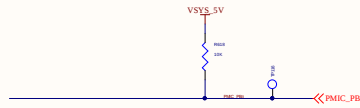
SOC 3.3V IO SUPPLY

VCC_3V3_LOAD SWITCH

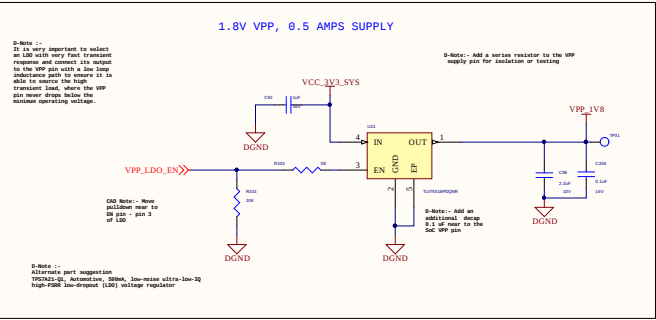


D-Note :- Add a cap (220 pF or higher) to
the CT pin for SOC IO supply slew rate
control.
SOC IO supplies have slew rate requirements
specified

PMIC ON/OFF PUSH BUTTON LOGIC



1.8V VPP, 0.5 AMPS SUPPLY



D-Note :-
It is very important to select
an LDO with very fast transient
response and select the output
to the VPP pin with a low load
current path to ensure it is in
the transient time, where the VPP
pin never drops below the
minimum operating voltage.

D-Note :- Add a series resistor to the VPP
supply pin for isolation or testing

QAD Note :-
None
isolation must be
to pin - pin 3
of LDO

D-Note :- Add an
additional decap
0.1 uF near to the
SOC VPP pin

D-Note :-
Alternate part suggestion
TPS7821-Q1 Automotive, 500mA, low-noise ultra-low-
drop-out (LDO) voltage regulator

Company : In-tech Electronics Limited

Model: AM62X SOM BOARD	The information contained herein shall not be reproduced without the prior written by In-Tech Ltd
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Drawn: Xiong	Date: 3/20/2023
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