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Revisions			
Rev	Description	Date	Approved
X1	Initial schematic	08/21/2019	Guru K.
A	Format clean-up, Final Release	10/11/2019	Guru K.
AX1	Removed U8, changed R111, added class 2 R124	02/28/2020	Guru K.
B	Final Release	03/05/2020	Guru K.

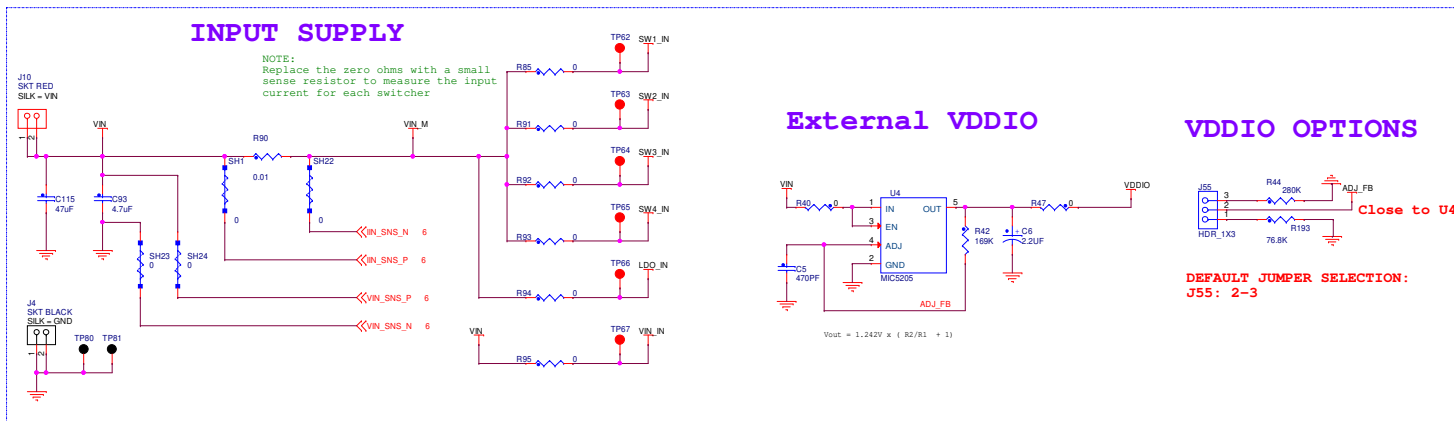
KITPF5020FRDMEVM

Notes and documentation

All the default jumper and solder short configurations are noted in the corresponding pages

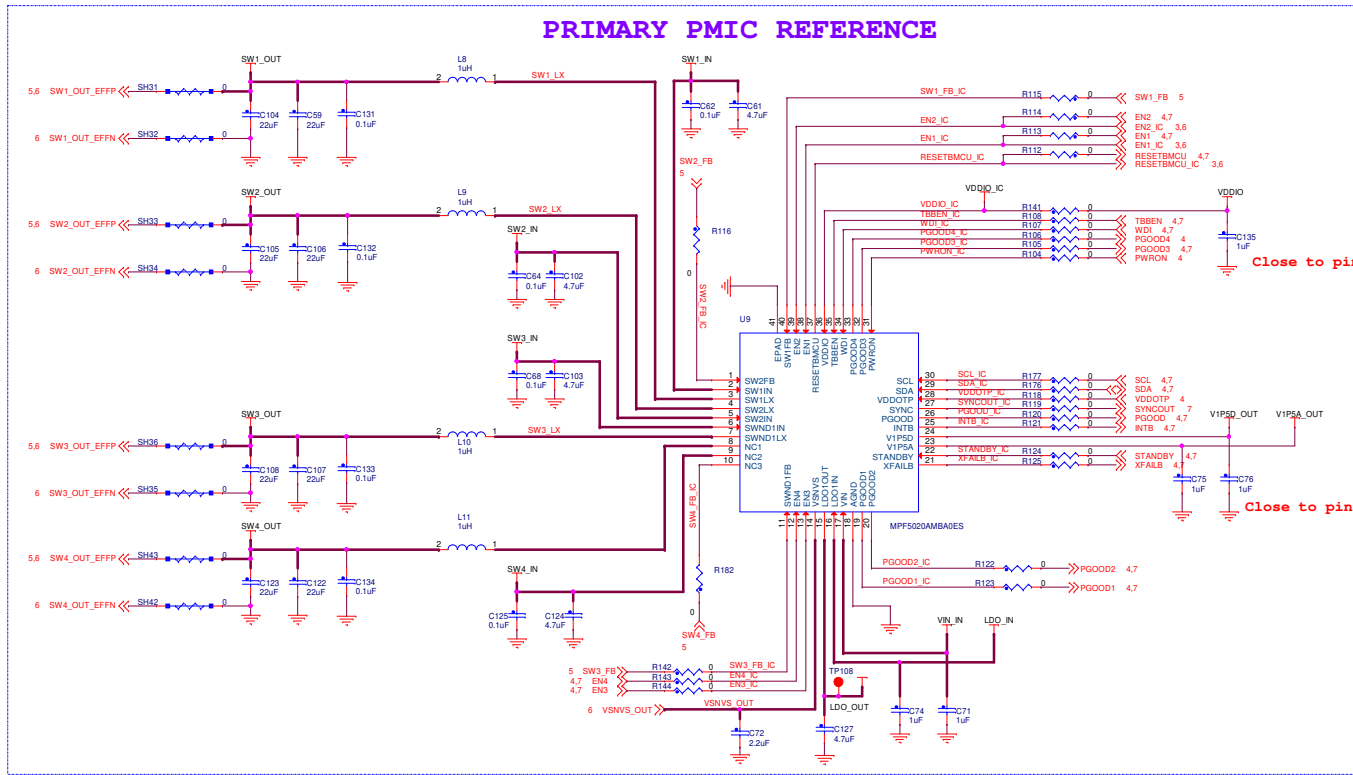
		6501 William Cannon Drive West Austin, TX 78725-6598	
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NXP SEMICONDUCTORS		Classification: Company Internal/Proprietary	
Designer: Guru Karthik	Drawing Title: KITPF5020FRDMEVM		
Drawn by: Diego Garay	Page Title: Title, ToC and Rev History		
Approved: Guru Karthik	Size: C	Document Number: SCH-46401-SPF-46401	Rev: B
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POWER GENERATION




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NOTE:
The zero ohms resistors and the solder shorts
are used only on the EV board for debugging purposes



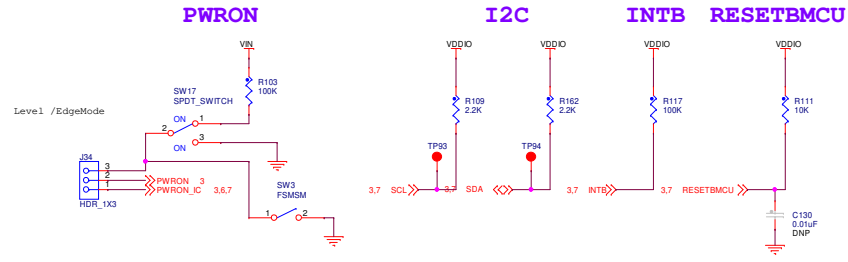
- 3.6 RESETBMCU_IC <<> EN1_IC 3.6
- 3.6 INTB_IC <<> EN2_IC 3.6
- 6 SYNCOUT_IC <<> EN3_IC 6
- 3.6 INTB_IC <<> EN4_IC 6
- 6 WDI_IC <<> PGGOOD1_IC 6
- 3.6 PWOR_IC <<> PGGOOD2_IC 6
- 4.7 STANDBY_IC <<> PGGOOD3_IC 6
- 6 SCL_IC <<> PGGOOD4_IC 6
- 6 SDA_IC <<> PGGOOD4_IC 6
- 6 XFAILB_IC <<> PGGOOD4_IC 6
- 6 PGGOOD_IC <<> PGGOOD4_IC 6



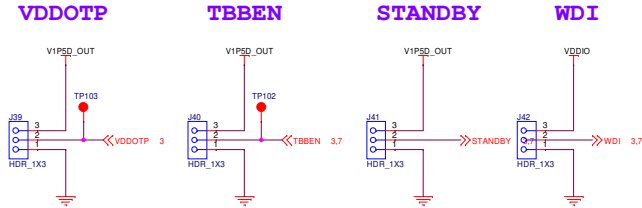
Classification: Company Internal/Proprietary		
Drawing Title: KITPF5020FRDMEVM		
Page Title: PMIC_Reference_Schematic		
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PULL-UPS AND STATUS INDICATORS

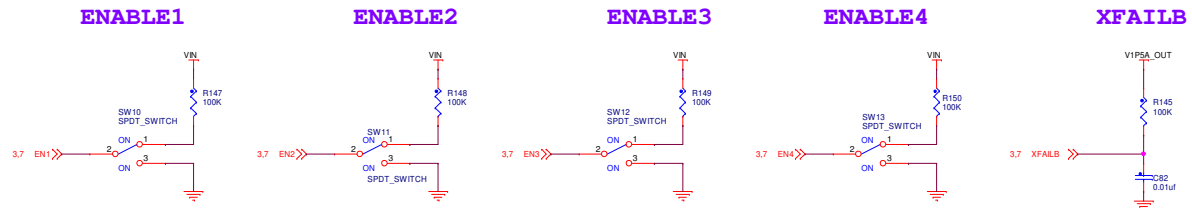
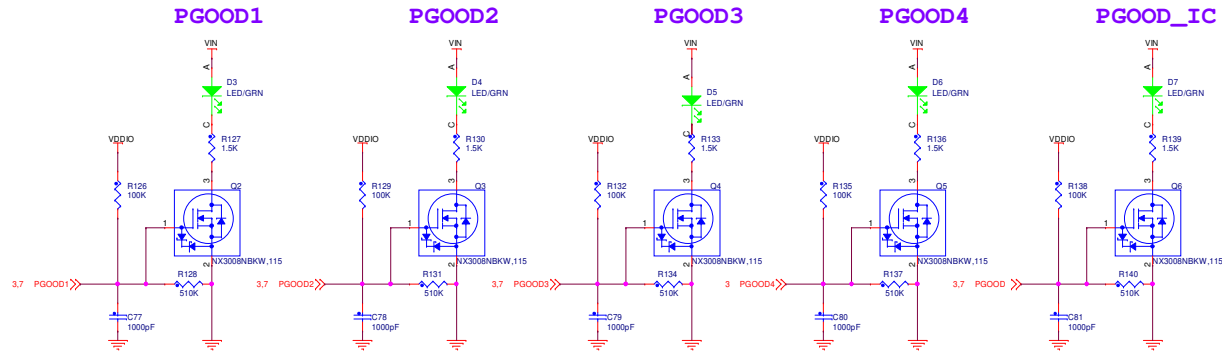
DEFAULT JUMPER SELECTION:
J34: 2-3



DEFAULT JUMPER SELECTION:
J39: 1-2
J40: Open
J41: Open
J42: Open



PGOODS AND ENABLE CONTROLS



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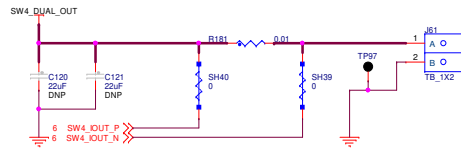
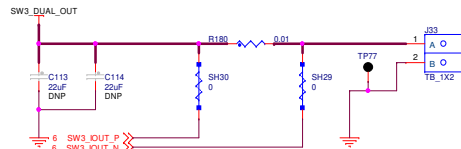
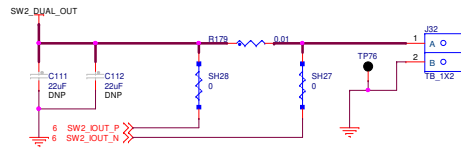
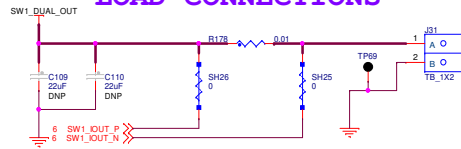
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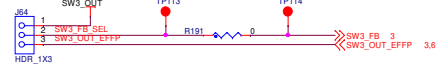
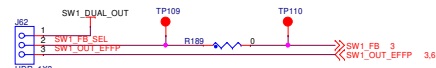
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NOTE (review):
 Use below TPs for stability measurement
 TP109, TP110 (SW1)
 TP111, TP112 (SW2)
 TP113, TP114 (SW3)
 TP117, TP118 (SW4)

LOAD CONNECTIONS



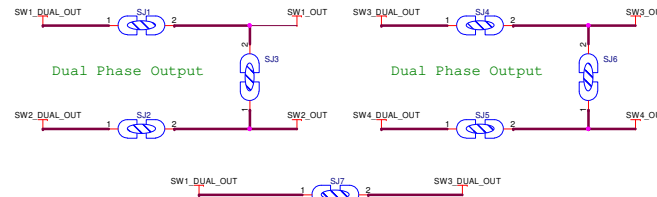
SW FEEDBACK OPTIONS



DEFAULT JUMPER SELECTION:
 J62: 2-3
 J63: 2-3
 J64: 2-3
 J65: 2-3

LOAD CONFIGURATION

Dual phase options: Short SJ3 and SJ1, SJ4 and SJ6
 Remove short on SJ2, SJ5



Quad Phase Output: Short SJ7

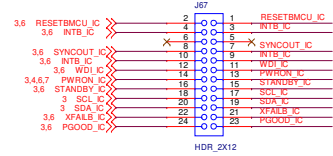
DEFAULT SOLDER BLOB SELECTION: Short SJ1, SJ2, SJ4, SJ5



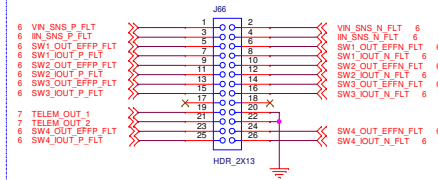
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Drawing Title: KITPF5020FRDMEVM		
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MASTER/SLAVE CONNECTOR

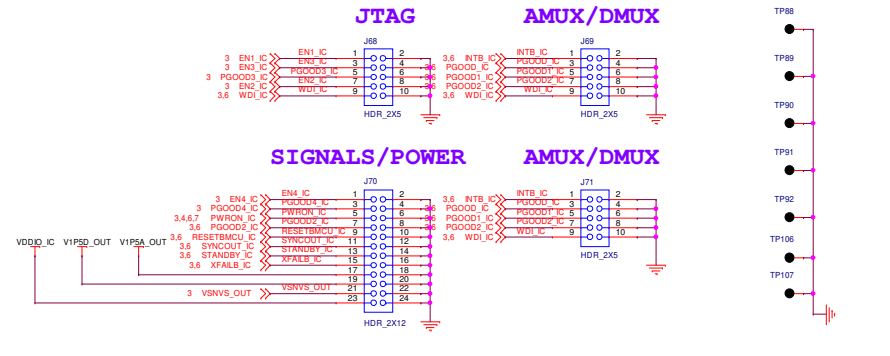
NOTE: Use single 12 Row connector to connect Slave side from primary EVB to Master side of 2nd EVB. Resistors can be configured on primary board for specific configurations.



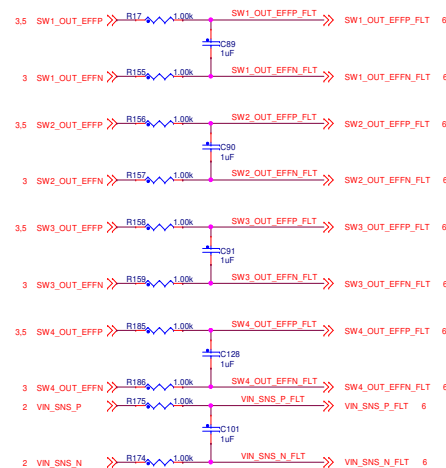
EFFICIENCY MEASUREMENT HEADER



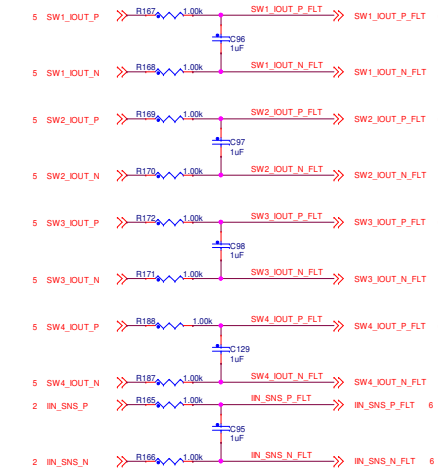
TEST POINTS AND TEST MODE HEADERS



VOLTAGE



CURRENT



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Page Title: **Efficiency Filters, Headers**

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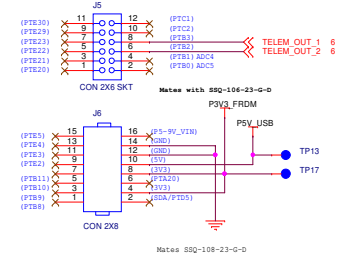
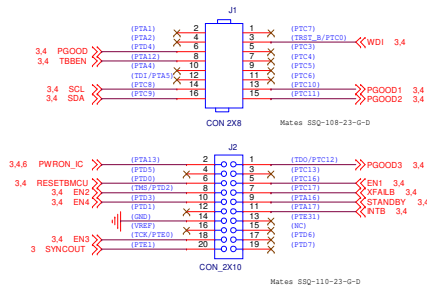
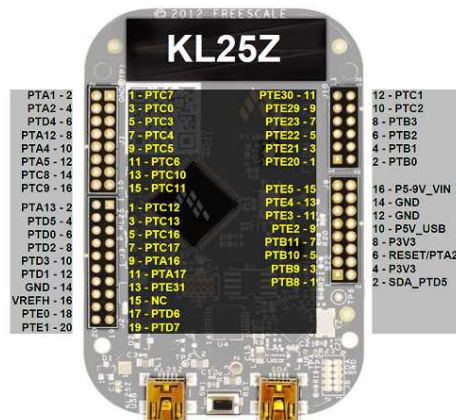
Female connectors on the Freedom board with long pins, low insertion:
 SSQ-106-23-G-D / 210-80515
 SSQ-110-23-G-D / 210-80513
 SSQ-108-23-G-D (x2) / 210-80247

KL25Z

KL25Z INTERFACE

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KL25Z



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REF DES	JUMPER(DEFAULT)	PAGE NAME
J55	2-3	02 - PWRIN & VDDIO
J39	1-2	04 - PU, PGOOD and ENABLE
J34	2-3	04 - PU, PGOOD and ENABLE
J41,J42,J40	Open	04 - PU, PGOOD and ENABLE
J65,J64,J63,J62	2-3	05 - Load Connectors & Feedback

REF DES	ASSY OPT	PAGE NAME
C68,C64	DNP	03 - PMIC Reference
C130	DNP	04 - PU, PGOOD and ENABLE
C113,C109,C110,C111,C114, C120,C112,C121	DNP	05 - Load Connectors & Feedback

REF DES	SWITCH(DEFAULT)	SWITCH(OPTION1)	PAGE NAME
SW12,SW13,SW10,SW11,SW17	1-2: ENABLE VIN	2-3: ENABLE GND	04 - PU, PGOOD and ENABLE
SW3	OFF	ON	04 - PU, PGOOD and ENABLE



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