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Revisions			
Rev	Description	Date	Approved
X1	Initial schematic	08/21/2019	Guru K.
A	Format clean-up, Final Release	10/14/2019	Guru K.
AX1	Removed UB, changed R111, added class 2 R129, R132, DNP	03/09/2020	Guru K.
B	Final Release	03/10/2020	Guru K.

KITPF5023FRDMEVM

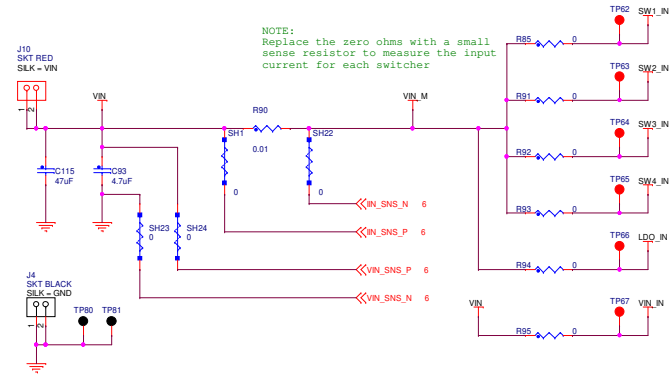
**Notes and
documentation**

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

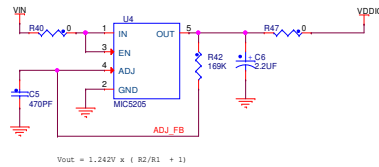
		6501 William Cannon Drive West Austin, TX 78725-6598	
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NXP SEMICONDUCTORS		Classification: Company Internal/Proprietary	
Designer: Guru Karthik	Drawing Title: KITPF5023FRDMEVM		
Drawn by: Diego Garay	Page Title: Title, ToC and Rev History		
Approved: Guru Karthik	Size: C	Document Number: SCH-46402-SPF-46402	Rev: B
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POWER GENERATION

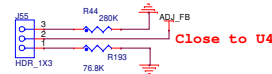
INPUT SUPPLY



External VDDIO



VDDIO VOLTAGE OPTIONS

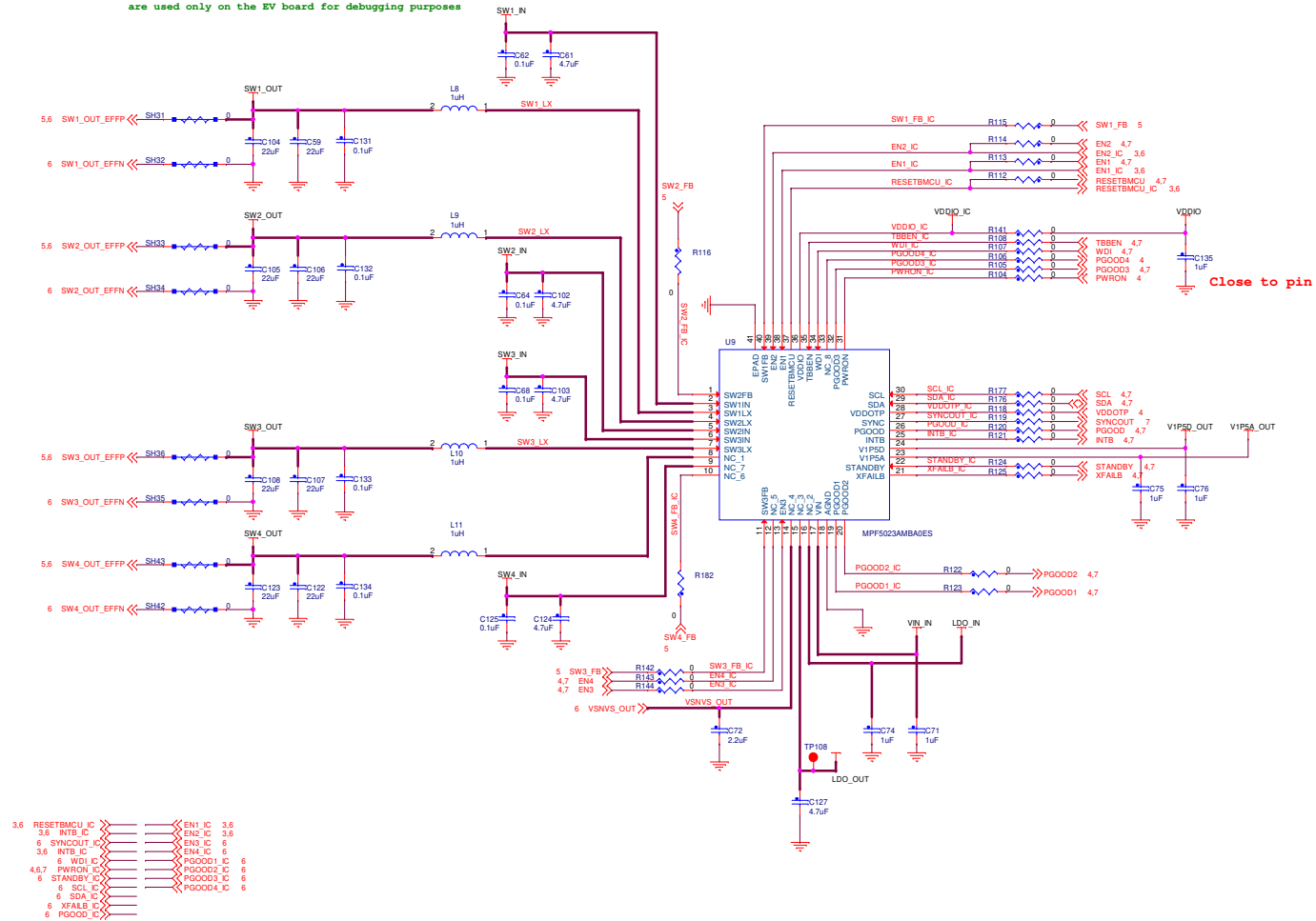


DEFAULT JUMPER SELECTION:
J55: 2-3



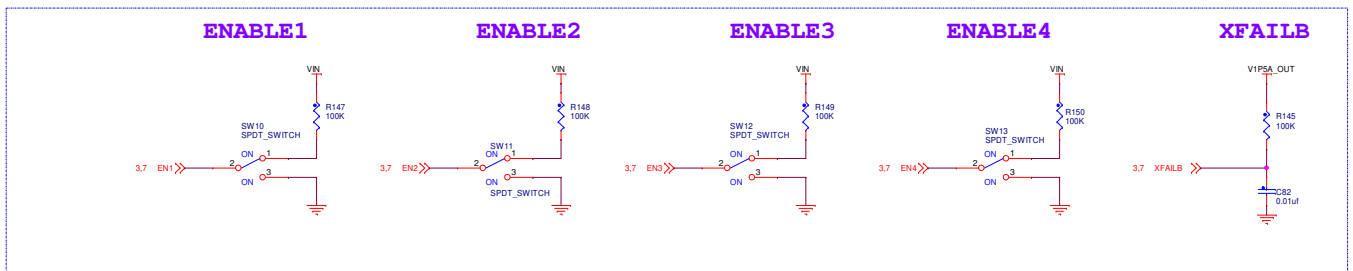
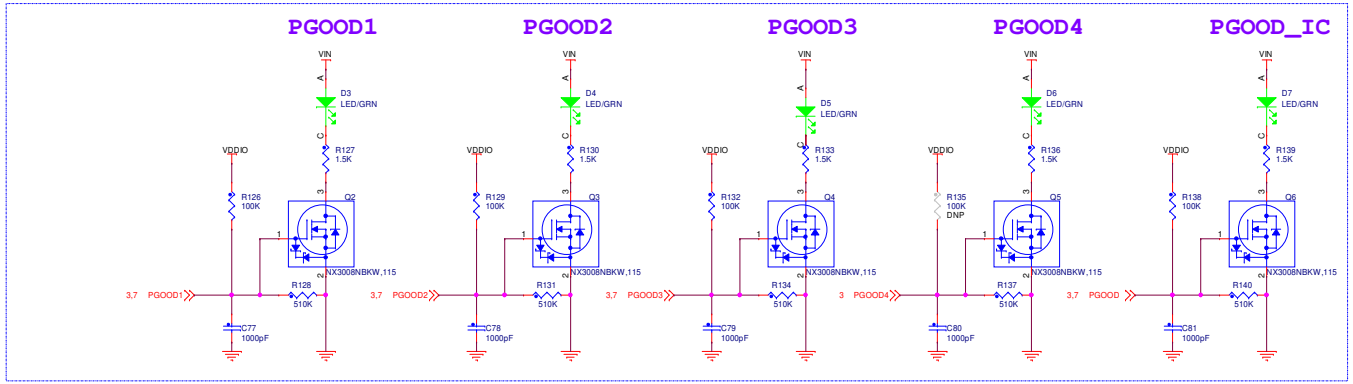
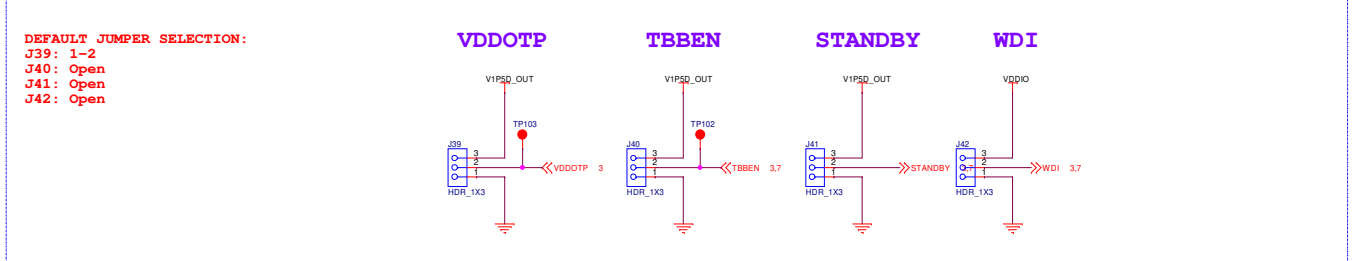
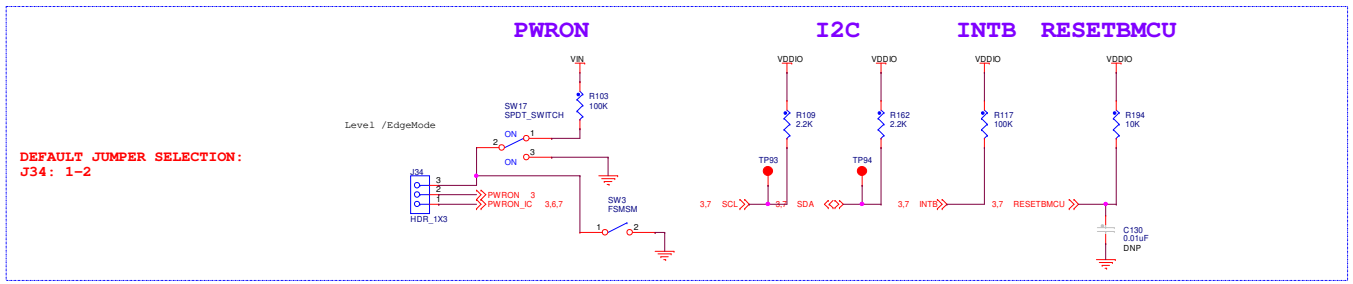
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NOTE:
The zero ohms resistors and the solder shorts
are used only on the EV board for debugging purposes



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Page Title: PMIC_Reference_Schematic		
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PULL-UPS, POWER GOODS AND STATUS INDICATORS

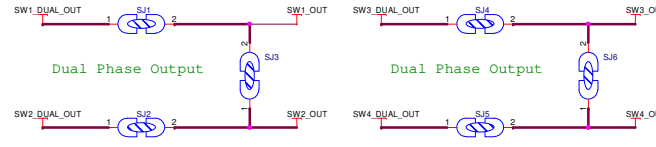




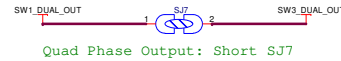
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LOAD CONFIGURATION

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

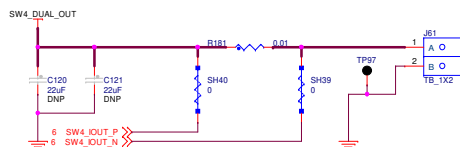
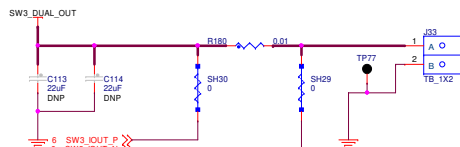
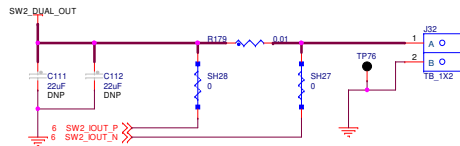
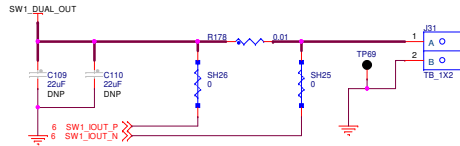


DEFAULT SOLDER BLOB
SELECTION: Short SJ1, SJ2, SJ4, SJ5



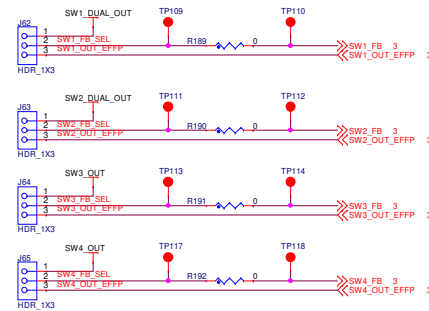
LOAD CONNECTIONS

Layout notes:
Place the resistors and the test points on the top
close to the load connectors



SW FEEDBACK OPTIONS

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

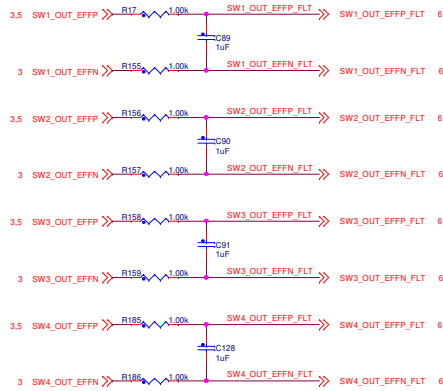


DEFAULT JUMPER SELECTION:
J62: 2-3
J63: 2-3
J64: 2-3
J65: 2-3

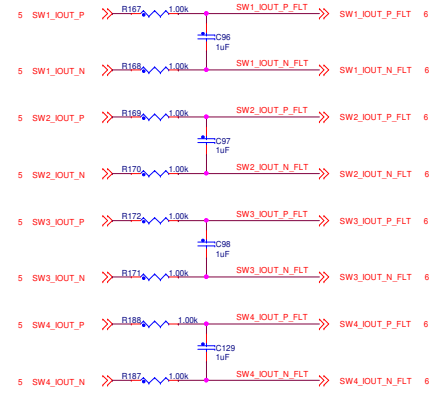


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Drawing Title: KITPF5023FRDMEVM		
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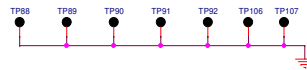
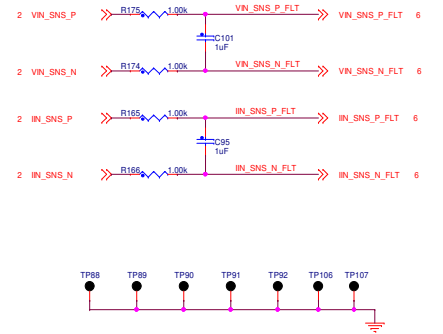
PHASE VOLTAGE



PHASE CURRENT

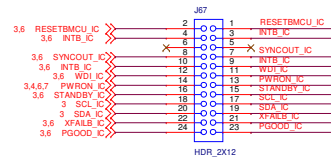


INPUT VOLTAGE & CURRENT

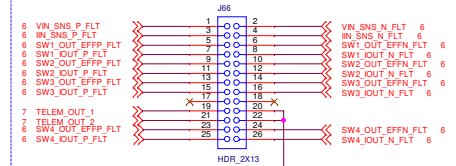


MASTER/SLAVE CONNECTOR

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.

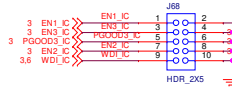


EFFICIENCY HEADER

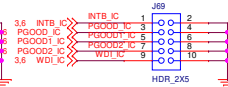


TEST POINTS AND TEST MODE HEADERS

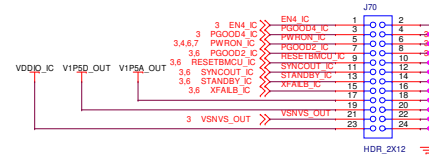
JTAG



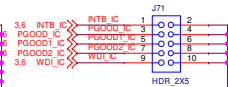
AMUX/DMUX



SIGNALS/POWER



AMUX/DMUX



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Drawing Title: **KITPF5023FRDMEVM**

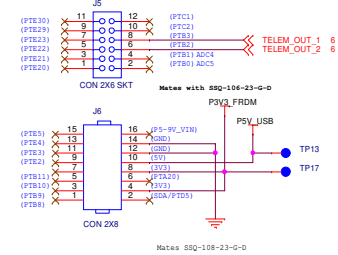
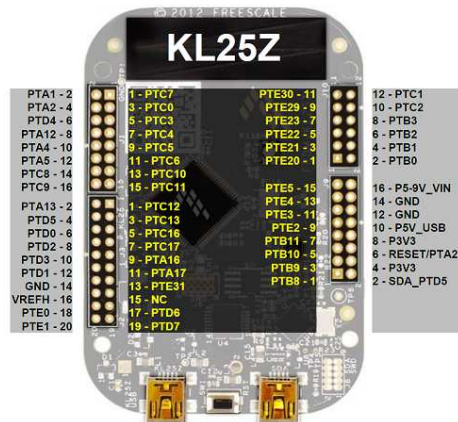
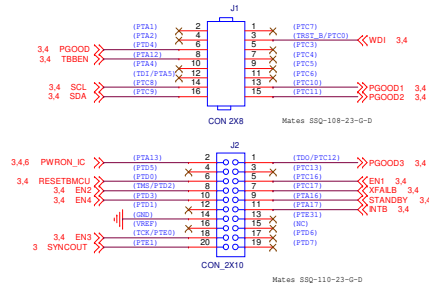
Page Title: **Efficiency Filters, Headers**


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KL25Z

KL25Z INTERFACE

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





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REF DES	JUMPER(DEFAULT)	PAGE NAME
J55	2-3	02 - PWRIN & VDDIO
J34,J39	1-2	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
R135,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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