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Revisions

Rev	Description	Date	Approved
X8	Cleanup	15-SEP-15	Adrien Gambino
X9	Added 22uF DNP on VSYS. Changed solder blobs to 0402 and short. Project title changed to X-VALPF1550EVB. Changed L4, L5 and L6 to DNP. Changed shunt jumpers into solder blobs. Renamed SYS net into VSYS.	22-SEP-15	Adrien Gambino
X10	Added TP* SILK info	24-SEP-15	Adrien Gambino
X11	Added 0R on top of 0402 solder blobs Added SILK properties Removed LX testpoint USBPHY TP changed from pad to hook Removed VBUSIN hook testpoint: using VBUS_PORT as force and pad as sense Created sub assembly for FRDM connectors	24-SEP-15	Adrien Gambino
X12	Added 0R options for VDDOTP Changed TP1 to a bigger footprint Changed J1, J2, J9 and J10 to male only	30-SEP-15	Adrien Gambino
X13	USB to 211-77242, UX60-MB-5S8	02-OCT-15	Adrien Gambino
X14	Removed solder bridges	08-OCT-15	Adrien Gambino
A	Release to Agile	08-OCT-15	Adrien Gambino
A	Release to Agile Change the names from "X-VALPF1550EVB" to "FRDM-PF1550EVM", and from "SCH-29694" to "SCH-29660". U1 Part-No. name changed from "PC32PF1550A0EP" to "PC32PF1550A4EP".	01-MAR-17	Sean Liu
A1	Changed the C46 from 22uF/6.3V to 47uF/10V. Changed the C23 from 4.7uF/6.3V to 10uF/6.3V. Changed the C4 to be DNF.	11-SEP-17	Sean Liu

# FRDM-PF1550EVM



ICAP Classification: FCP: FIUO: X PUB:

Drawing Title: **FRDM-PF1550EVM**

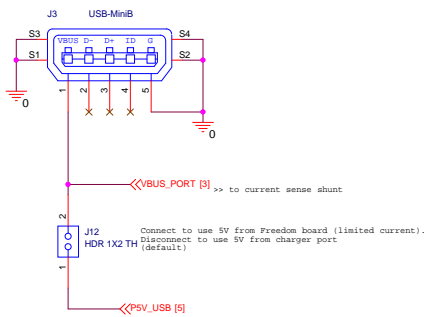
Page Title: **FRDM-PF1550EVM**

Size C Document Number SCH-29660 PDF: SPF-29660 Rev A1

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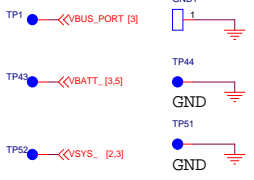
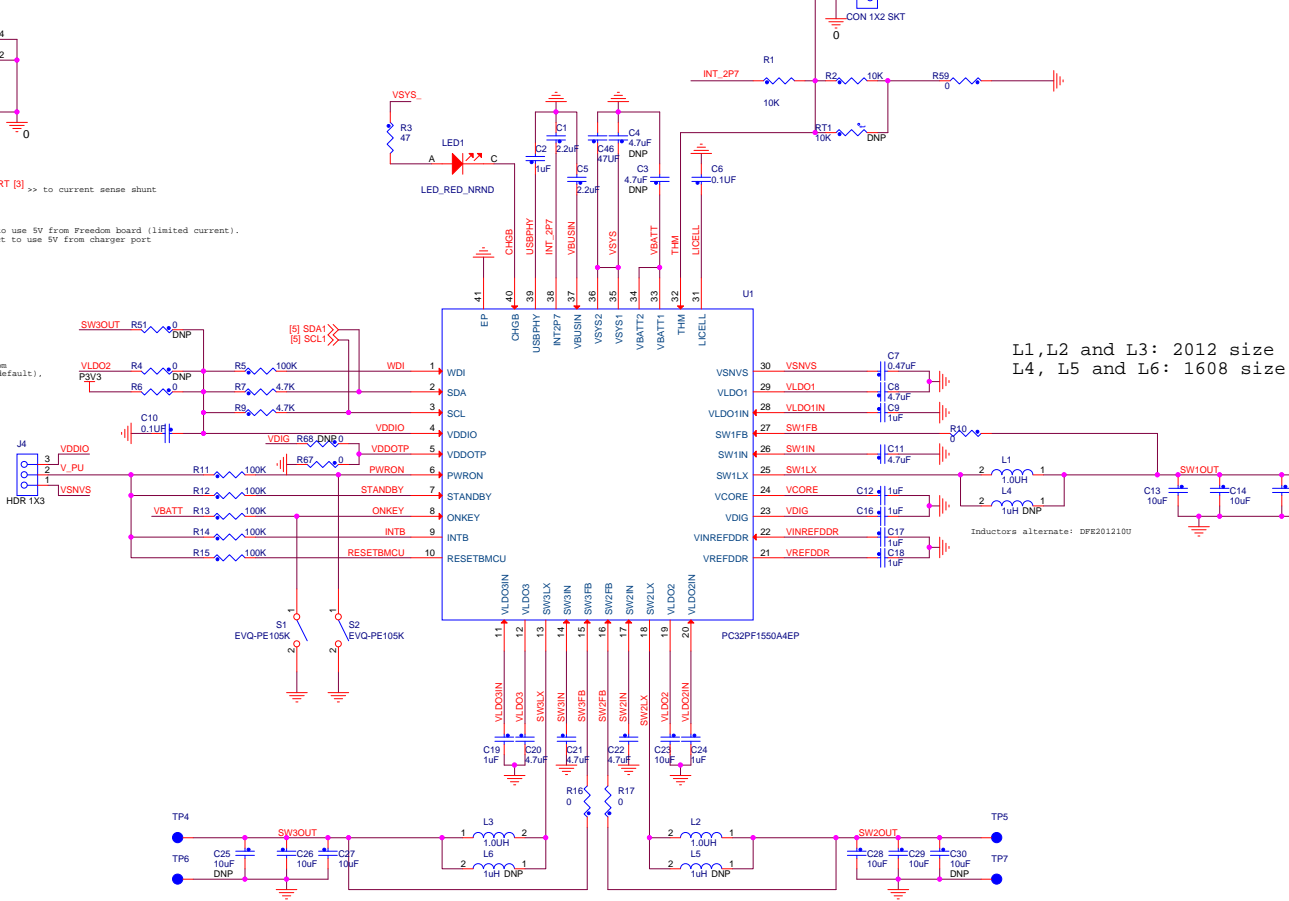
PF1550

CHARGER USB PORT

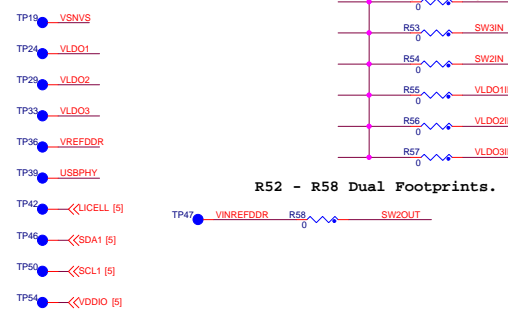


VDDIO from Freedom board 3.3V LDO (default), VLDO2 or SW3

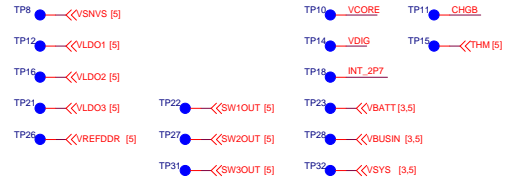
V\_PU to VSNVS by default



Standard hook testpoints



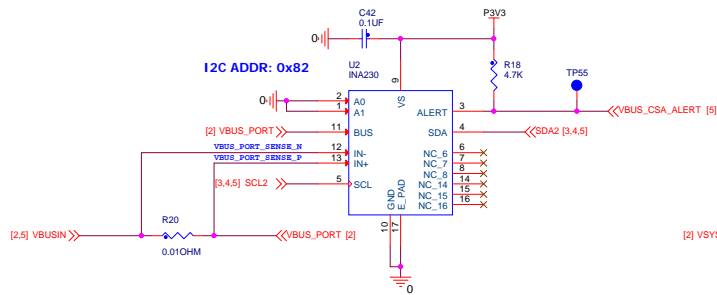
Compact hook testpoints



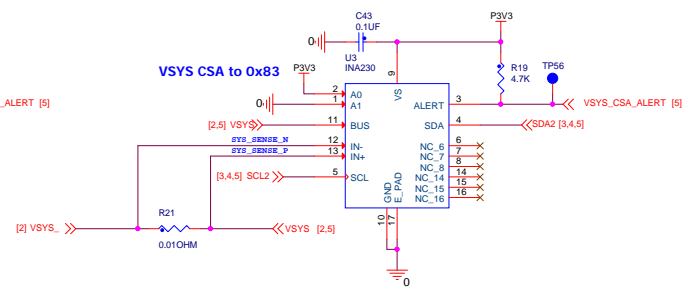
SMT pad testpoints

ICAP Classification: FCP: FIUO: X PUBL: Drawing Title: **FRDM-PF1550EVM** Page Title: **PMIC** Size C Document Number SCH4-29660 PDF: SPF-29660 Rev A1 Date: Monday, September 11, 2017 Sheet 2 of 5

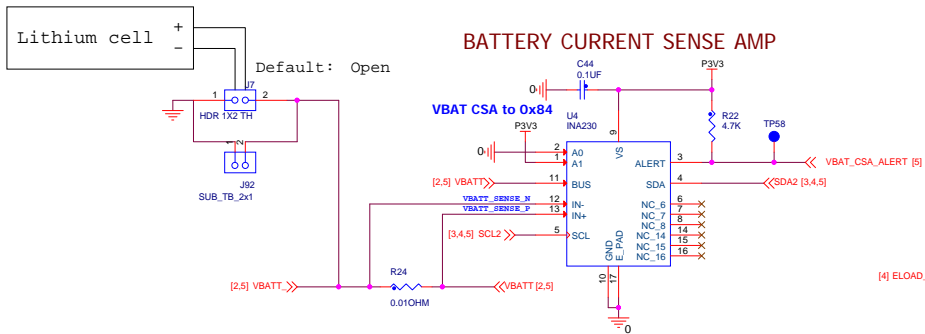
### VBUS CURRENT SENSE AMP



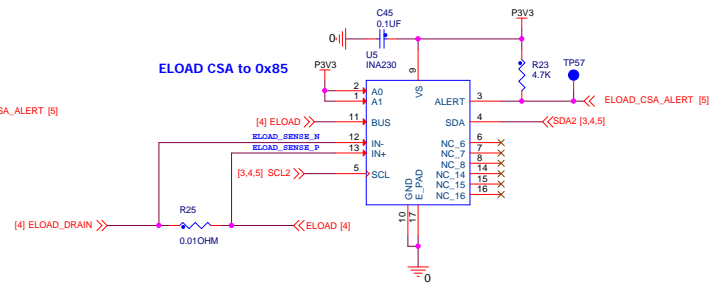
### VSYS CURRENT SENSE AMP



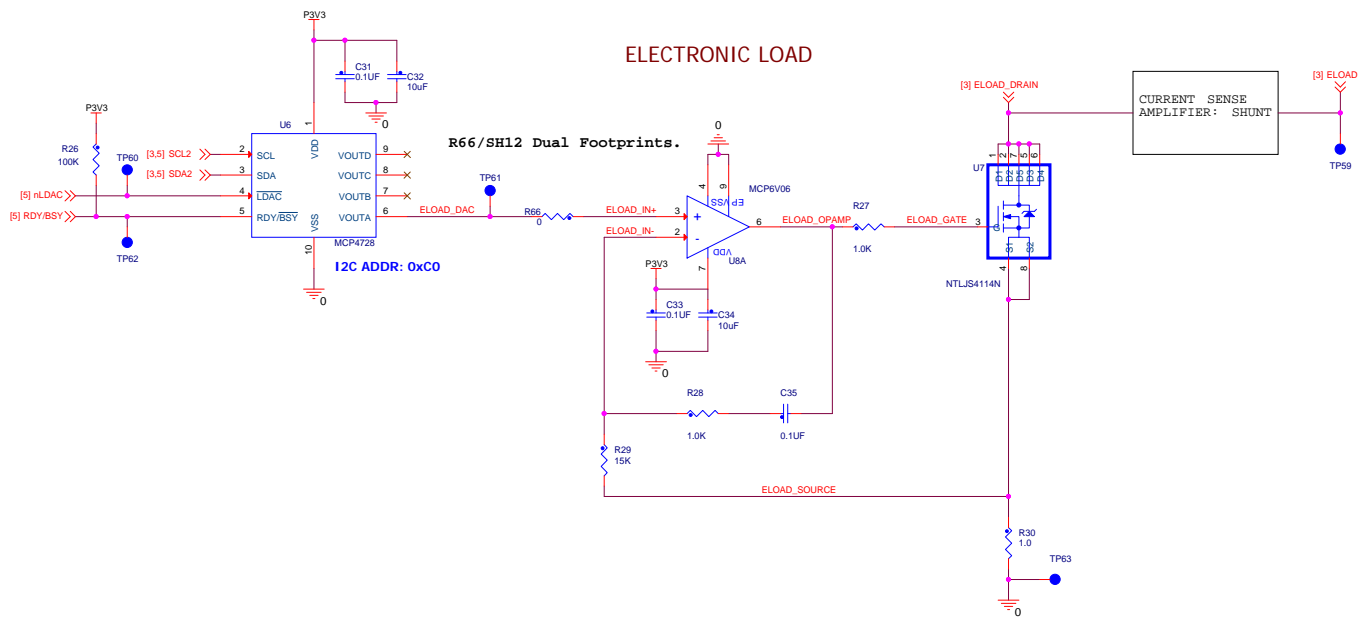
### BATTERY CURRENT SENSE AMP




### ELOAD CURRENT SENSE AMP



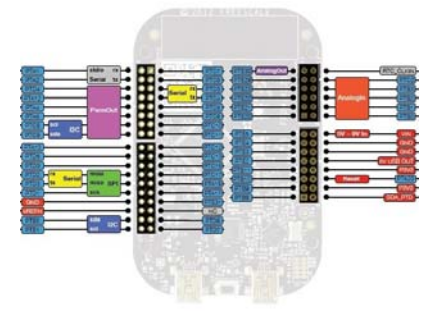
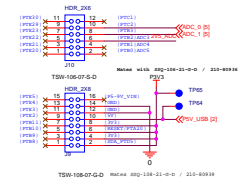
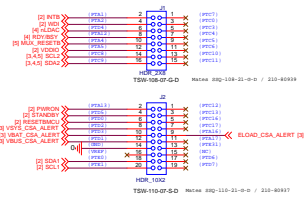
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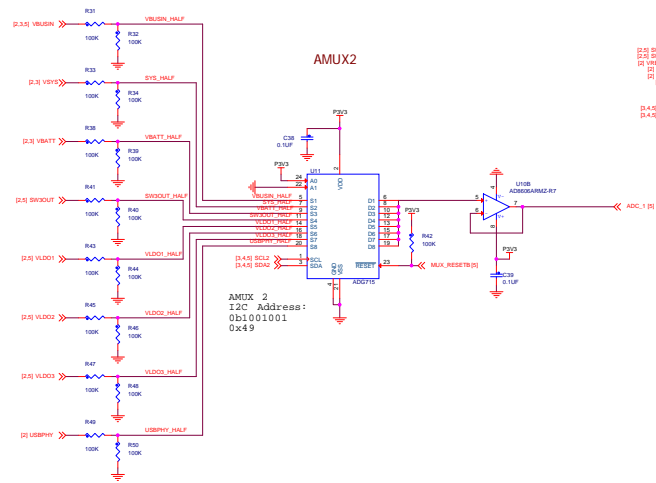
### KL25Z INTERFACE



Populate the following connectors on the Freedom board (female with short pins, low insertion):  
 SSQ-106-21-G-D / TMP-WP-25549  
 SSQ-110-21-G-D / TMP-WP-25550  
 SSQ-108-21-G-D (x2) / TMP-WP-25551

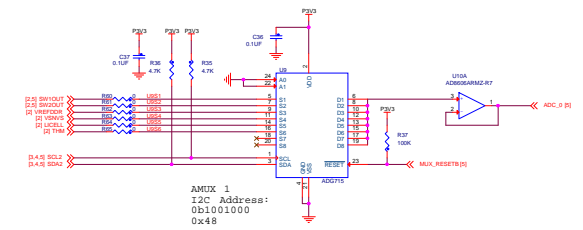
### VOLTAGE SENSE

RAIL	VOLTAGE RANGE	AMUX/CHANNEL
SW1	0V to 1.4V, typ 1.1V	AMUX 1/CH 1
SW2	0V to 1.4V, typ 1.2V	AMUX 1/CH 2
VREFDDR	0V to 0.7V, typ 0.6V	AMUX 1/CH 3
VSNVS	0V to 3.0V, typ 3.0V	AMUX 1/CH 4
LICELL	0V to 3.0V, typ 3.0V	AMUX 1/CH 5
THM	0V to 2.7V, typ 1.35V	AMUX 1/CH 6
RESERVED		AMUX 1/CH 7
RESERVED		AMUX 1/CH 8
VBUSIN	0V to 6V, typ 5V	AMUX 2/CH 1
VSYS	2.5V to 4.5V, typ 3.6V	AMUX 2/CH 2
VBATT	0V to 4.2V, typ 3.7V	AMUX 2/CH 3
SW3	0V to 3.3V, typ 1.8V	AMUX 2/CH 4
VLD01	0V to 3.3V, typ 3.3V	AMUX 2/CH 5
VLD02	0V to 3.3V, typ 3.3V	AMUX 2/CH 6
VLD03	0V to 3.3V, typ 3.3V	AMUX 2/CH 7
USBPHY	0V to 4.9V, typ 3.3V	AMUX 2/CH 8



1/2 voltage divider to accommodate 3.3V Full scale ADC

### AMUX1



### 2.5V Voltage reference

