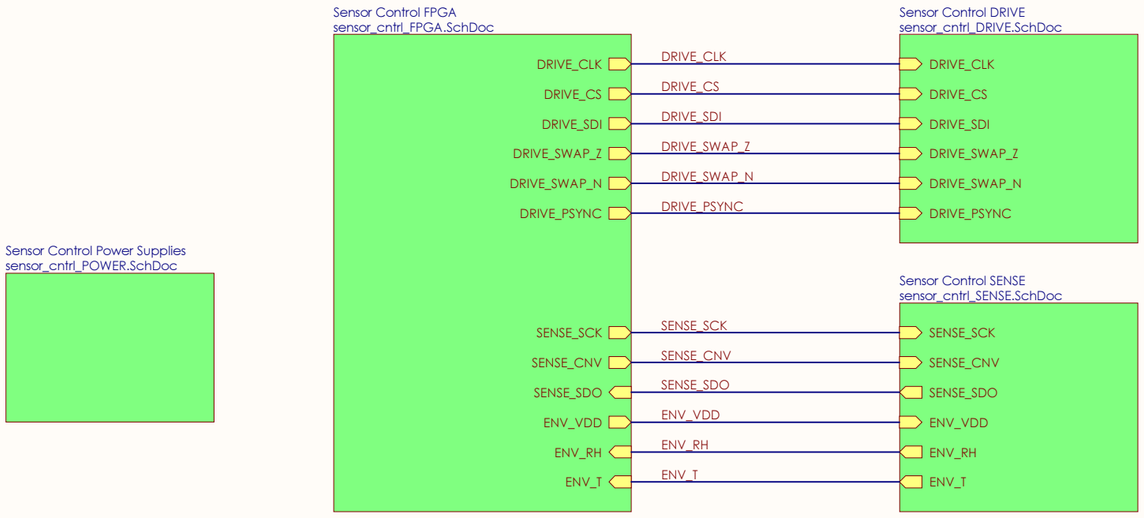
REVISION HISTORY					
REV	DESCRIPTION	CAT	DWN	ENGR	SEE JPL DATA MANAGEMENT SYSTEM FOR APPROVAL SIGNATURES AND DATES
A	---------- INITIAL RELEASE ----------	II	-	-	



NOTES: UNLESS OTHERWISE SPECIFIED

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DO NOT SCALE DRAWING
INTERPRET DEMENSIONING AND TOLERANCING PER ASME Y14.5 2009
INTERPRET DWG PER ASME Y14.100

10398567	TMT
NEXT ASSEMBLY	USED ON
APPLICATION	

CONTRACT NO _____

DWN	C SHELTON
ENGR	C SHELTON

SEE JPL DATA MANAGEMENT SYSTEM FOR APPROVAL SIGNATURES AND DATES

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CA 91109

TITLE
SCHEMATIC DIAGRAM, EDGE SENSOR CONTROLLER

SIZE	DAI	DWG NO	REV
B	23835	10398566	A

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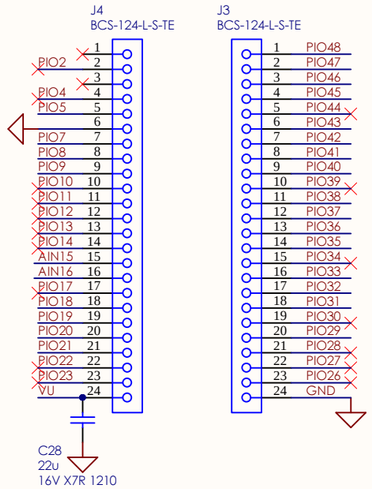
JPL_B_SH1

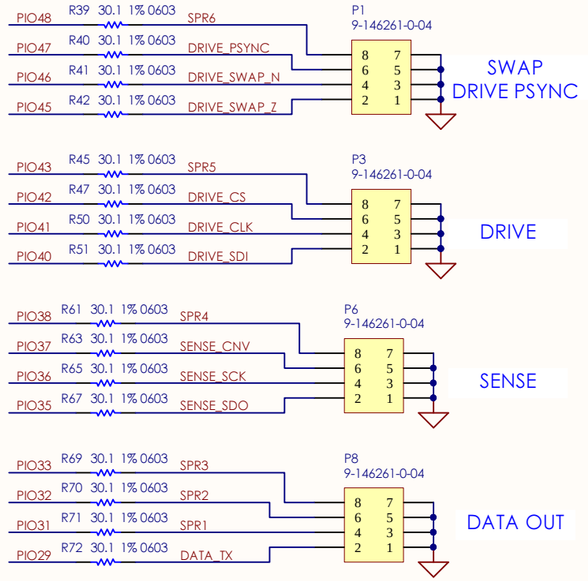
PIO-01,-03 are used internally in the CMOD A7.

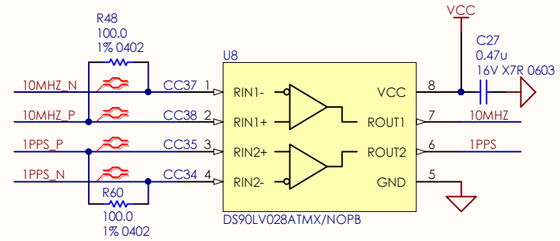
HARD CLOCK

FPGA RX/TX

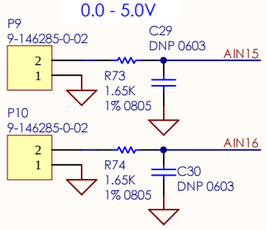


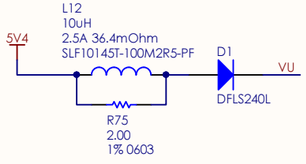
Socket for CMOD A7 Artix-7 Module
48-pin DIP 0.600 inch row spacing



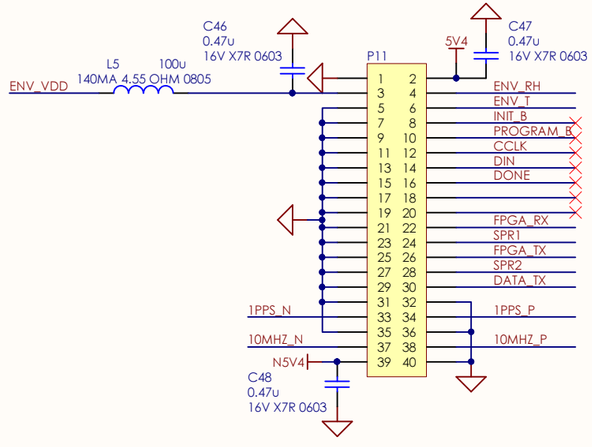


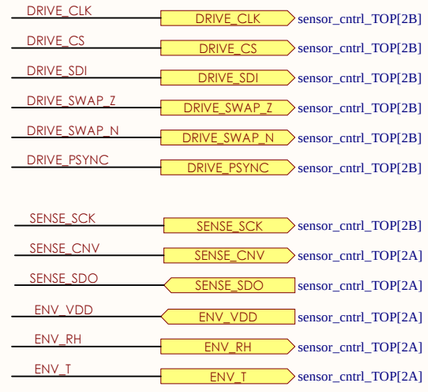
SPARE ADC
0.0 - 5.0V





Command and Control Connection
from Edge Sensor Interface Board





FPGA

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SIZE	DAI	DWG NO	REV
B	23835	10398566	A
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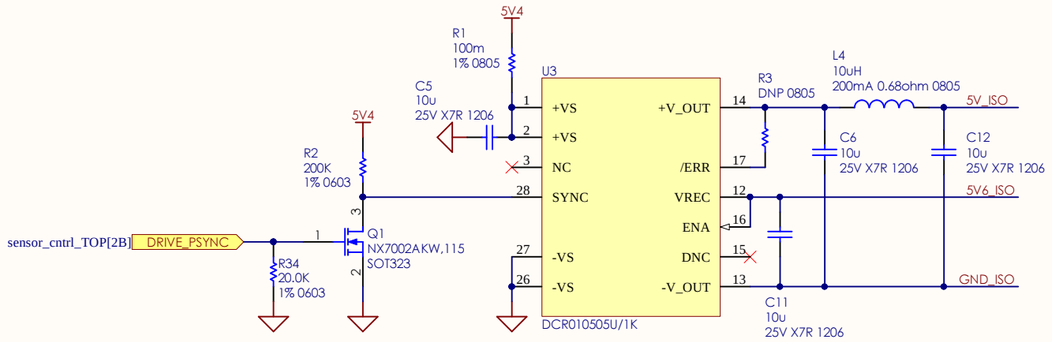

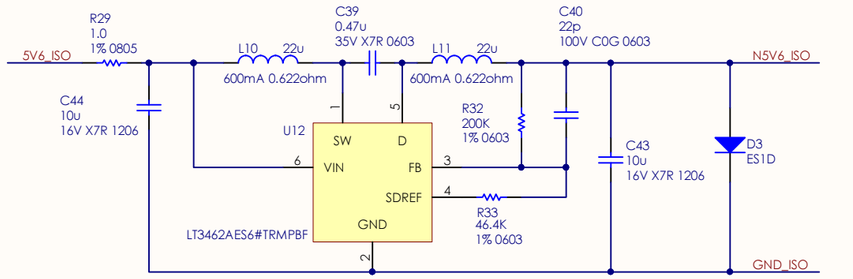

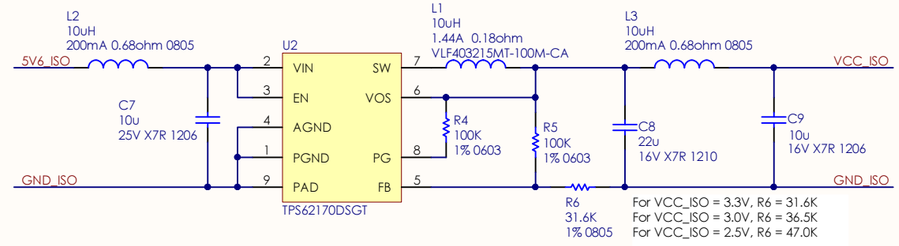

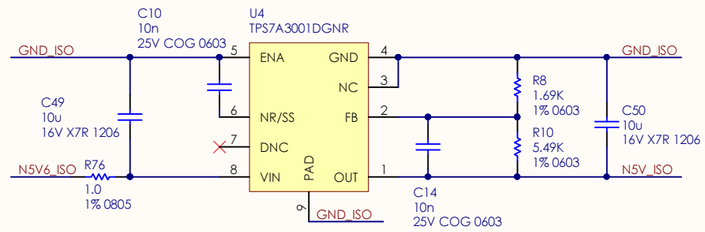

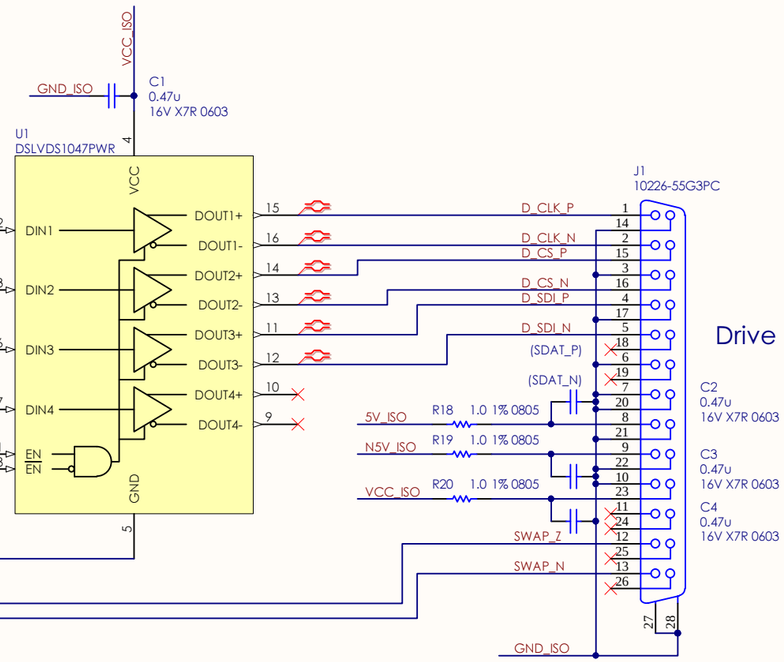

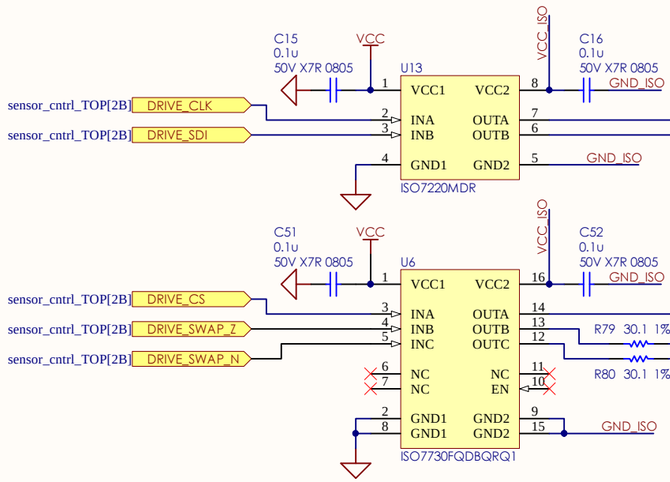

NOTES

Notes on the isolated power part (DCR010505U, above):
Place the split between the isolated ground plane and the main ground plane under this part.
Minimize total capacitance of node connecting to SYNC pin and keep on one layer.
Place guard ring around node connecting to SYNC pin and connect it to -VS pins.
This part has a 150C internal thermal cutout which auto-resets at 130C.
The VREC pin does not otherwise have intrinsic current limiting, while the +V_OUT pin has current limiting and can be short-circuited indefinitely.

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DRIVE INTERFACE

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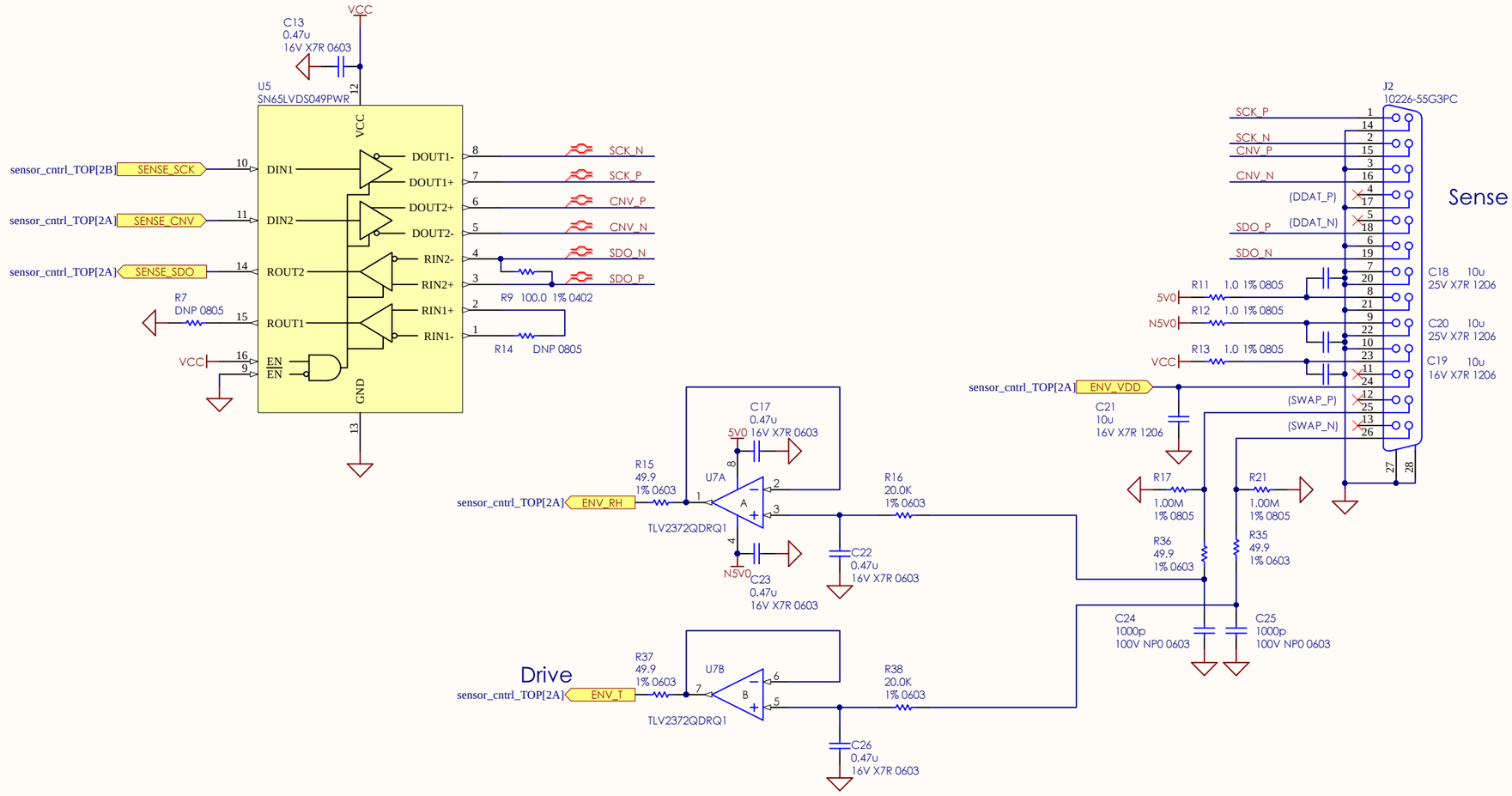
SIZE	DAI	DWG NO	REV
B	23835	10398566	A
SCALE: NONE	UNCLASSIFIED	SHEET 3 OF 5	

REV 05/2018

ALTIUM GENERATED

JPL_B_SH2



SENSE INTERFACE

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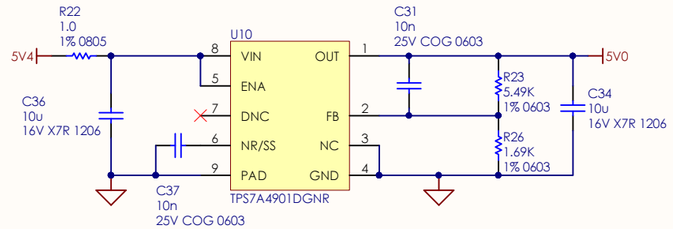
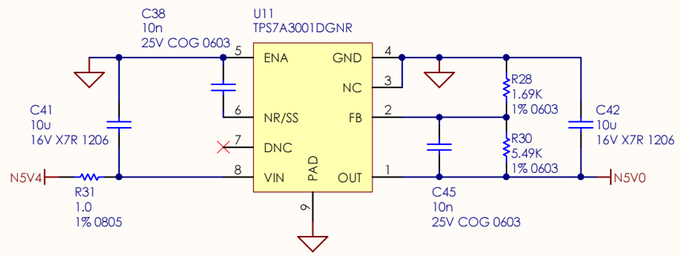
SIZE	DAI	DWG NO	REV
B	23835	10398566	A
SCALE: NONE	UNCLASSIFIED	SHEET 4 OF 5	

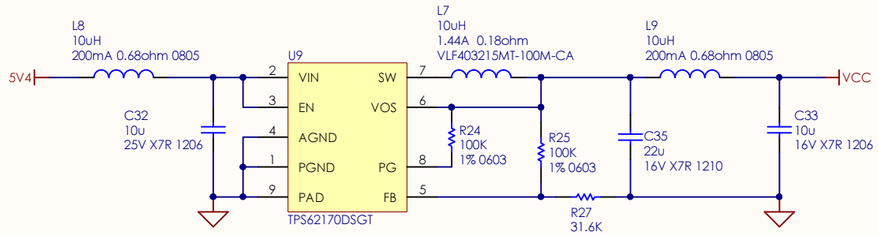
ALTIUM GENERATED

REV 05/2018

JPL_B_SH2







For VCC = 3.3V, R27 = 31.6K
For VCC = 3.0V, R27 = 36.5K
For VCC = 2.5V, R27 = 47.0K

POWER SUPPLIES

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SIZE	DAI	DWG NO	REV
B	23835	10398566	A

SCALE: NONE | UNCLASSIFIED | SHEET 5 OF 5

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