

Schematic: 742904 Obelisk Hashing SOM Controller


SHEET	SHEET NAME
01	Title & Revision History
02	Power Supply
03	SAMA5D27SOM
04	JTAG & DBUG
05	SD & QSPI
06	Ethernet & USB
07	HASHING Board Interface

Revision History

DATE	REV	DESCRIPTION
07 JUN 2018	0	INITIAL- OBELISK HASHING CONTROLLER 742904 (FROM PROTOTYPE 742902)
14 JUN 2018	A	PRODUCTION RELEASE- OBELISK SOM HASHING CONTROLLER 742904 REV A

PCB# 742905

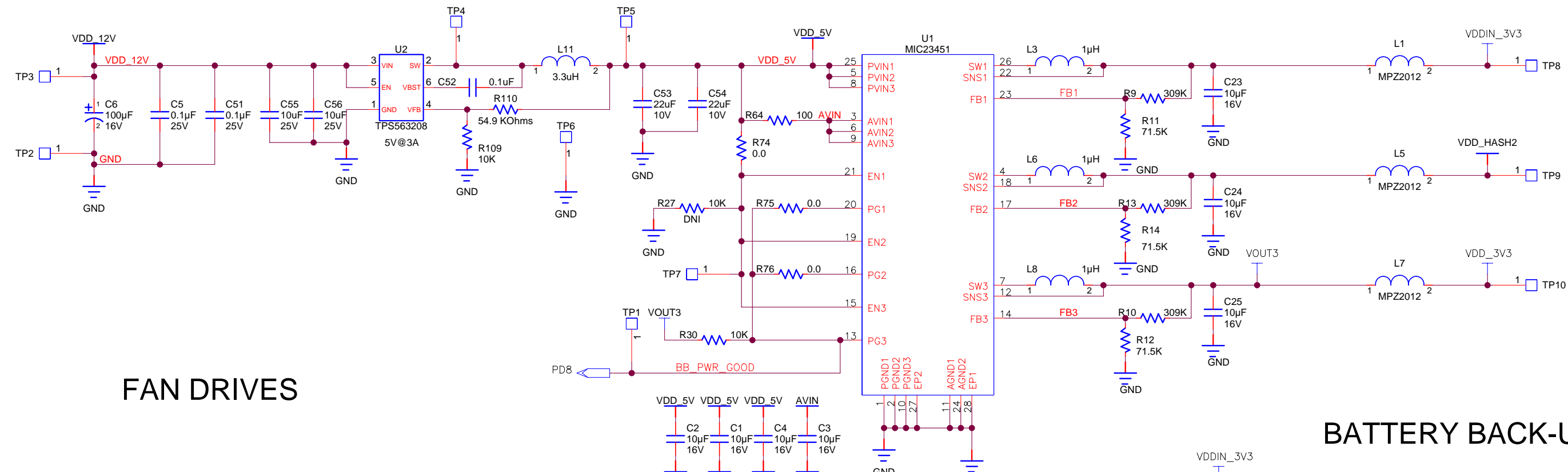
FID1 FID2 FID3 FID4 FID5 FID6 FID7 FID8



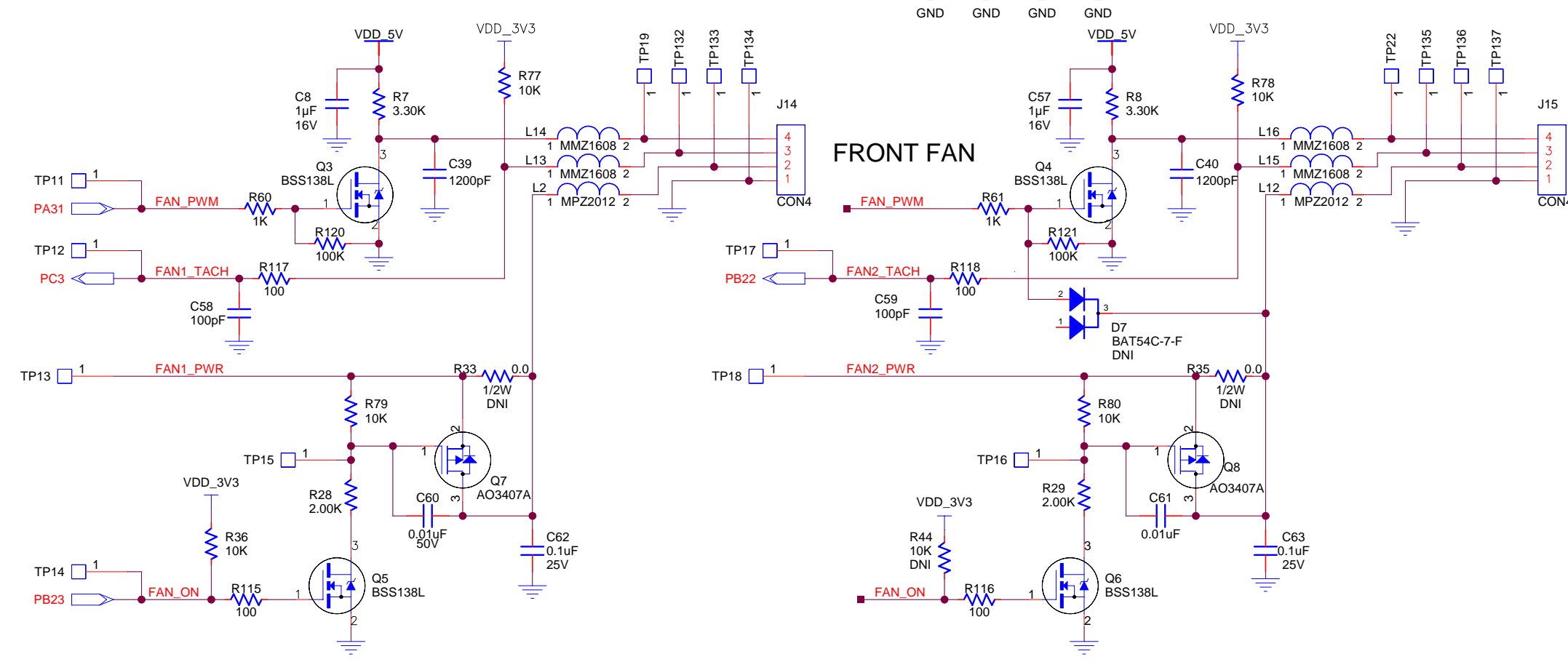
115 Cedar Street, Milford, MA 01757 (508)478-0042

TITLE Obelisk Hashing SOM Controller REVISION HISTORY		
SIZE B	DWG NO 742904	REV A
DRAWN BY		
DATE 06/14/18:10:56	SHEET 1 of 7	

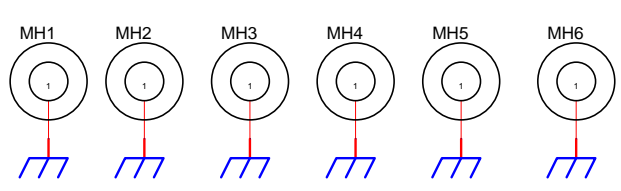
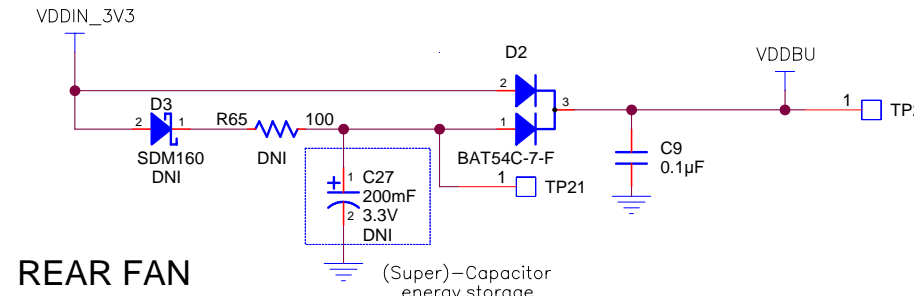
POWER SUPPLY



FAN DRIVES



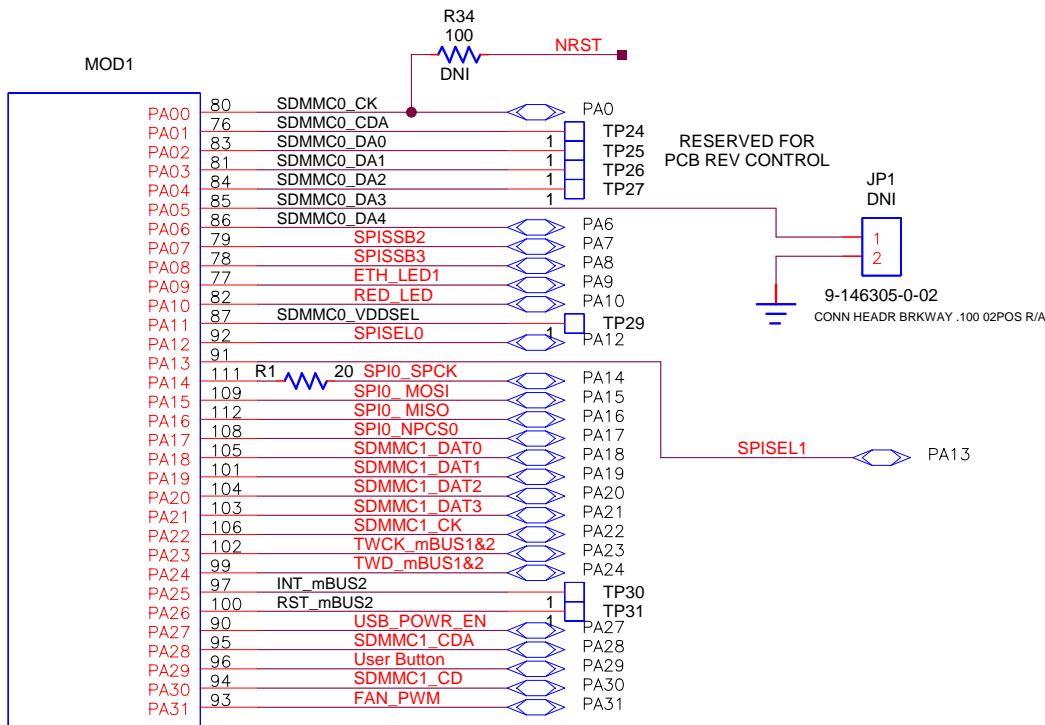
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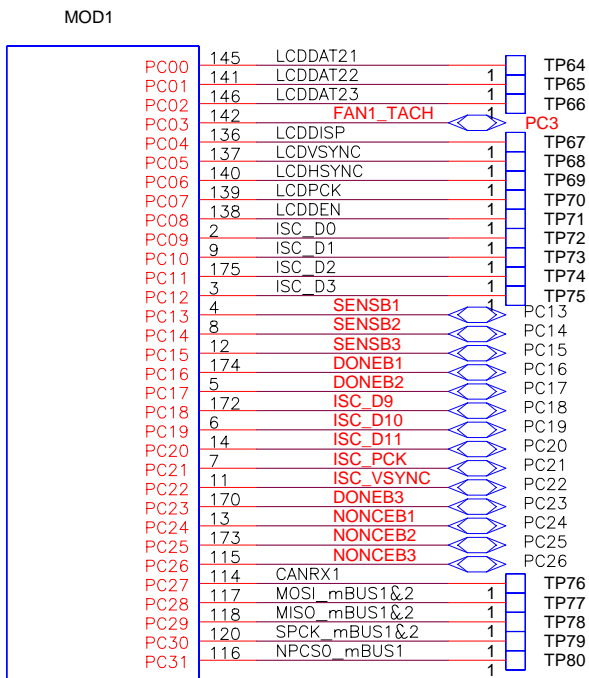
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TITLE			Obelisk Hashing SOM Controller Power Supply	
SIZE	DWG NO	742904		REV
B				A
DRAWN BY		ml/tpd		
DATE		06/13/18:13:44		SHEET 2 of 7

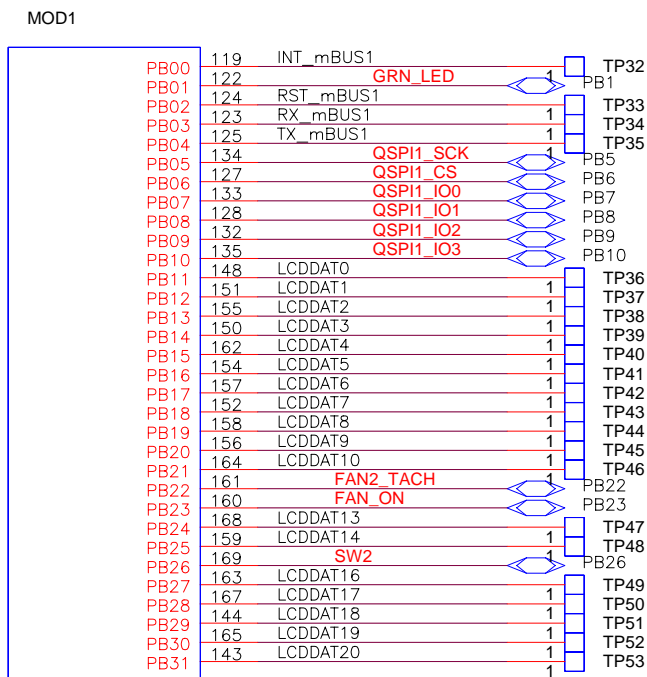
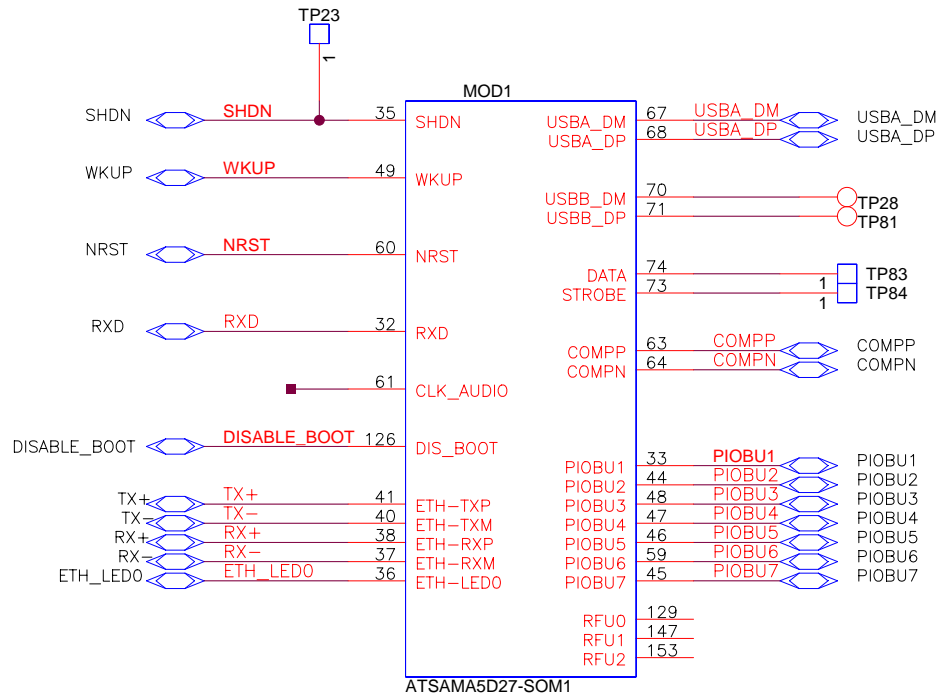
SOM CONTROLLER



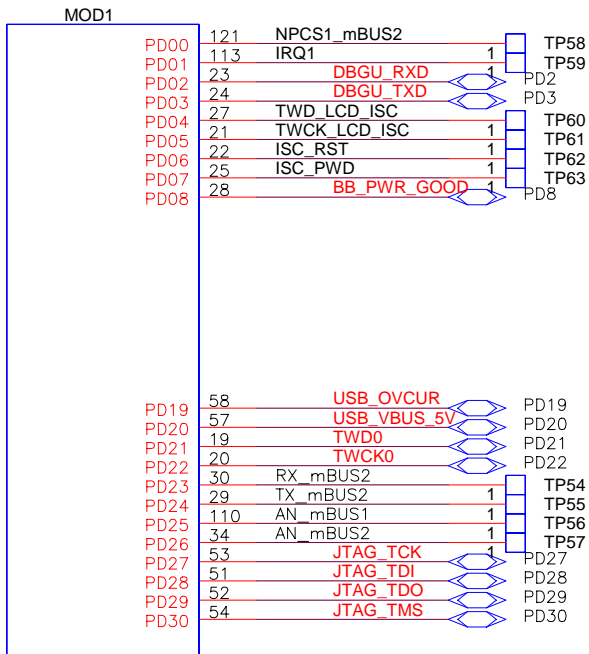
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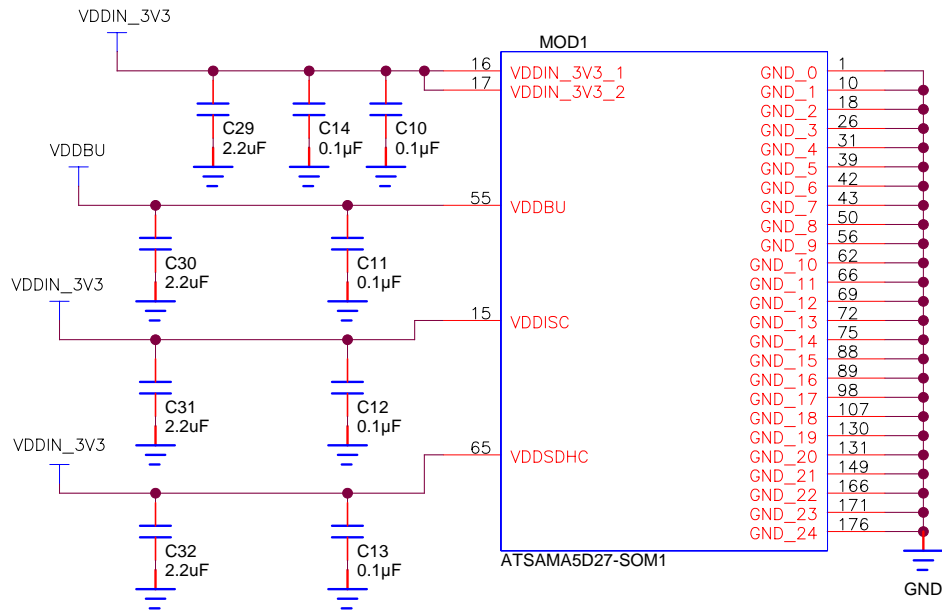
ATSAMA5D27-SOM1



ATSAMA5D27-SOM1



ATSAMA5D27-SOM1



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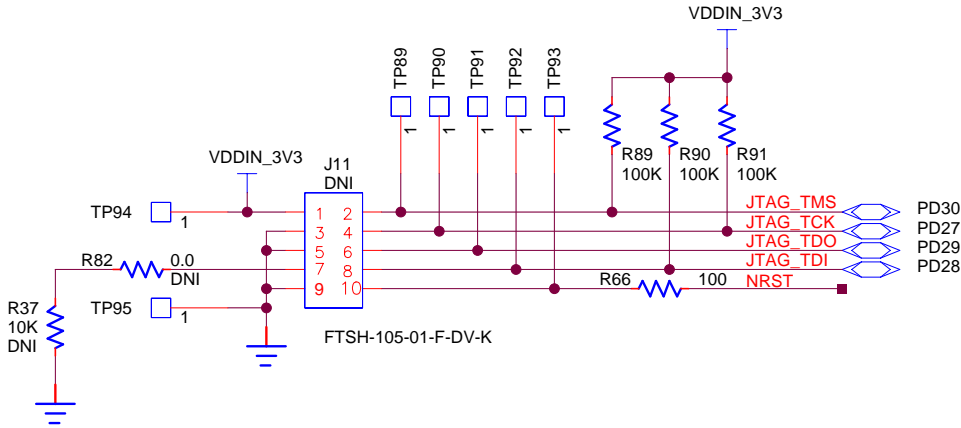
TITLE Obelisk Hashing SOM Controller SOM Module

SIZE B DWG NO 742904 REV A

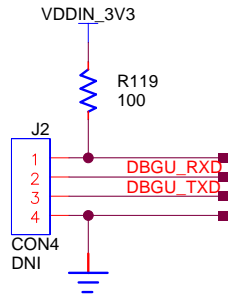
DRAWN BY ml/tpd

DATE 06/13/18:13:41 SHEET 3 of 7

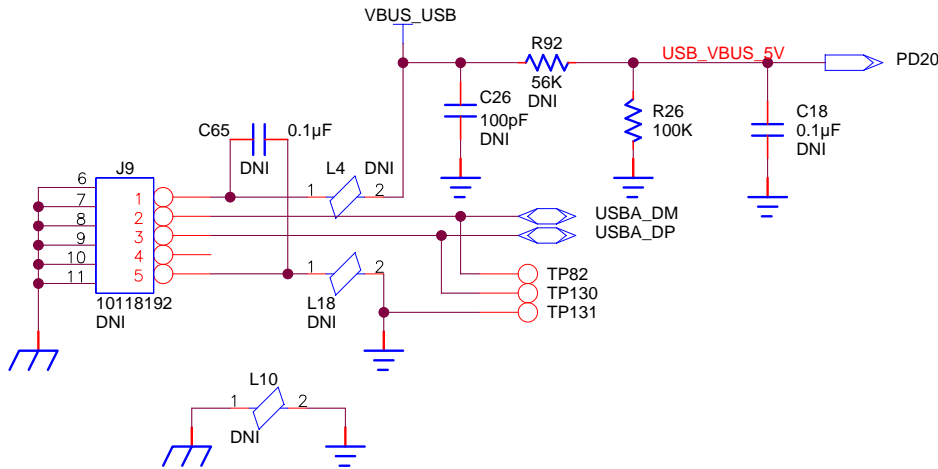
JTAG



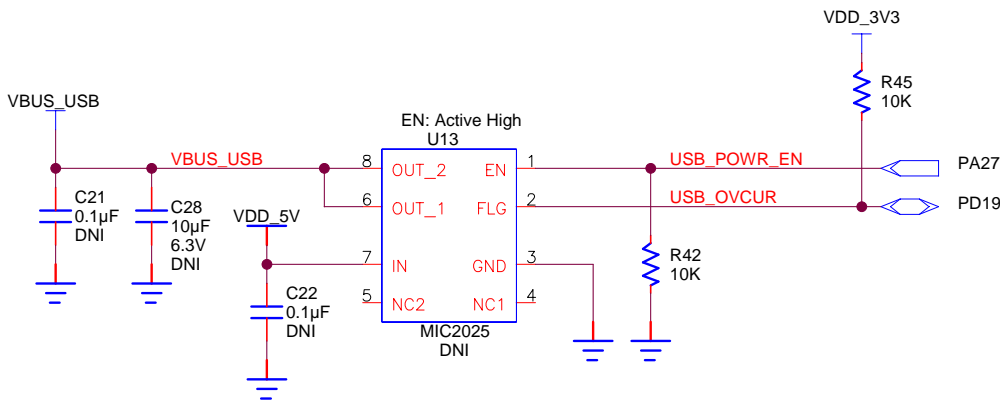
DEBUG PORT



USB



USB OTG POWER



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TITLE Obelisk Hashing SOM Controller
JTAG DEBUG

SIZE B DWG NO 742904

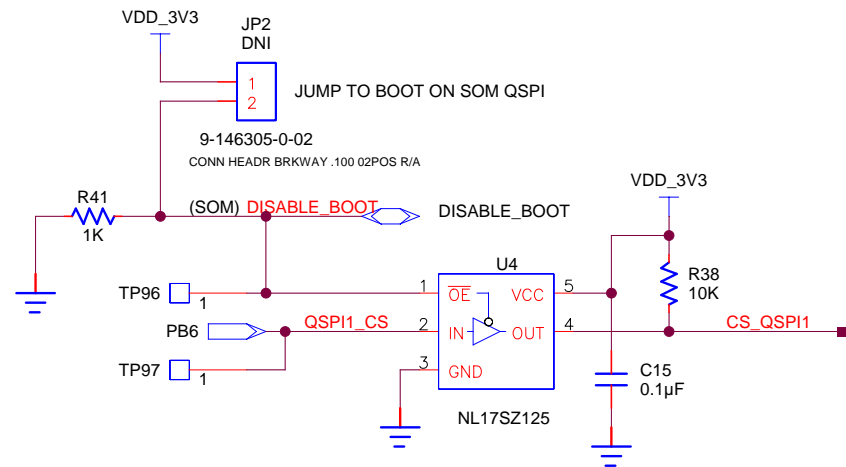
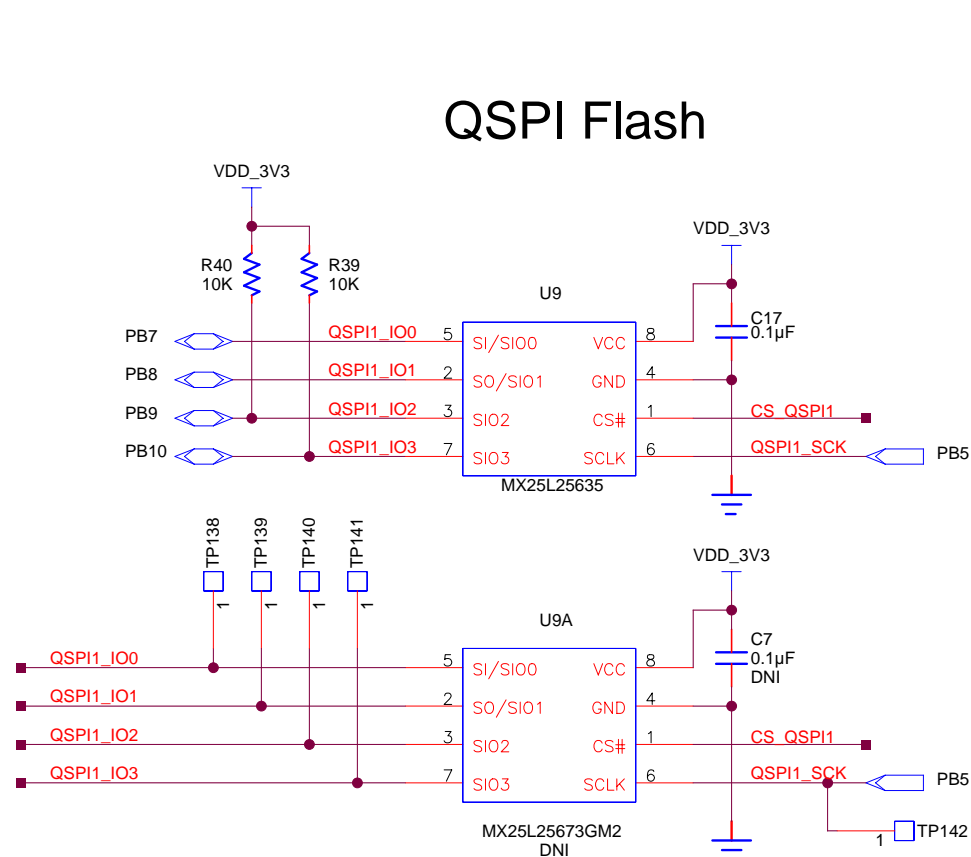
REV A

DRAWN BY ml/tpd

DATE 06/14/18:10:55

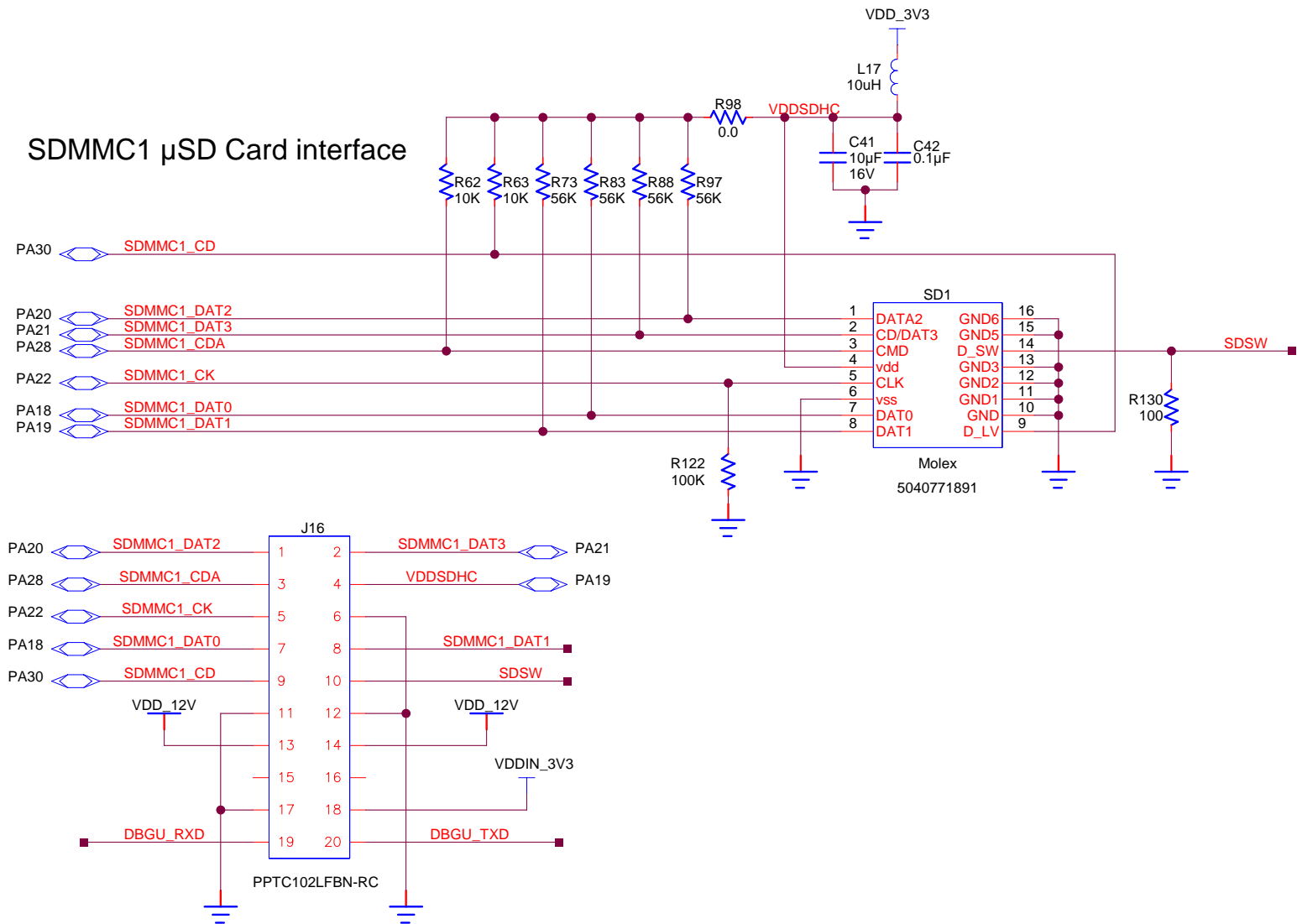
SHEET 4 of 7

QSPI Flash

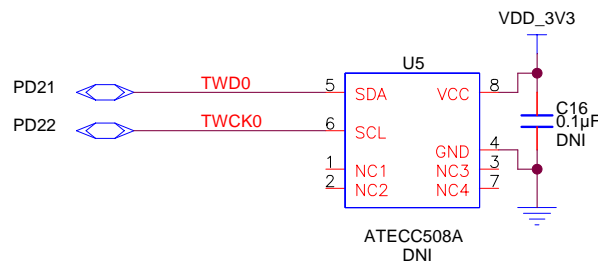


BOOT SOURCE

SDMMC1 µSD Card interface



Crypto Authentication



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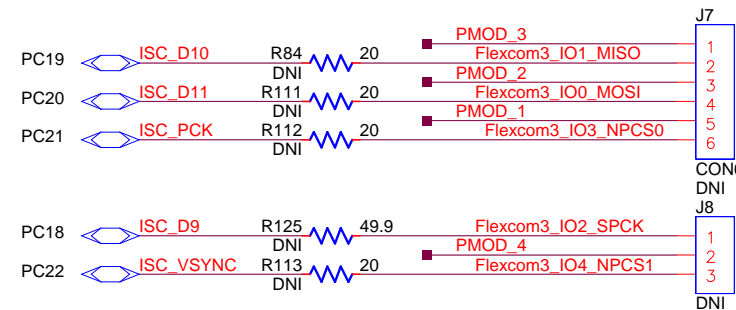
TITLE Obelisk Hashing SOM Controller
SD QSPI

SIZE B DWG NO 742904 REV A

DRAWN BY ml/tpd

DATE 06/13/18:13:40 SHEET 5 of 7

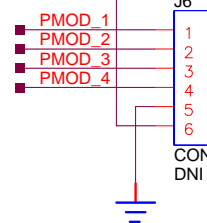
AUX IO



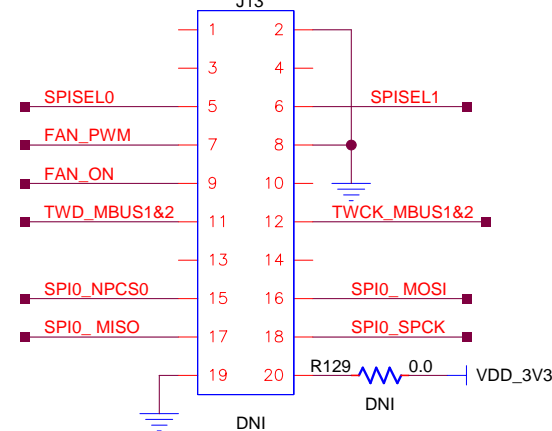
CONFIG AUX IO J7 J8

SPI	1-2, 3-4, 5-6	1-2
TWI	2-3, 4-5	OPEN
USART	1-2, 3-4, 5-6	2-3

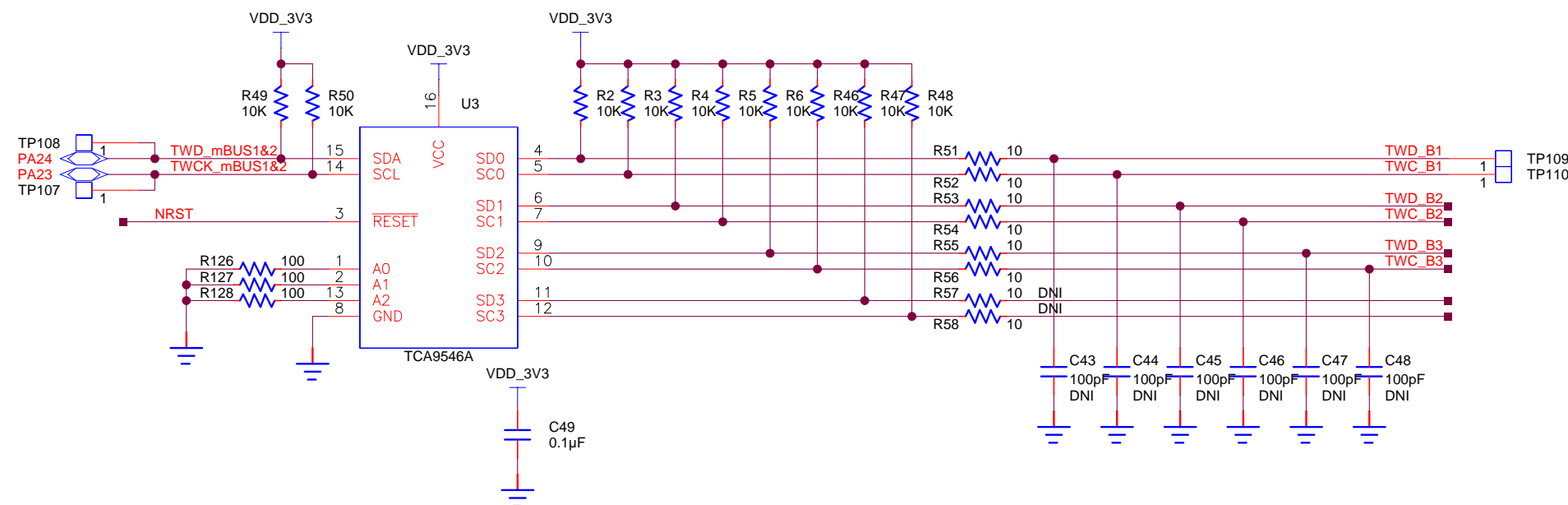
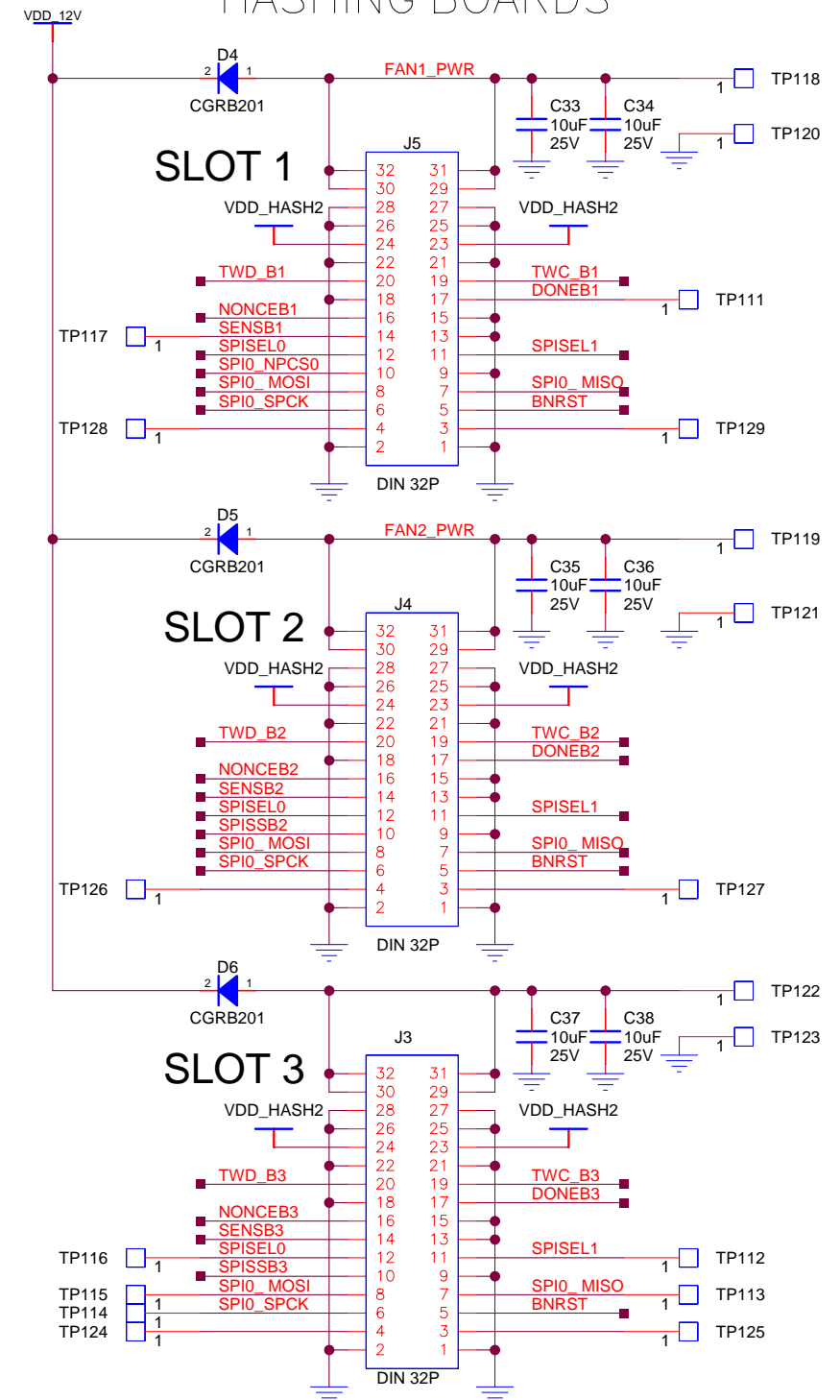
VDD_3V3



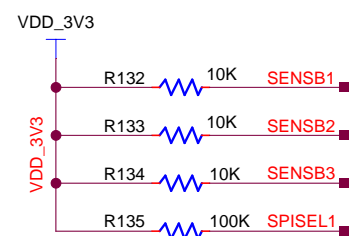
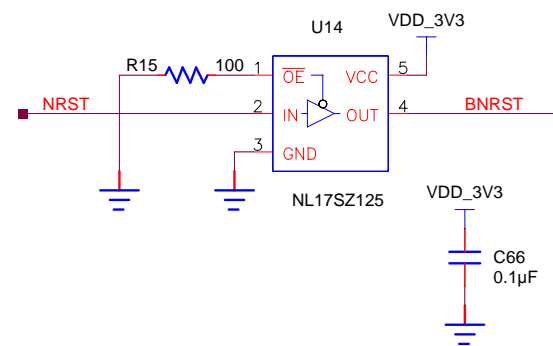
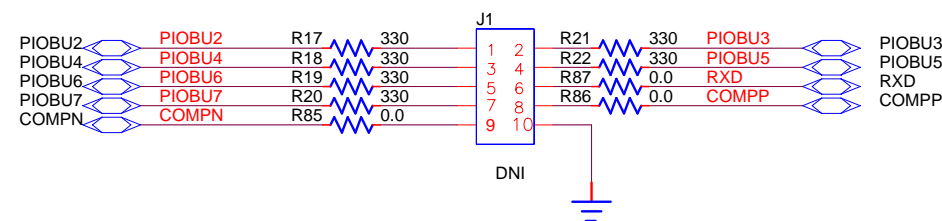
TEST PORT



HASHING BOARDS



TAMPER



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TITLE Obelisk Hashing SOM Controller
IO CONNECTIONS

SIZE	DWG NO	REV
B	742904	A

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