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# GALILEO GEN2

## INTEL QUARK X1000

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### FAB H

PB: H48142-207

PBA: H48125-800

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Thu Sep 11 08:52:51 2014

INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		
TITLE	GALILEO Gen2	DOCUMENT NUMBER
	DESIGN TITLE PAGE	H38681
		REV
		2.0
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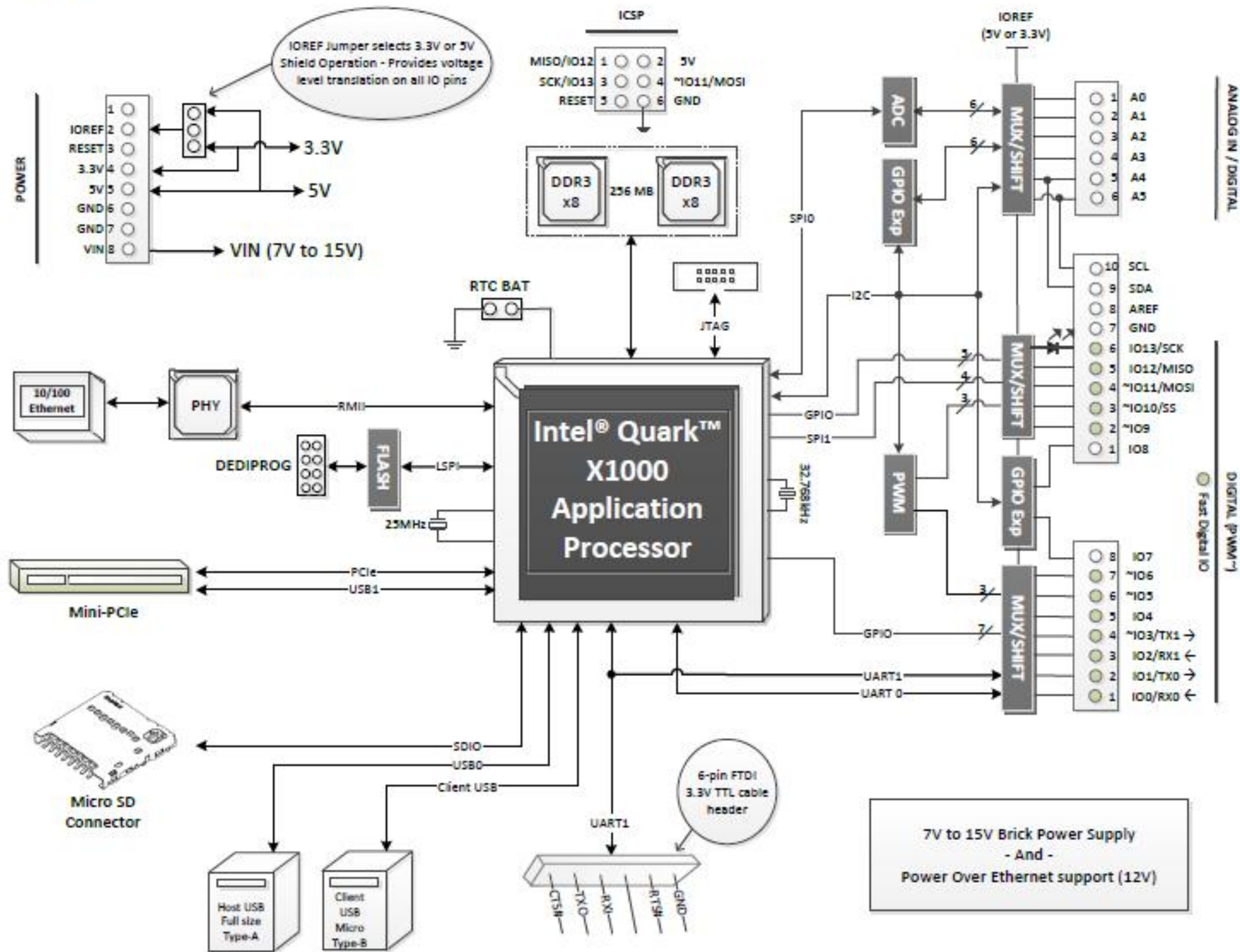
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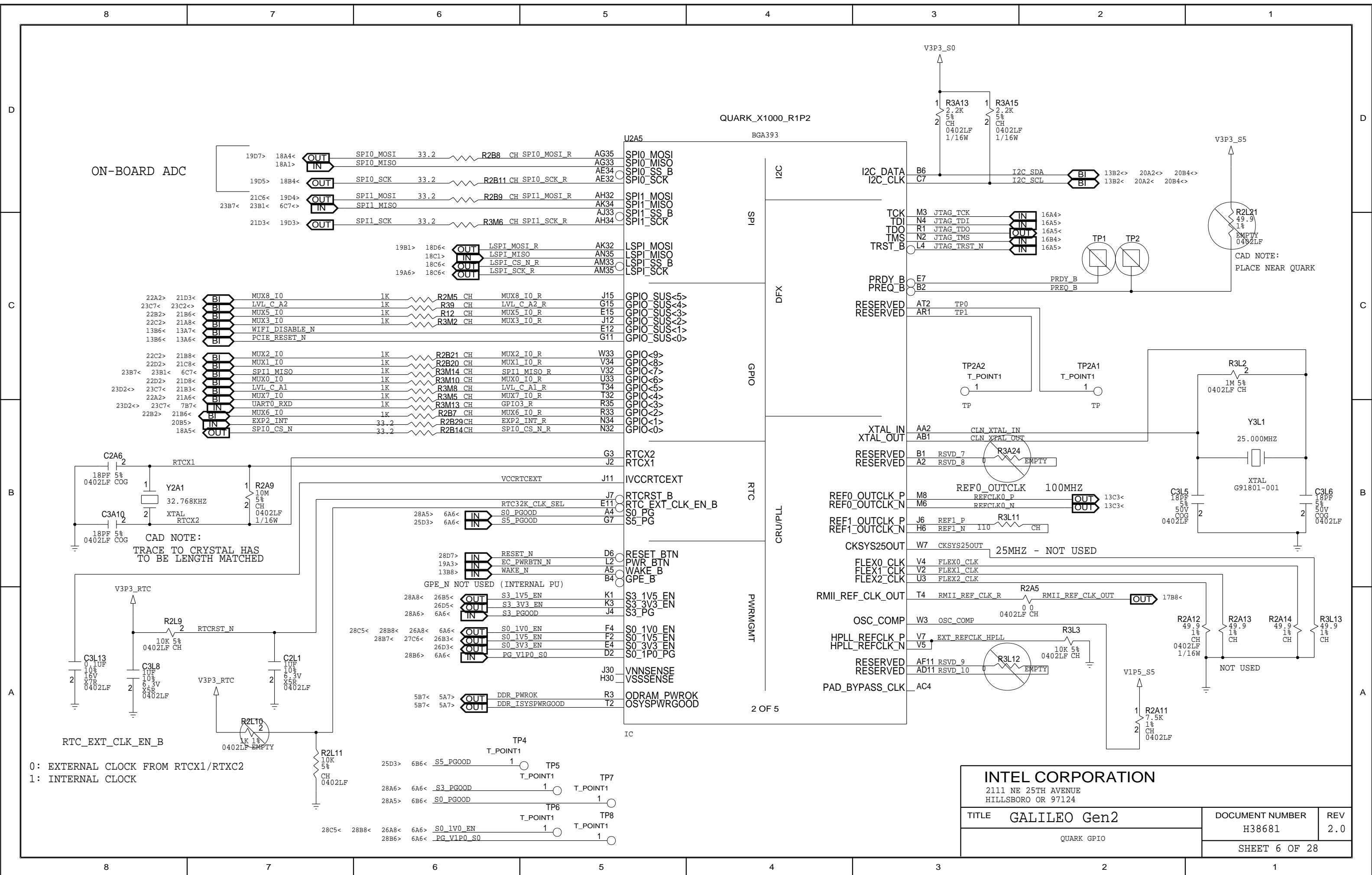
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INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 DISCLAIMER		REV: 2.0	SHEET 3 OF 28

Intel® Galileo™ Board Fab H (PVT)  
May/2014



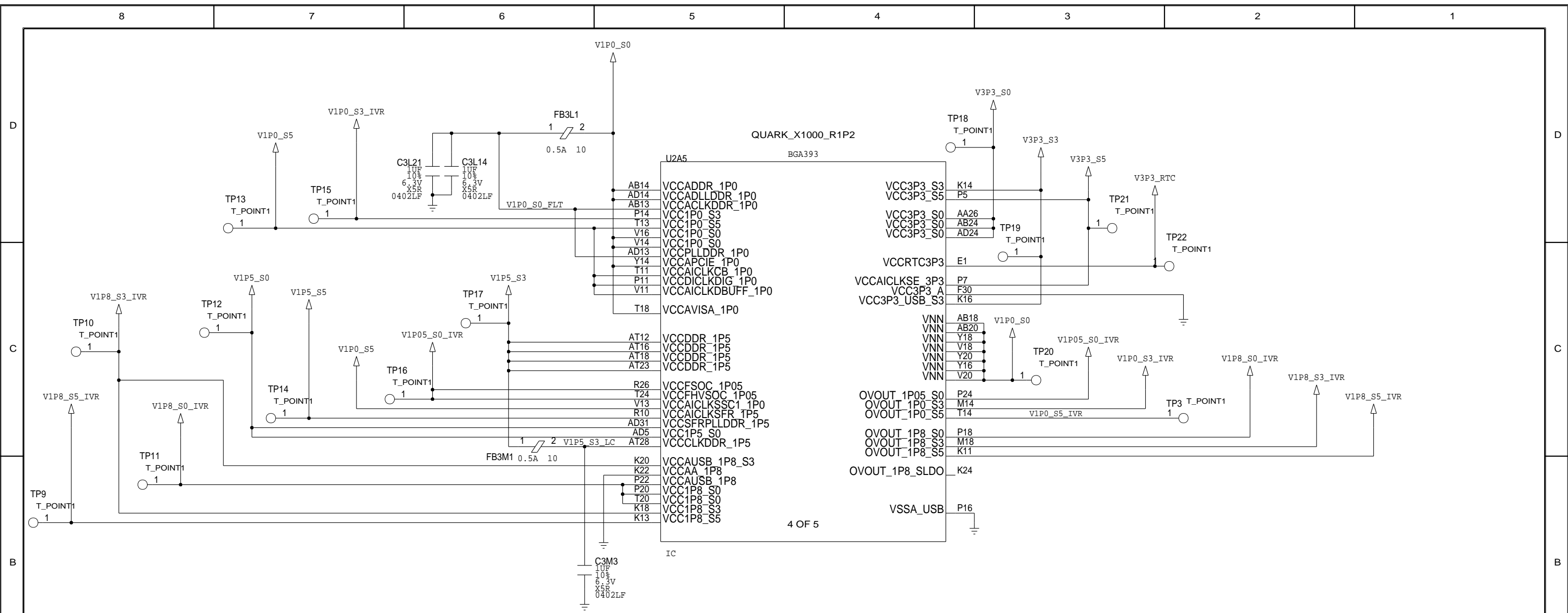




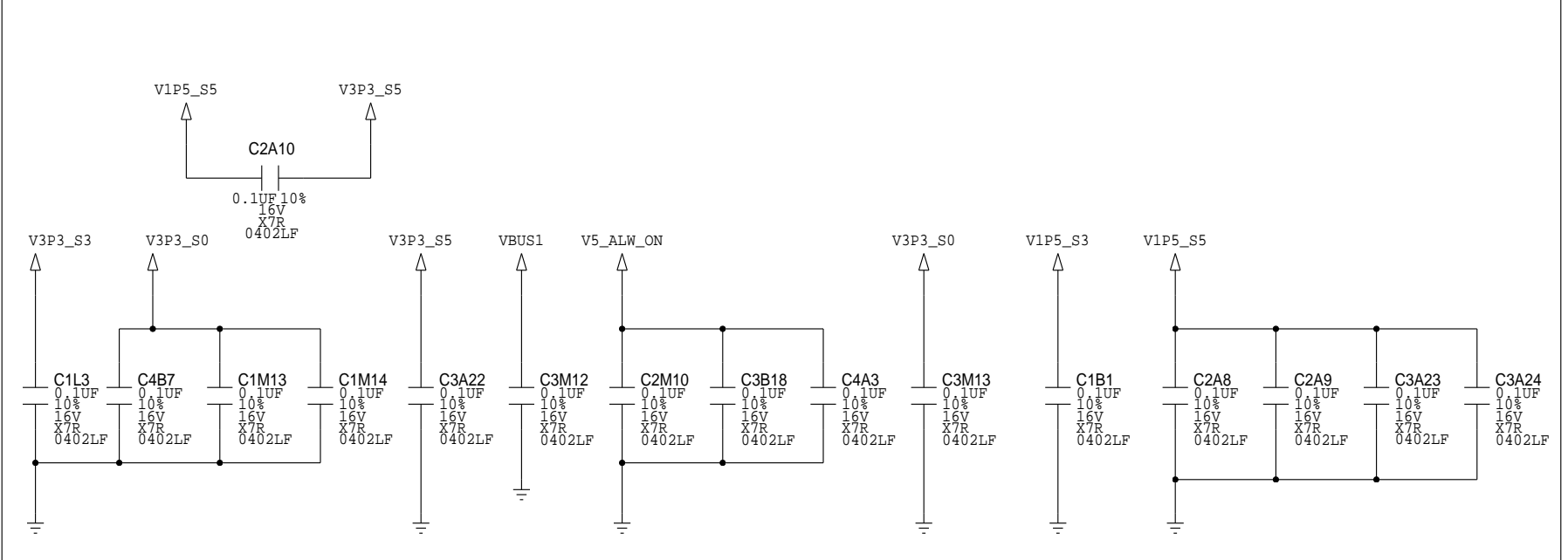
**INTEL CORPORATION**  
 2111 NE 25TH AVENUE  
 HILLSBORO OR 97124

TITLE	GALILEO Gen2	DOCUMENT NUMBER	H38681	REV	2.0
QUARK GPIO			SHEET 6 OF 28		



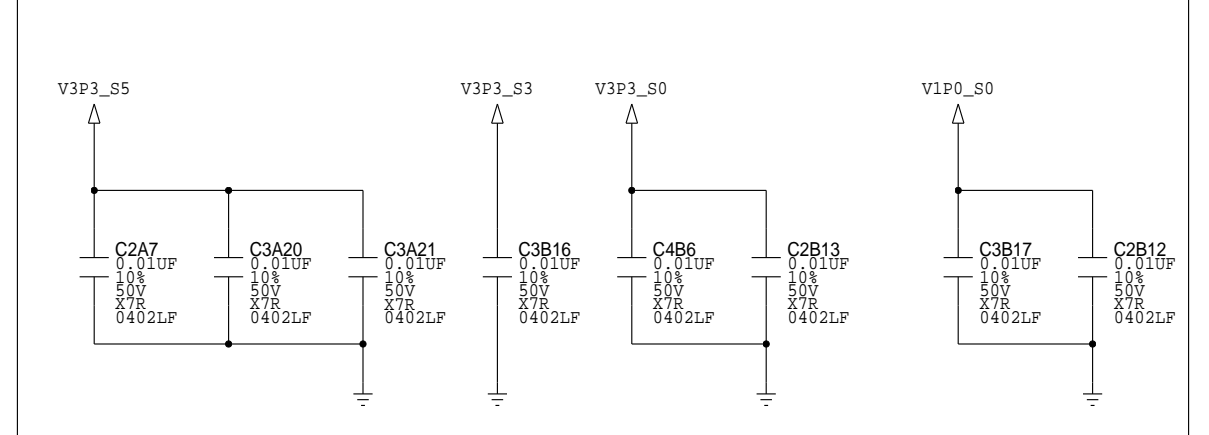


STITCHING CAPS FOR SPLIT PLANES

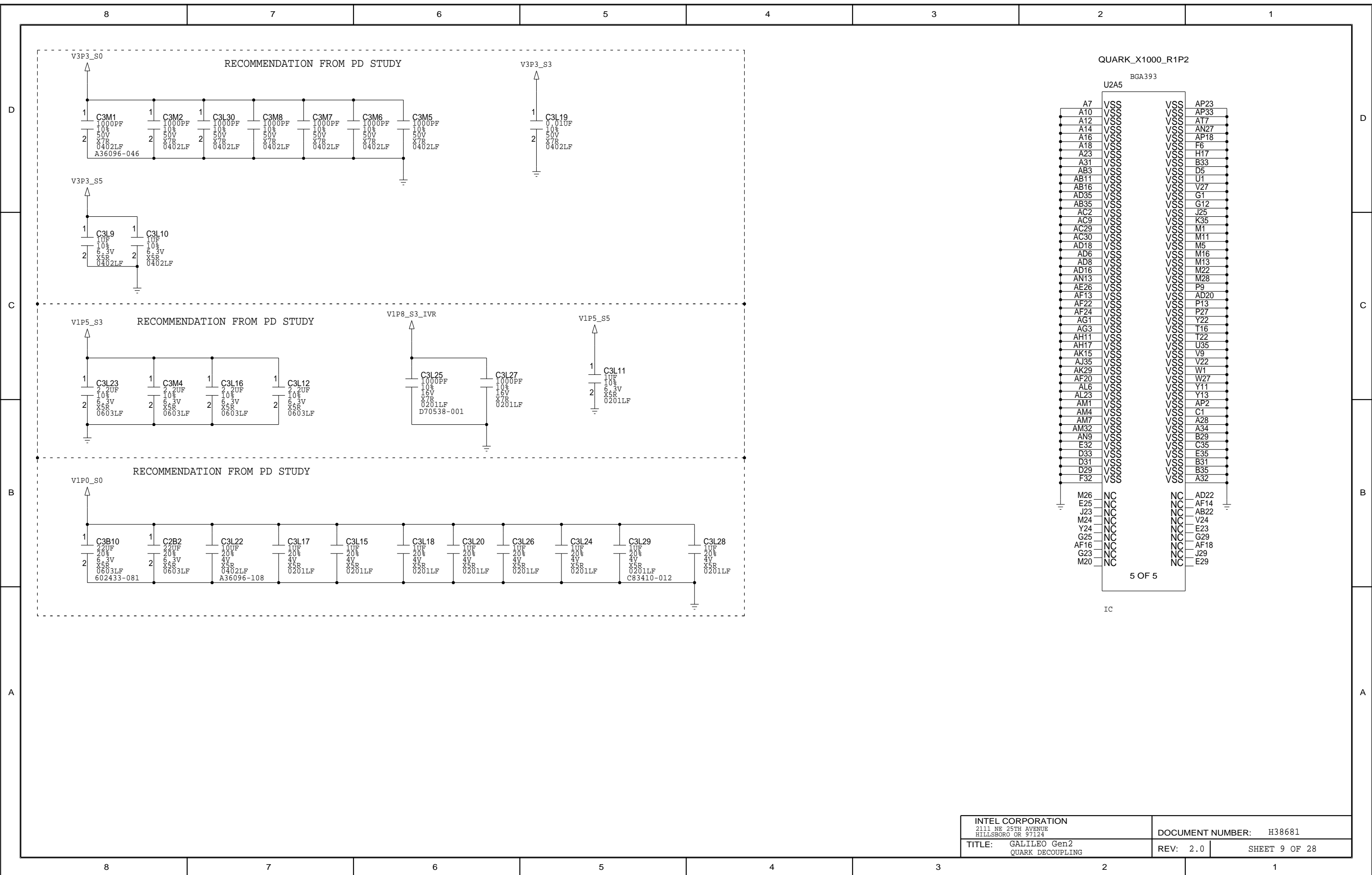


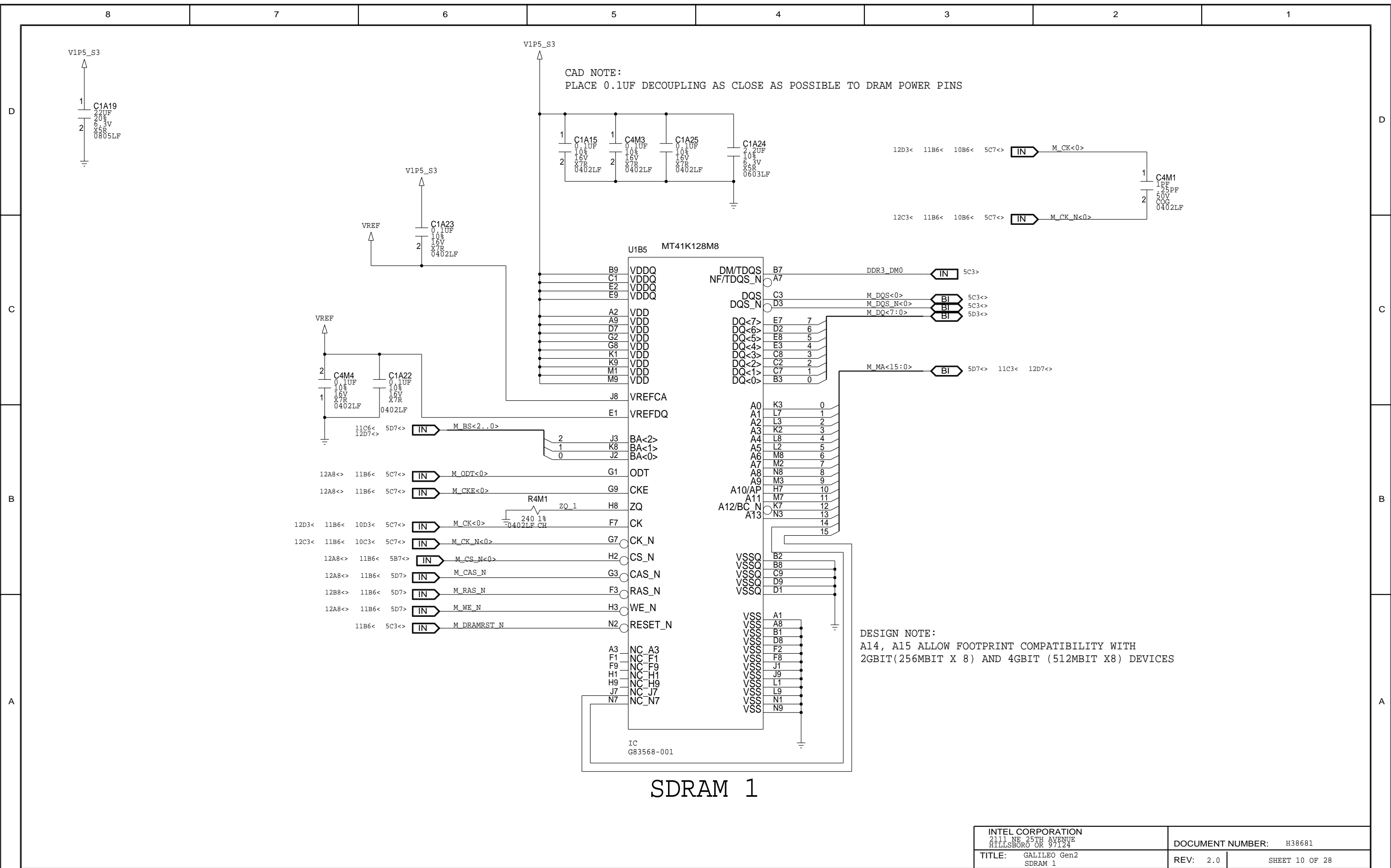
CAD NOTE  
PLACE AS CLOSE AS POSSIBLE TO SIGNAL VIAS

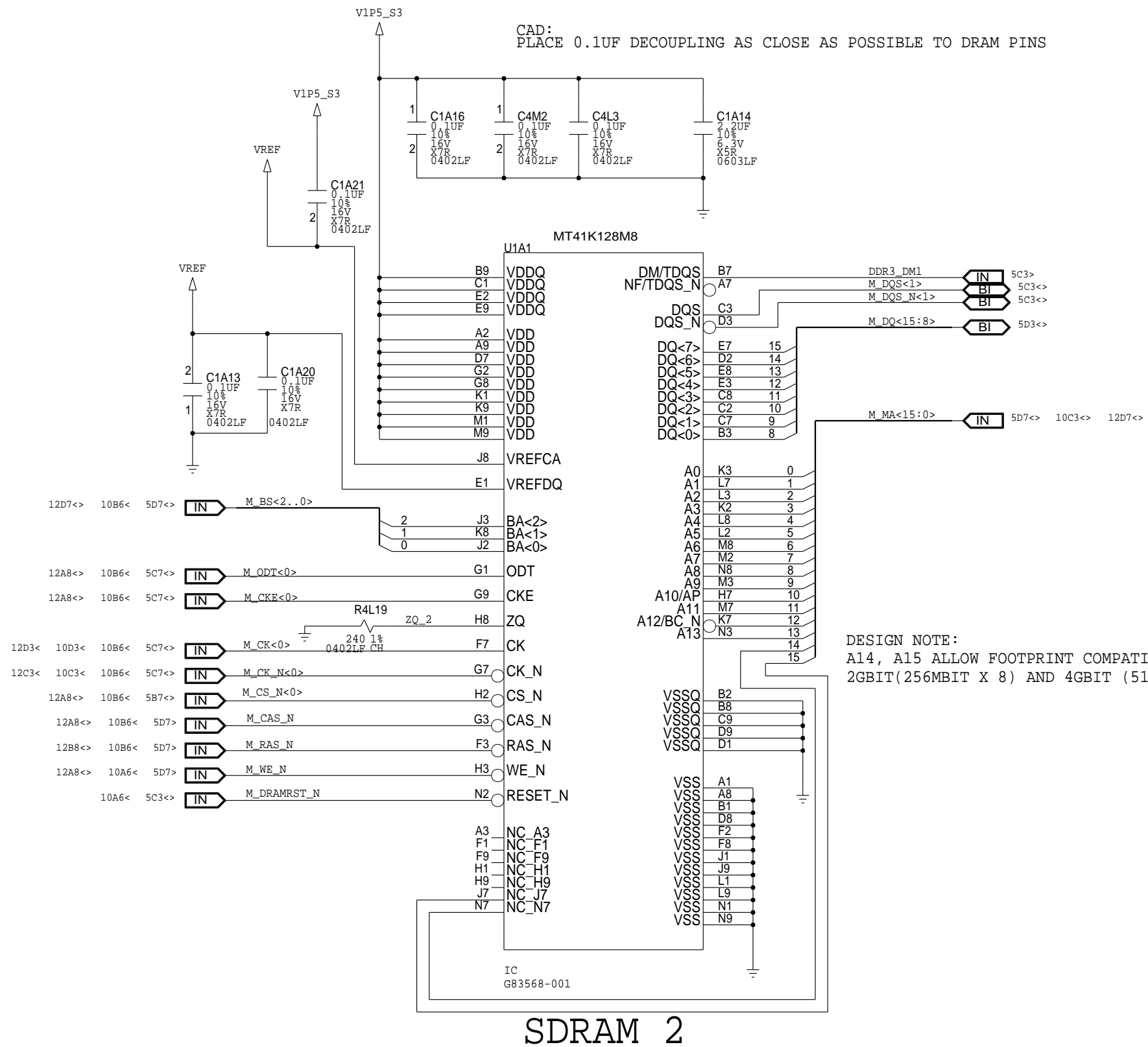
STITCHING CAPS FOR SIGNAL REFERENCE TRANSITION

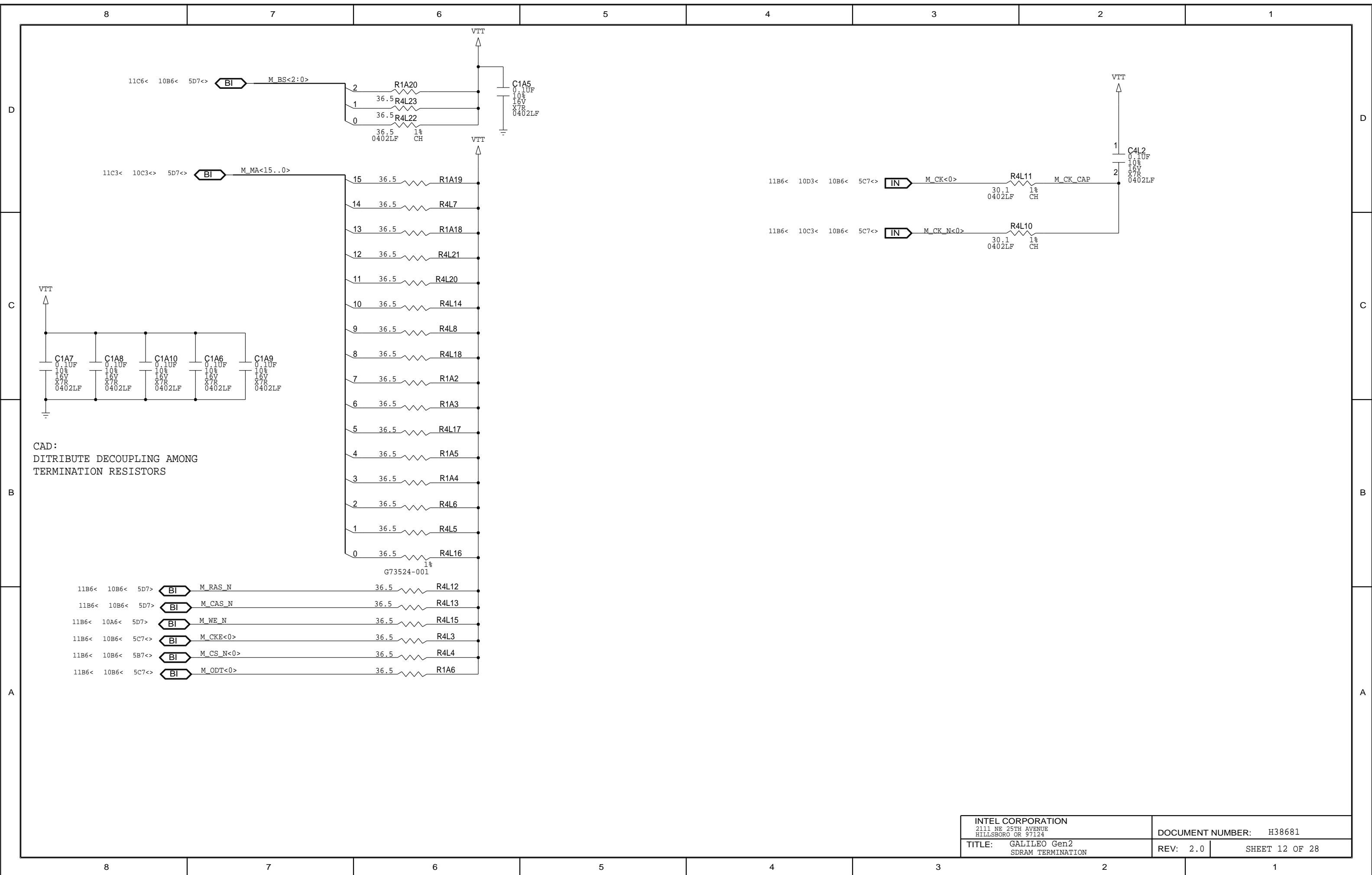




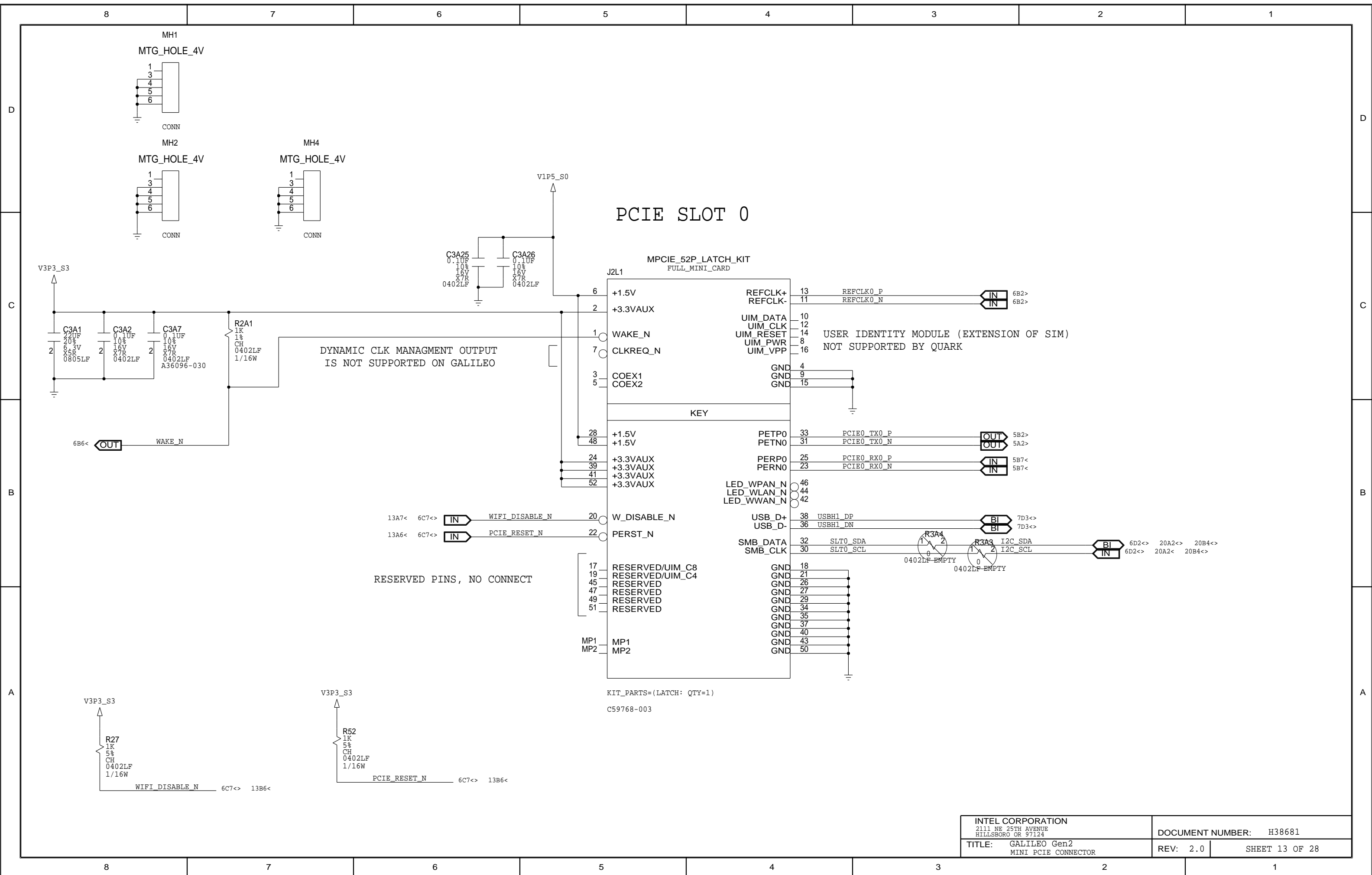








CAD:  
DITRIBUTE DECOUPLING AMONG  
TERMINATION RESISTORS



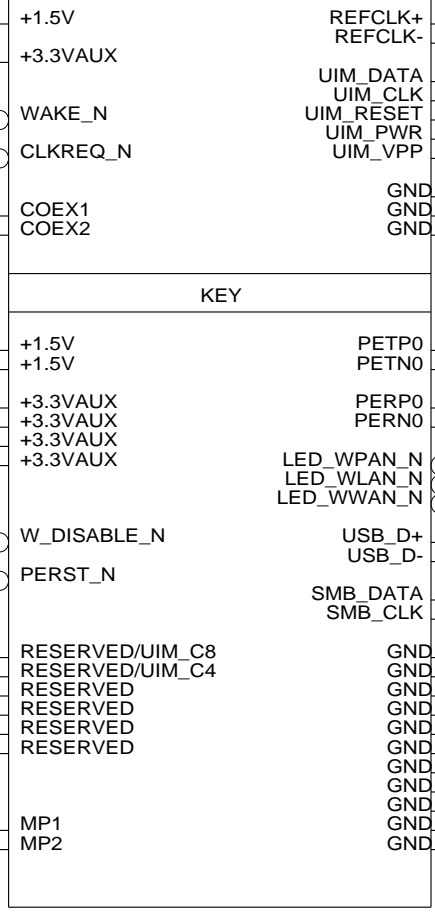
DYNAMIC CLK MANAGEMENT OUTPUT  
IS NOT SUPPORTED ON GALILEO

RESERVED PINS, NO CONNECT

### PCIE SLOT 0

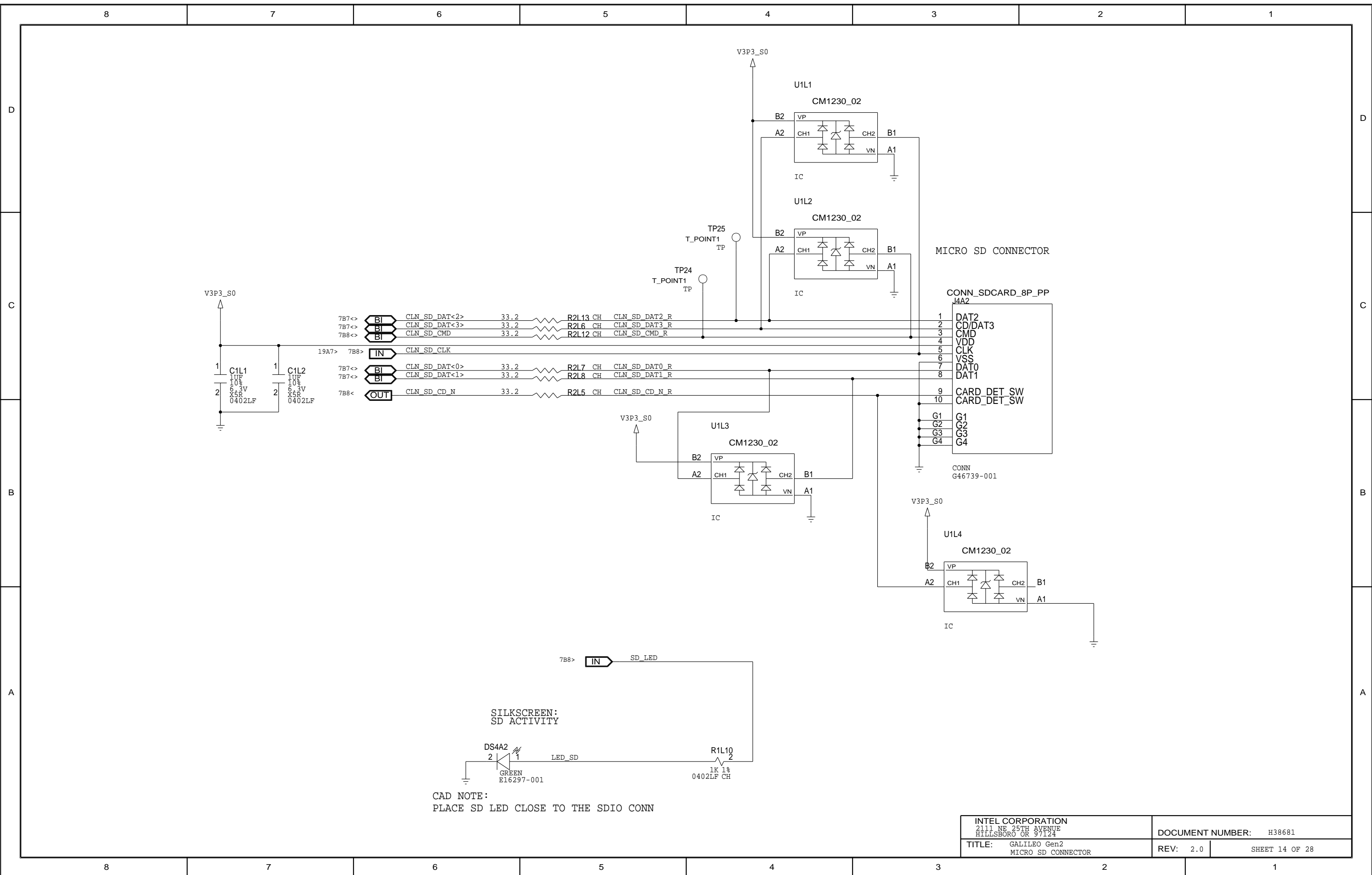
MPCIE\_52P\_LATCH\_KIT  
FULL\_MINI\_CARD

J2L1



KIT\_PARTS=(LATCH: QTY=1)  
C59768-003

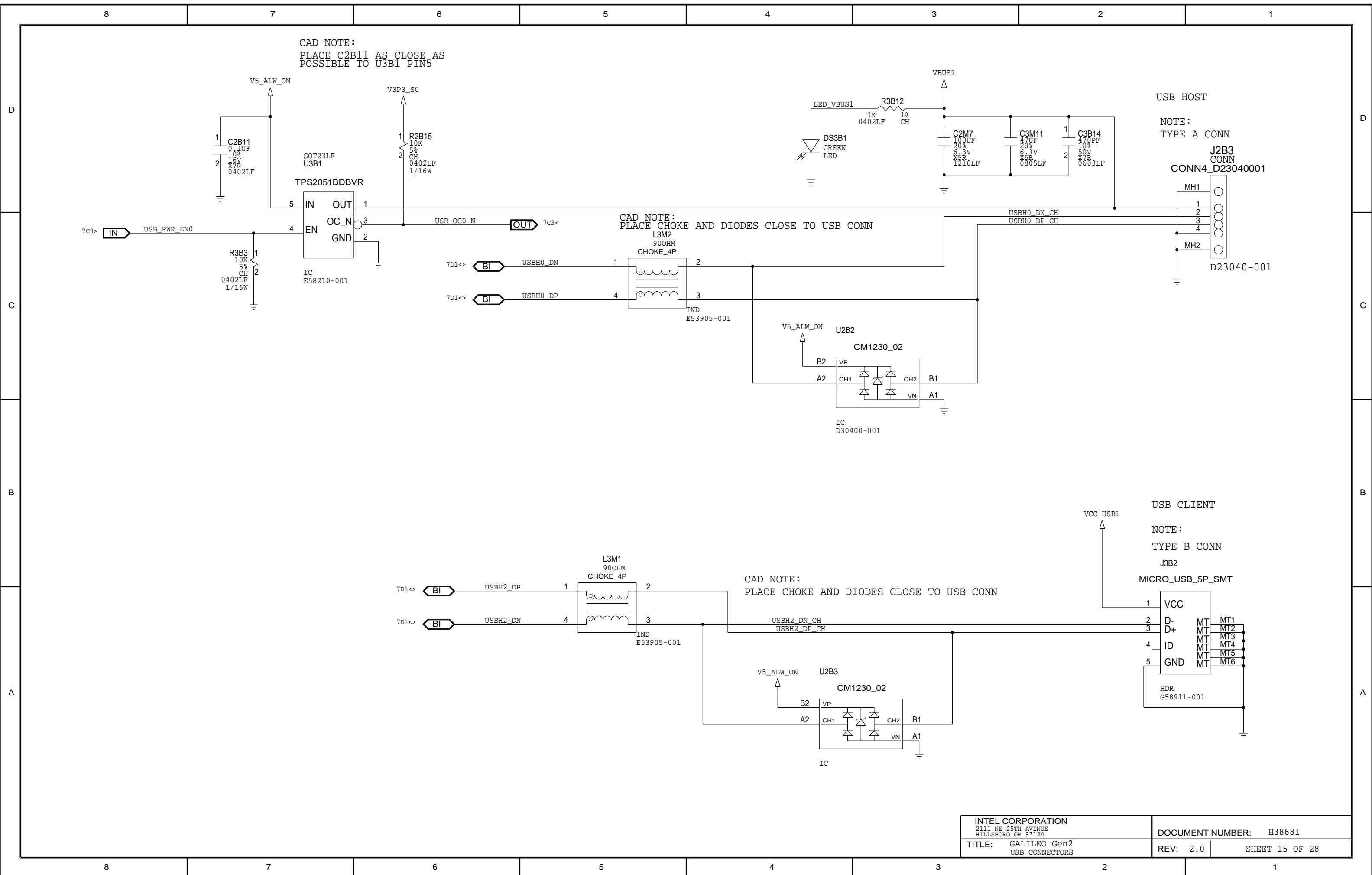
INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 MINI PCIE CONNECTOR		REV: 2.0	SHEET 13 OF 28

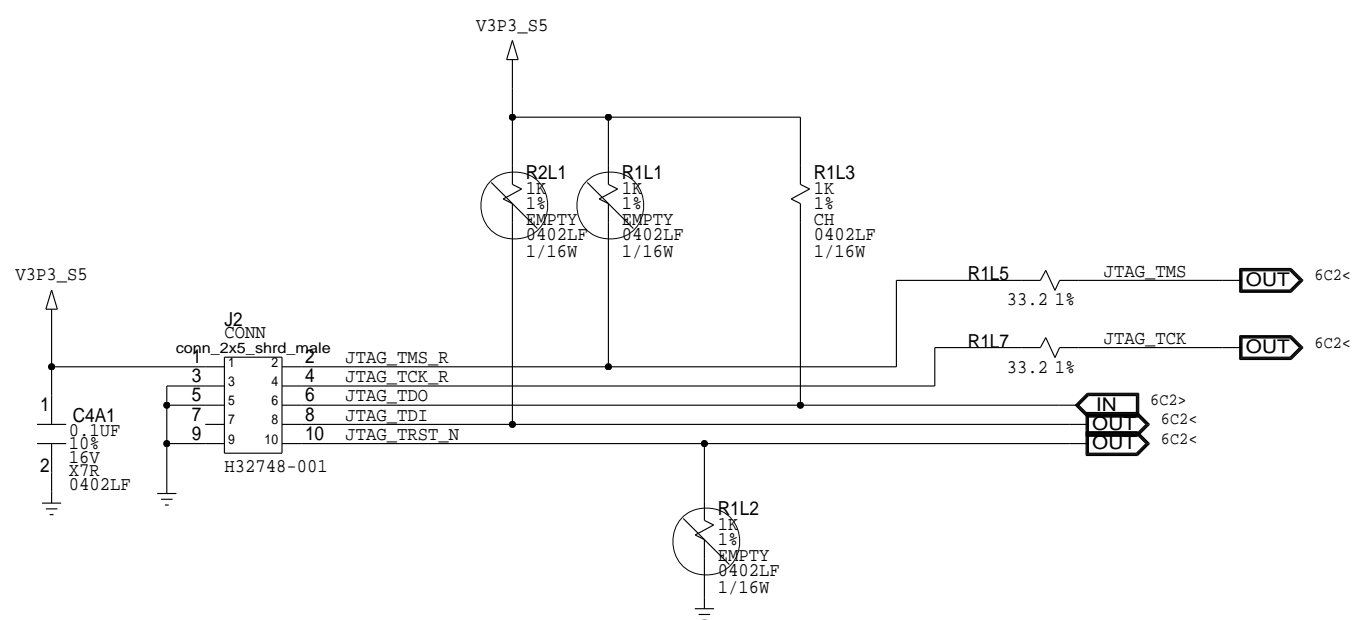
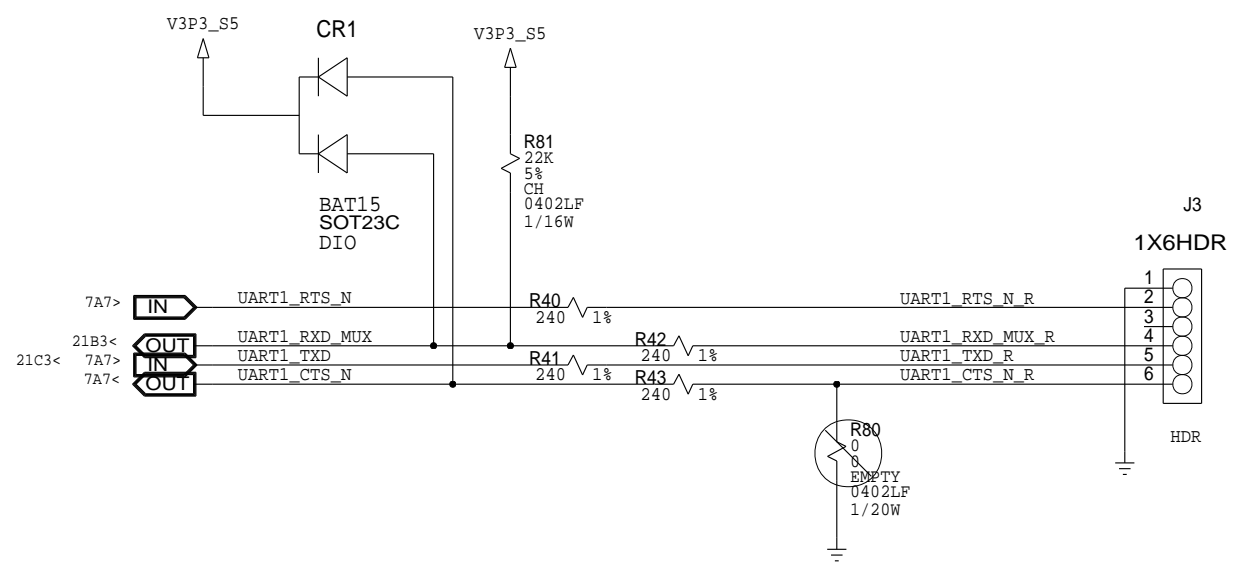


SILKSCREEN:  
SD ACTIVITY

CAD NOTE:  
PLACE SD LED CLOSE TO THE SDIO CONN

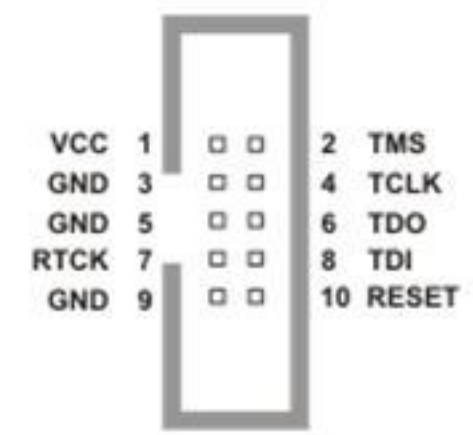
INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 MICRO SD CONNECTOR		REV: 2.0	SHEET 14 OF 28



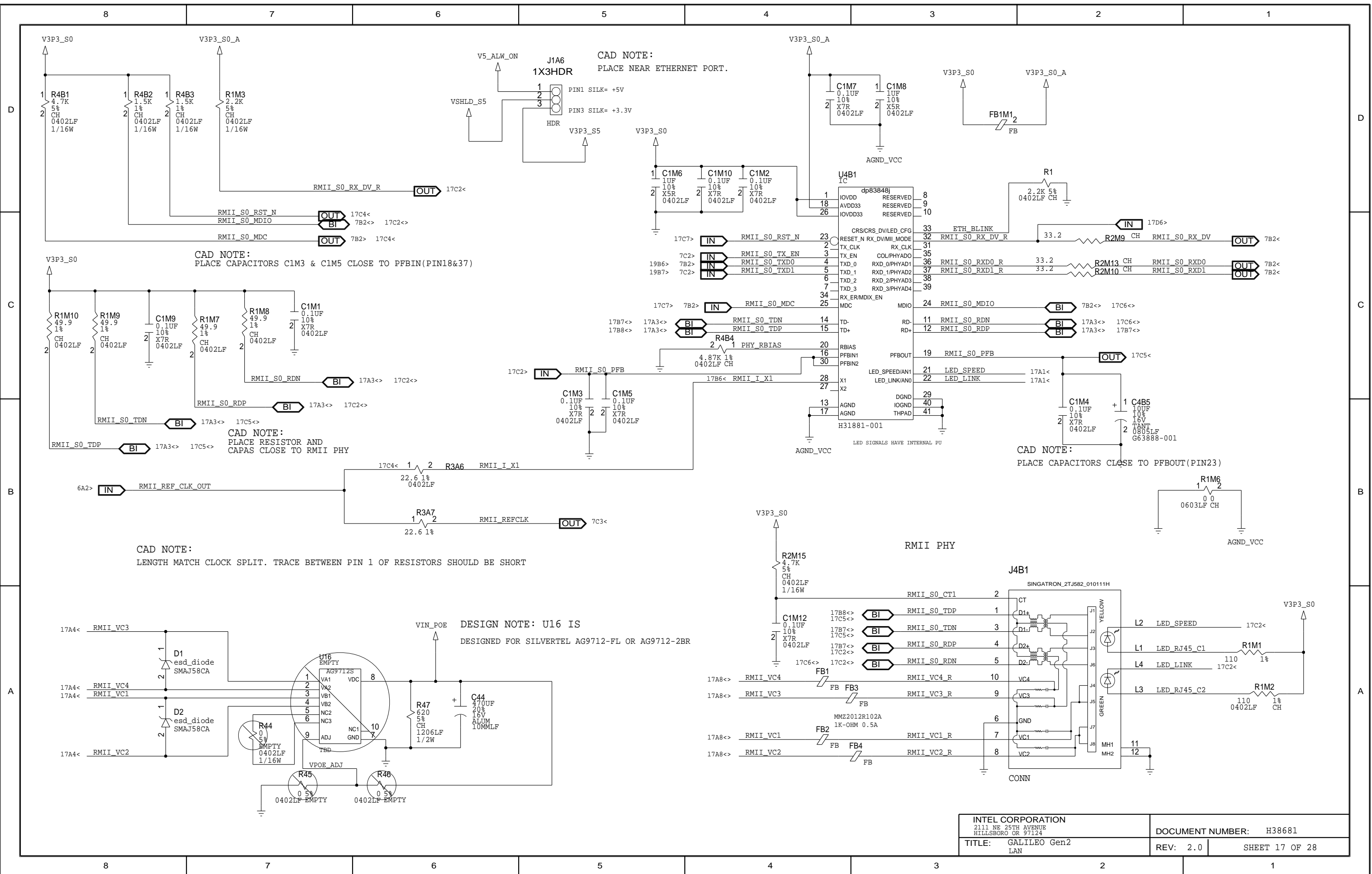


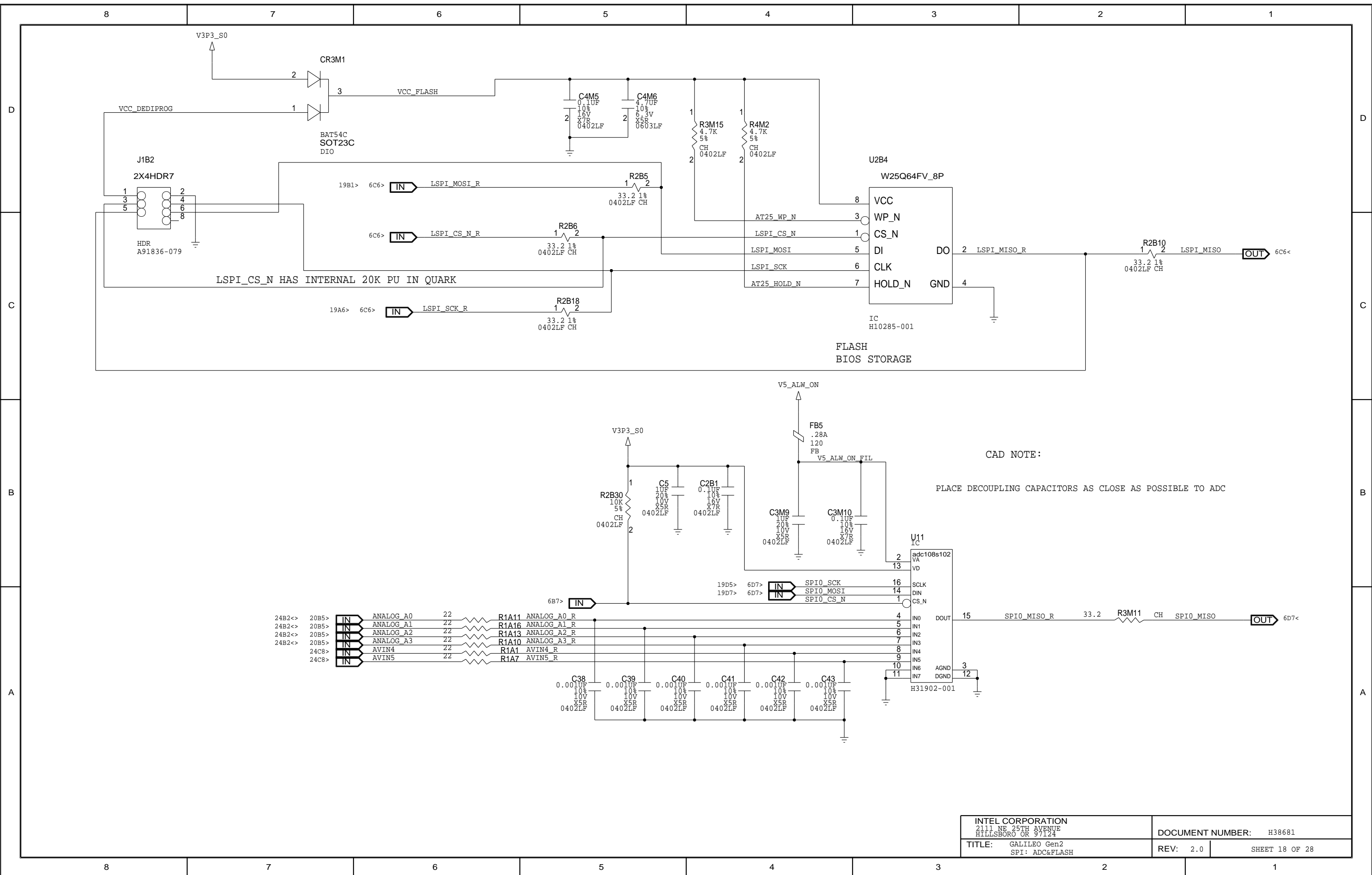
CAD NOTE:  
PLACE CONNECTOR ON SOLDER-SIDE.

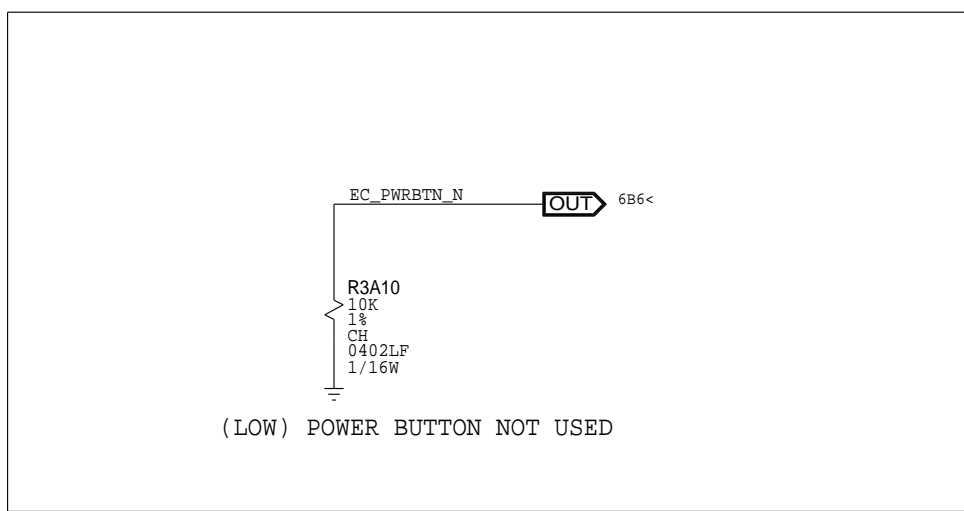
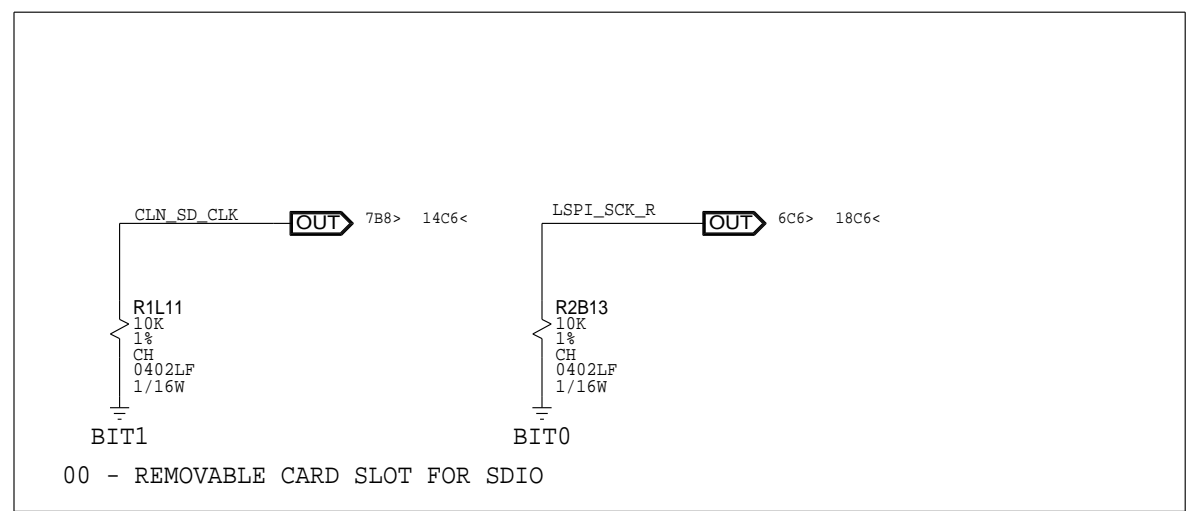
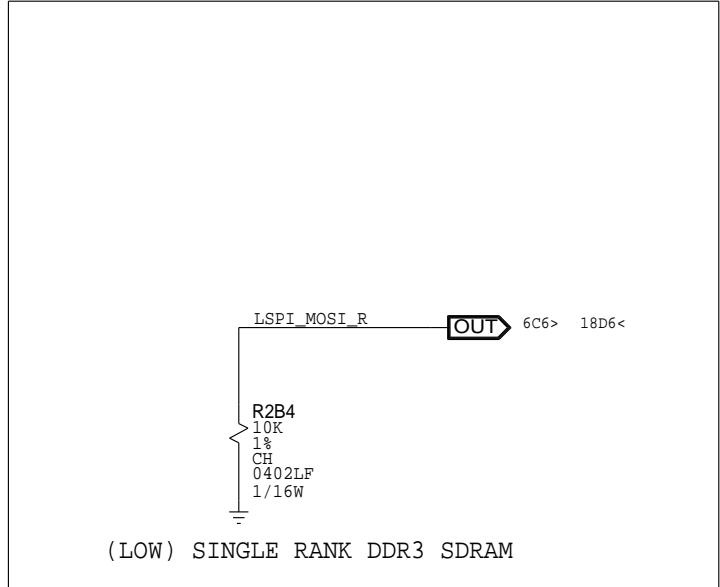
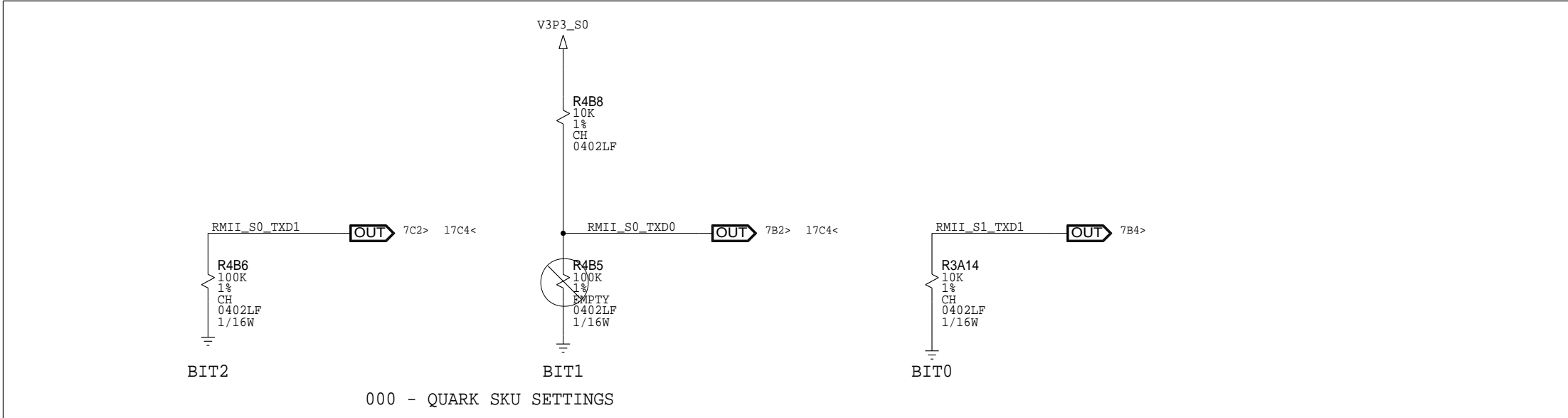
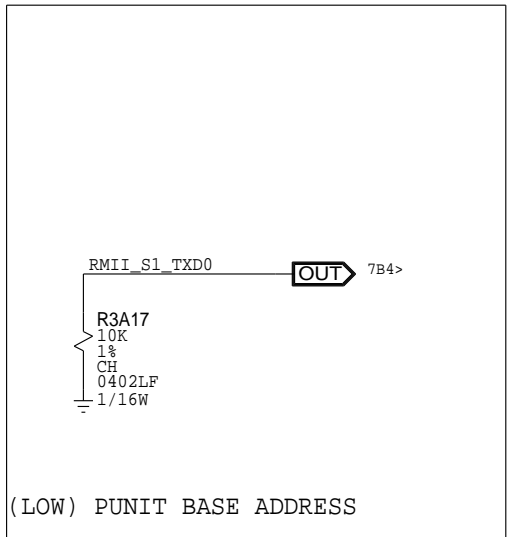
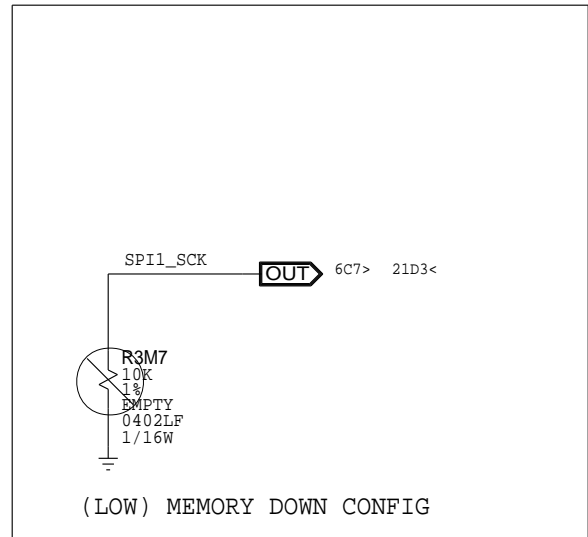
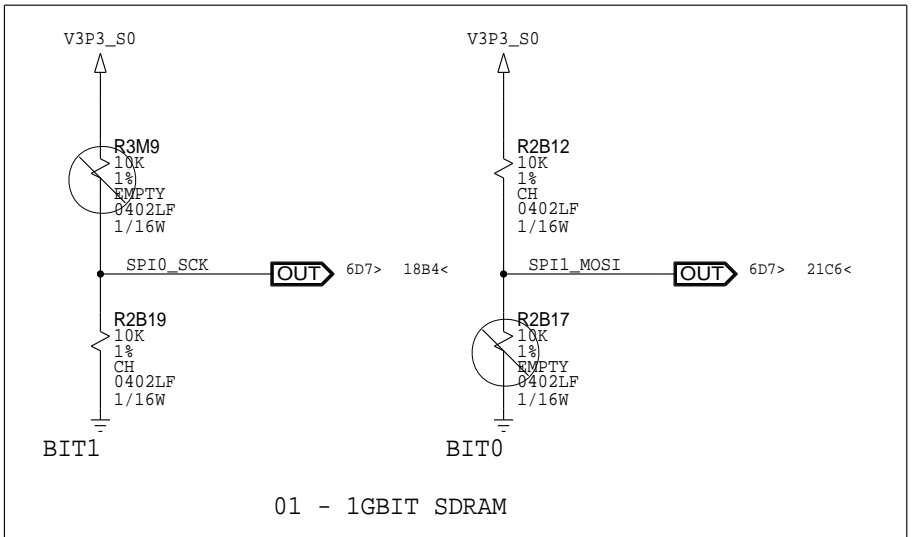
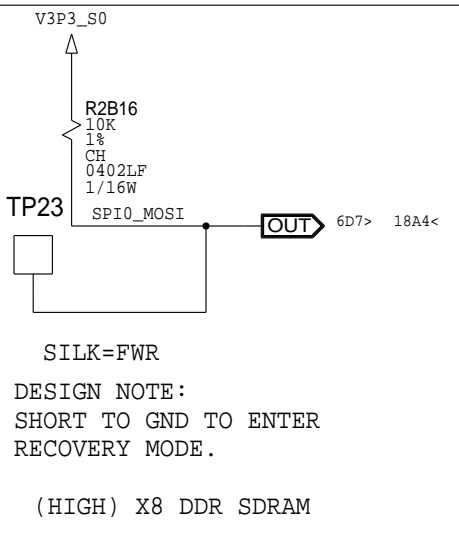
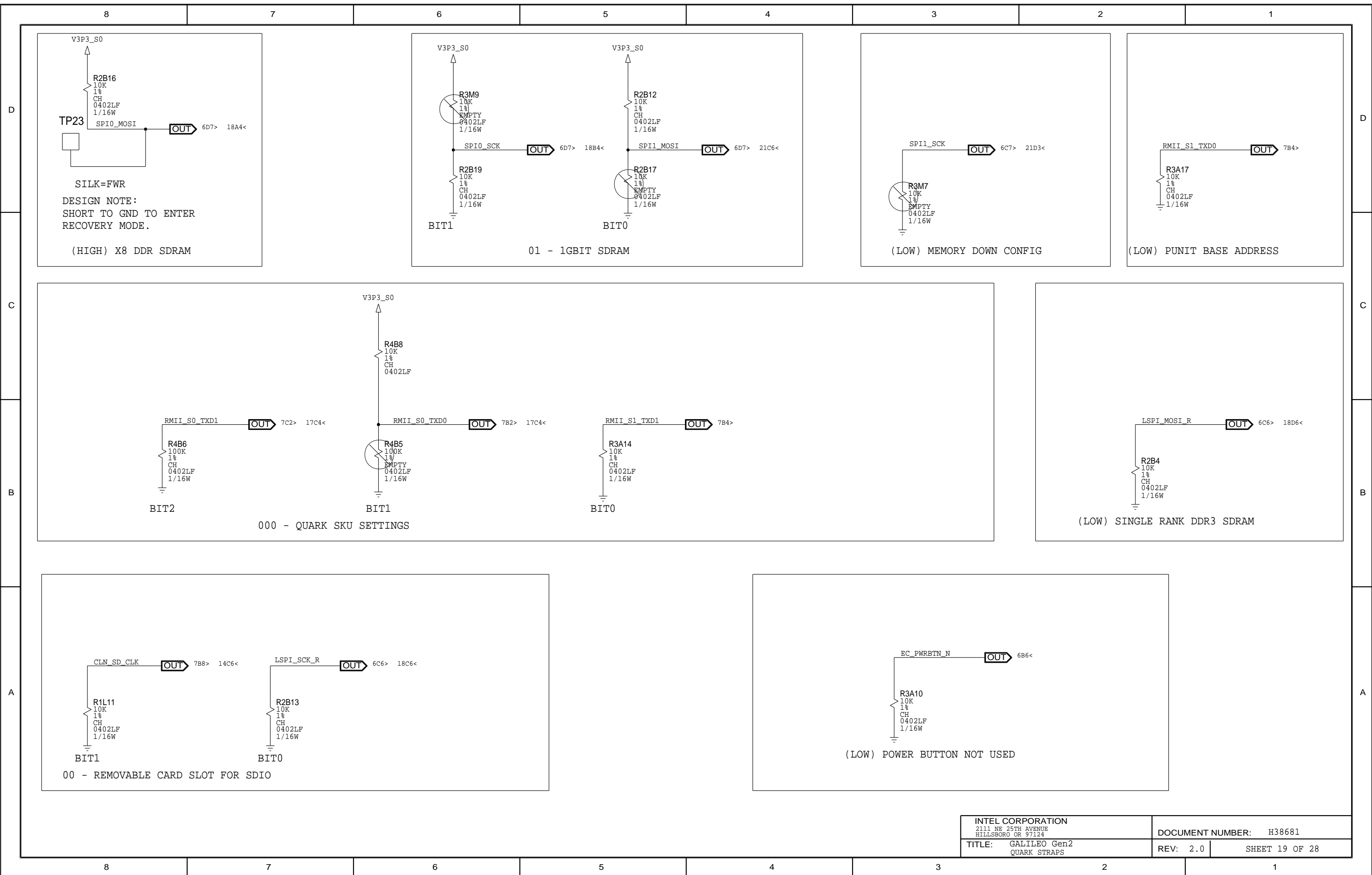
### MINI-JTAG CONNECTOR

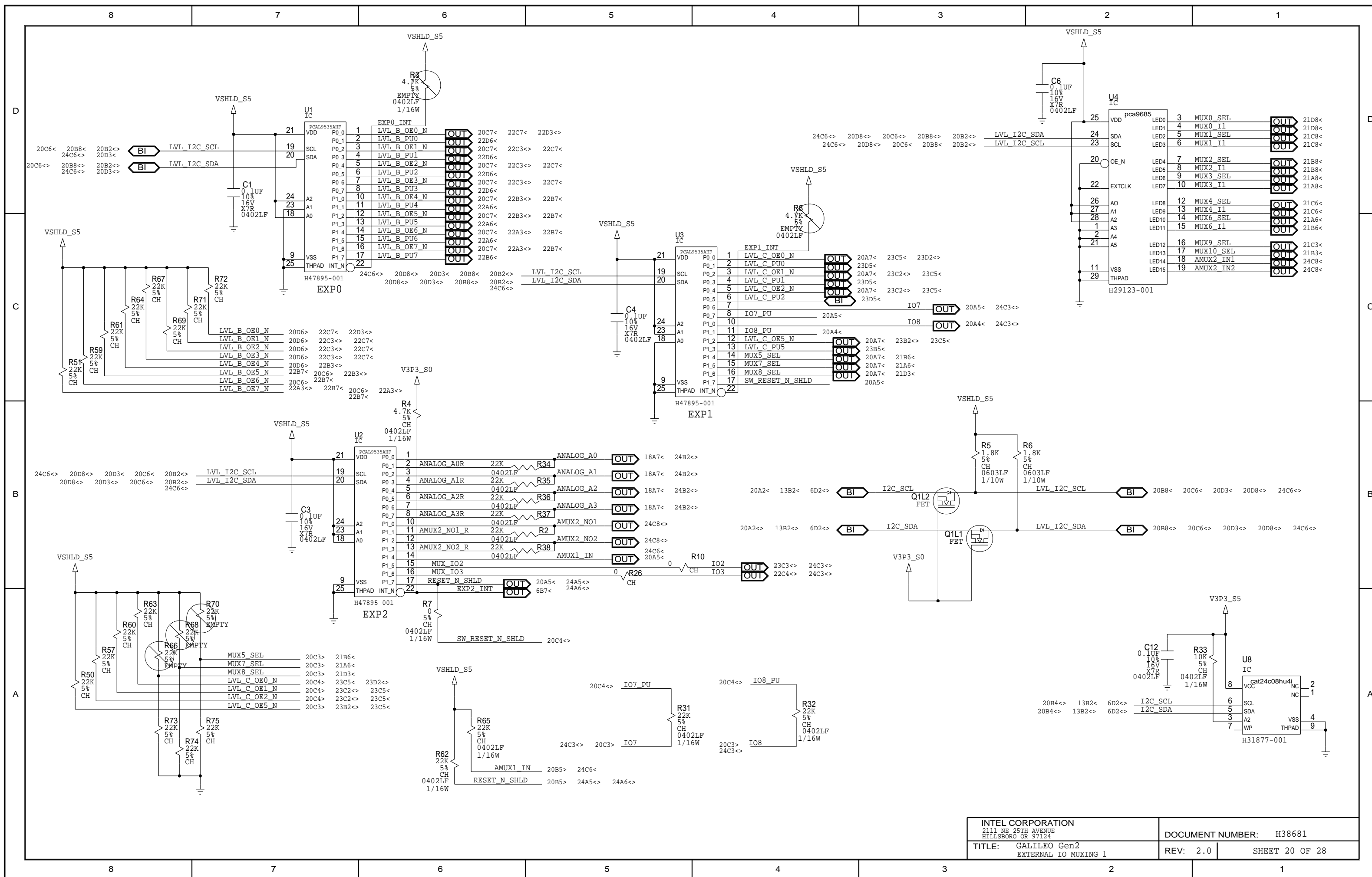


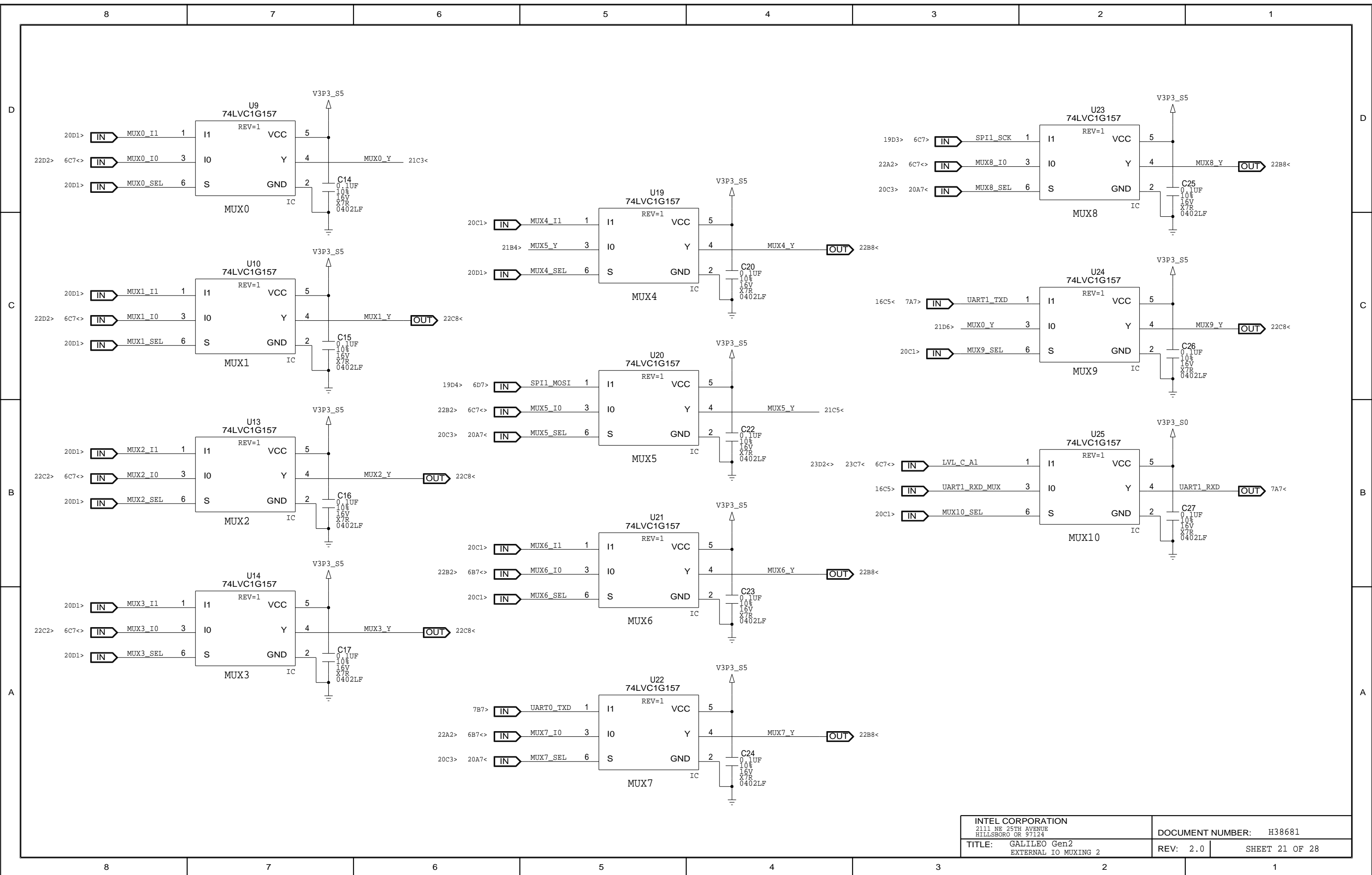


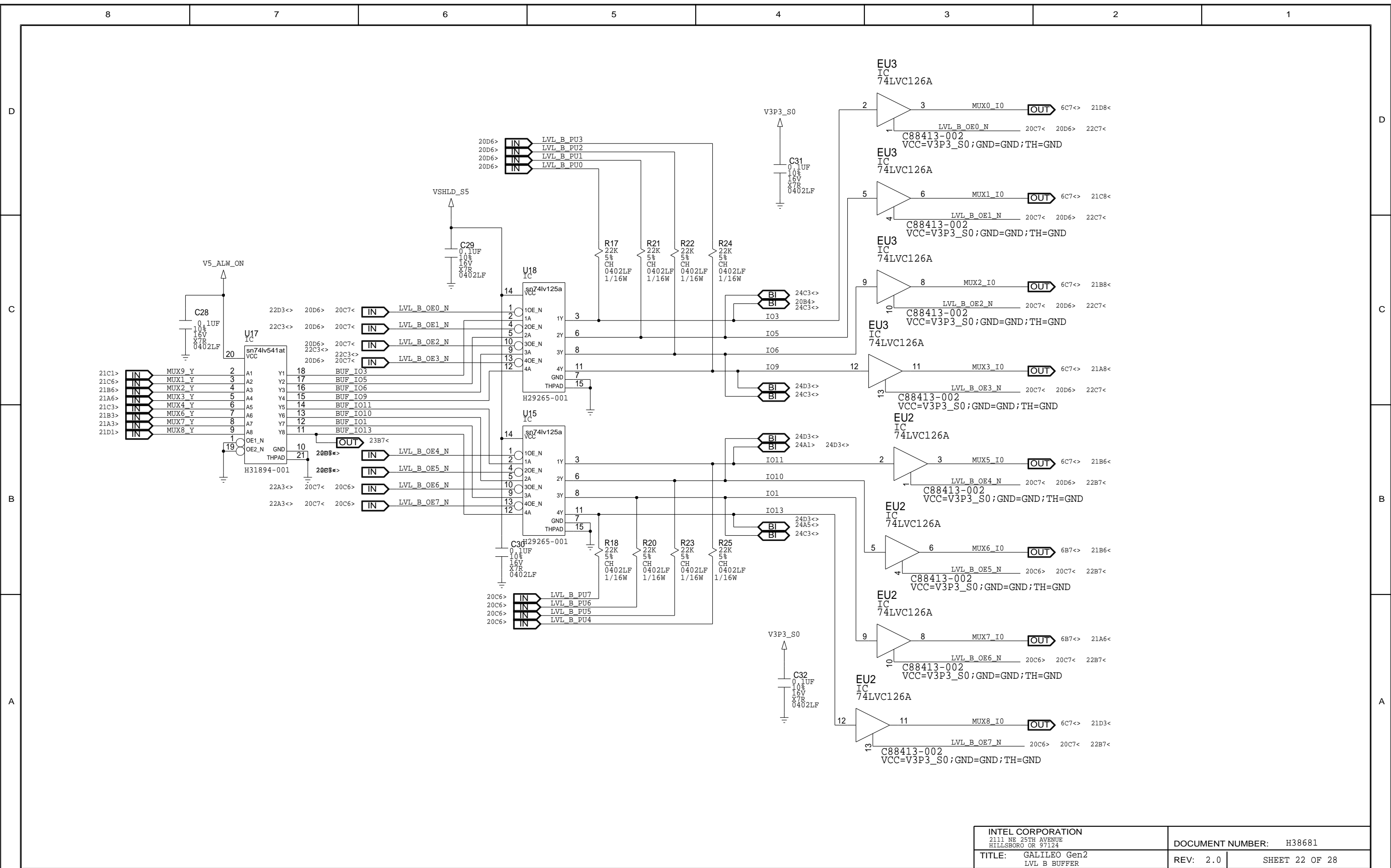


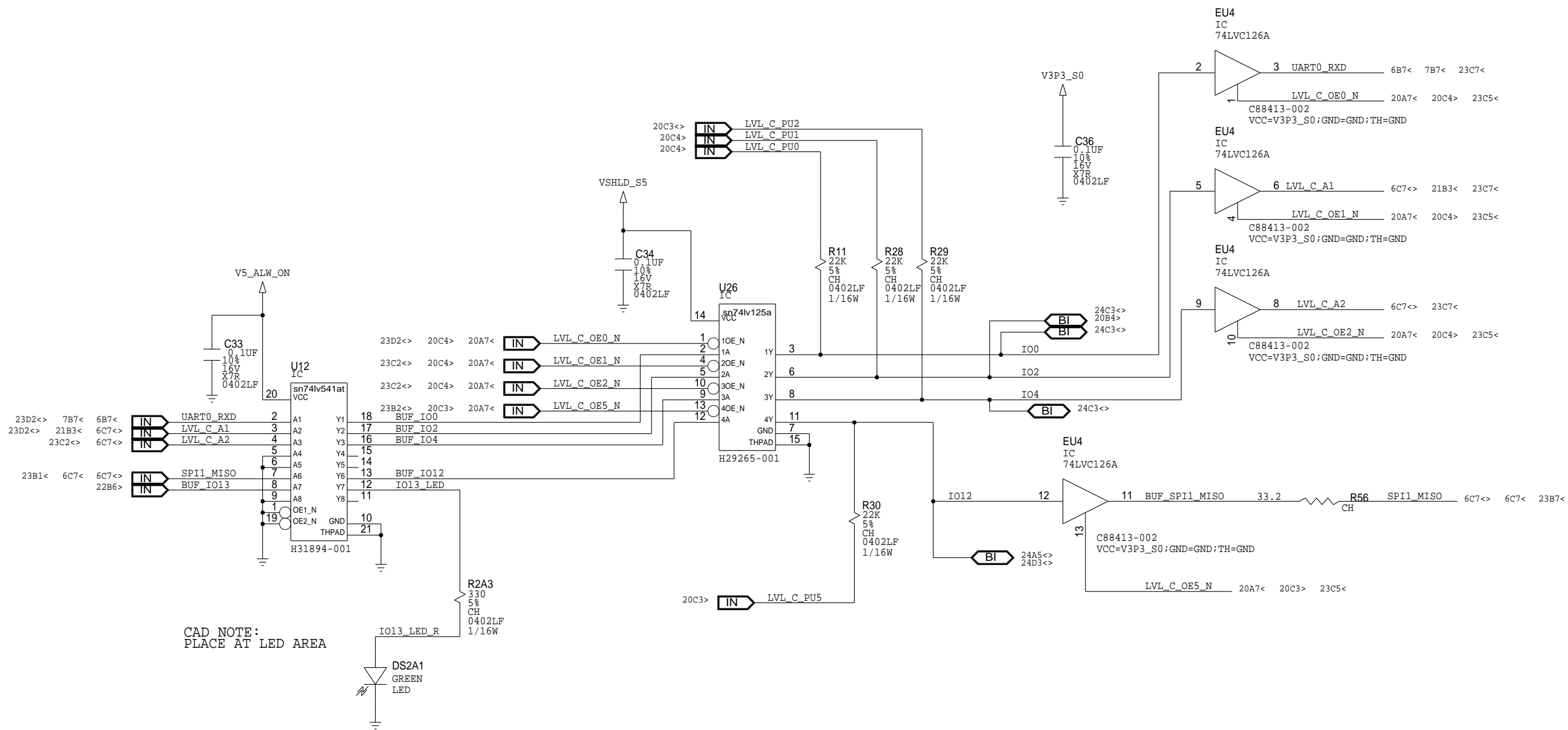


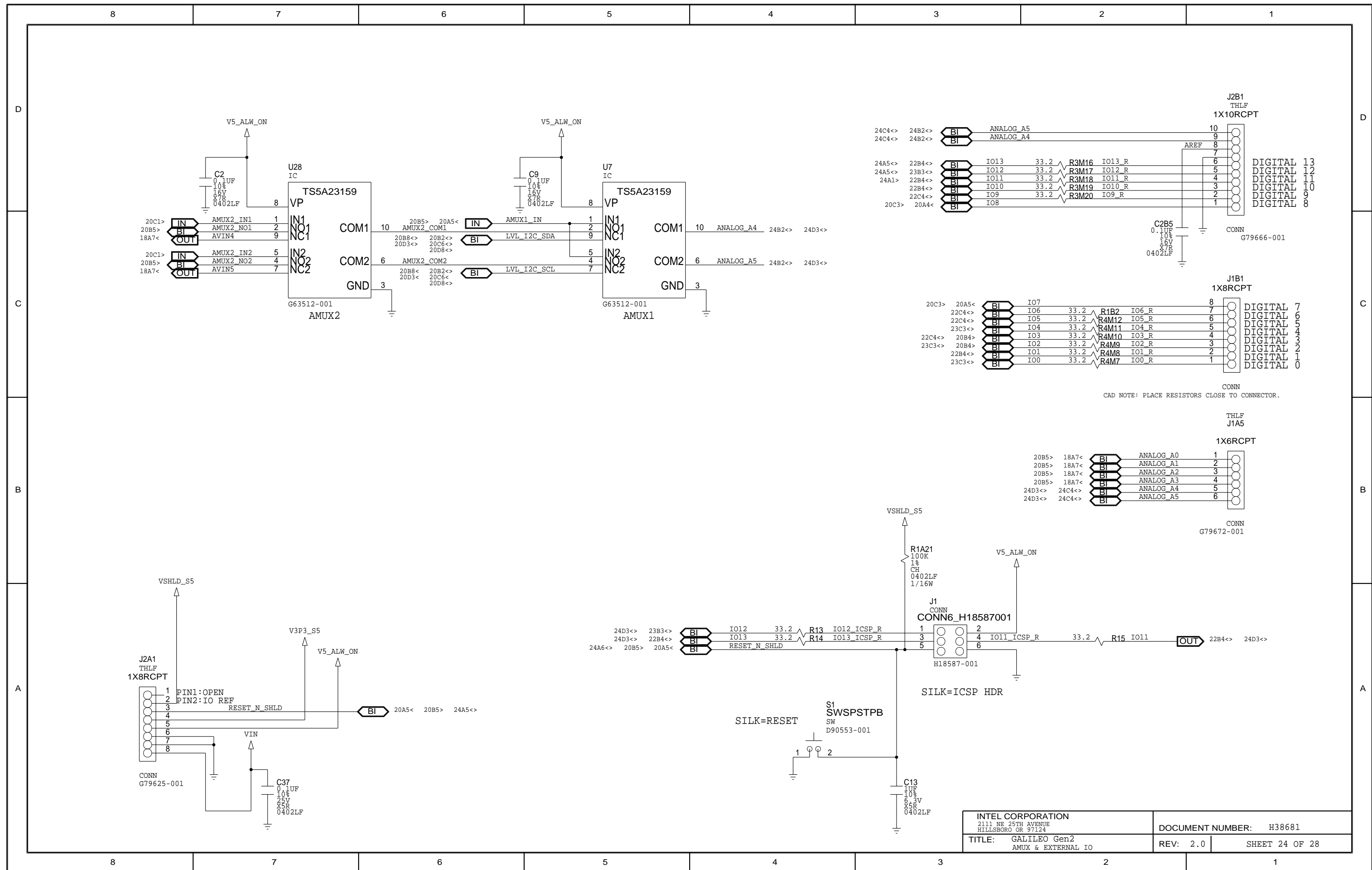








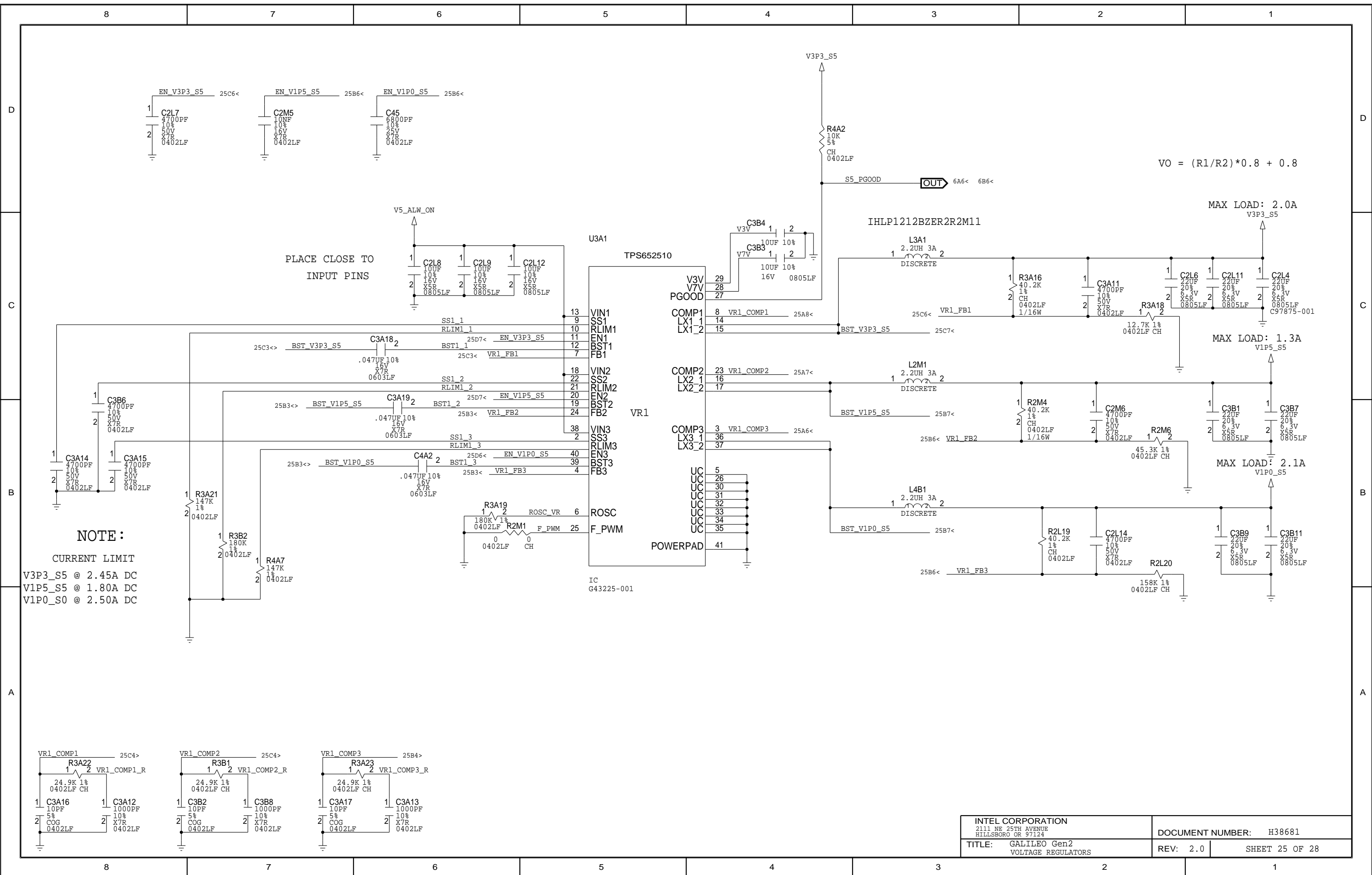




CAD NOTE: PLACE RESISTORS CLOSE TO CONNECTOR.

INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 AMUX & EXTERNAL IO		REV: 2.0	SHEET 24 OF 28



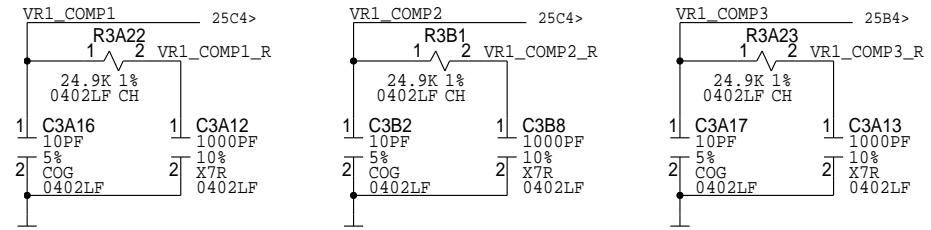


$$VO = (R1/R2) * 0.8 + 0.8$$

PLACE CLOSE TO  
INPUT PINS

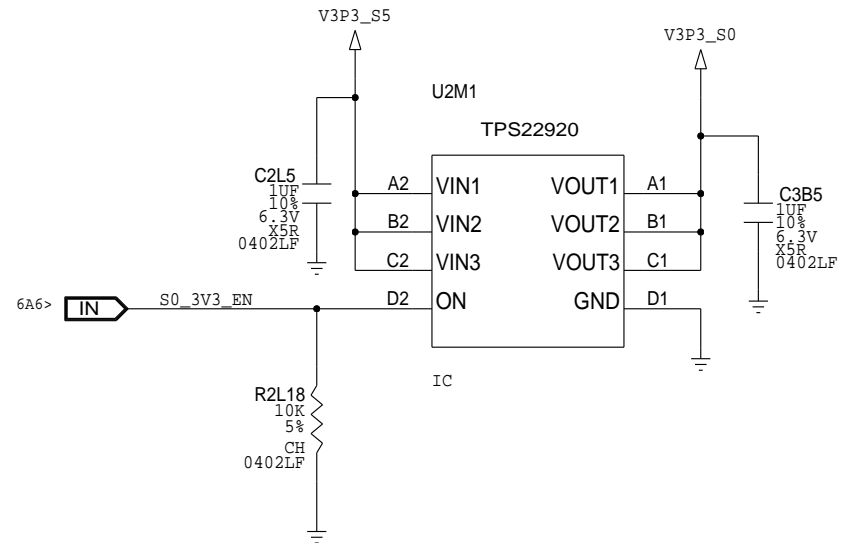
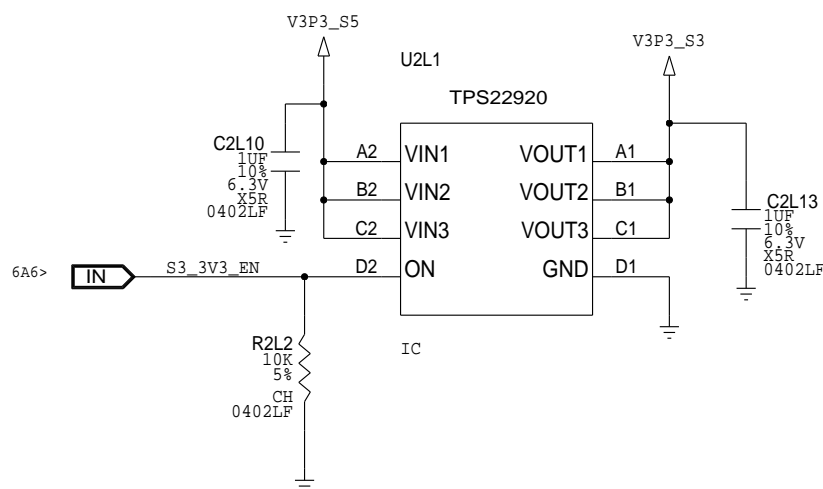
**NOTE :**

- CURRENT LIMIT
- V3P3\_S5 @ 2.45A DC
- V1P5\_S5 @ 1.80A DC
- V1P0\_S5 @ 2.50A DC

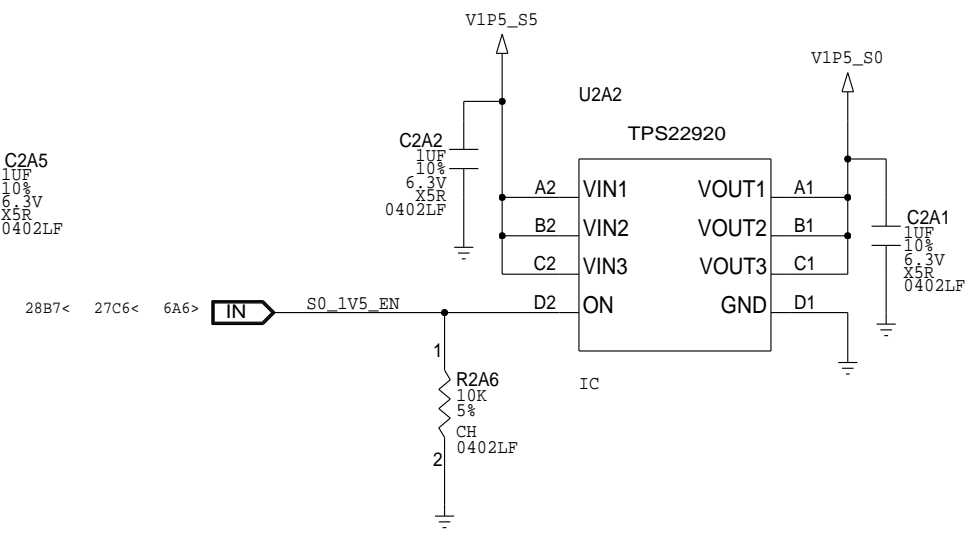
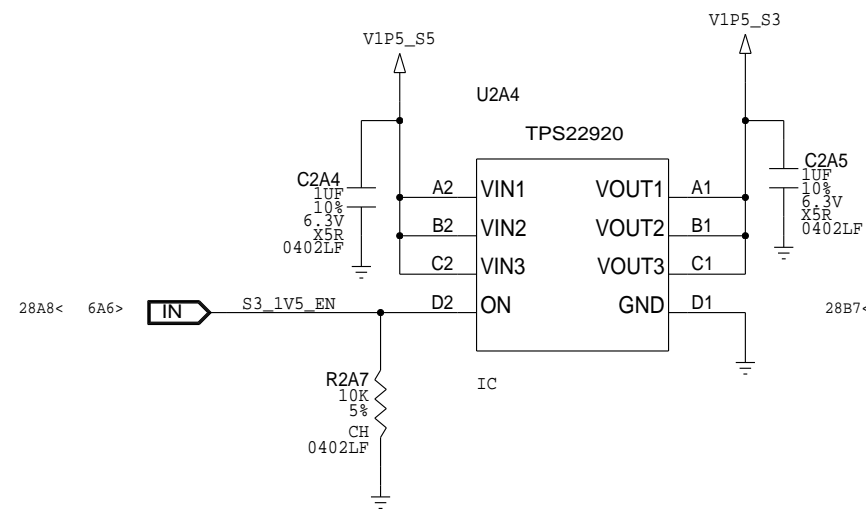


8 7 6 5 4 3 2 1

V3P3\_S5 IS GENERATED W ON-BRD REGULATOR



V1P5\_S5 IS GENERATED W ON-BRD REGULATOR

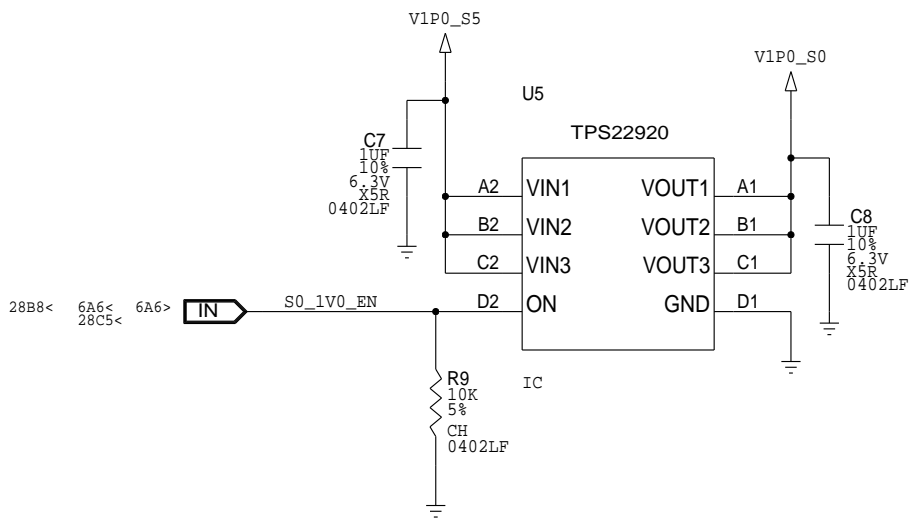


V1P0\_S5 IS GENERATED W ON-BRD REGULATOR

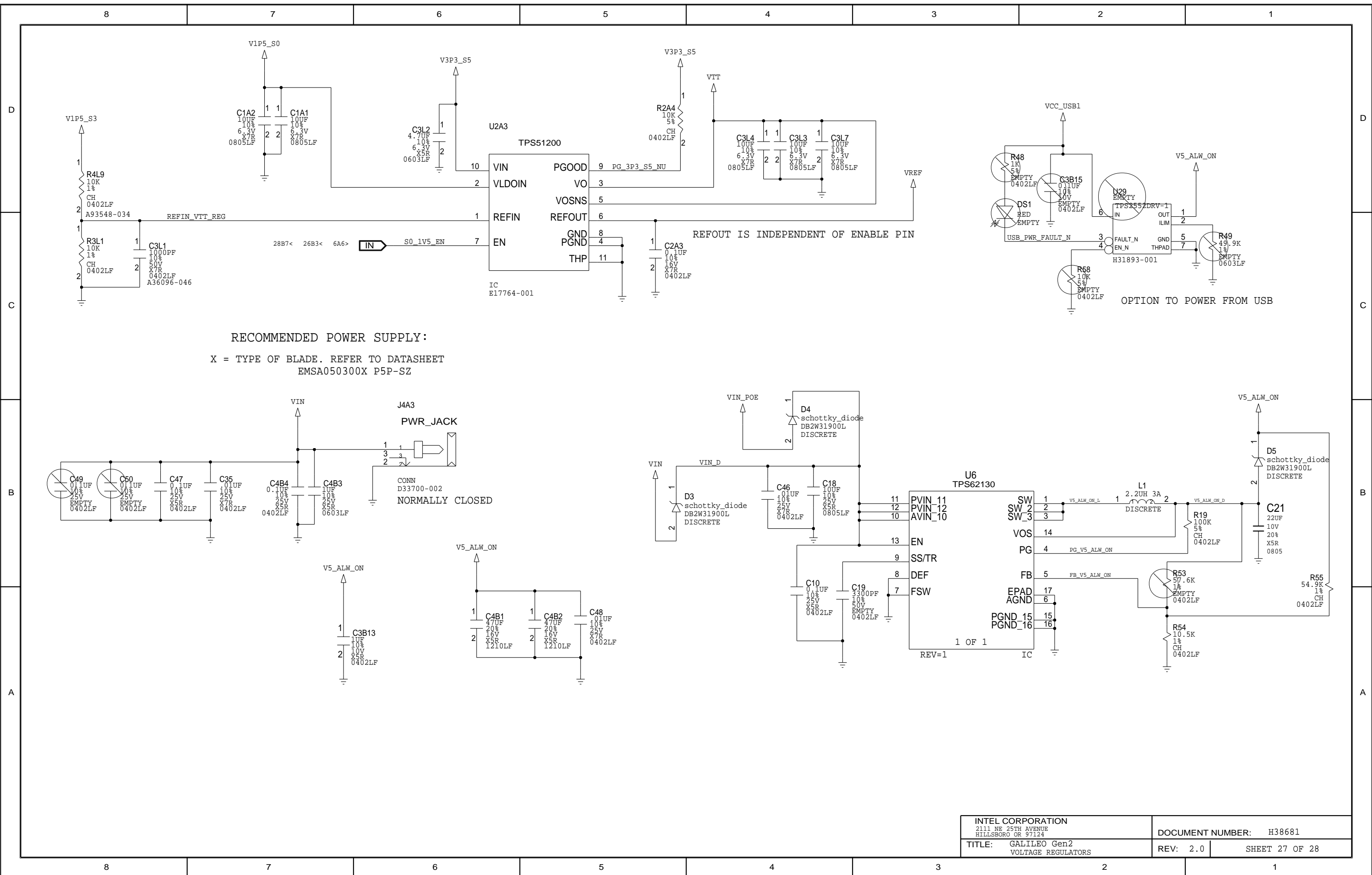
CAD NOTE:  
PLACE DECOUPLING CAPS AS CLOSE AS POSSIBLE TO SWITCH PINS

V1P0\_S3 IS GENERATED INTERNALLY

V1P0\_S0 IS GENERATED W ON-BRD REGULATOR



8 7 6 5 4 3 2 1



RECOMMENDED POWER SUPPLY:

X = TYPE OF BLADE. REFER TO DATASHEET  
EMSA050300X P5P-SZ

REFOUT IS INDEPENDENT OF ENABLE PIN

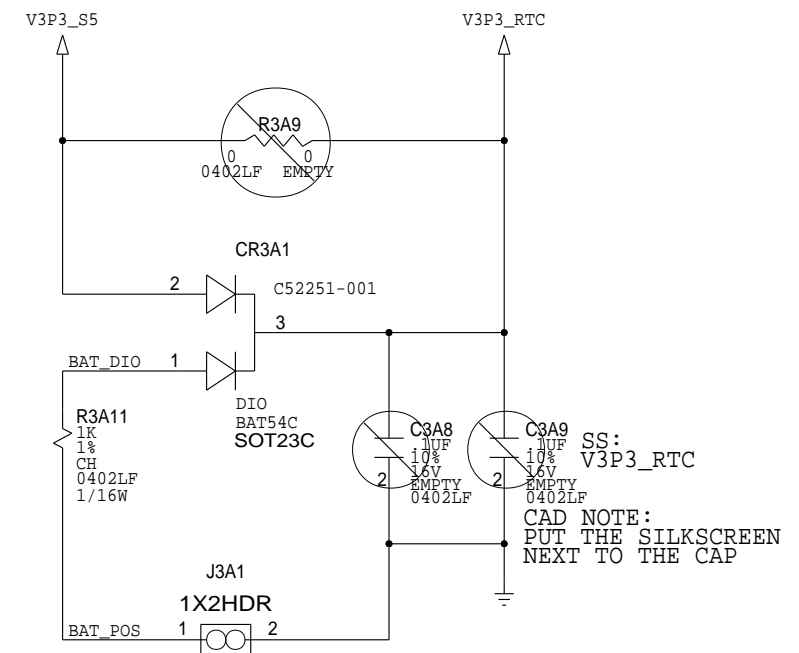
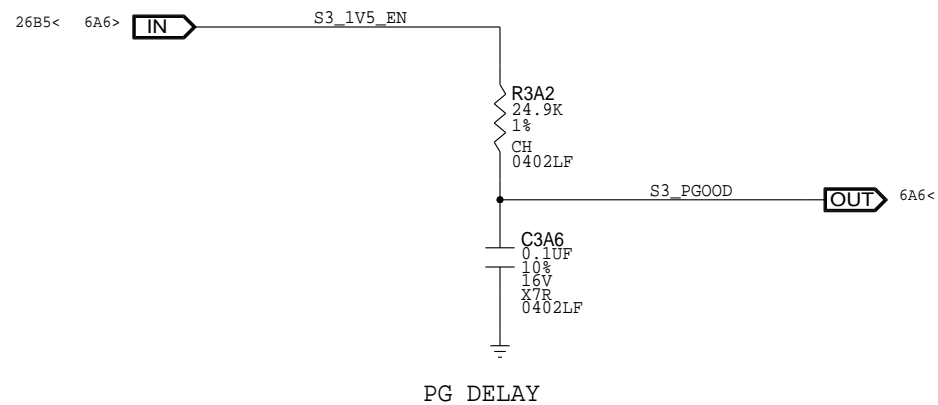
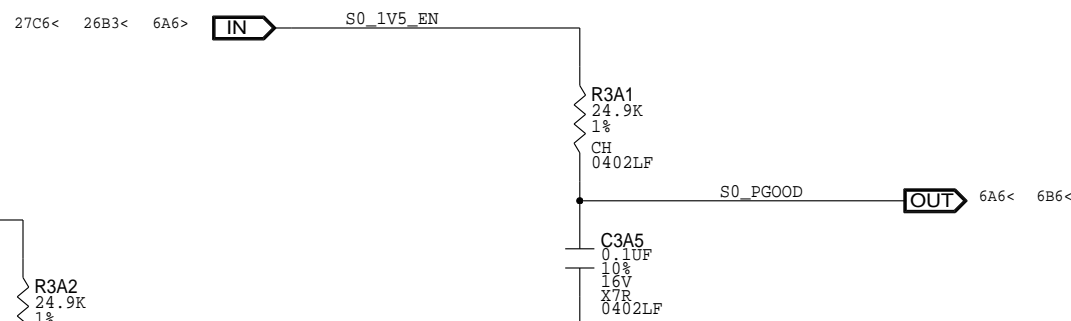
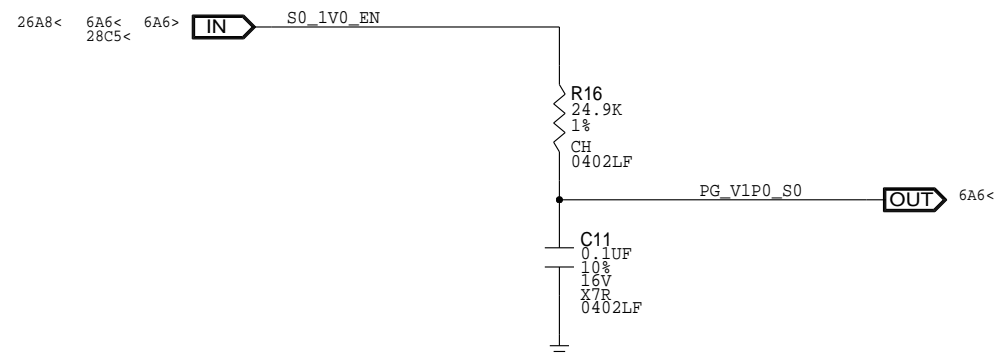
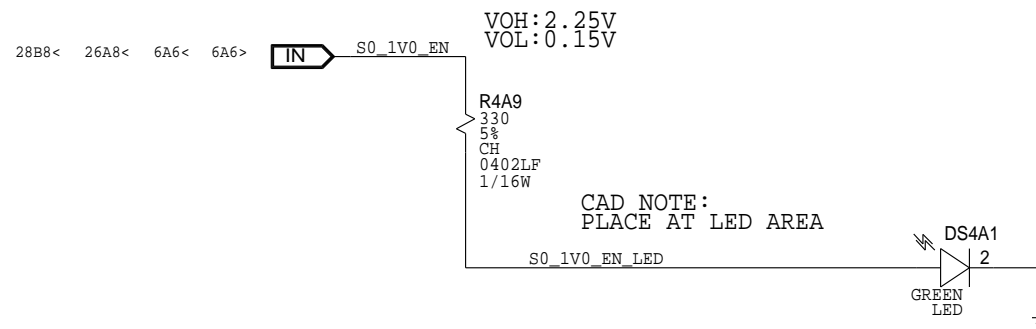
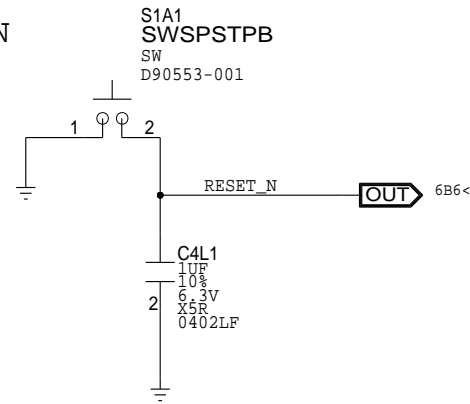
OPTION TO POWER FROM USB

NORMALLY CLOSED

INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 VOLTAGE REGULATORS		REV: 2.0	SHEET 27 OF 28

NOTE: RESET\_N HAS AN INTERNAL PU TO V3P3\_S3

SS:  
REBOOT BUTTON



CAD NOTE:  
LABEL "+" AND "-" TERMINALS ON 2 PIN HDR  
OFF-BOARD BATTERY

INTEL CORPORATION 2111 NE 25TH AVENUE HILLSBORO OR 97124		DOCUMENT NUMBER: H38681	
TITLE: GALILEO Gen2 POWER BUTTONS & MISC		REV: 2.0	SHEET 28 OF 28