

ODROID - H2 Schematics

Intel GeminiLake Platform Revision -B

2019-05-29

Title		ODROID-H2
Size	Document Number	Rev
2		A

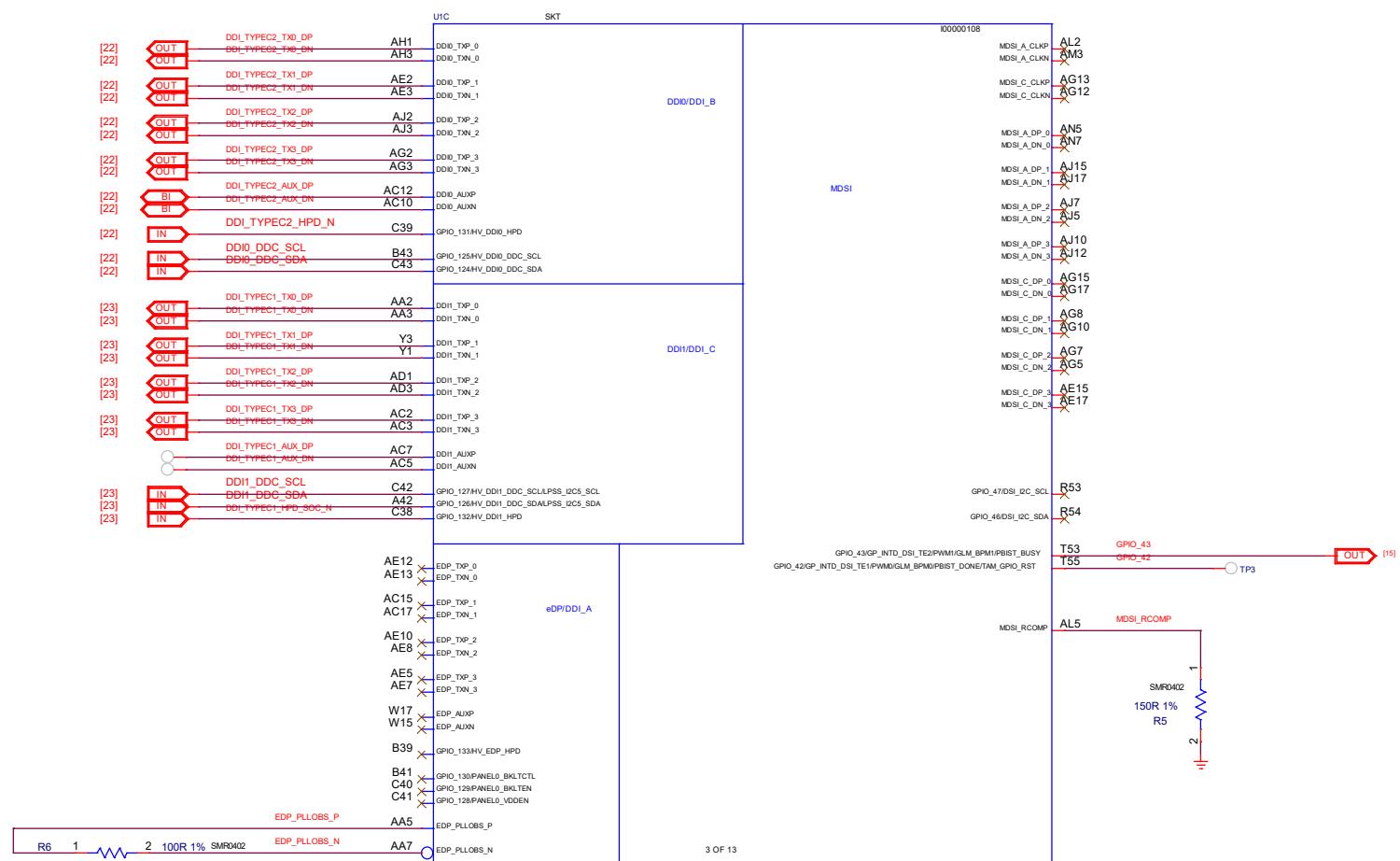
Date: Wednesday, May 29, 2019 Sheet 1 of 61

SCH Content

GLK_SFF_MP	01 ---- Cover Page	24 ---- LAN2(RTL8111G)
	02 ---- Contents	25 ---- USB3 X 2 PORT
	03 ---- SOC(DDR4 CH0)	26 ---- USB2 X 2 PORT
	04 ---- SOC(DDR4 CH1)	27 ---- CODEC ALC662
	05 ---- SOC(DDI/MIPI)	28 ---- AUDIO CONN
	06 ---- SOC(PCIE/SATA/USB)	29 ---- HDD&PWR
	07 ---- SOC(GPIO)	30 ---- GPIO HEAD/UART/I2C
	08 ---- SOC(SPI/I2C/SMBUS)	31 ---- EMMC
	09 ---- SOC(HDA/LPC/EMMC/SPI)	32 ---- Thermal Sensor
	10 ---- SOC(PMC/PMU/RTC)	33 ---- SPI ROM
	11 ---- SOC(+VNN/+VCG)	34 ---- RESET/LEDS
	12 ---- SOC(+VDDQ/VDD1P2/+V3P3)	35 ---- FAN/LPC DEBUG
	13 ---- SOC(VSS)	36 ---- LPC to Uart
	14 ---- SOC-(DECAP)	37 ---- MCU
	15 ---- SOC-STRAPS	38 ---- PWR DC IN
	16 ---- SODDR4 Channel 0	39 ---- PWR +V5P0A/+V3P3A
	17 ---- De-Caps Channel 0	40 ---- PWR PMIC(Controller)
	18 ---- SODDR4 Channel 1	41 ---- PWR (VNN/VCGI)
	19 ---- De-Caps Channel 1	42 ---- PWR (1P05/1P8A/1P2A)
	20 ---- DP++	43 ---- PWR (VDDQ)
	21 ---- HDMI2.0	44 ---- PWR +V3P3SX/+V5P0SX
	22 ---- M.2 PCIe SSD	45 ---- PWR 12VRUN
	23 ---- LAN1(RTL8111G)	46 ---- Explain Page

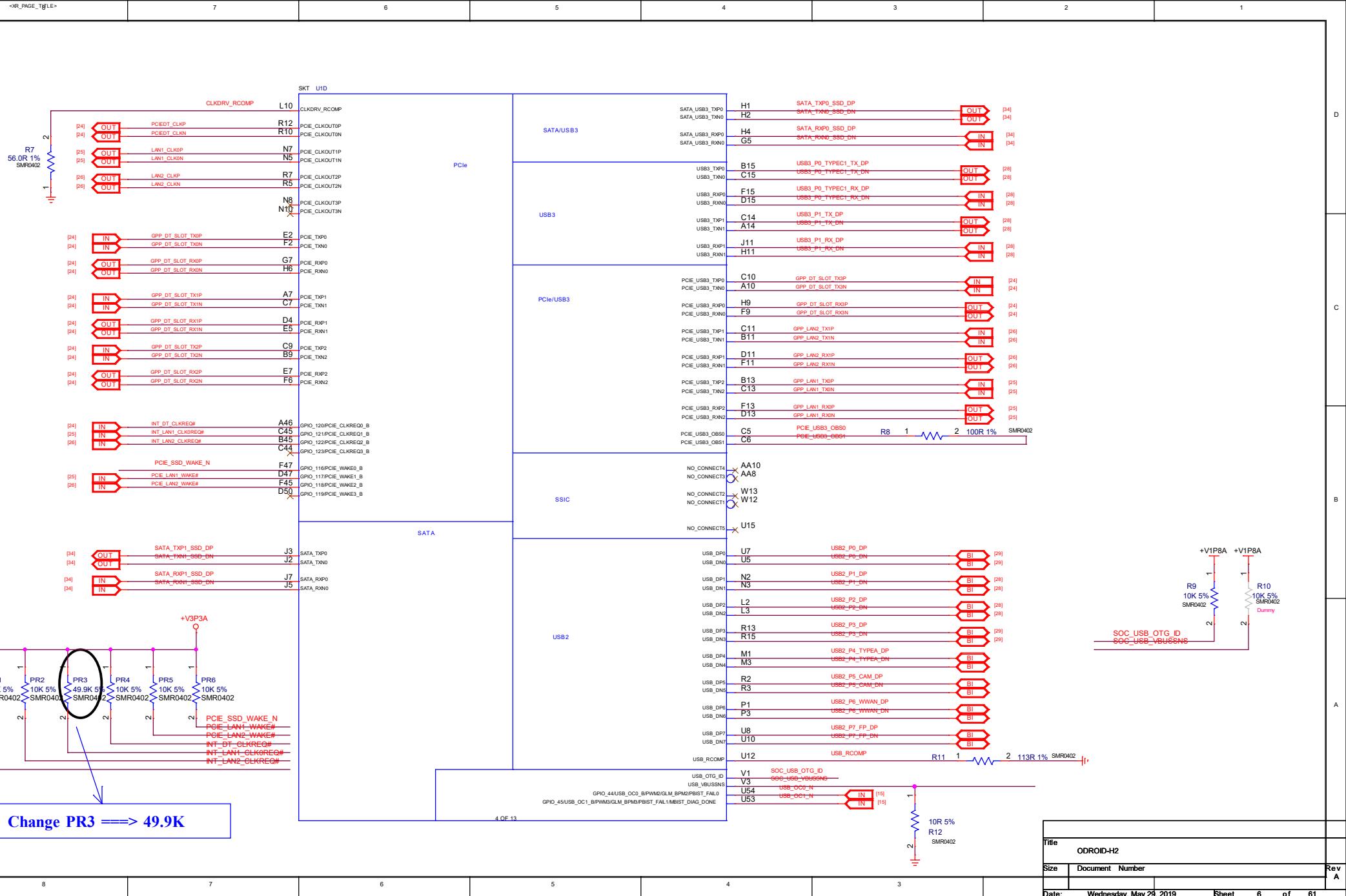
Title	ODROID-H2	
Size	Document Number	Rev A
Date:	Wednesday, May 29, 2019	Sheet 2 of 61

SOC 3 OF 13:

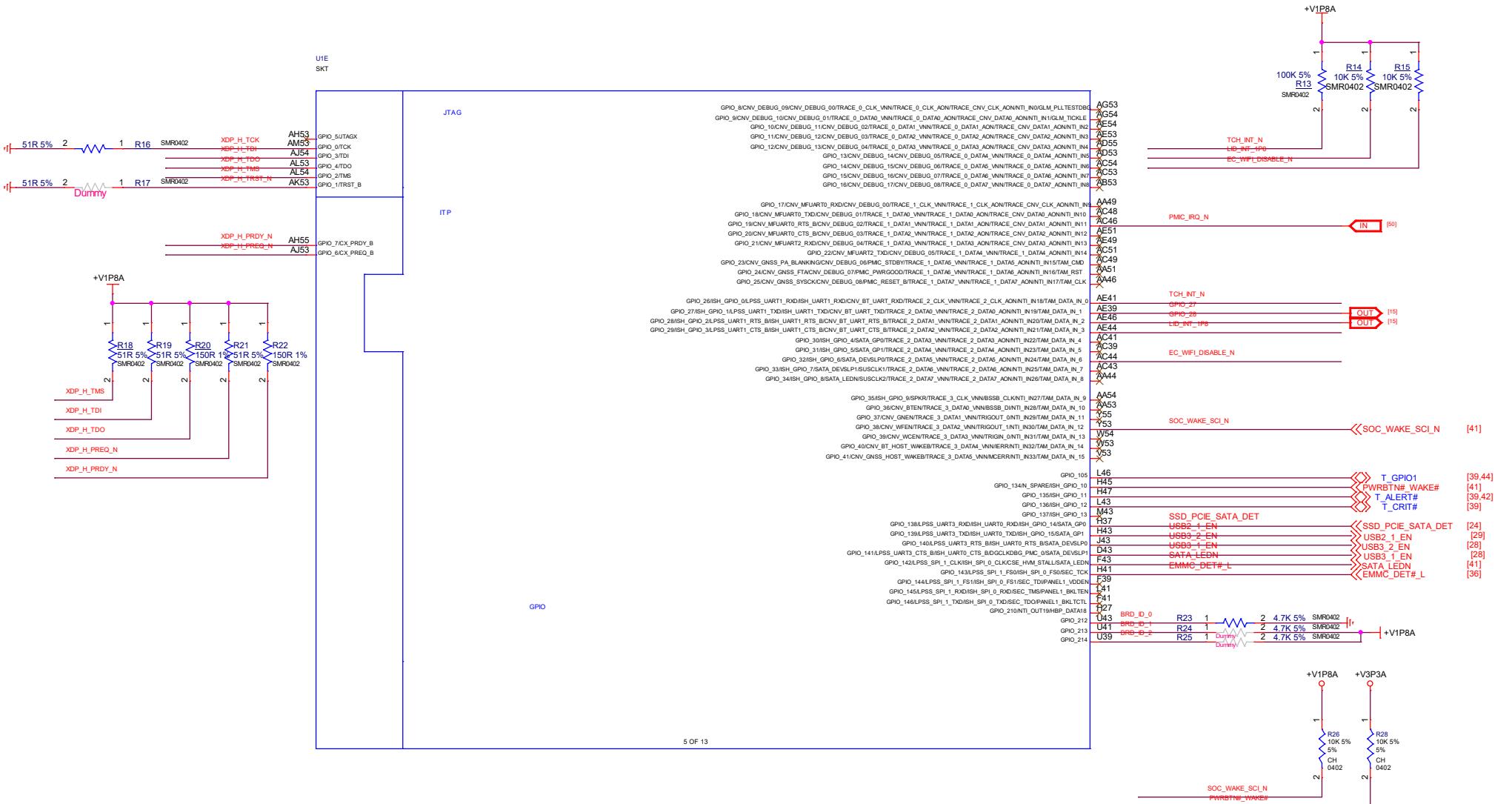


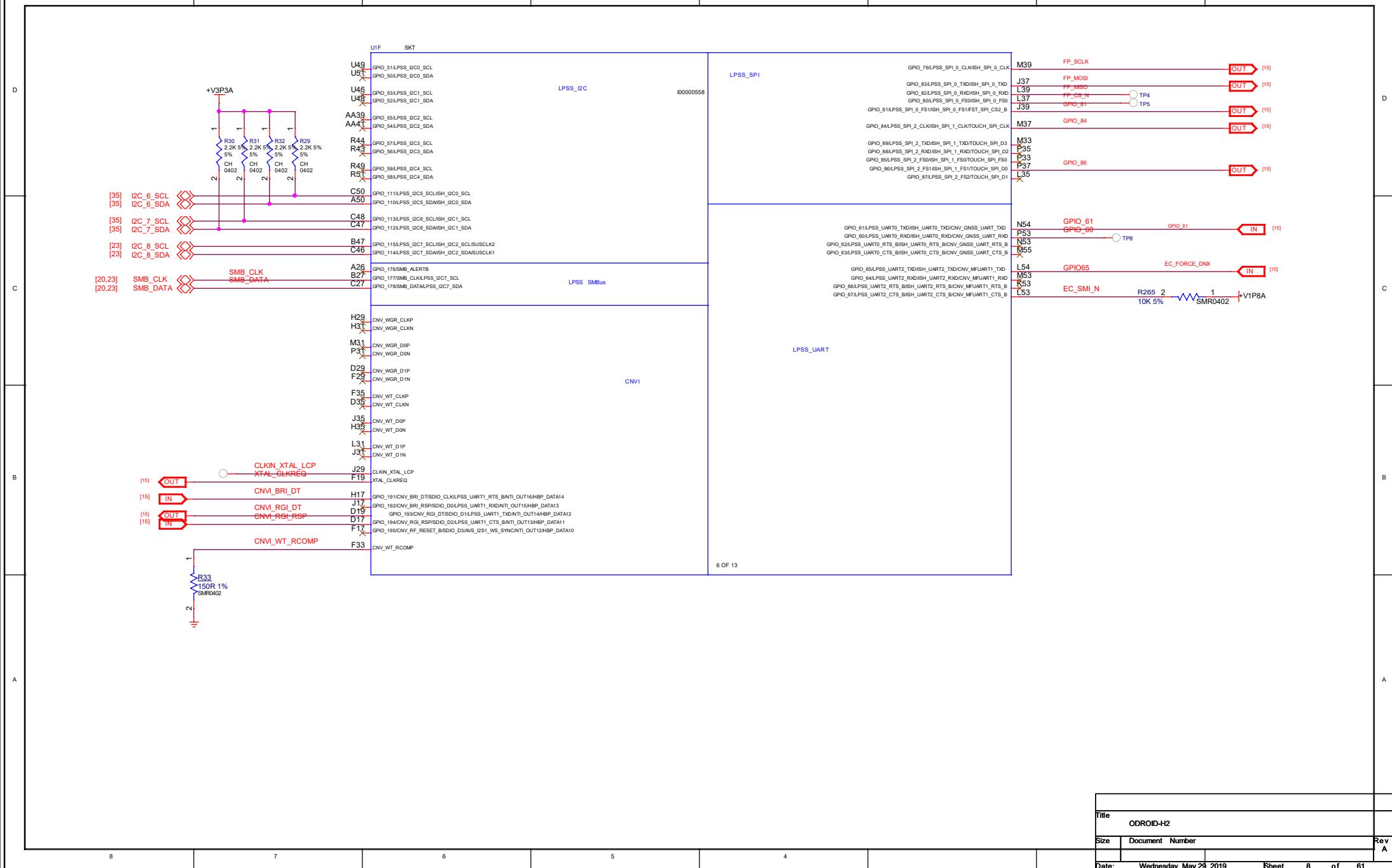
3 OF 13

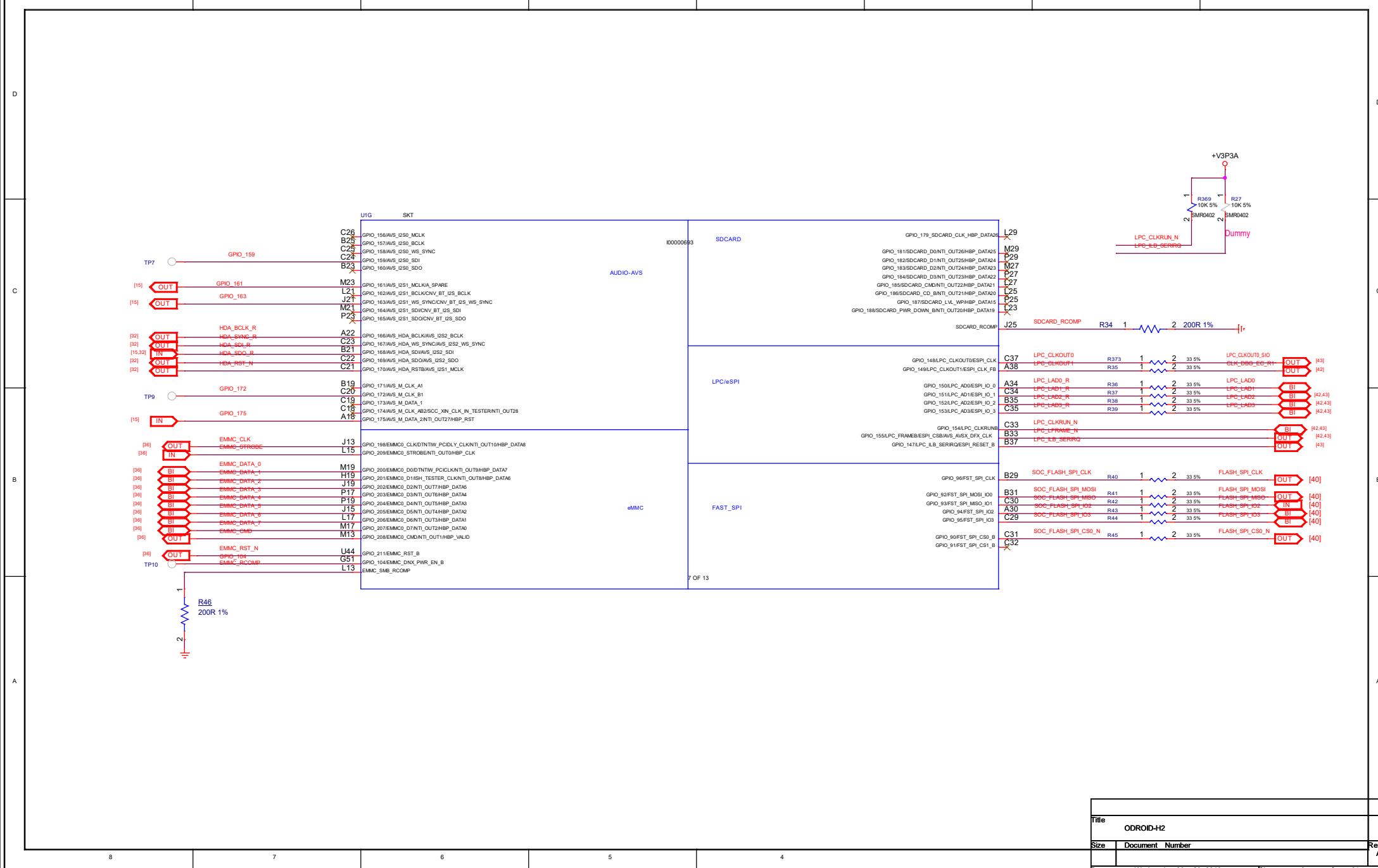
Title		
ODROID-H2		
Size	Document Number	Rev
		A
Date: Wednesday, May 29, 2019		
Sheet 5 of 61		

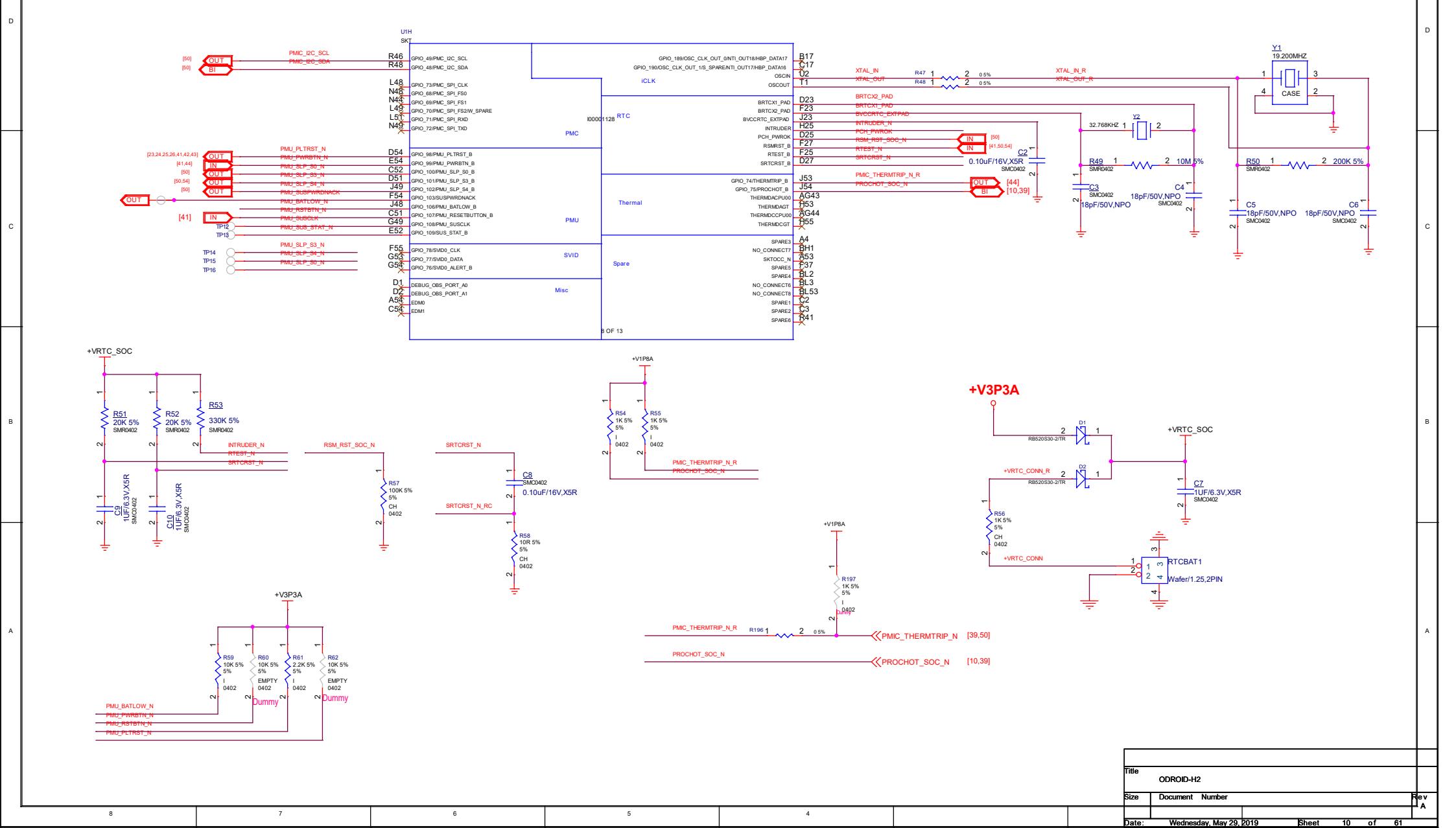


Title		
Size	Document Number	Rev
	ODROID-H2	A
Date:	Wednesday, May 29, 2019	

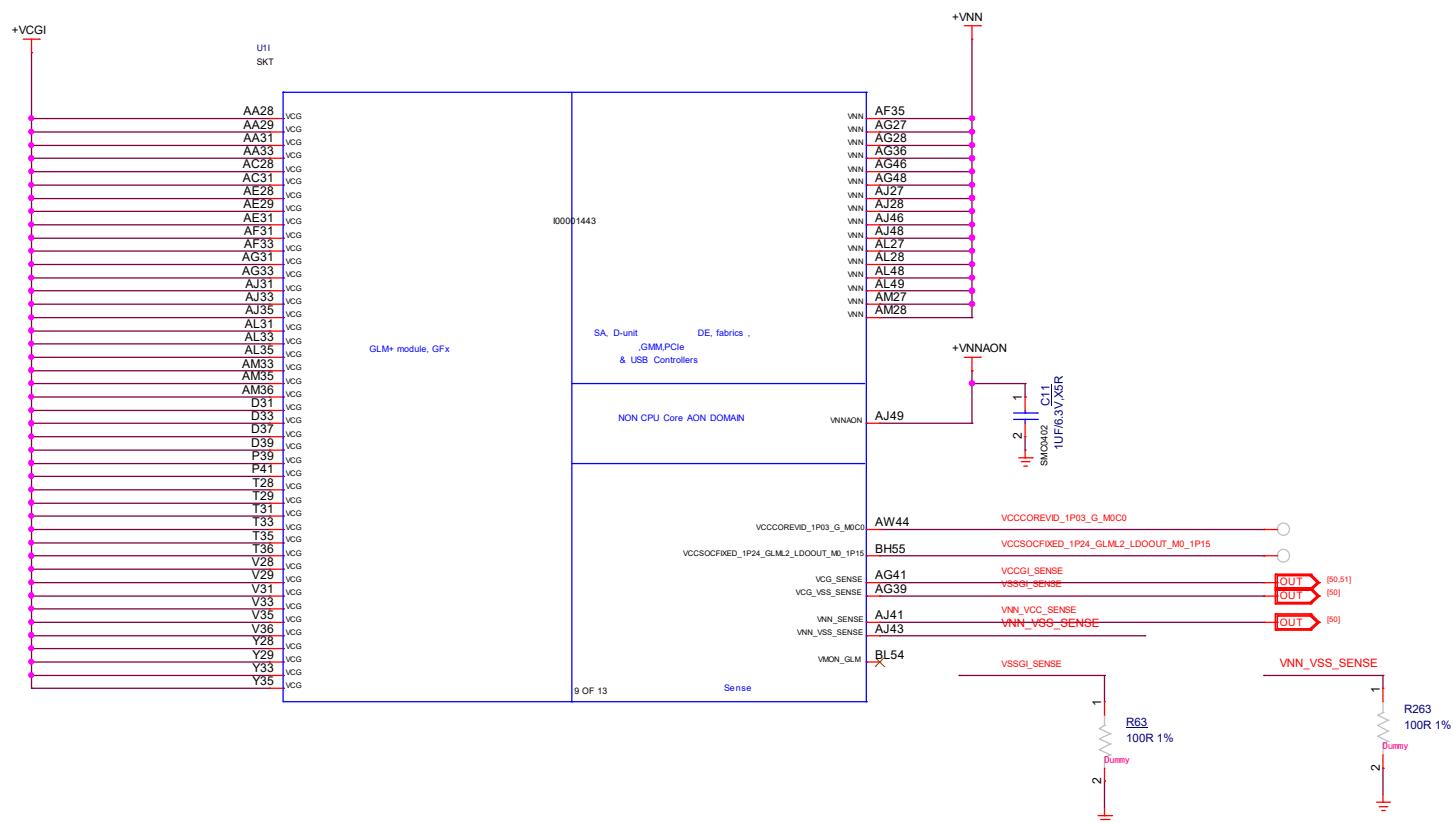




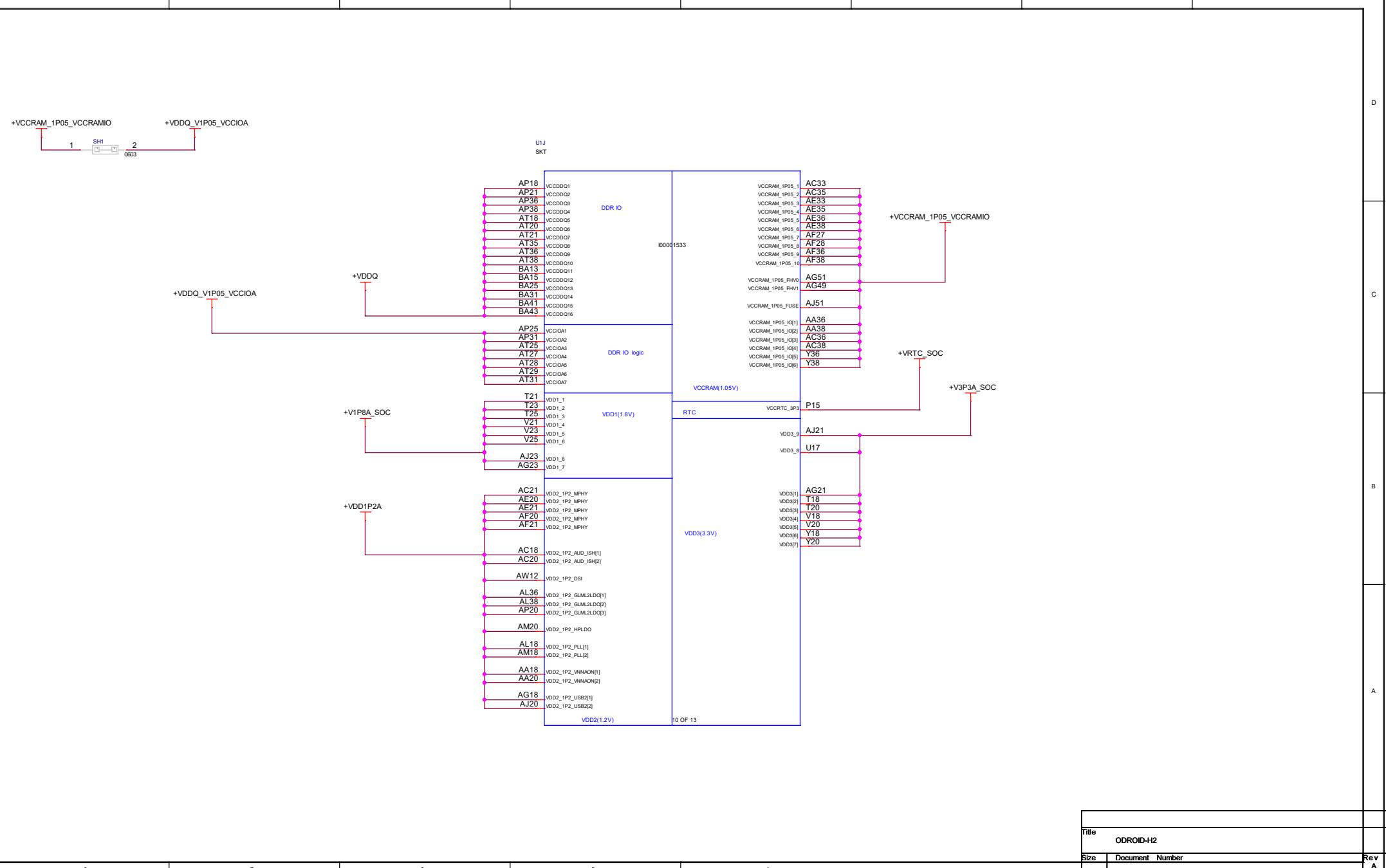




Title		
Size	Document Number	Rev
	ODROID-H2	A
Date:	Wednesday, May 29, 2019	

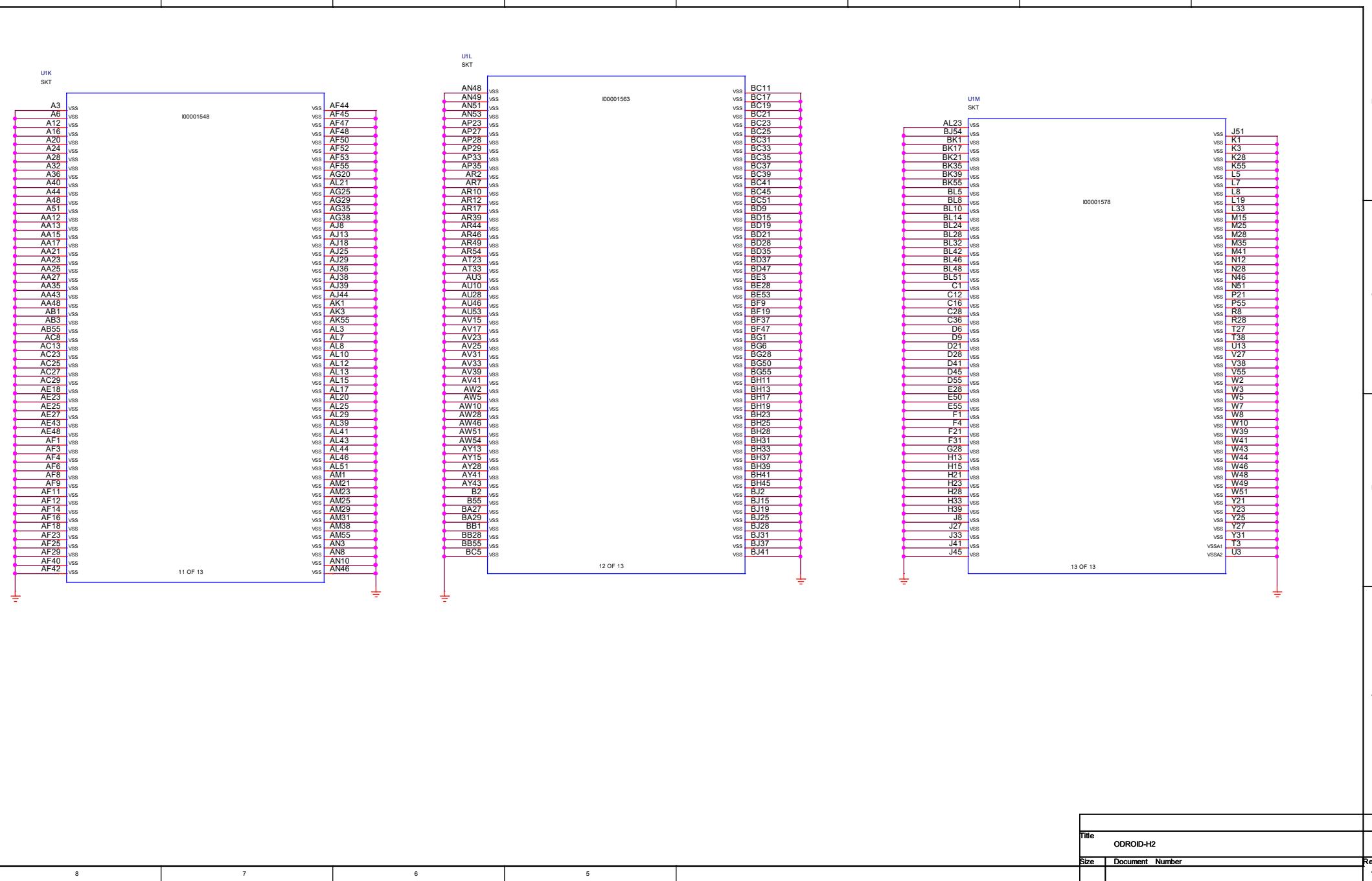


Title		
ODROID-H2		
Size	Document Number	Rev
		A
Date:	Wednesday, May 25, 2016	Sheet 11 of 61



Title		ODROID-H2	Rev
Size	Document Number		
			A

Date: Wednesday, May 25, 2016 Sheet 12 of 61

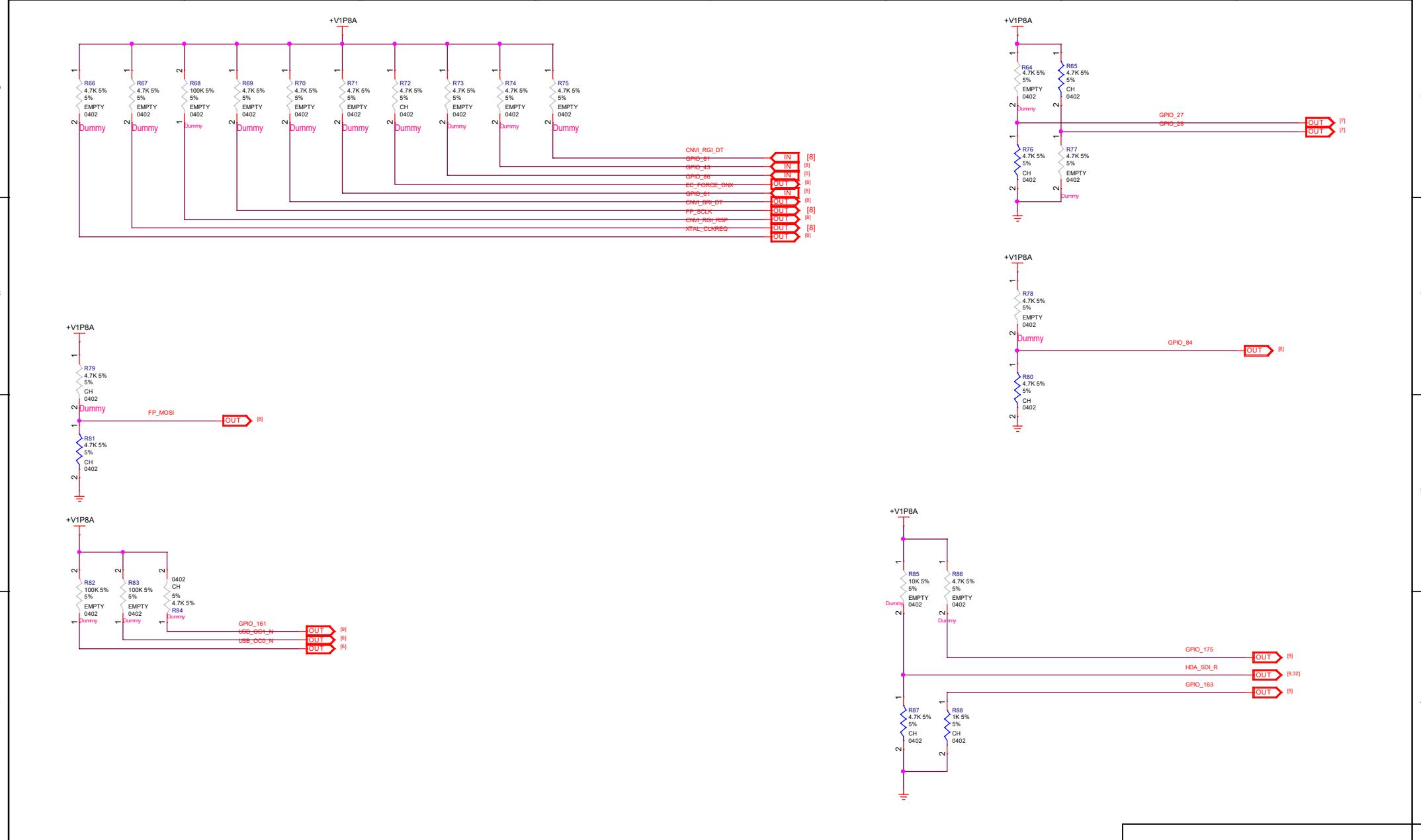


Title		
ODROID-H2		
Size	Document	Number
		Rev A

Date: Wednesday, May 25, 2016 Sheet: 10 of 61

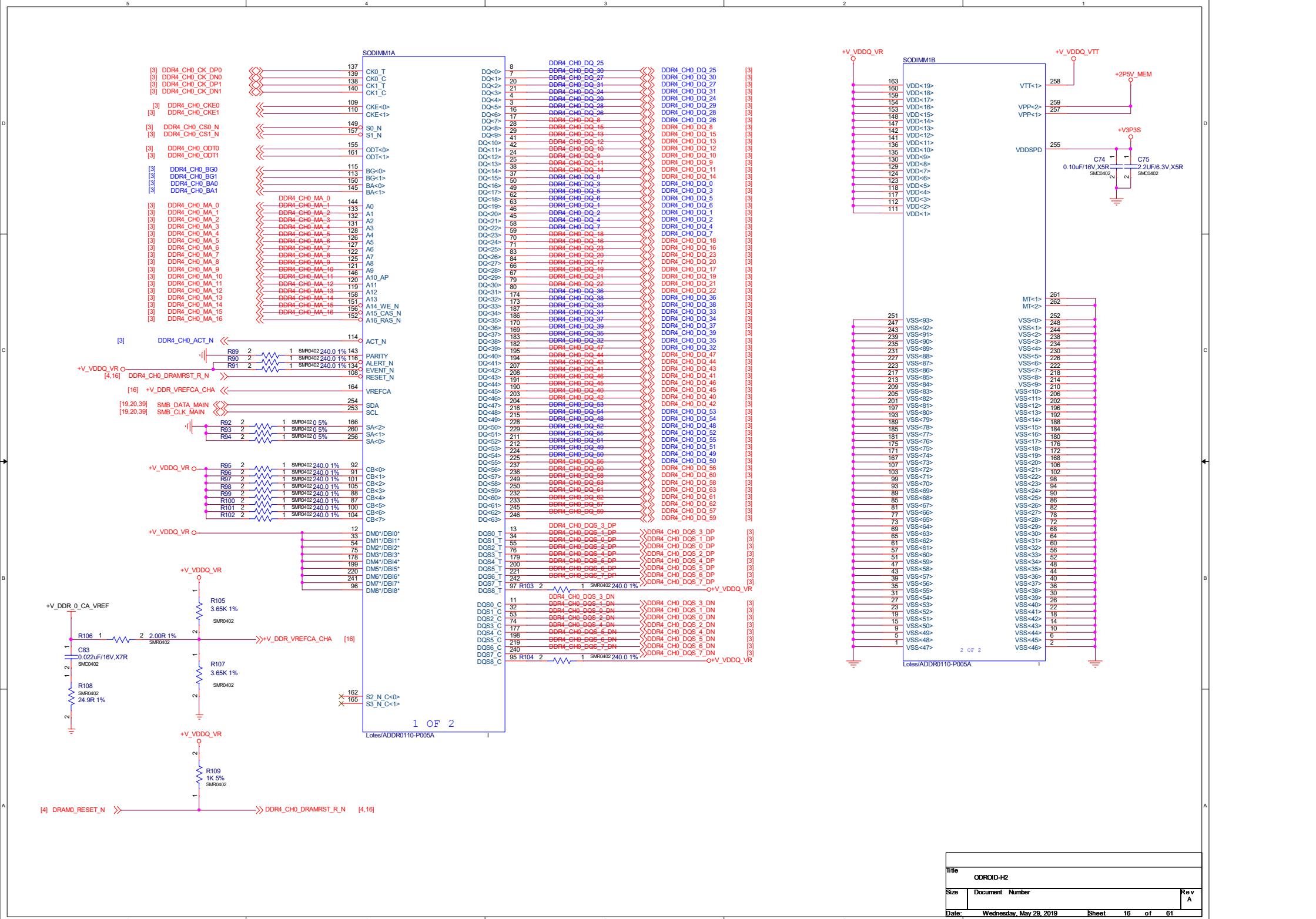


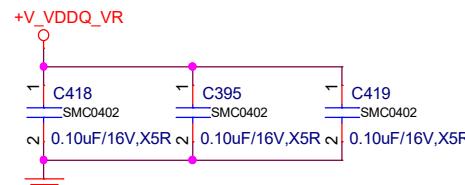
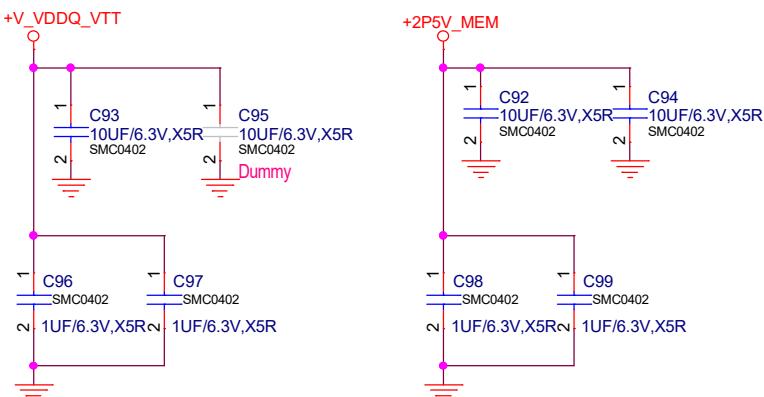
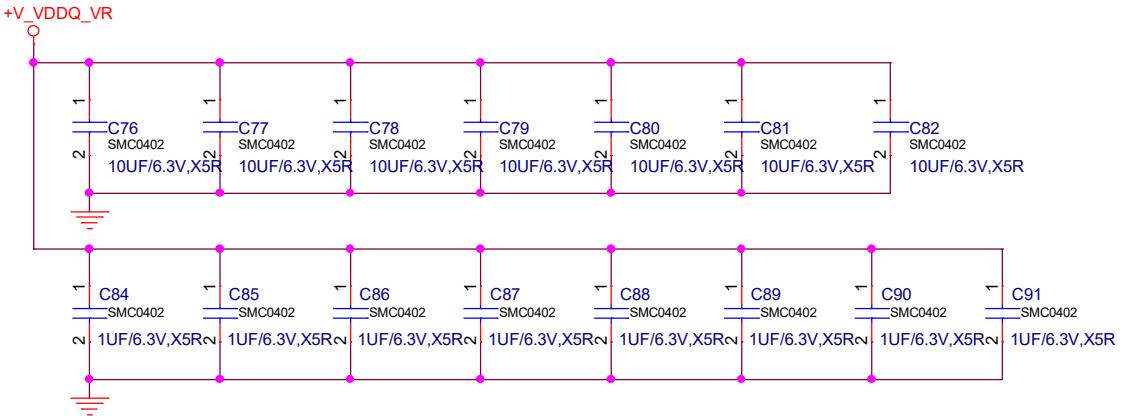
Title		ODROID-H2	Rev
Size	Document Number		
Date:	Wednesday, May 29, 2019	Sheet	14 of 61



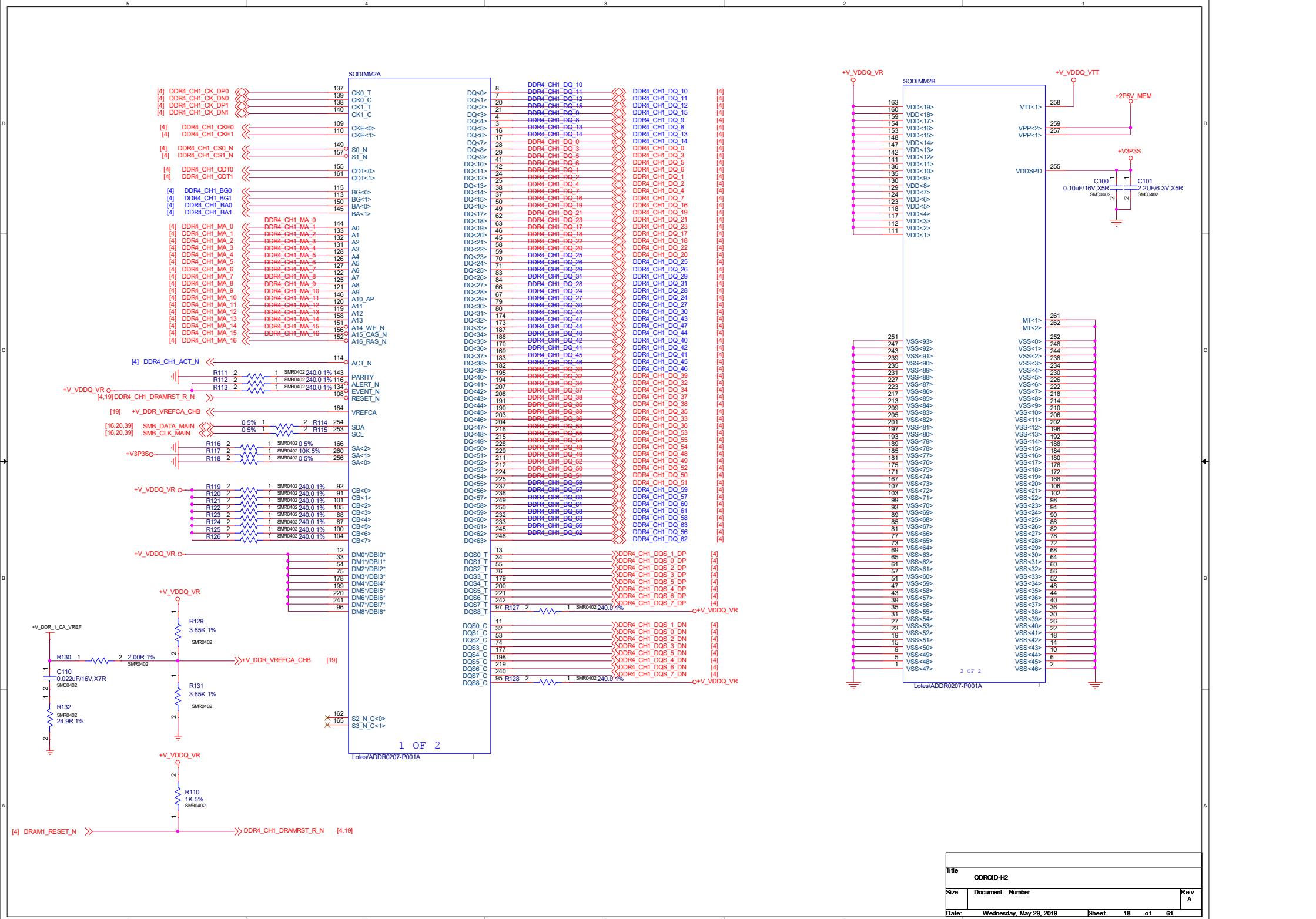
Title		
	ODROID-H2	
Size	Document	Number

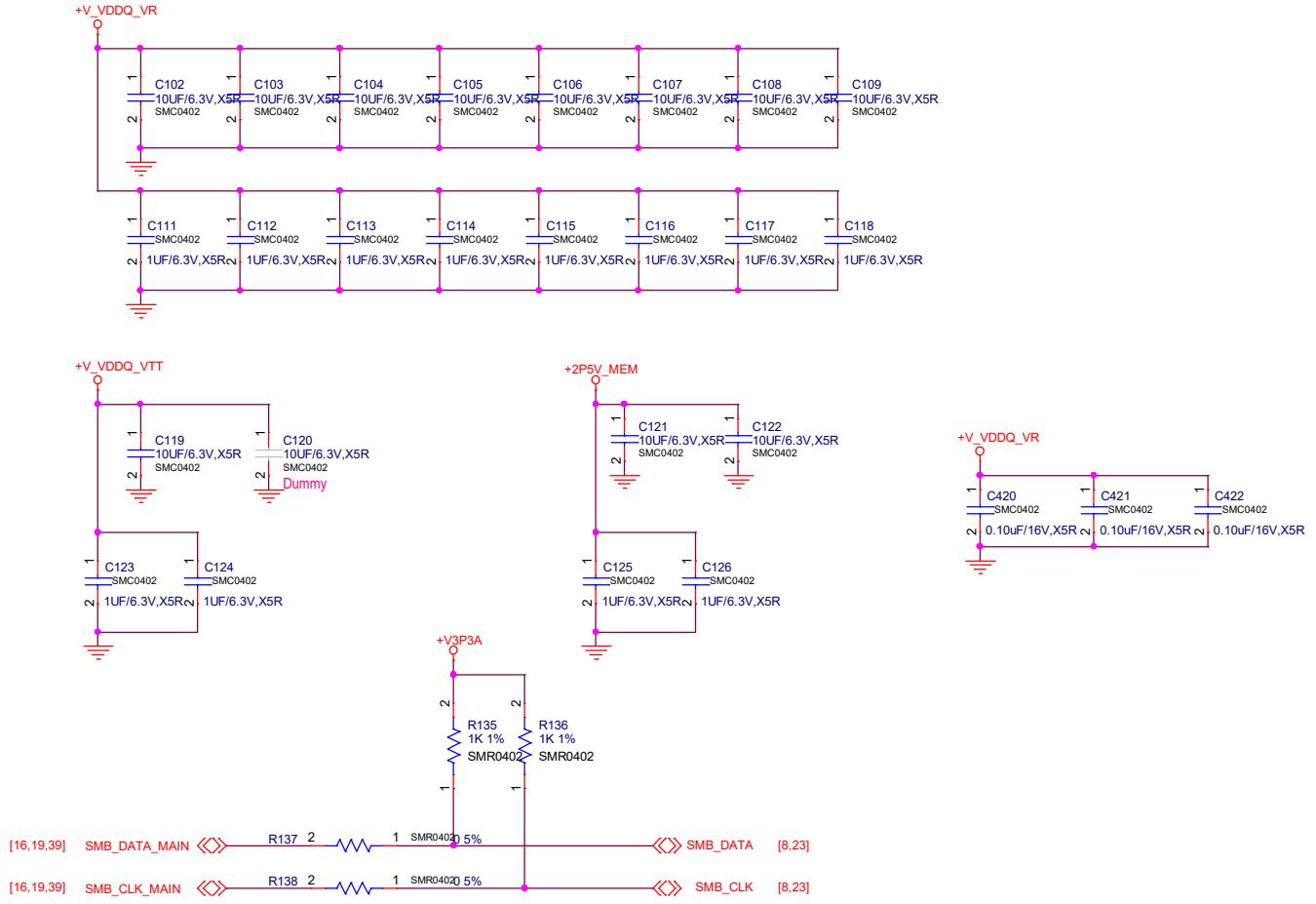
Date: Wednesday, May 25, 2016 Sheet 15 of 61 Rev A



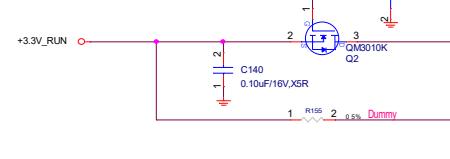
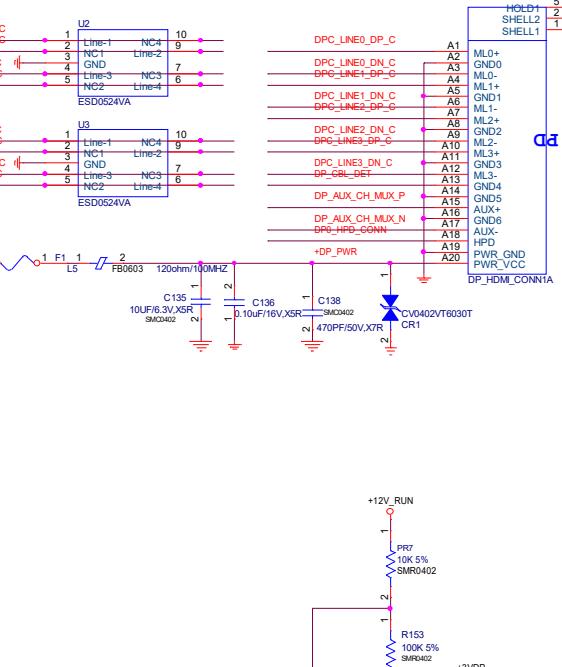
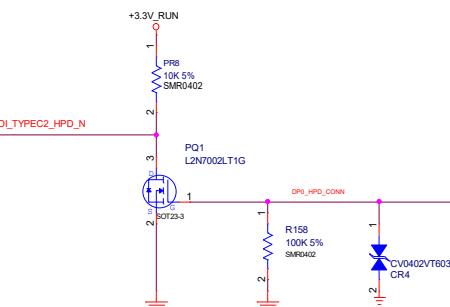
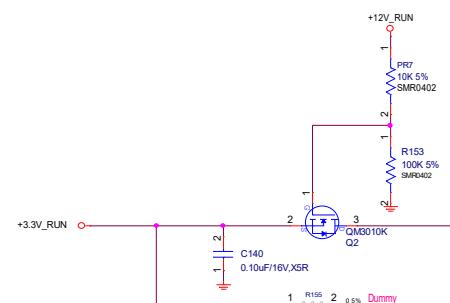
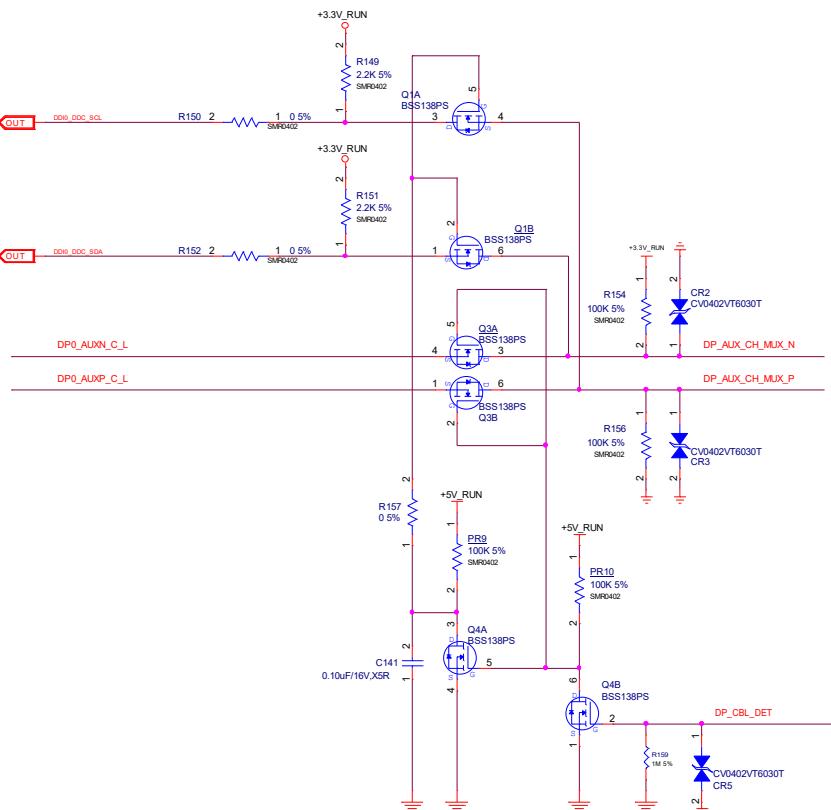
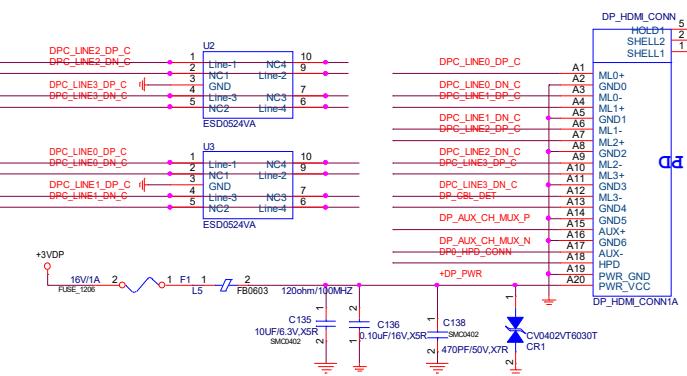
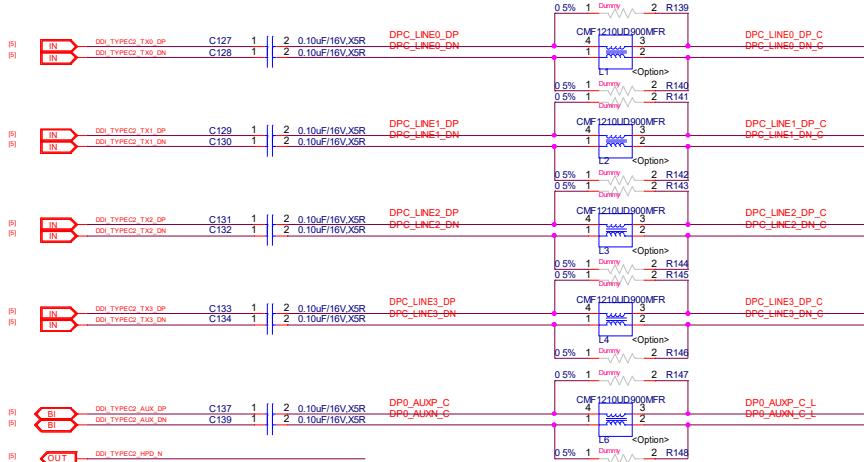


Title ODROID-H2		
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019	Sheet 17 of 61	



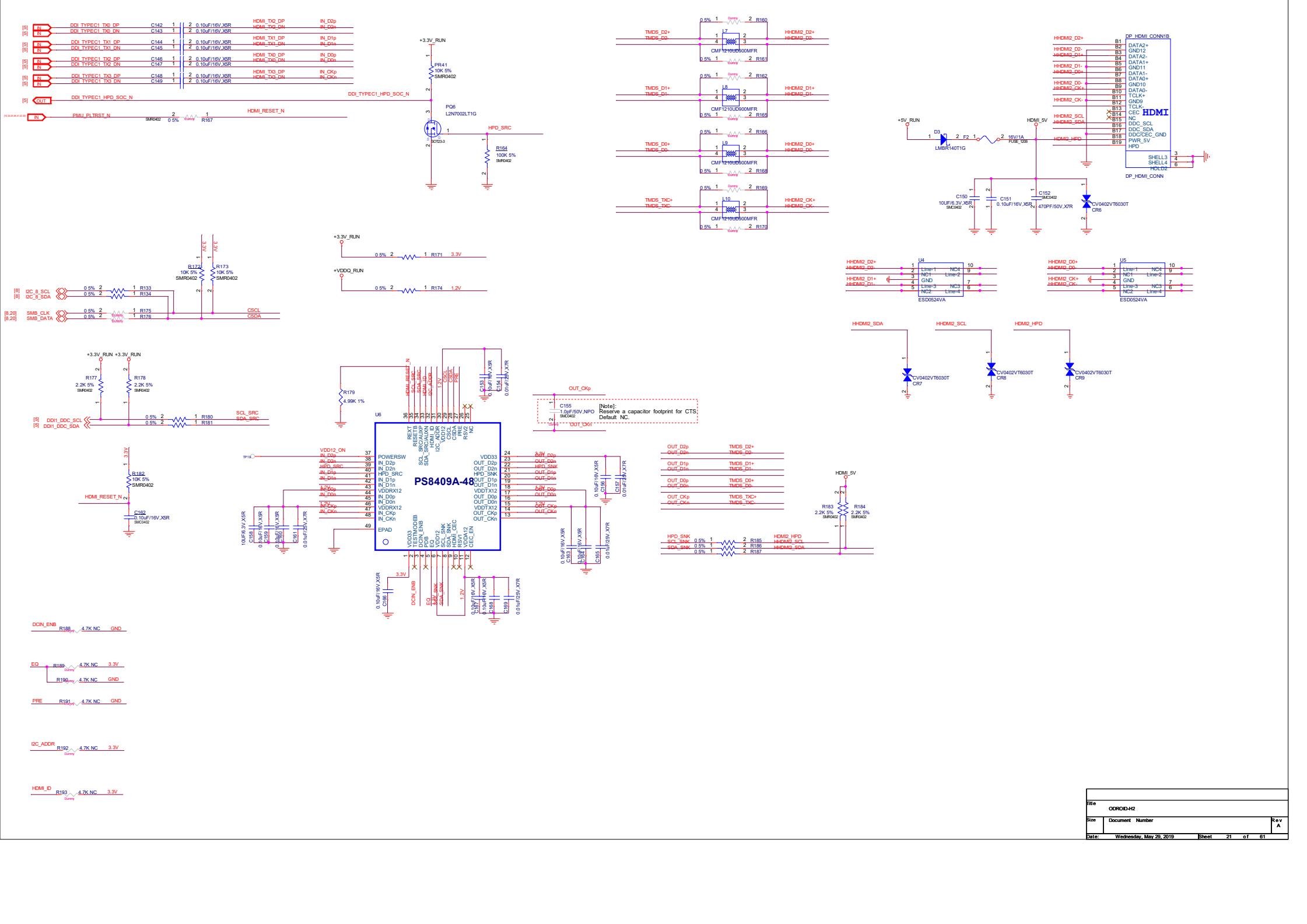


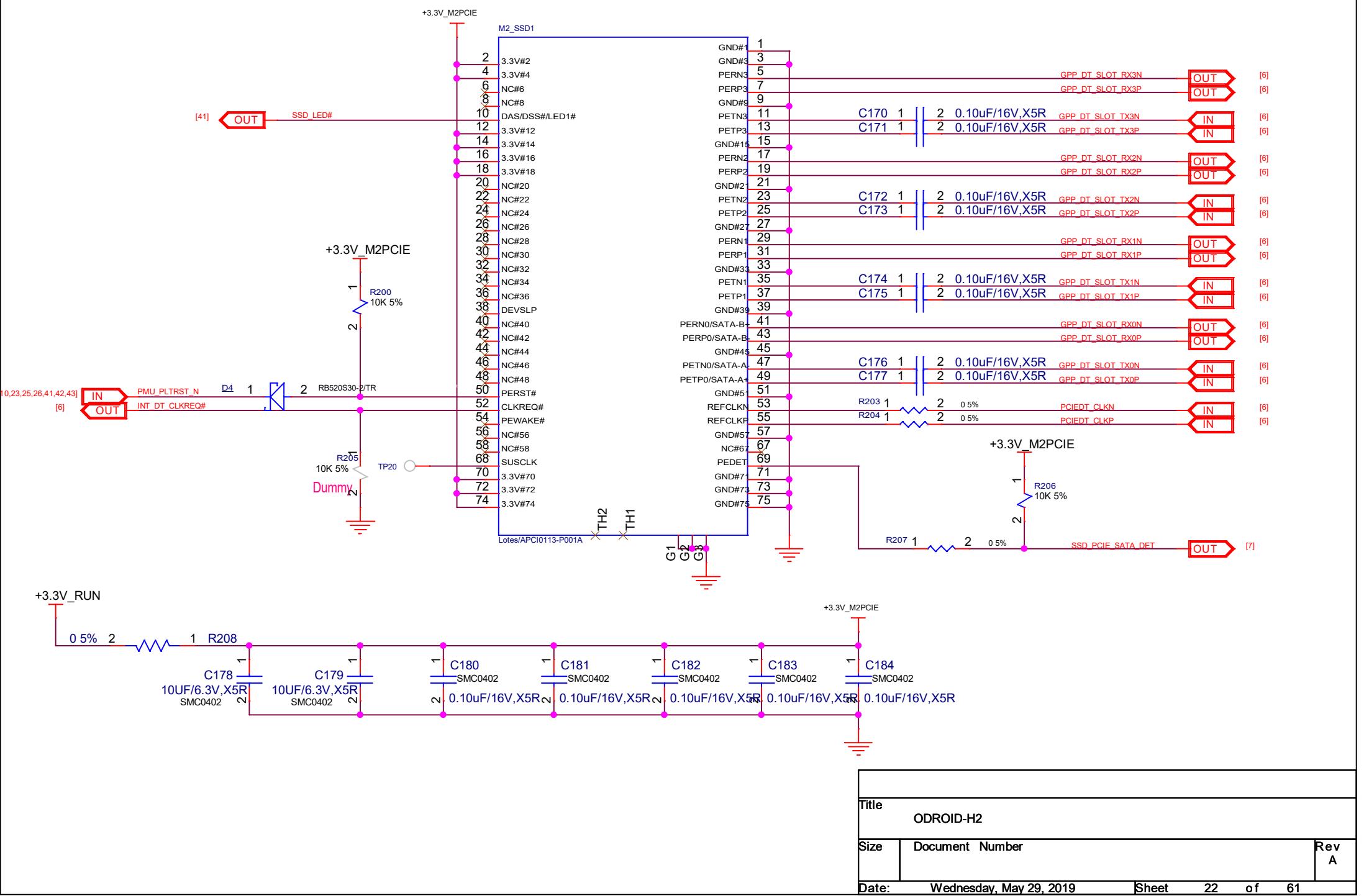
Title		
ODROID-H2		
Size	Document	Number
B		
Date:	Wednesday, May 29, 2019	Sheet 19 of 61
		Rev A

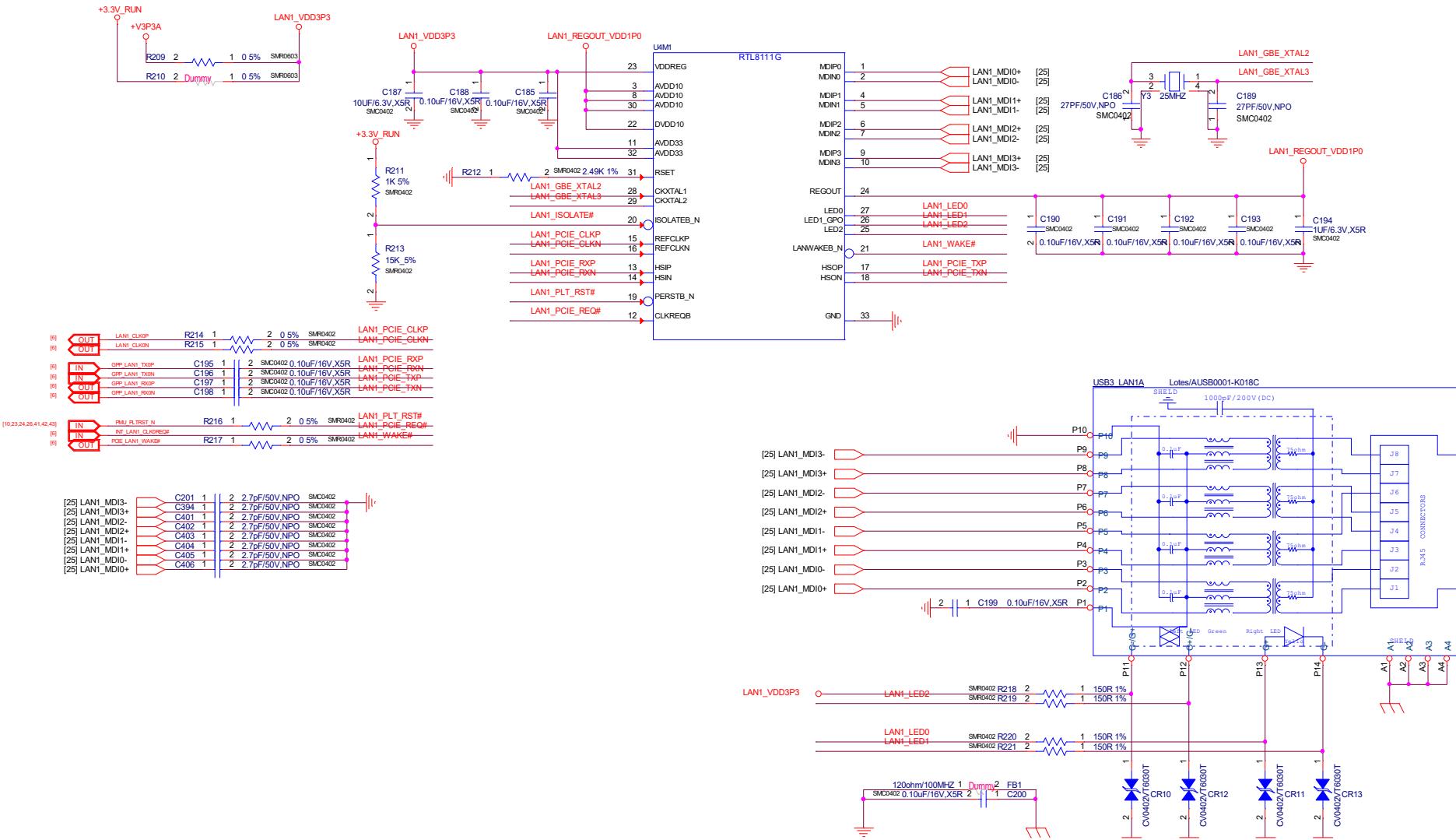


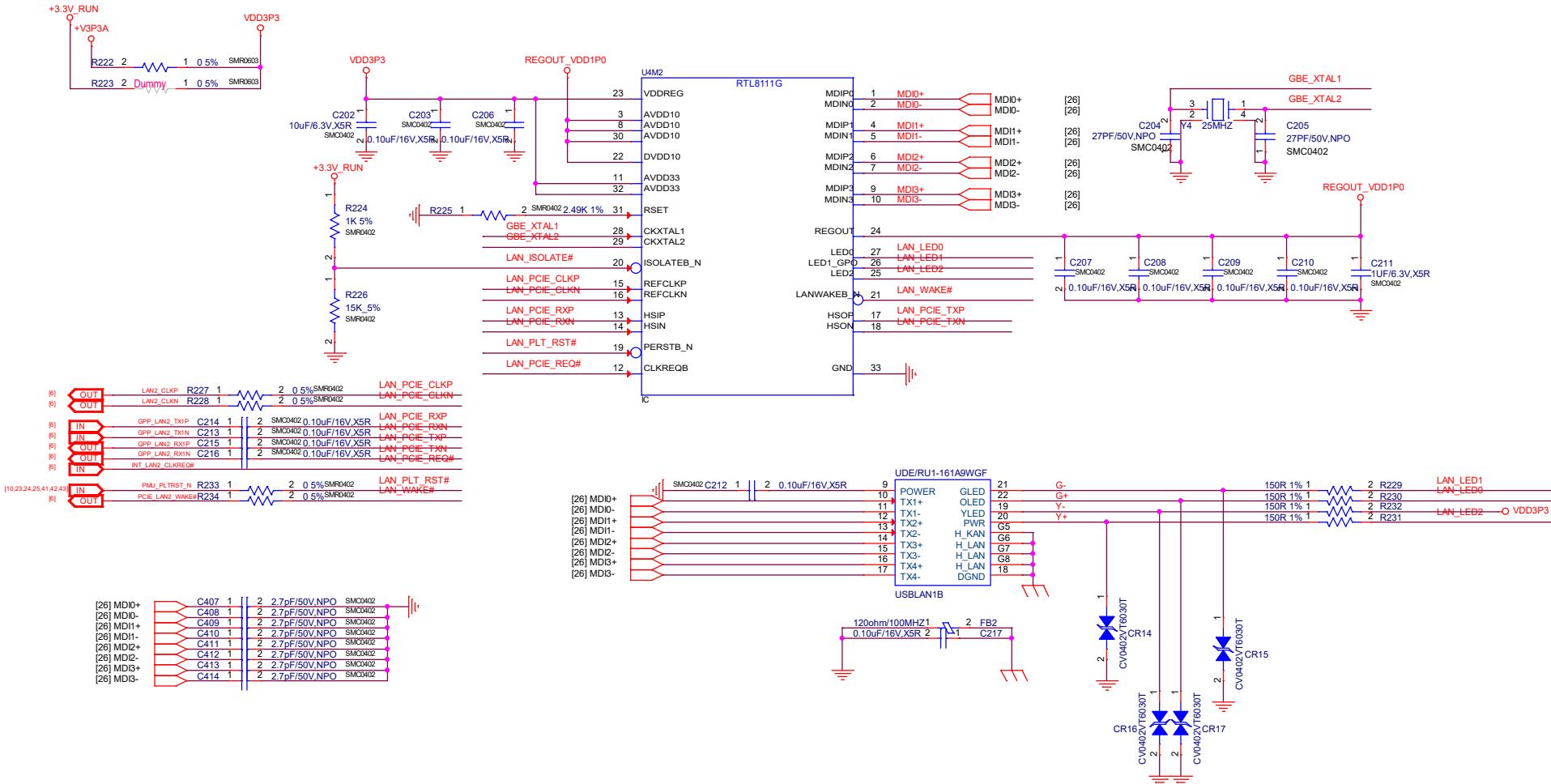
Title		
ODROID-H2		
Size	Document Number	Rev
		A

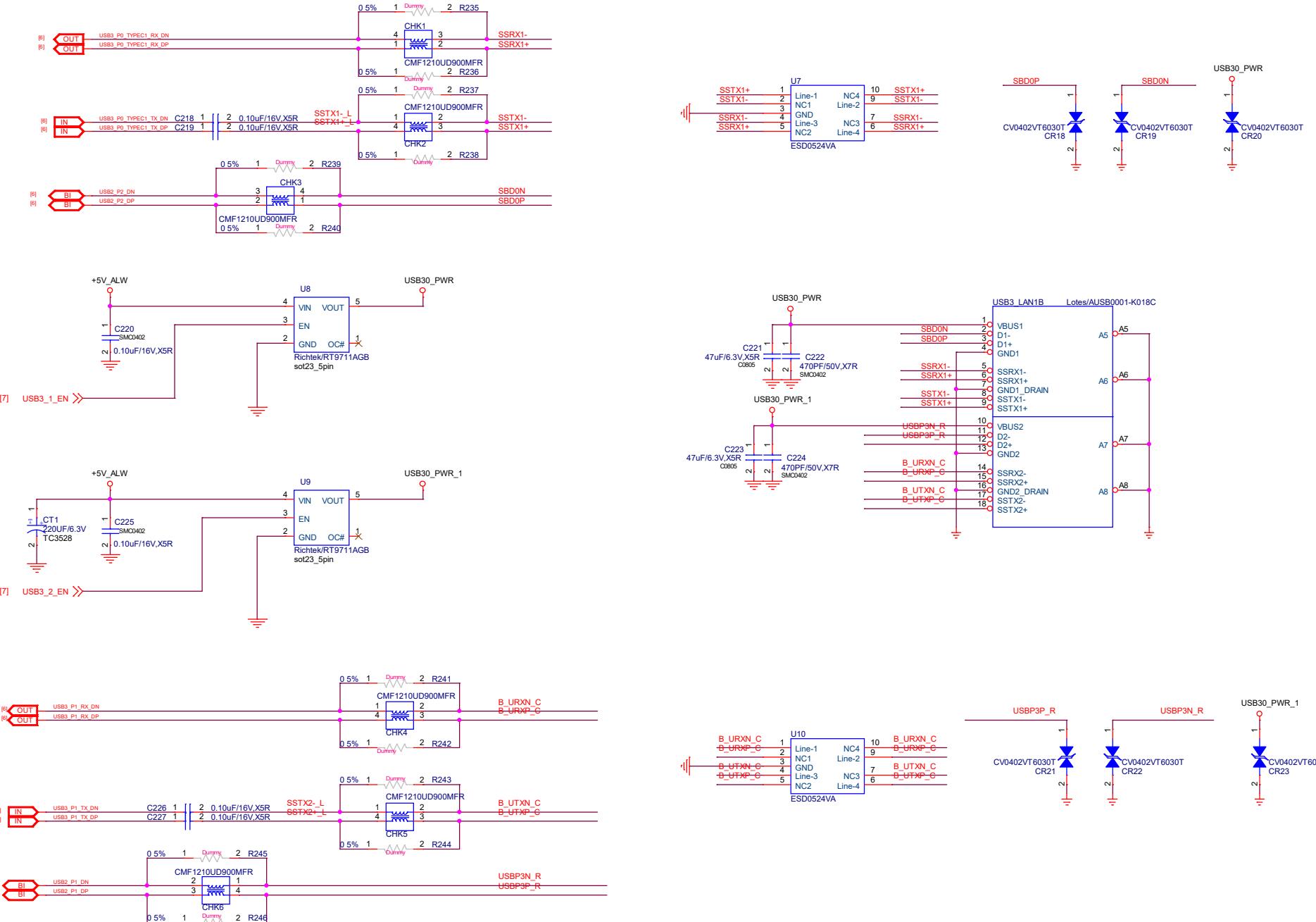
Date: Wednesday, May 29, 2019 Sheet 20 of 61

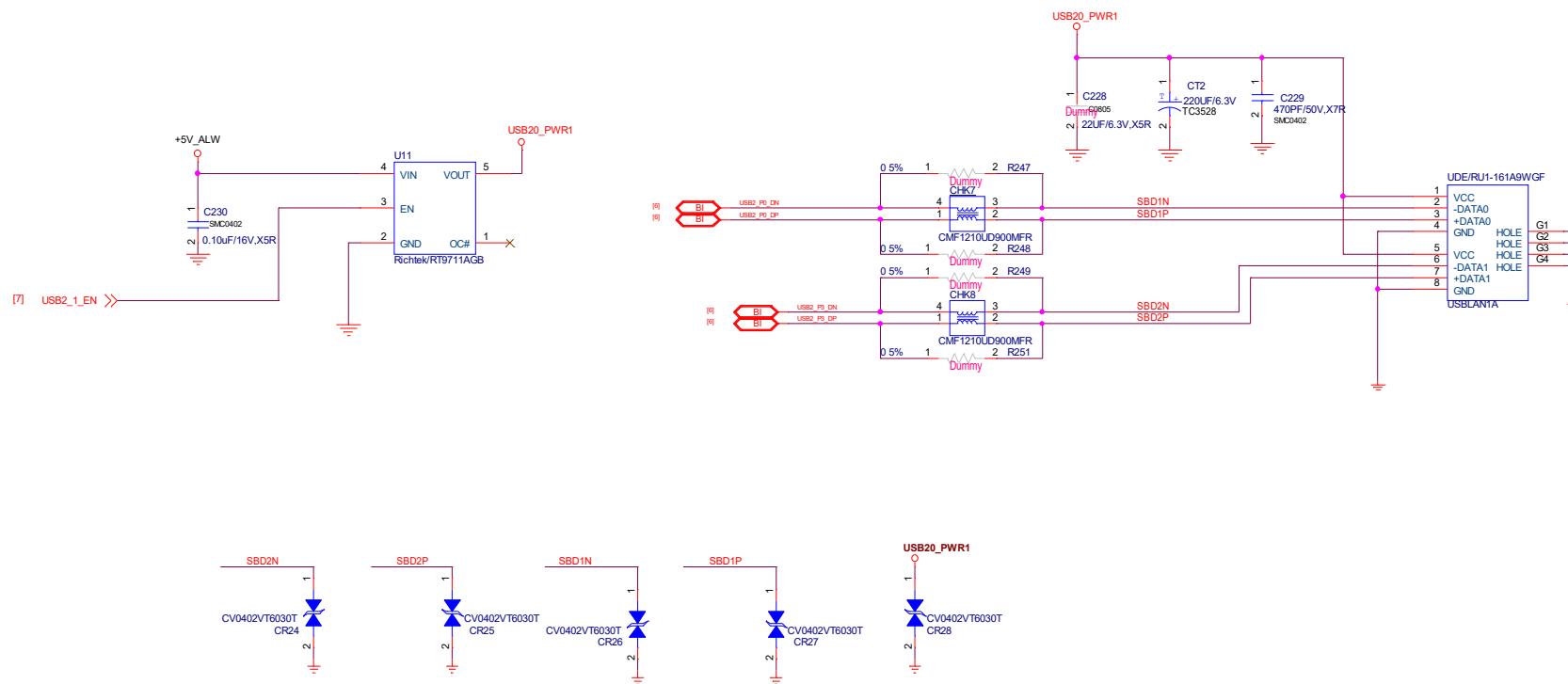




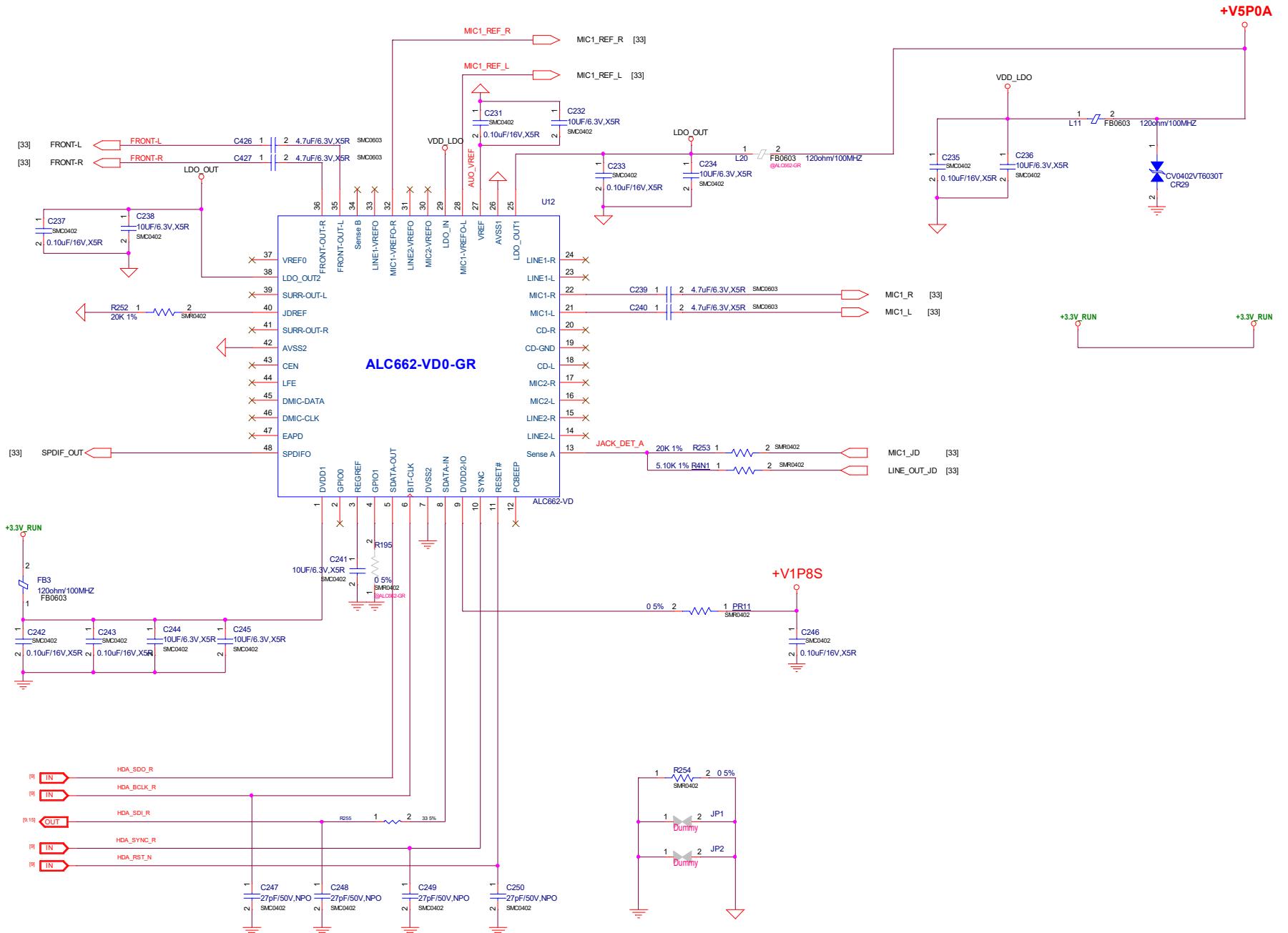




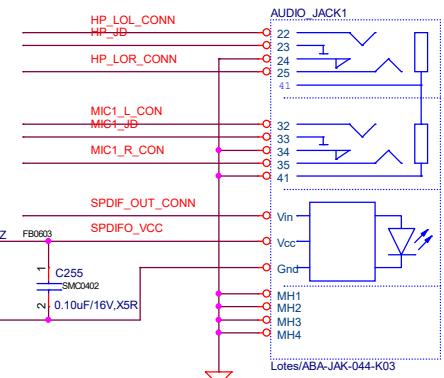
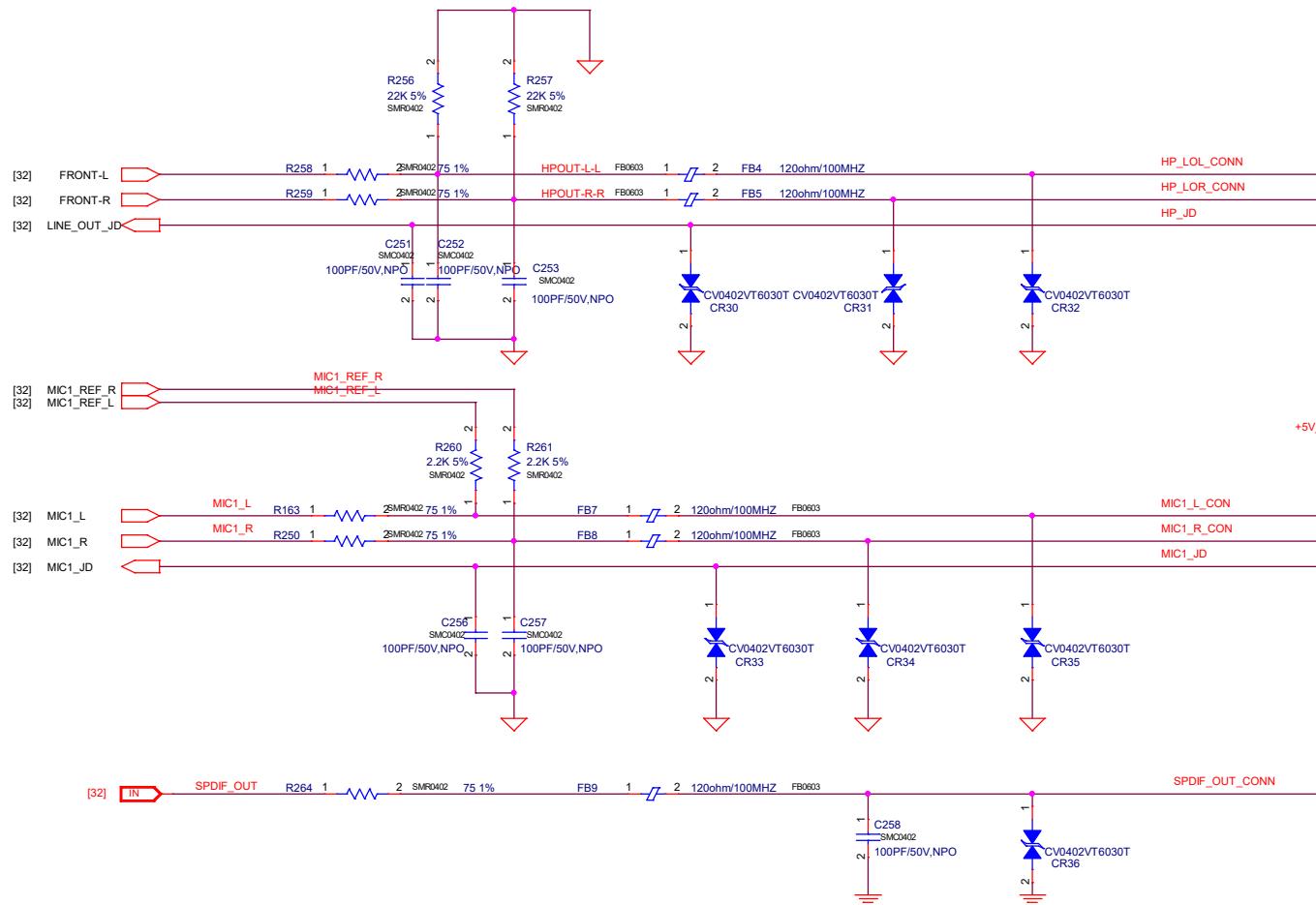


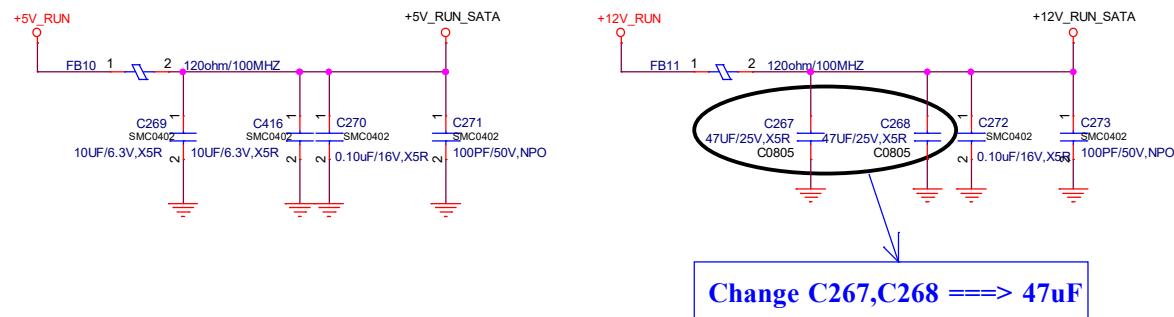
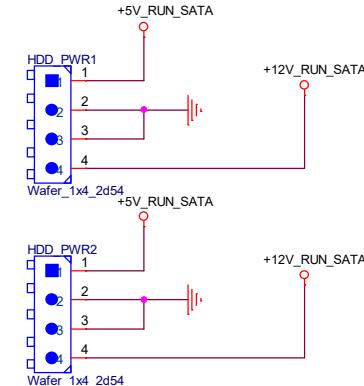
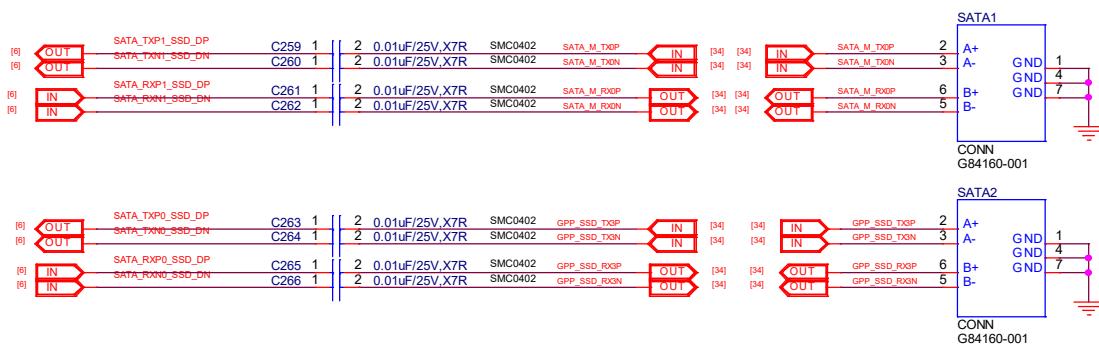


Title		
ODROID-H2		
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019	Sheet 26 of 61	

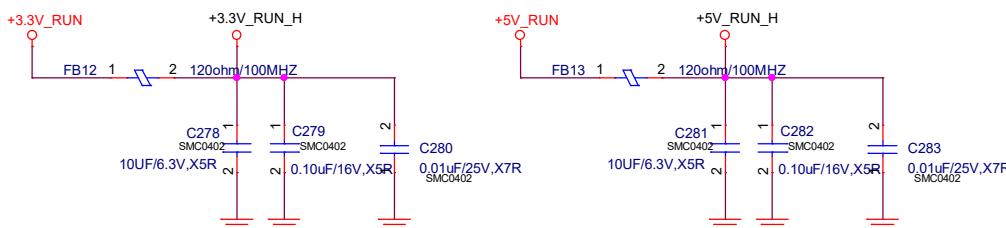
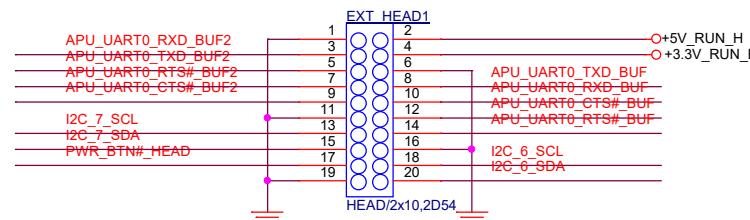
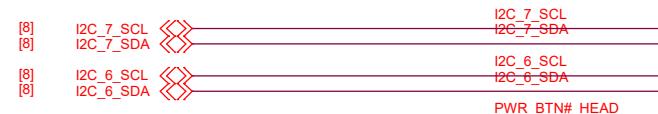


Title		
ODROID-H2		
Size	Document Number	Rev
Date: Wednesday, May 29, 2019	Sheet 27 of 61	A

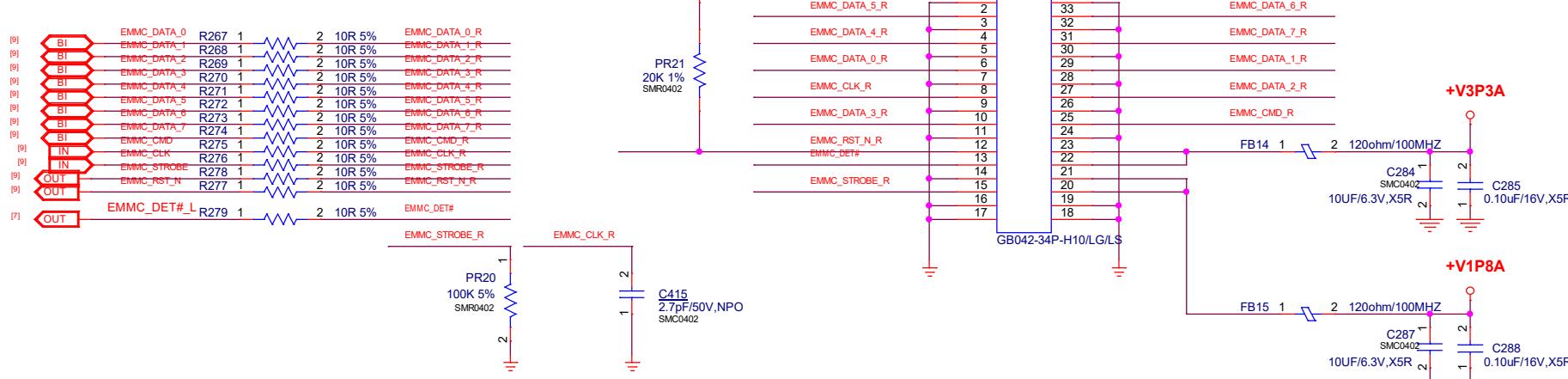




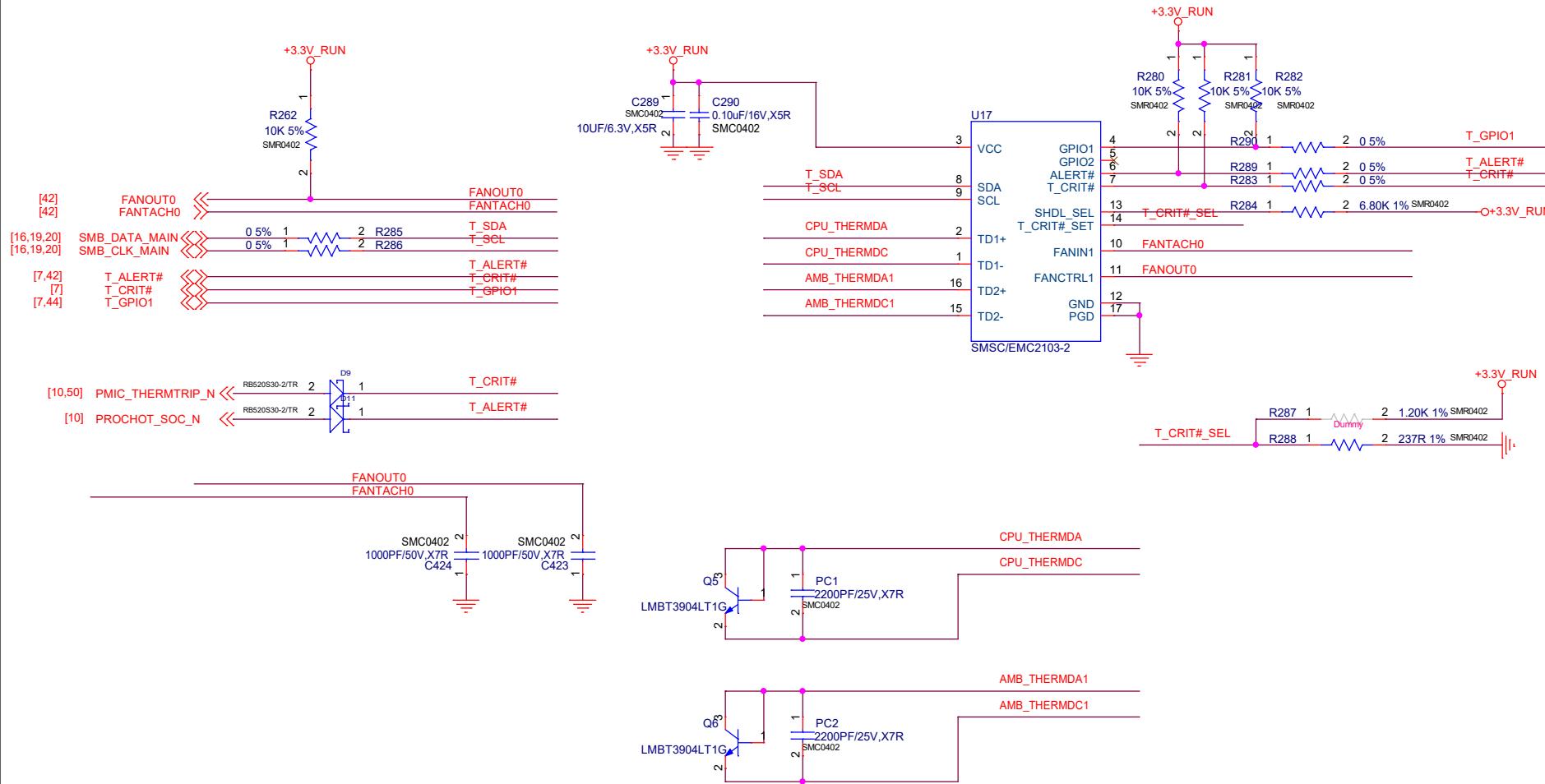
Title		
ODROID-H2		
Size	Document	Number
B		
Date:	Wednesday, May 29, 2019	Sheet 29 of 61
		Rev A



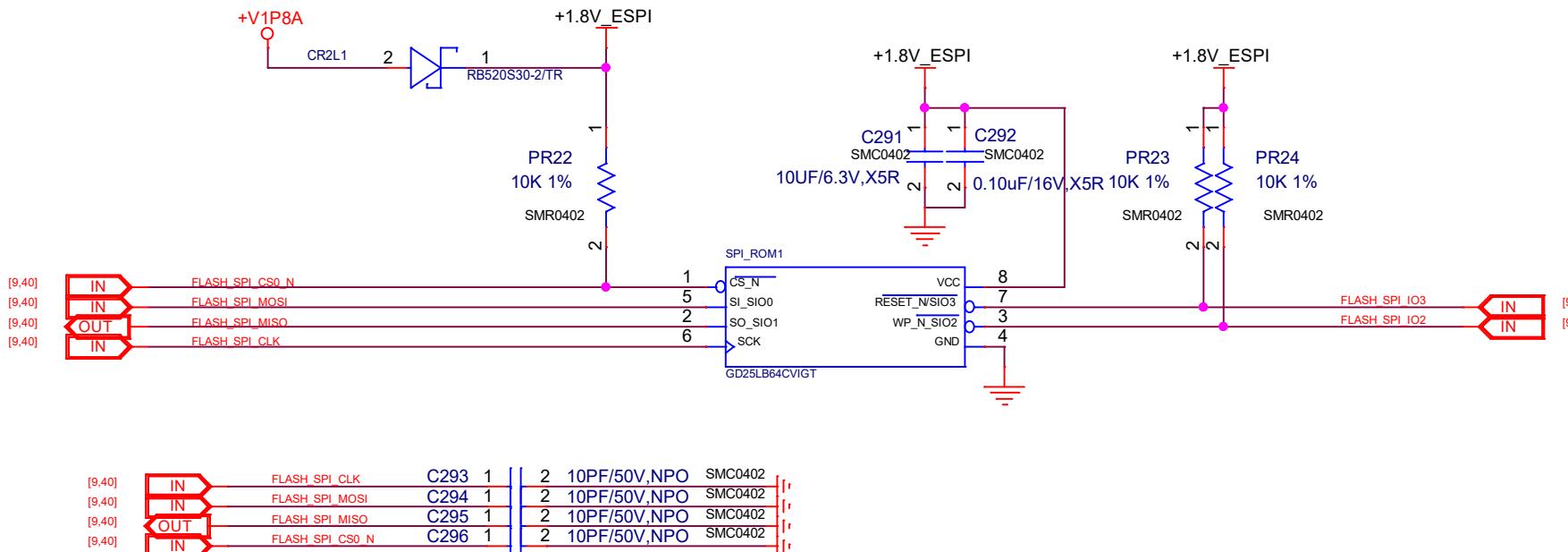
Title	ODROID-H2	
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019	Sheet 30 of 61	



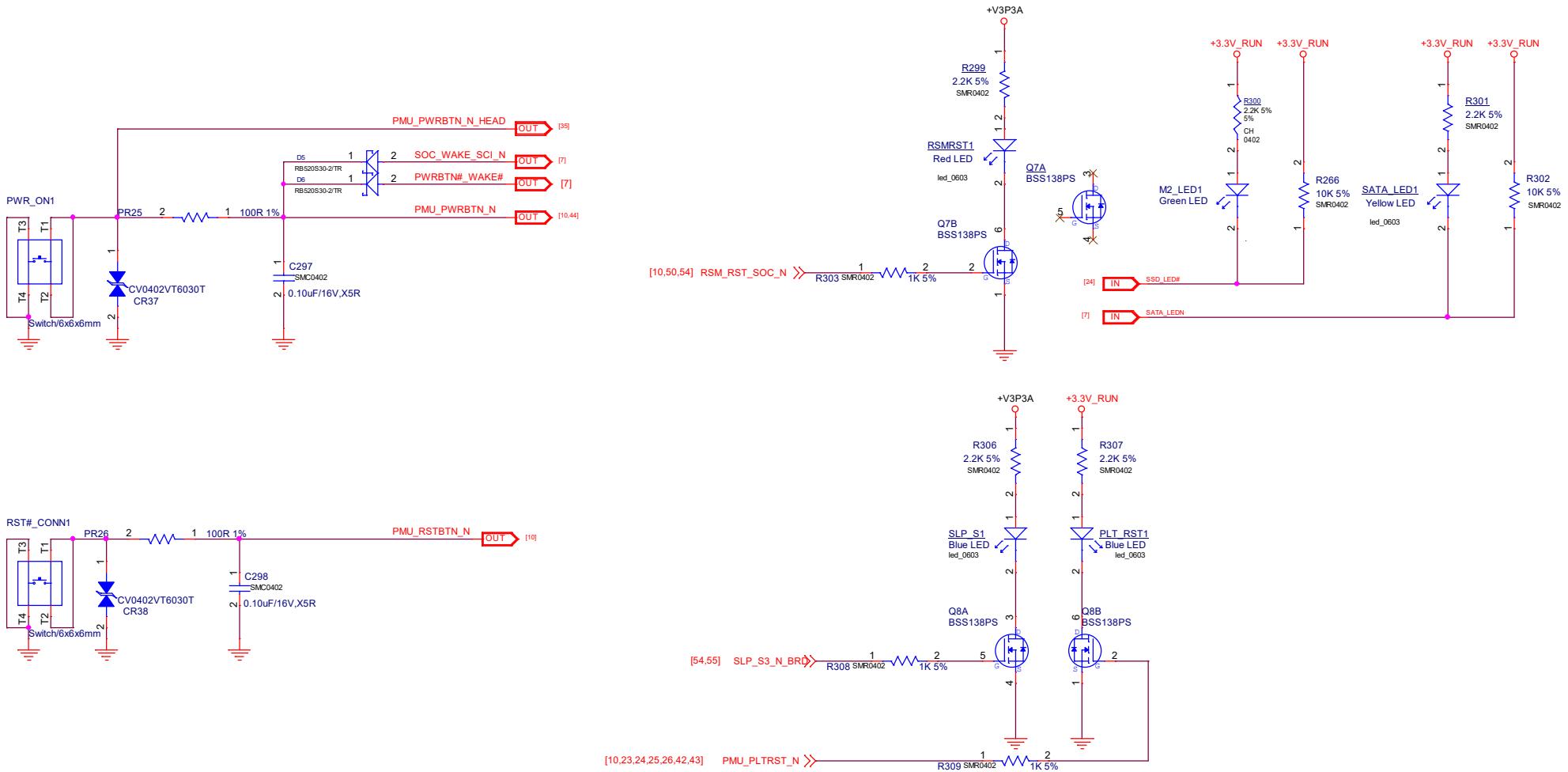
Title	ODROID-H2	
Size	Document Number	Rev A
Date:	Wednesday, May 29, 2019	Sheet 31 of 61

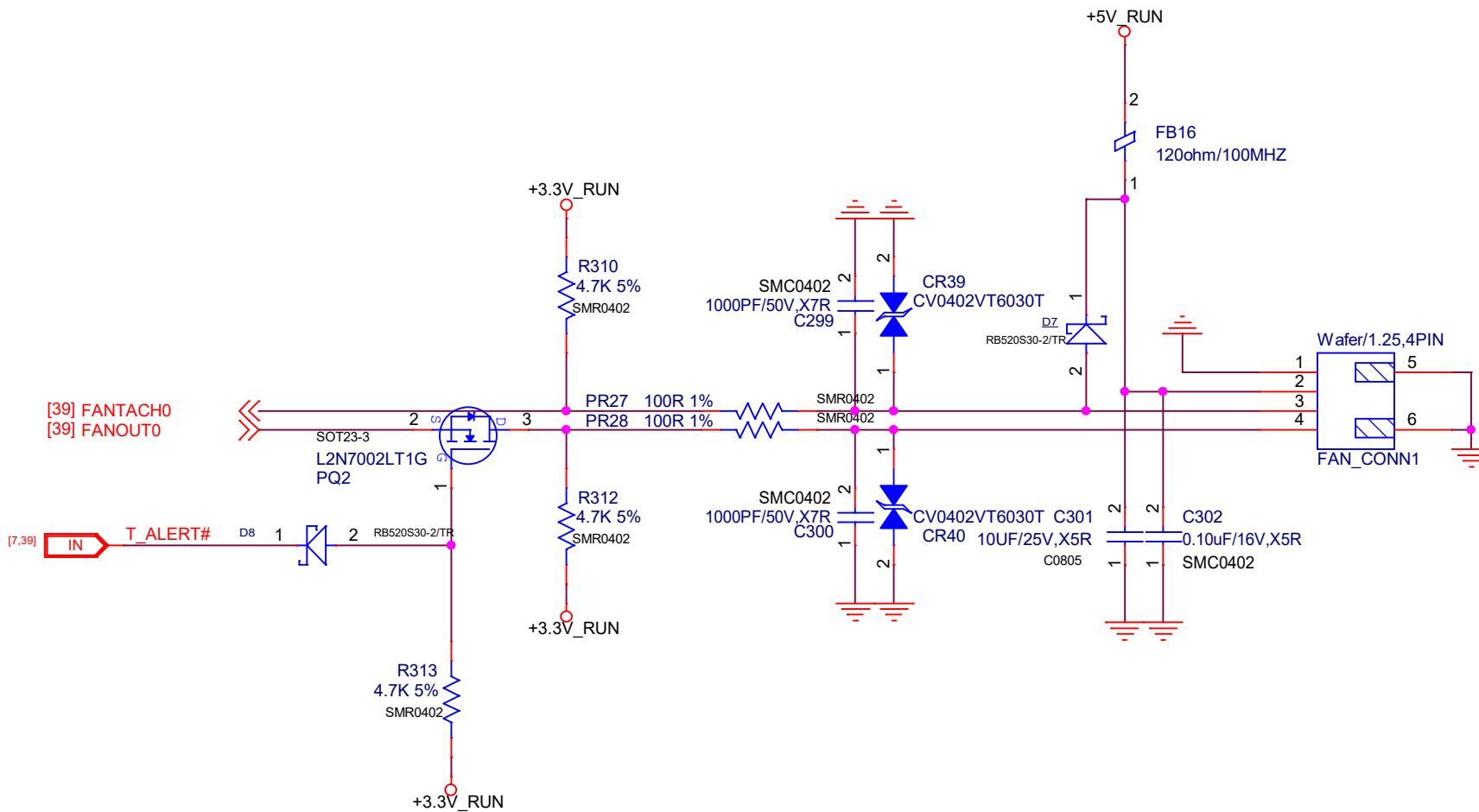


Title	ODROID-H2	
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019	Sheet 32 of 61	



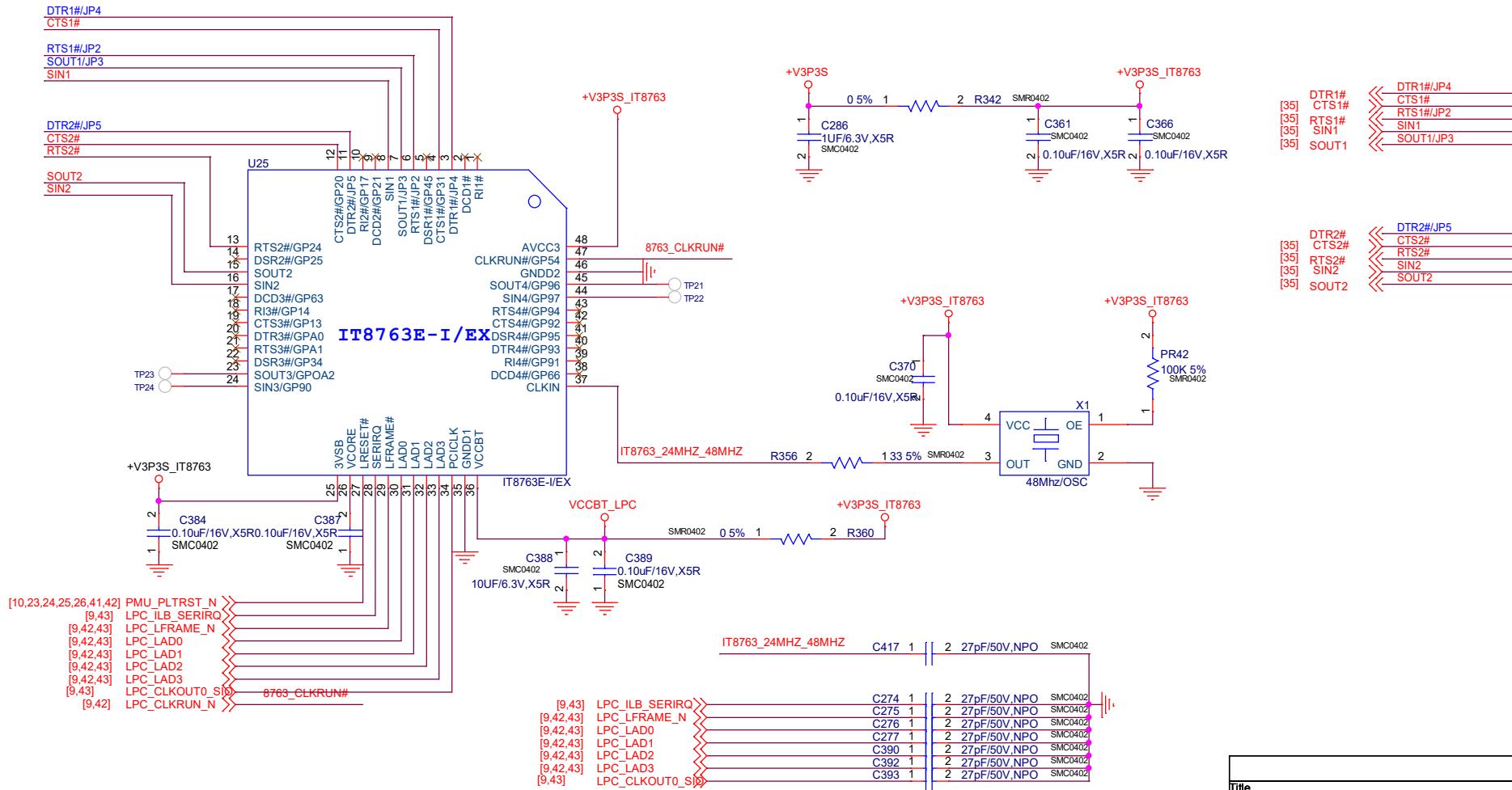
Title		ODROID-H2
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019		Sheet 33 of 61

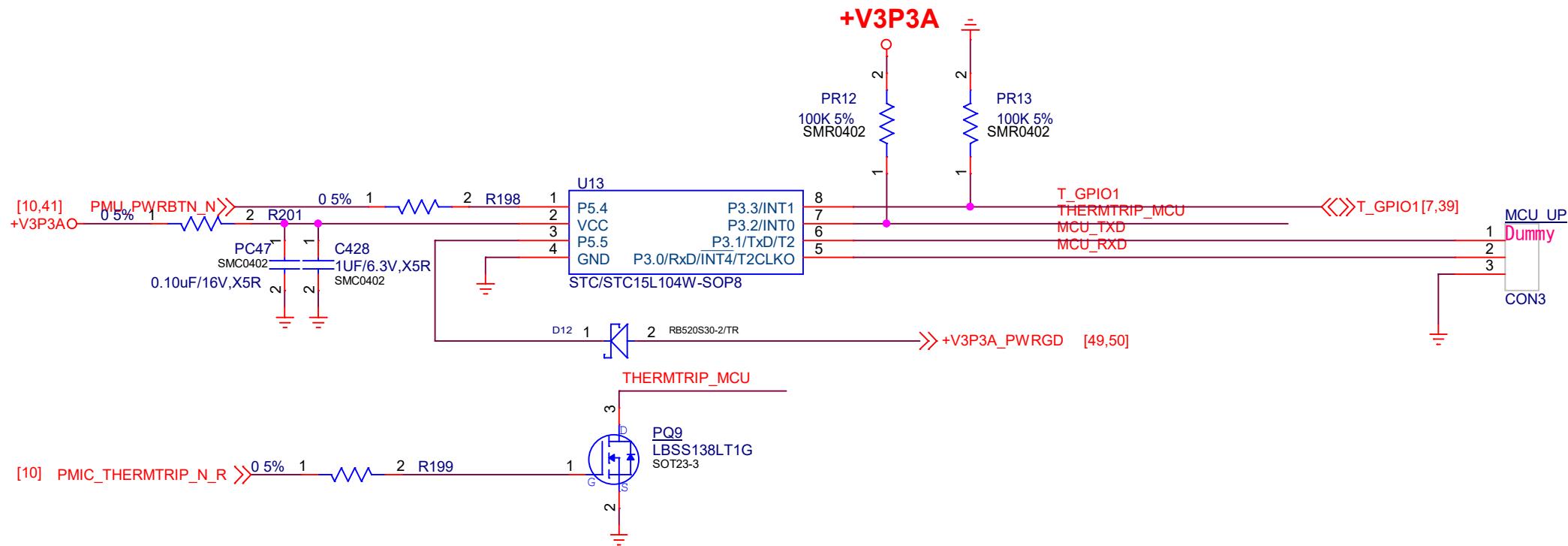




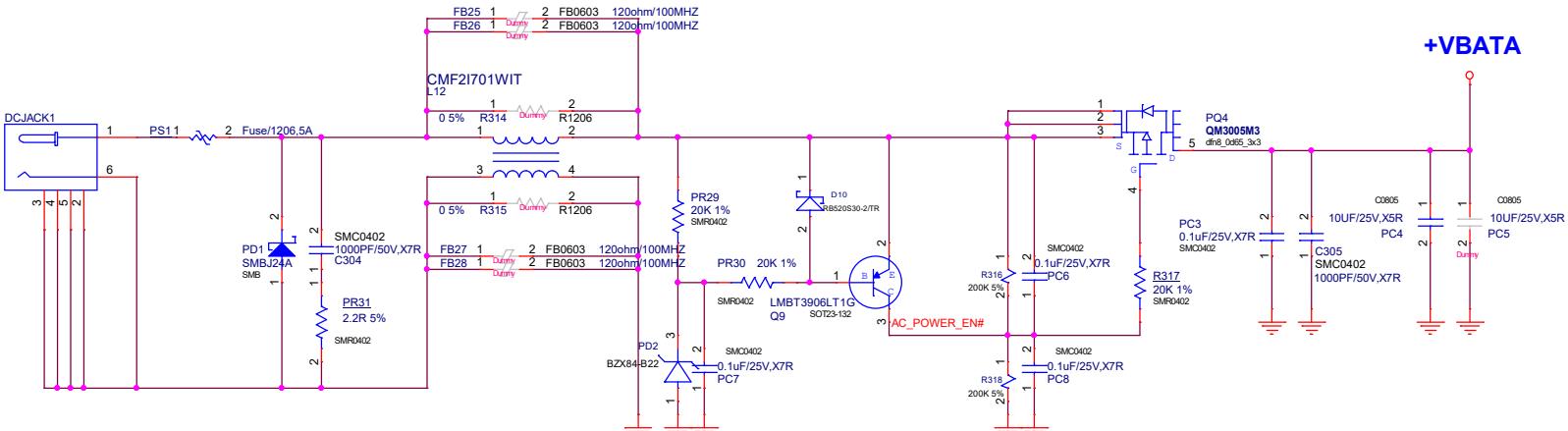
Title	ODROID-H2	
Size	Document Number	Rev
		A

Date: Wednesday, May 29, 2019 Sheet 35 of 61

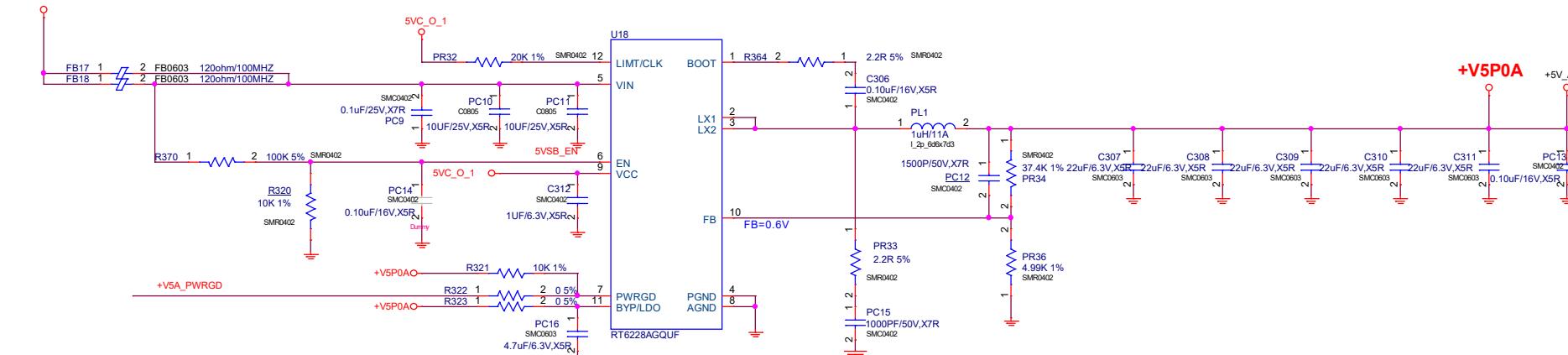
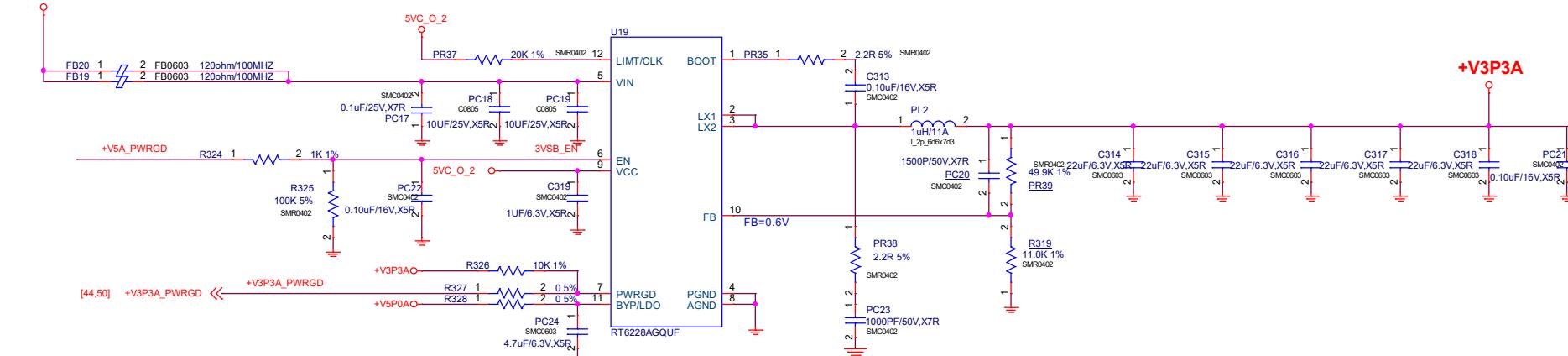




Title	ODROID-H2	
Size	Document Number	Rev
		A

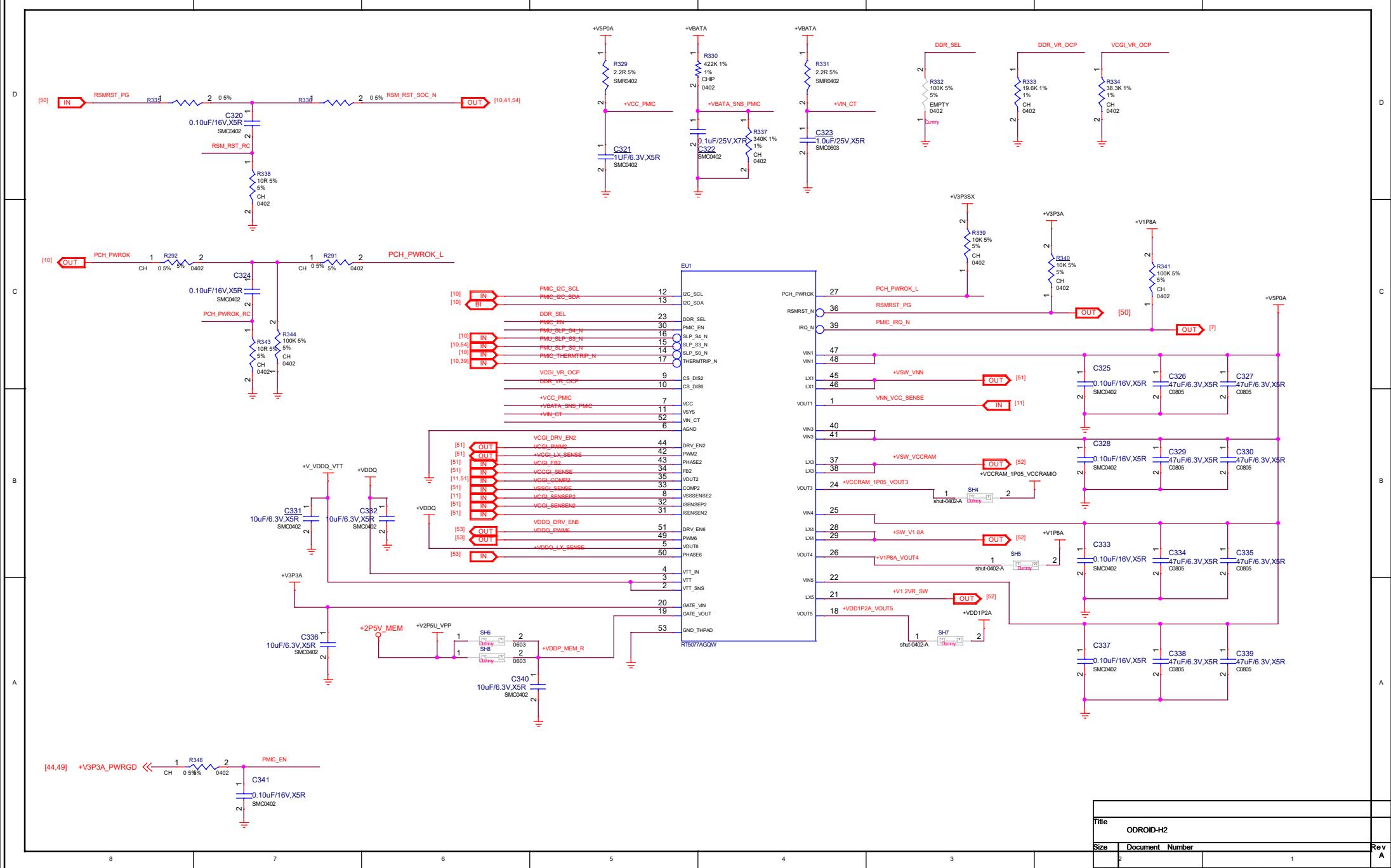


Title	ODROID-H2	Rev	A
Size	Document Number	Date:	Wednesday, May 29, 2019
			Sheet 36 of 61

+VBATA**+VBATA**

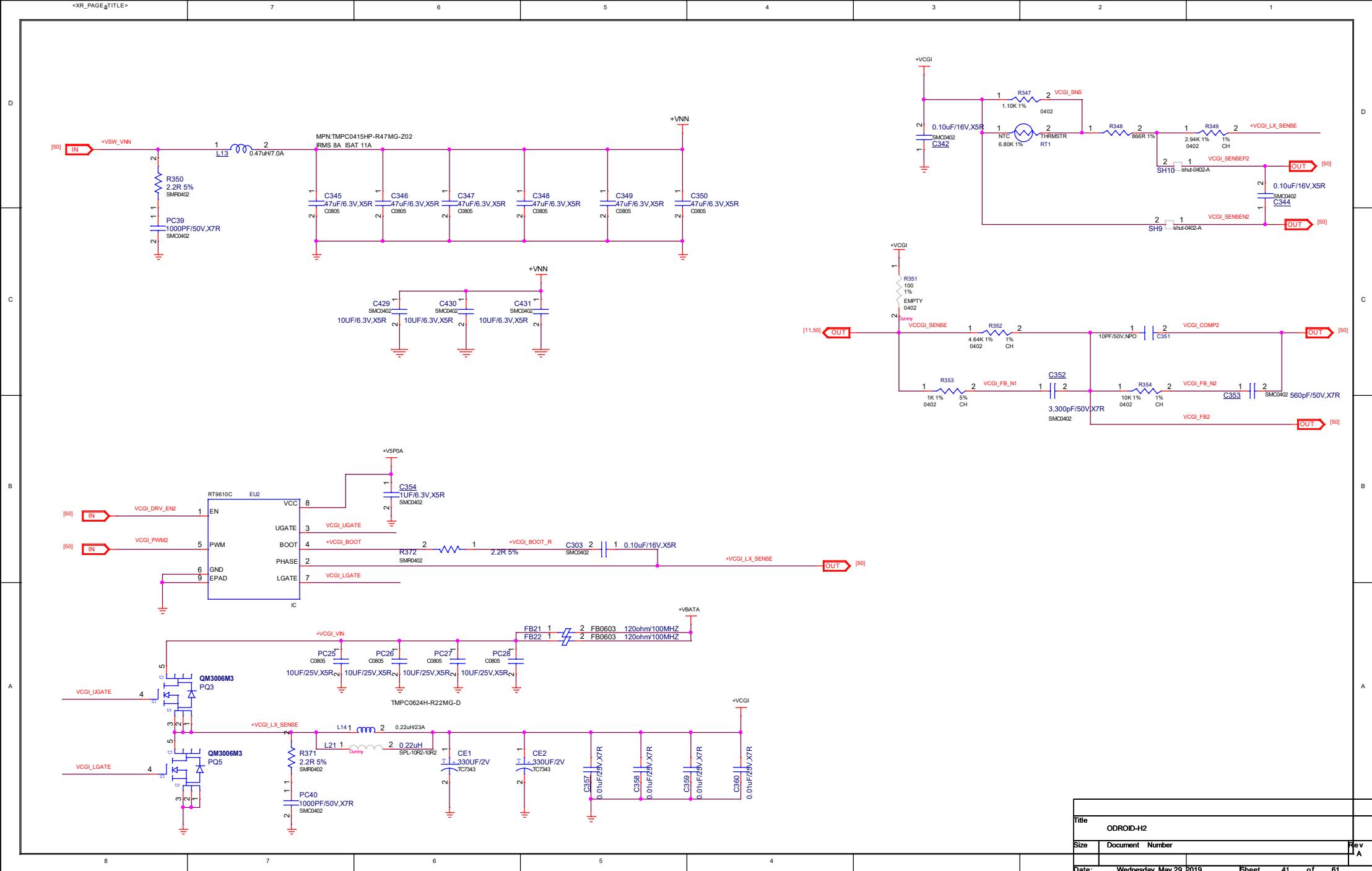
Title		
Size	Document	Number

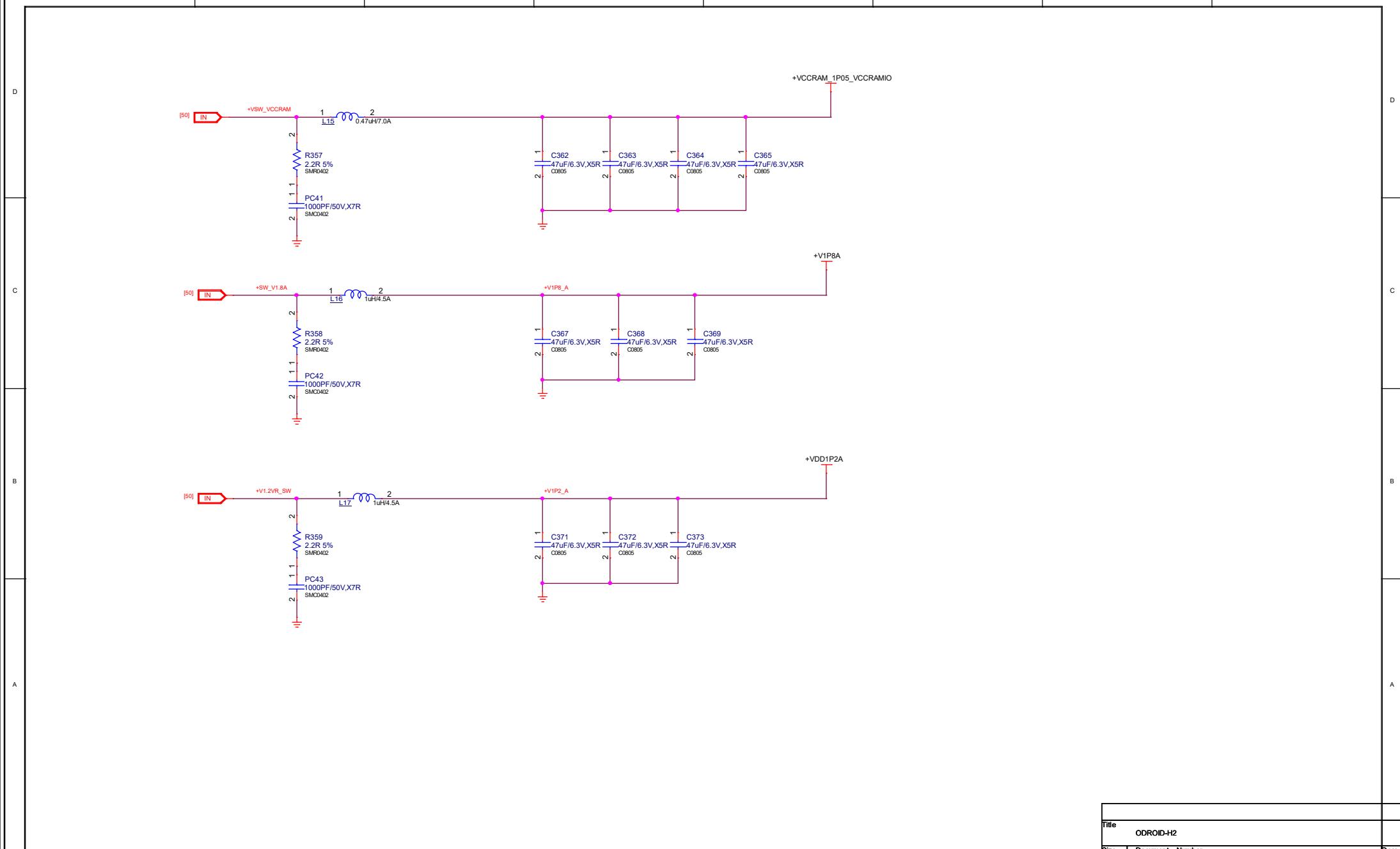
Date: Wednesday, May 25, 2016 Sheet 39 of 61 Rev A



Title: ODROID-H2		
Size	Document Number	Rev
2	1	A

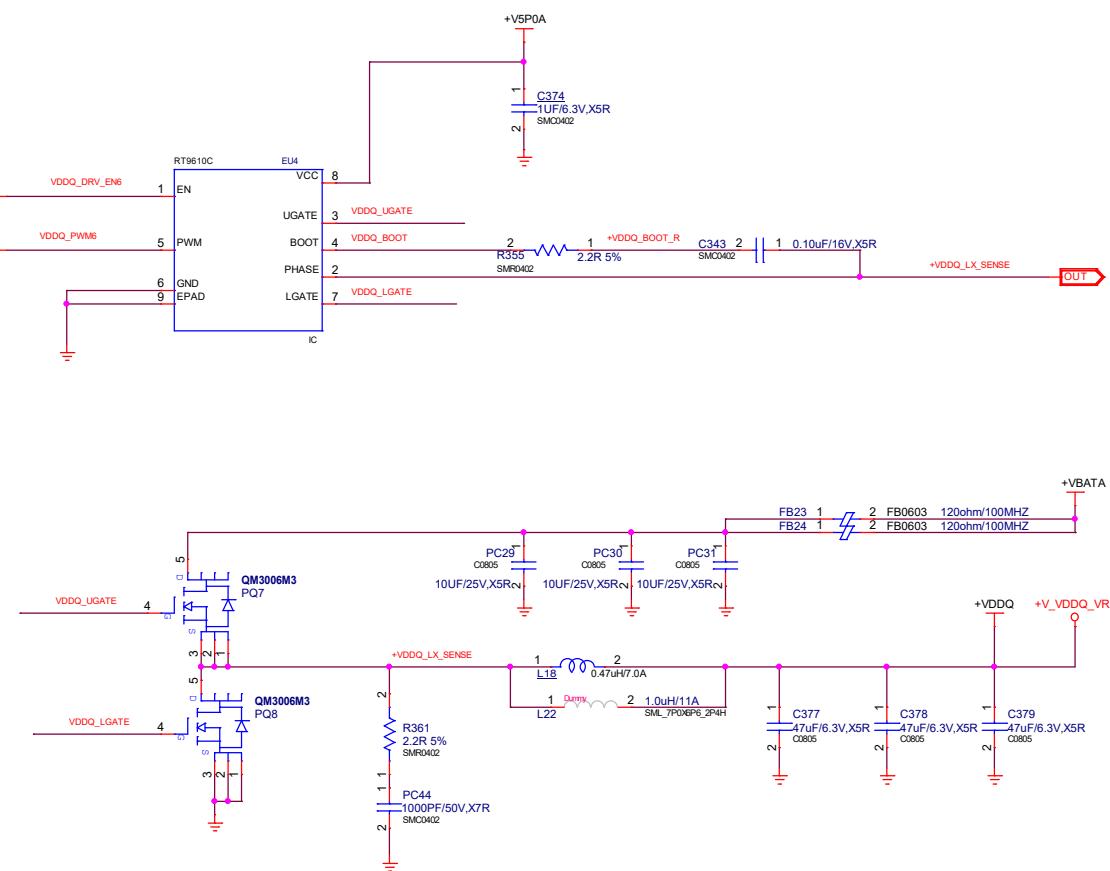
Date: Wednesday, May 29, 2019 Sheet 40 of 61



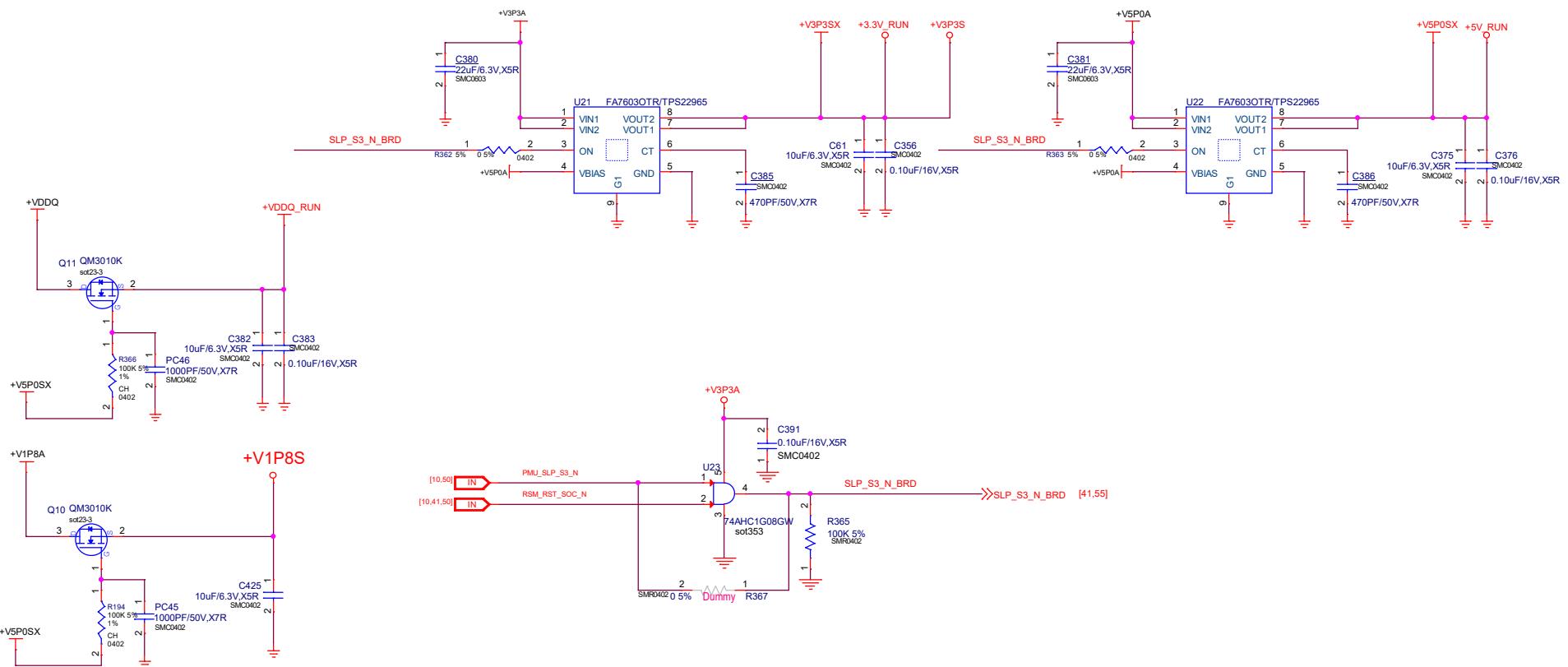


Title		
	ODROID-H2	
Size	Document	Number

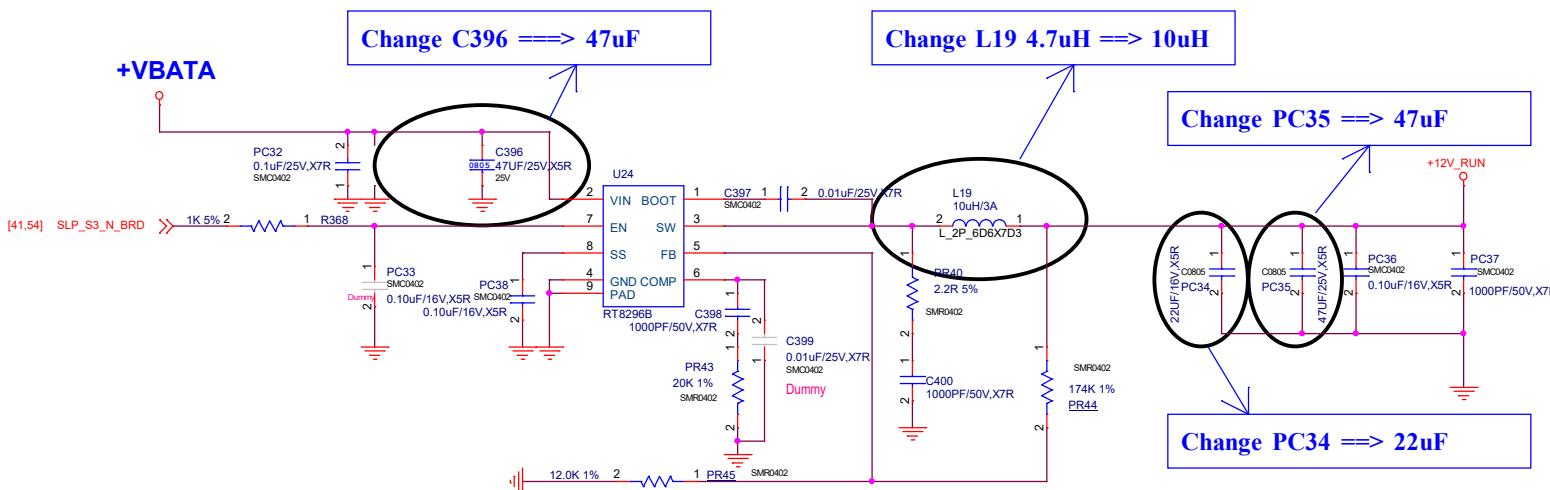
Date: Wednesday, May 25, 2011 Sheet 42 of 61 Rev A



Title		Document Number		Rev
ODROID-H2				A
Size				
Date:	Wednesday, May 29, 2019	Sheet	43	of 61



Title	
ODROID-H2	
Size	Document Number
Rev A	



Title			Rev
	ODROID-H2		A
Size	Document Number	Date:	Wednesday, May 29, 2019

Explain Content & Change List Revision -B

A) 12V power components changing for high speed HDD.

Page[29.45]

L19 ==> 10uH, PC35,C396,C267,C268 ==> 47uF/25V,X5R 1206,
PC34 ==>22uF/16V, 1206

B)CLKREQ Change Pull-up Resistor (Some NVME detection issue).

Page [6]

CLKREQ pull register PR3 change to 49.9K

Title ODROID-H2		
Size	Document Number	Rev A
Date: Wednesday, May 29, 2019	Sheet 45 of 61	