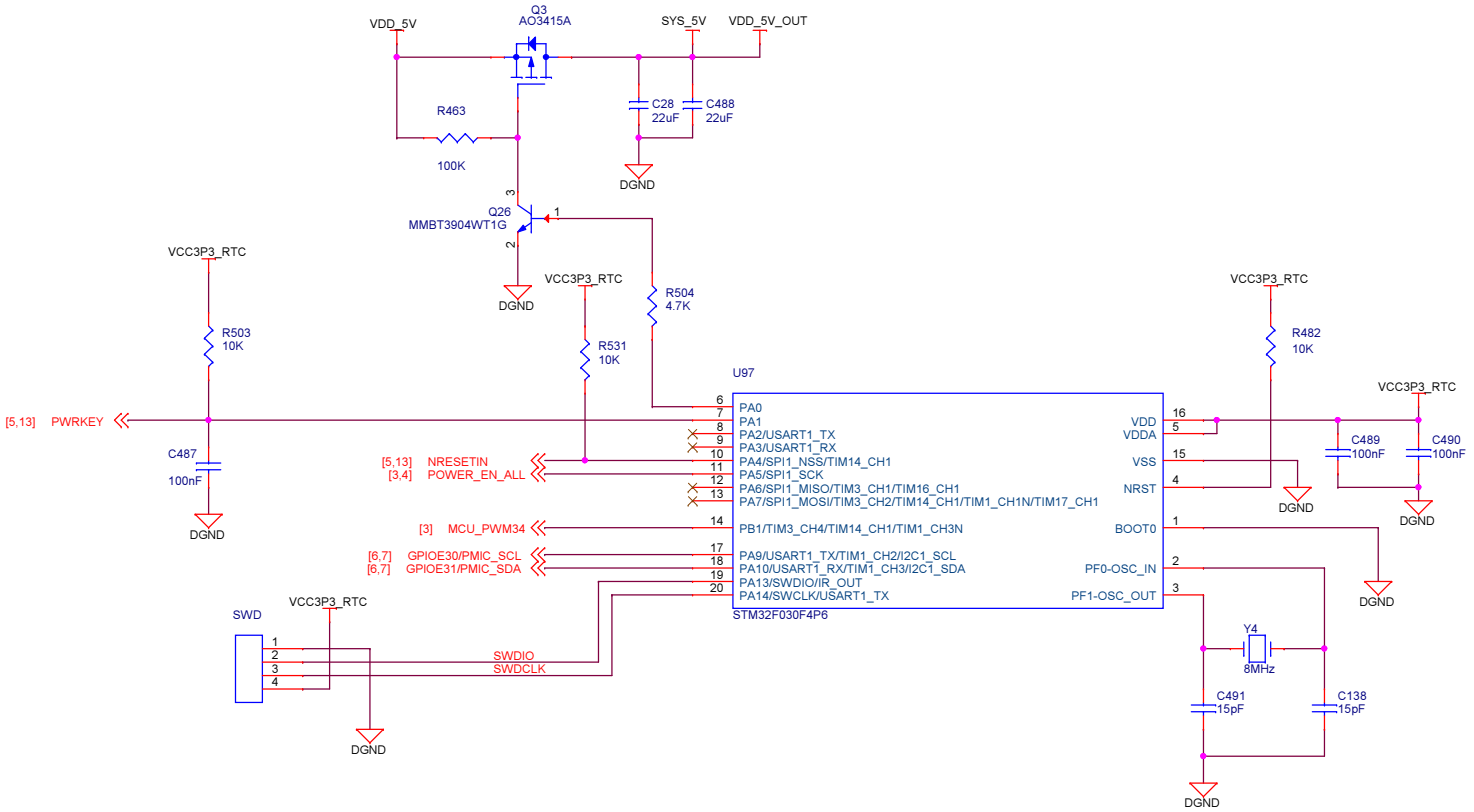
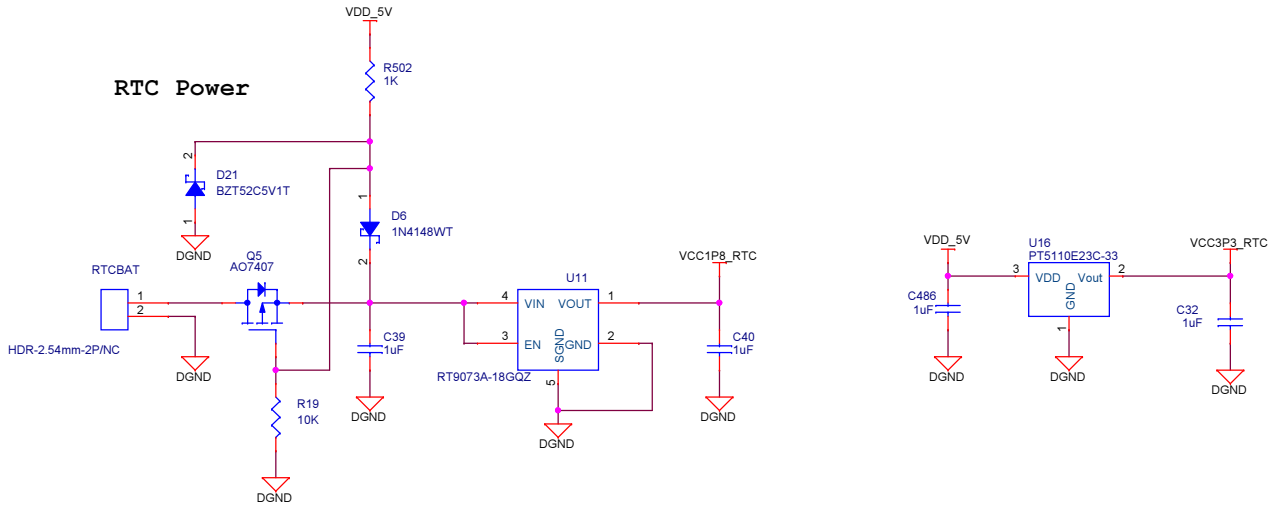
NanoPi S2

FRIENDLY ELEC

NanoPi S2		
Size: A3	Document Number: 01:Title	Rev: 1710
Date: Monday, December 25, 2017	Sheet 1 of 16	

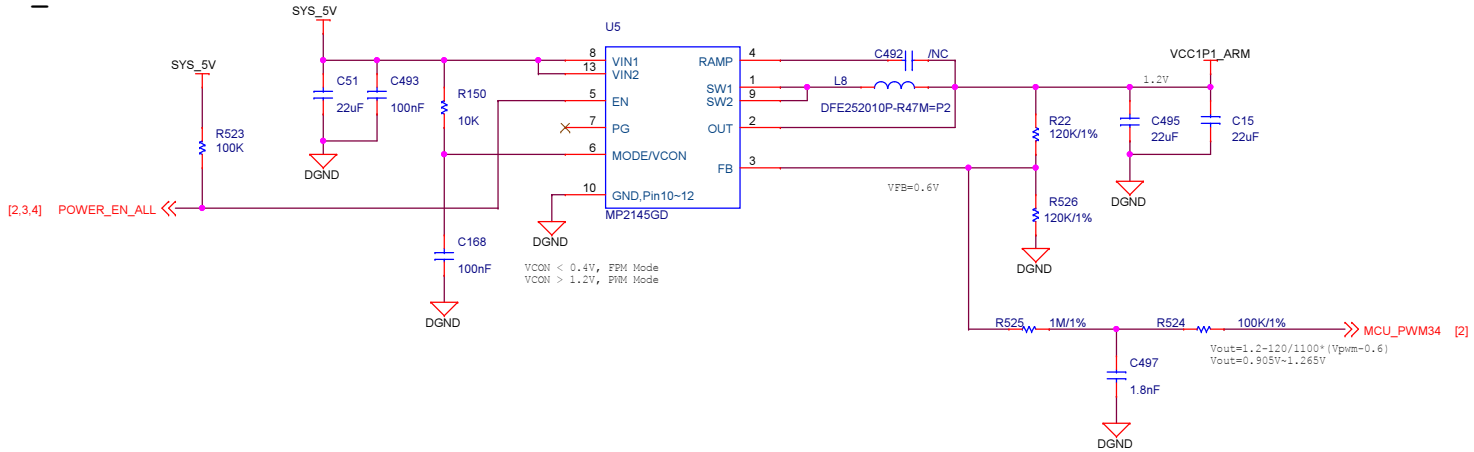




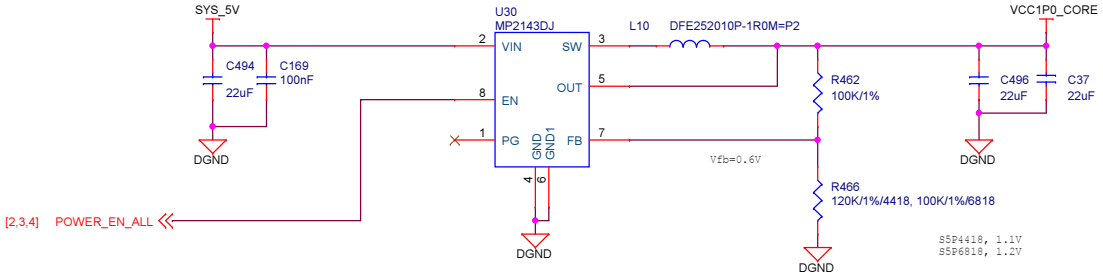
FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 02.SPU	Rev 1710
Date: Monday, December 25, 2017	Sheet 2 of 16	

VDD_ARM

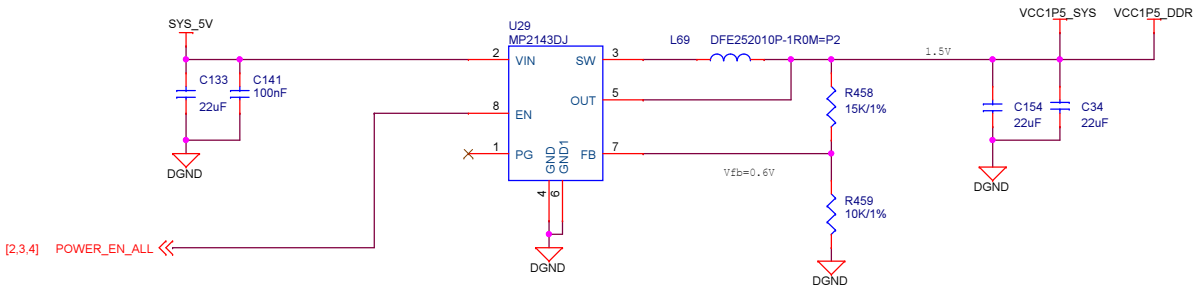


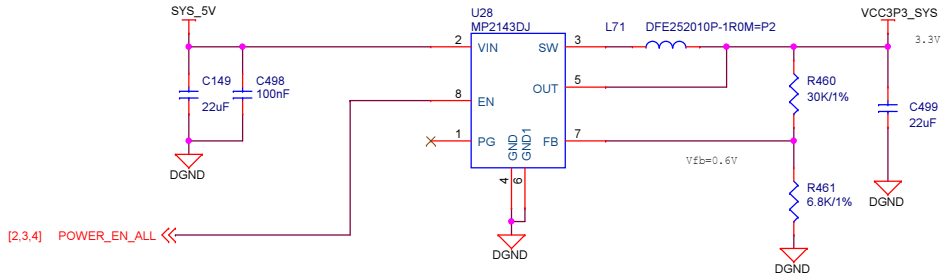
VDD_CORE

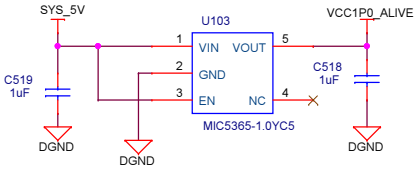


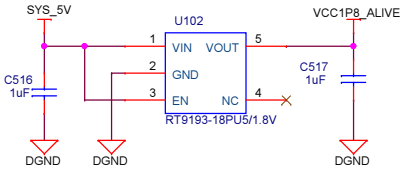
FRIENDLY ELEC

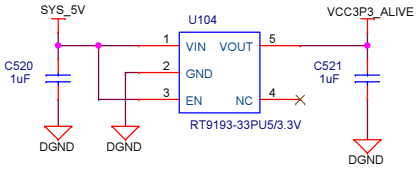
NanoPi S2		
Size A3	Document Number 02b:VDD_ARM/VDD_CORE	Rev 1710
Date: Monday, December 25, 2017	Sheet 3 of 16	

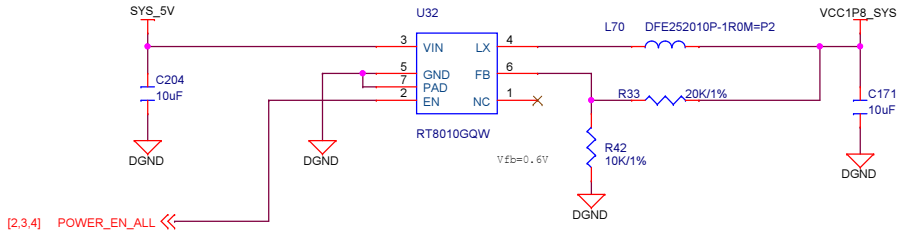








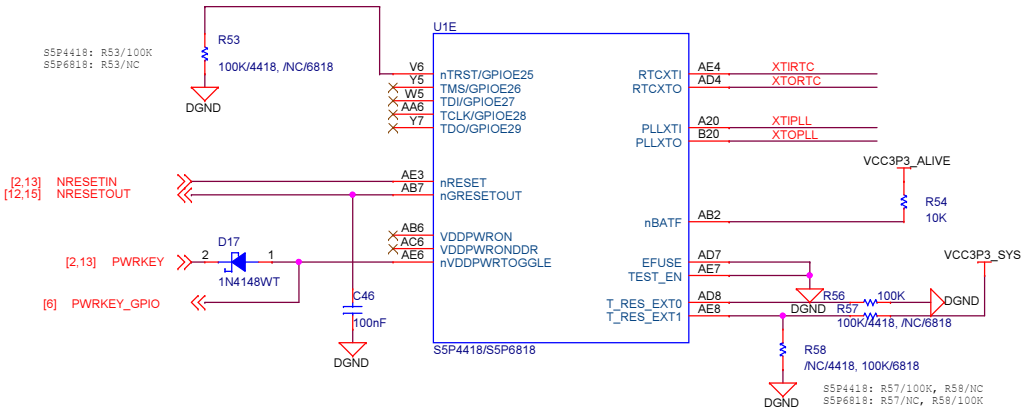


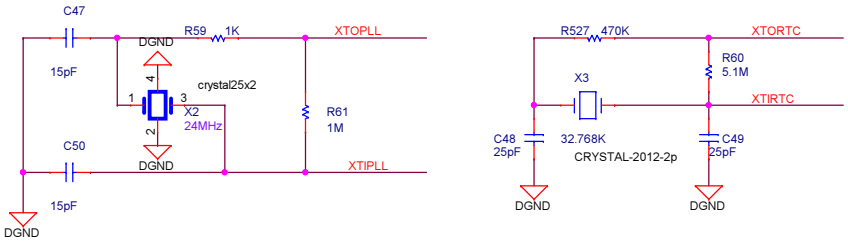


FRIENDLY ELEC

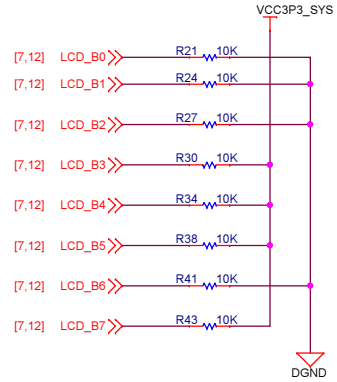
NanoPi S2		
Size A3	Document Number 02c:3.3V/1.8V/1.5V/alive	Rev 1710
Date: Monday, December 25, 2017	Sheet 4 of 16	

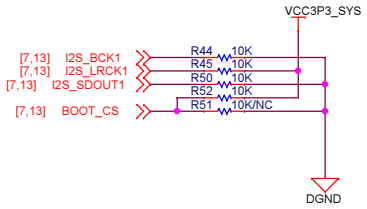
System Reset, Clocks





Boot Mode Config





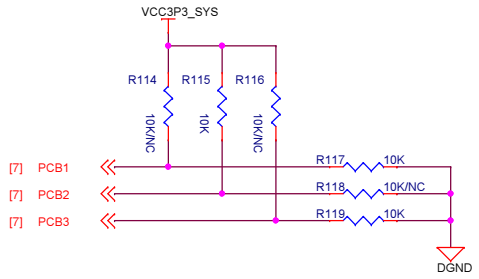
BOOT MODE OPTION

	eMMC	SPI	USB	NAND
SD0	HIGH	LOW	LOW	HIGH
SD1	LOW	LOW	HIGH	HIGH
SD2	HIGH	HIGH	HIGH	HIGH
SD4	LOW	HIGH		
SD5	LOW	LOW		

Boot media port select (SPI, eMMC)

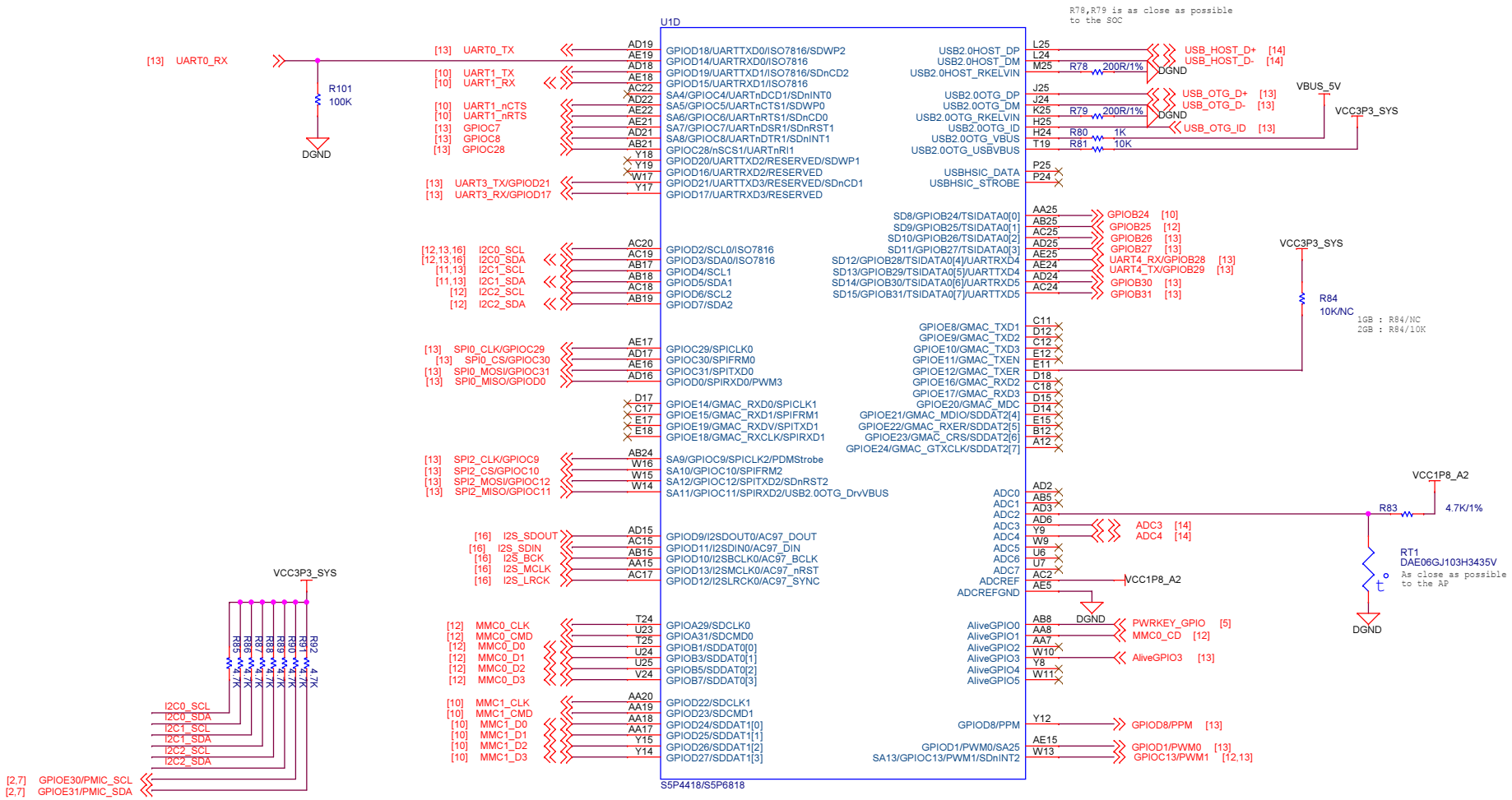
	CH0	CH1	CH2
SD3	LOW	HIGH	LOW
CAM1_D3	LOW	LOW	HIGH

PCB Version



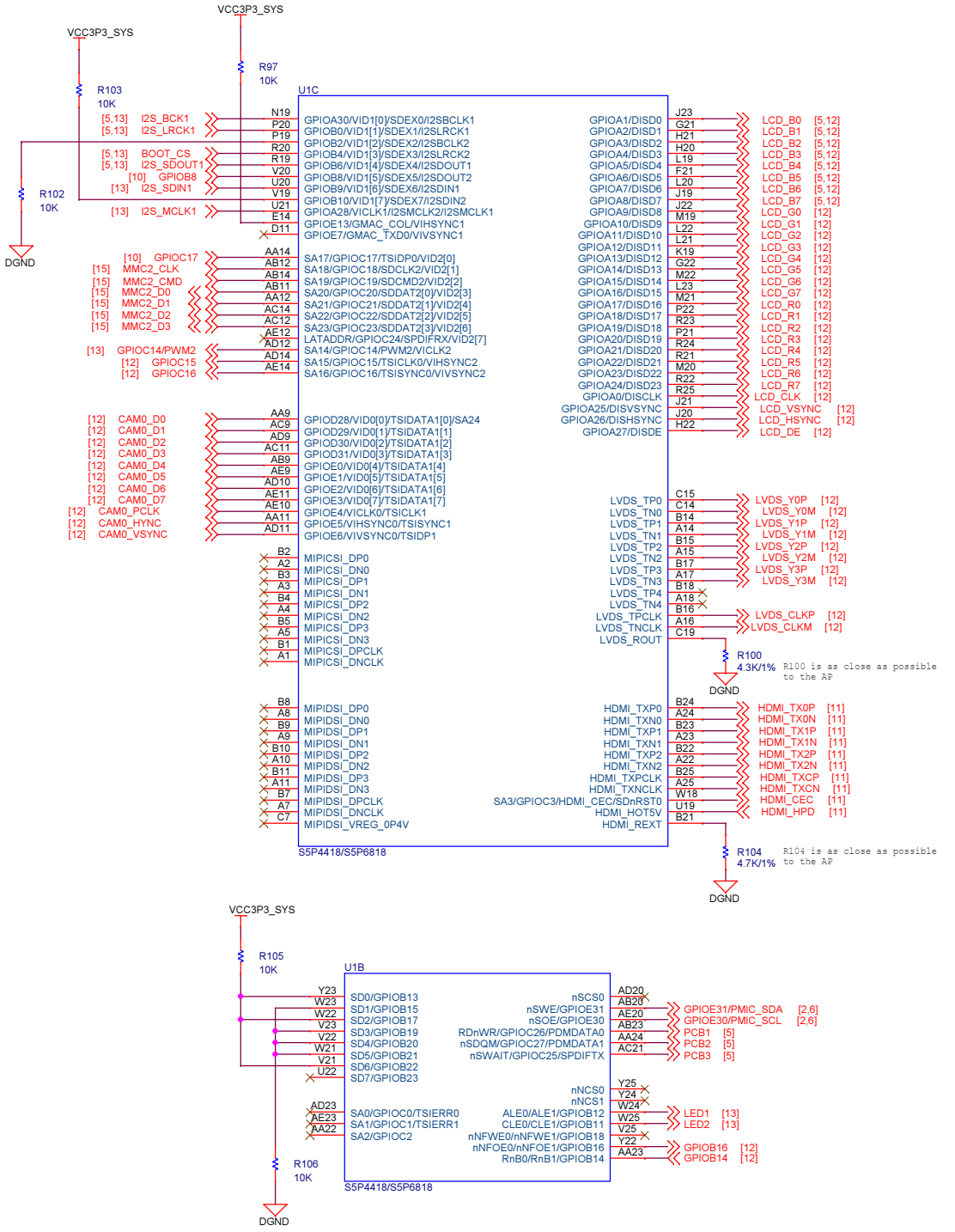
FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 03.AP System Control	Rev 1710
Date: Monday, December 25, 2017	Sheet 5 of 16	

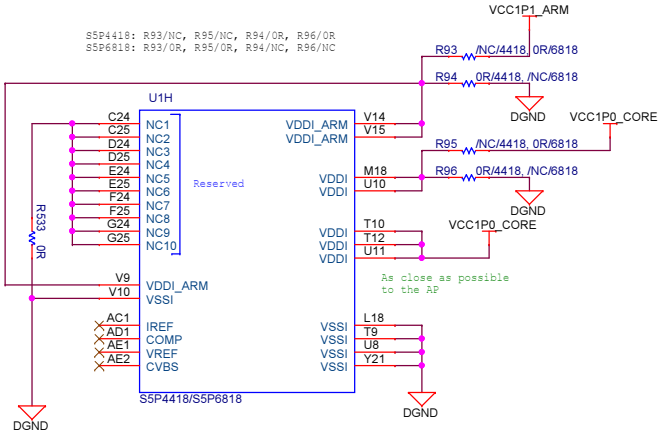


FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 04.AP Peripherals	Rev 1710
Date: Monday, December 25, 2017	Sheet 6 of 16	

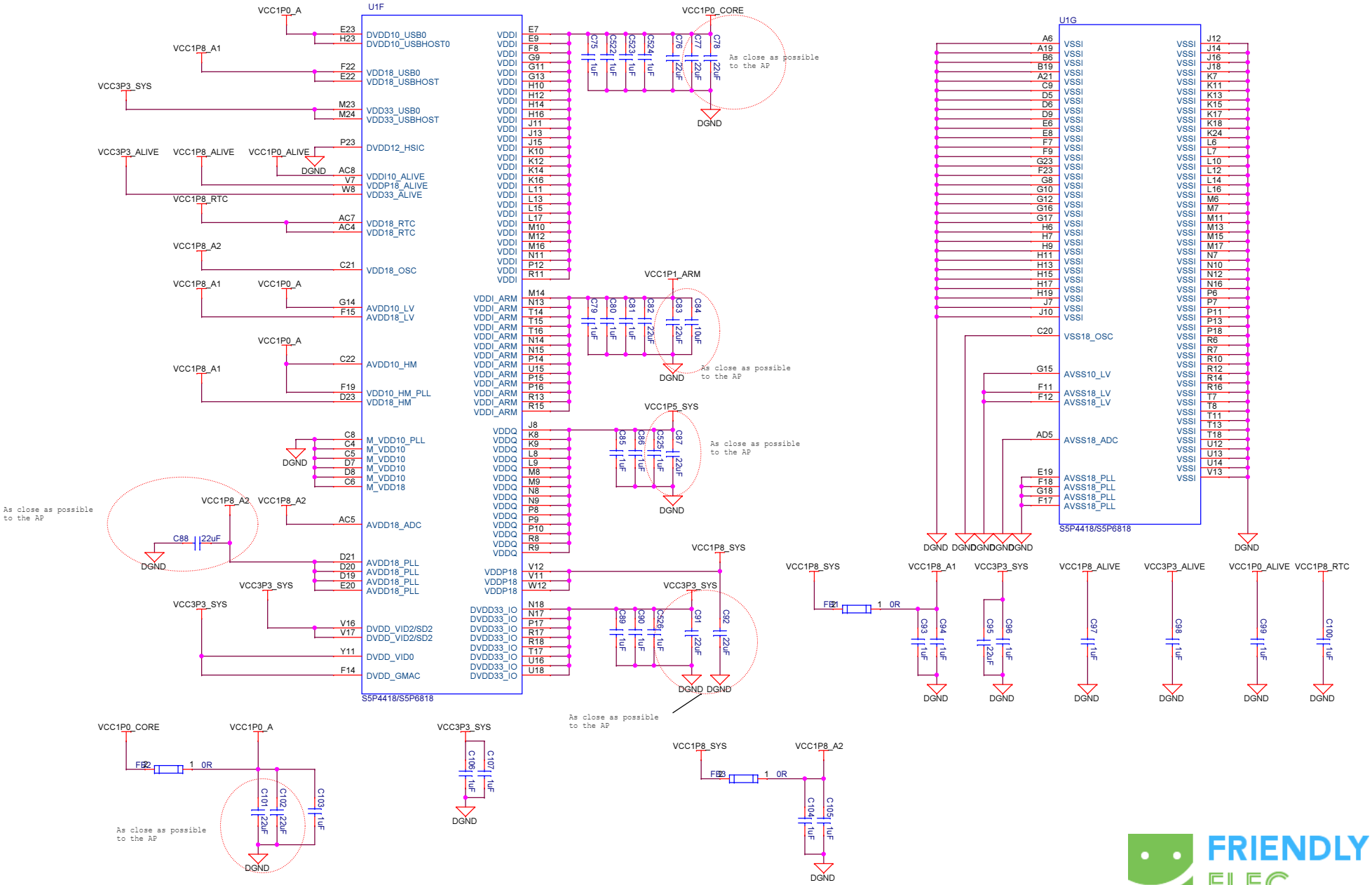


Reserved Function



FRIENDLY ELEC

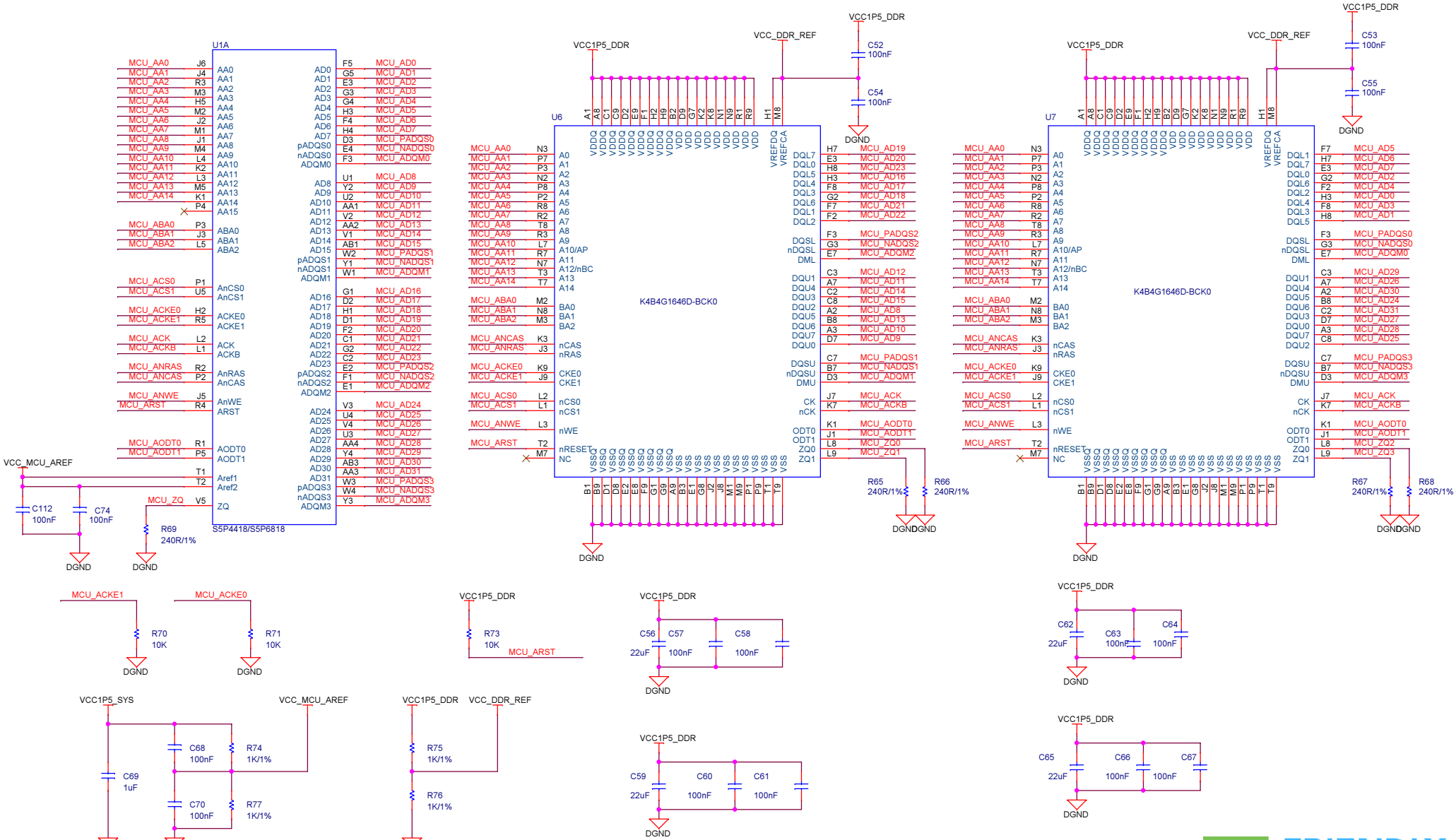
NanoPi S2		
Size A3	Document Number 05.AP VIP&Display	Rev 1710
Date: Monday, December 25, 2017	Sheet 7 of 16	



NanoPi S2

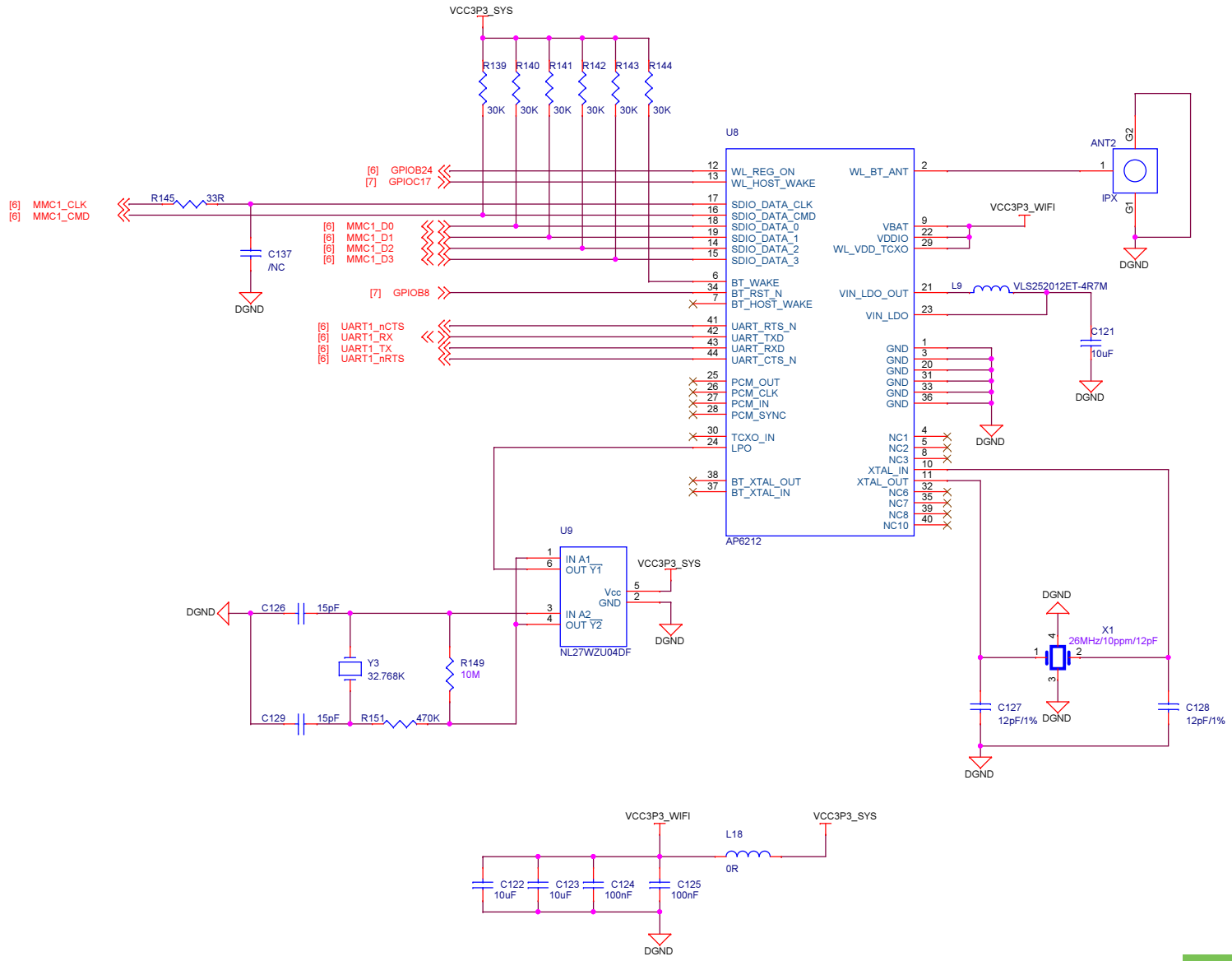
Size	Document Number	Rev
A3	06.AP Power	1710

Date: Monday, December 25, 2017 Sheet 8 of 16



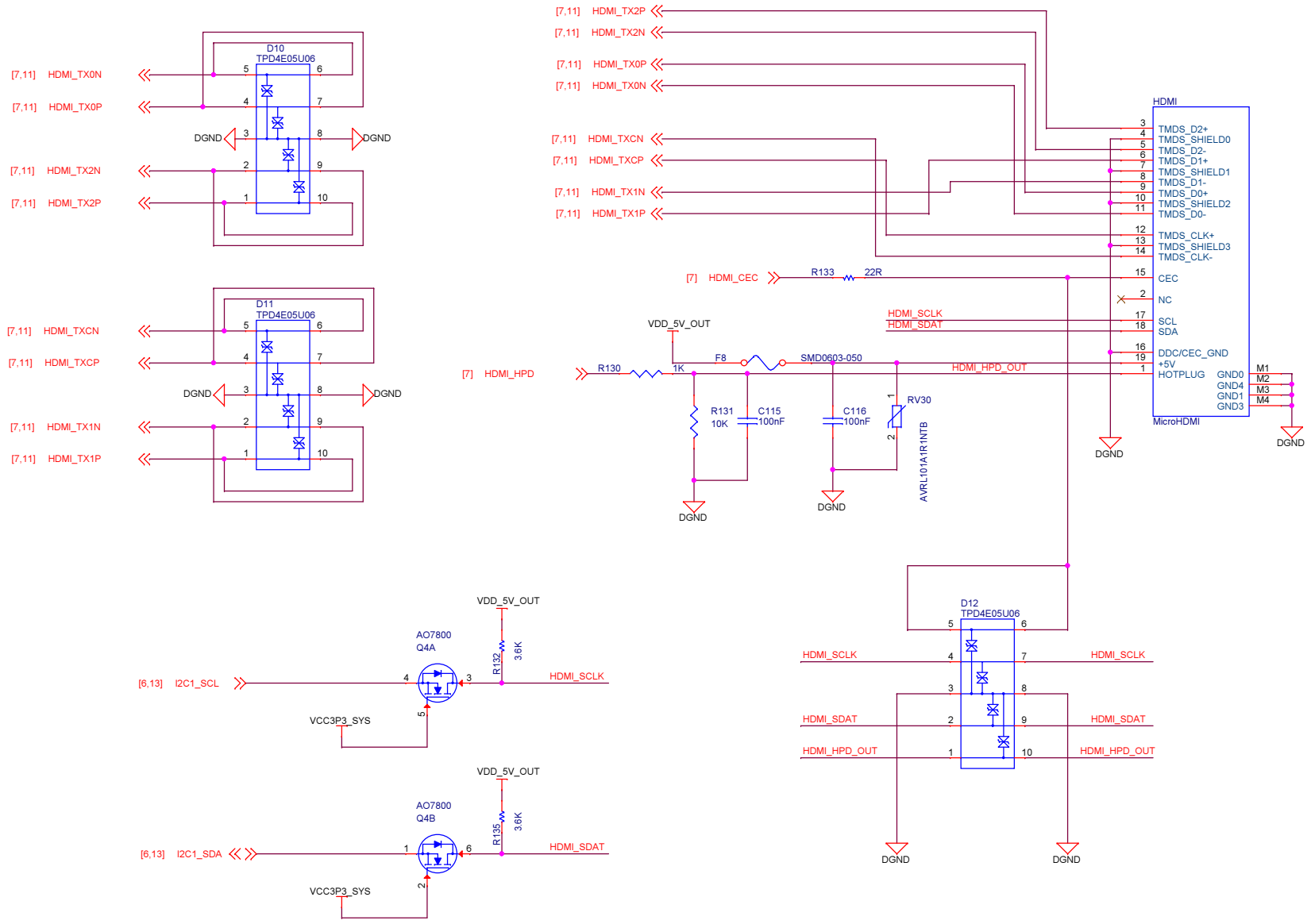
FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 07.DDR III	Rev 1710
Date: Monday, December 25, 2017	Sheet 9 of 16	



FRIENDLY ELEC

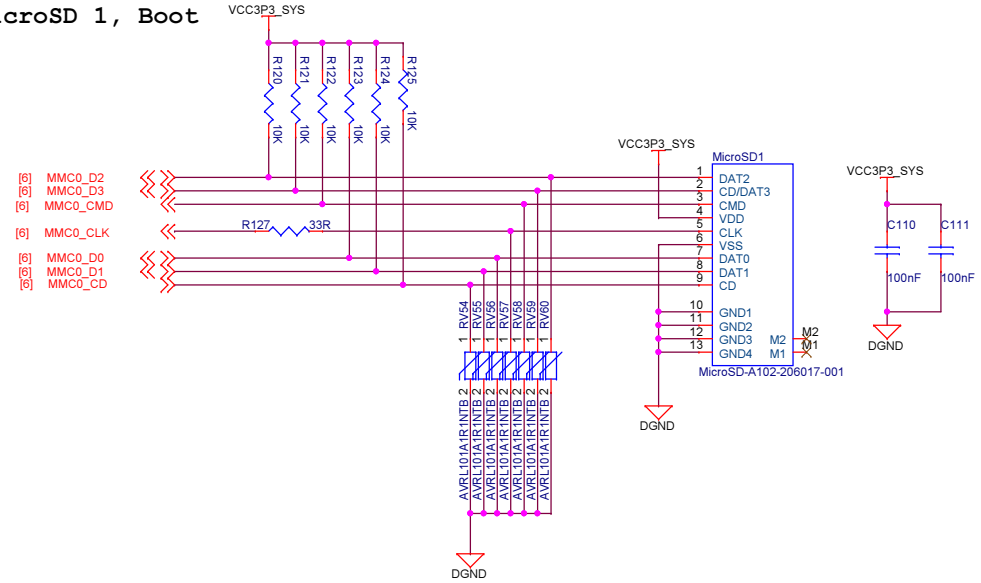
NanoPi S2		
Size A3	Document Number 08.Wi-Fi&BT	Rev 1710
Date: Monday, December 25, 2017	Sheet 10 of 16	



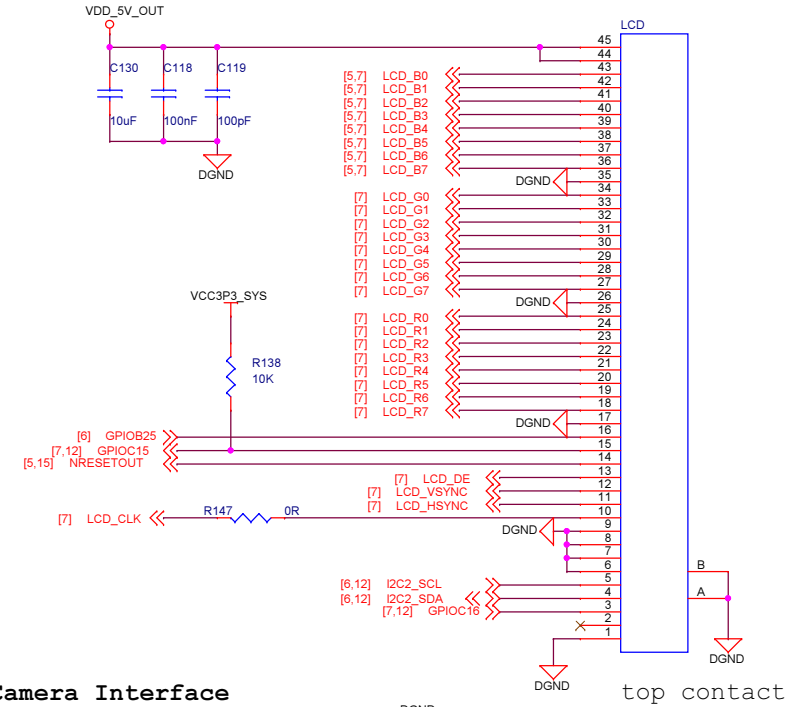
FRIENDLY ELEC

NanoPi S2		
Size: A3	Document Number: 09.HDMI	Rev: 1710
Date: Monday, December 25, 2017	Sheet 11 of 16	

MicroSD 1, Boot

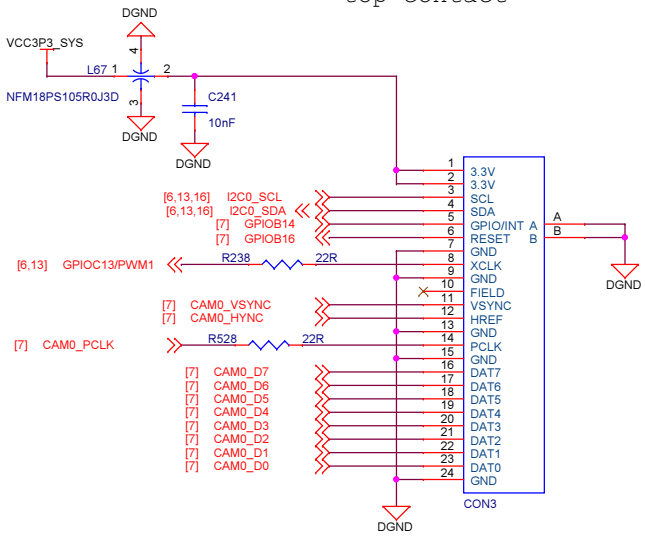


RGB LCD Interface

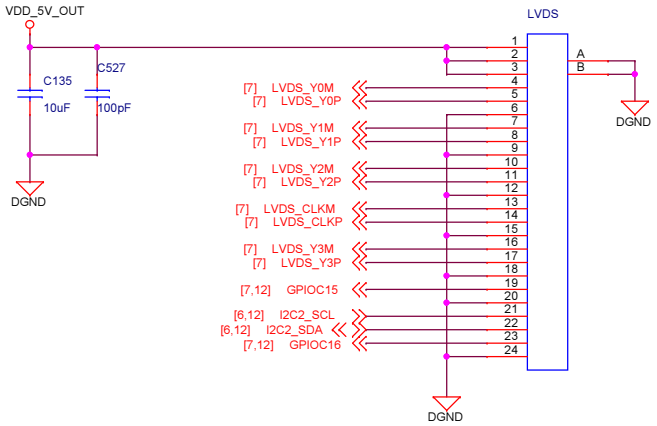


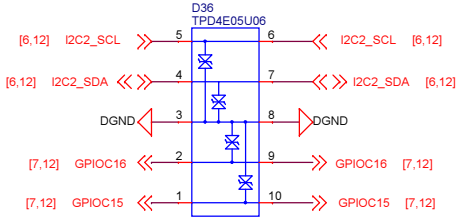
top contact

Camera Interface



LVDS

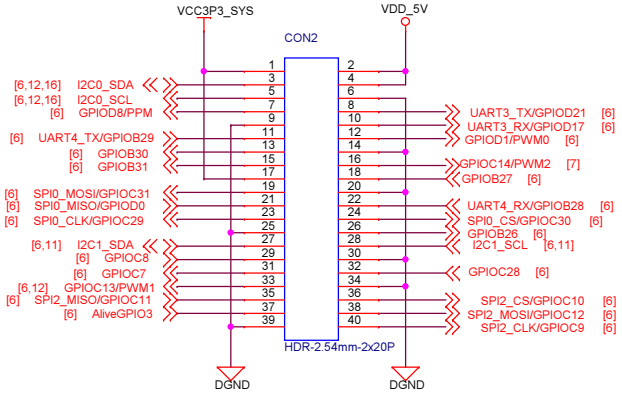




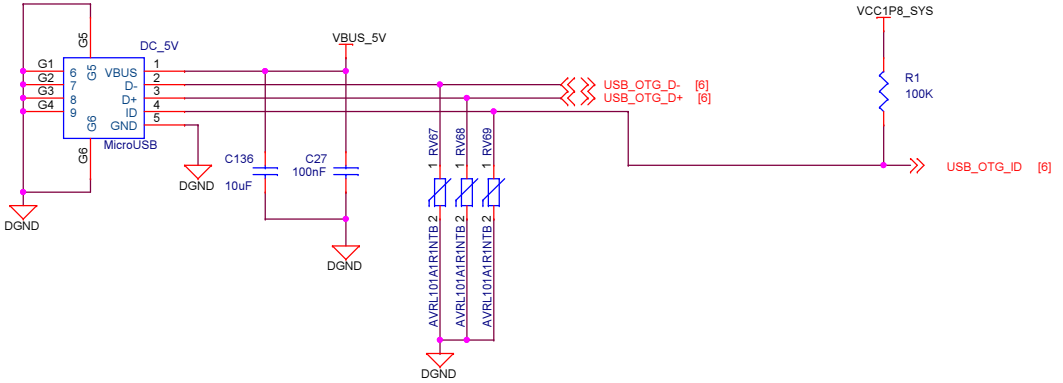
FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 10.MicroSD, LCD&Camera	Rev 1710
Date: Monday, December 25, 2017	Sheet 12 of 16	

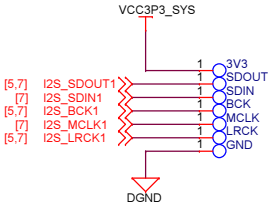
2.54mm Header



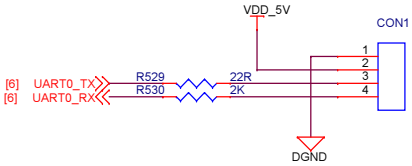
MicroUSB

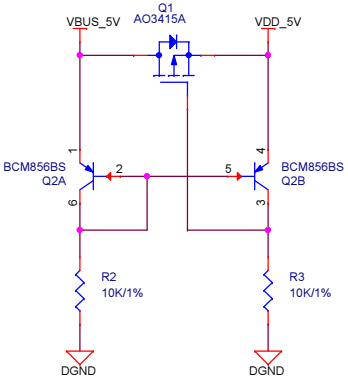


I2S

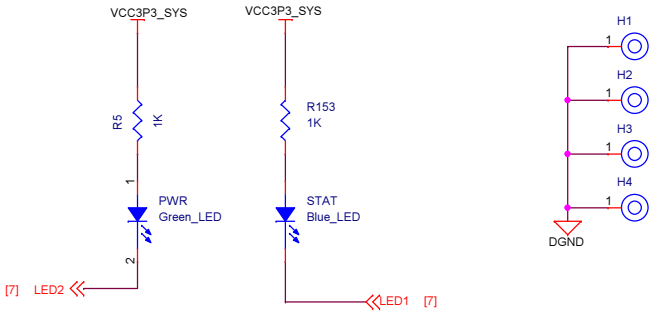


Debug UART

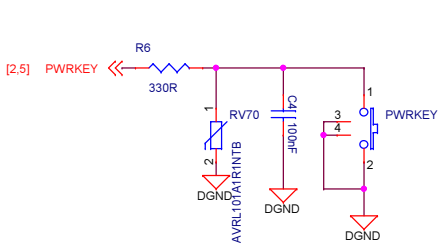


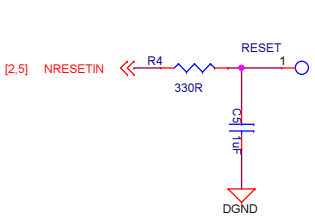


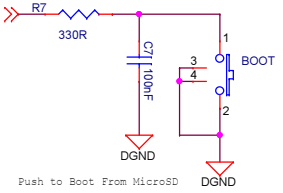
LEDs



Buttons



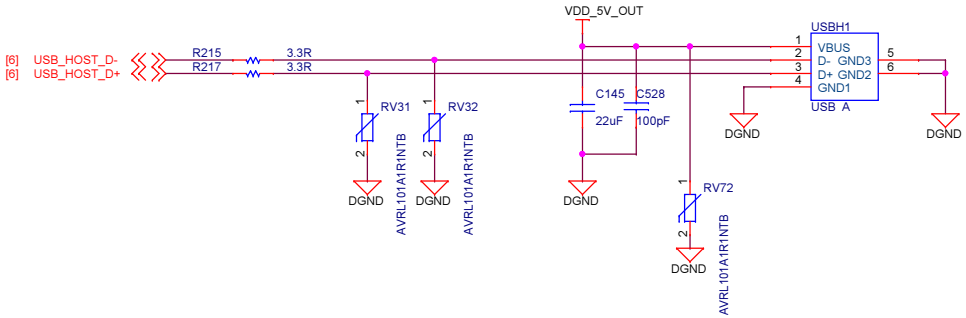




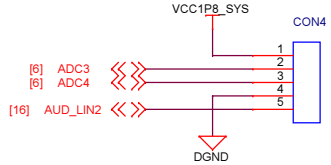
FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 11.Header,USB,LEDs,Buttons	Rev 1710
Date: Monday, December 25, 2017	Sheet 13 of 16	

USB 2.0 Host

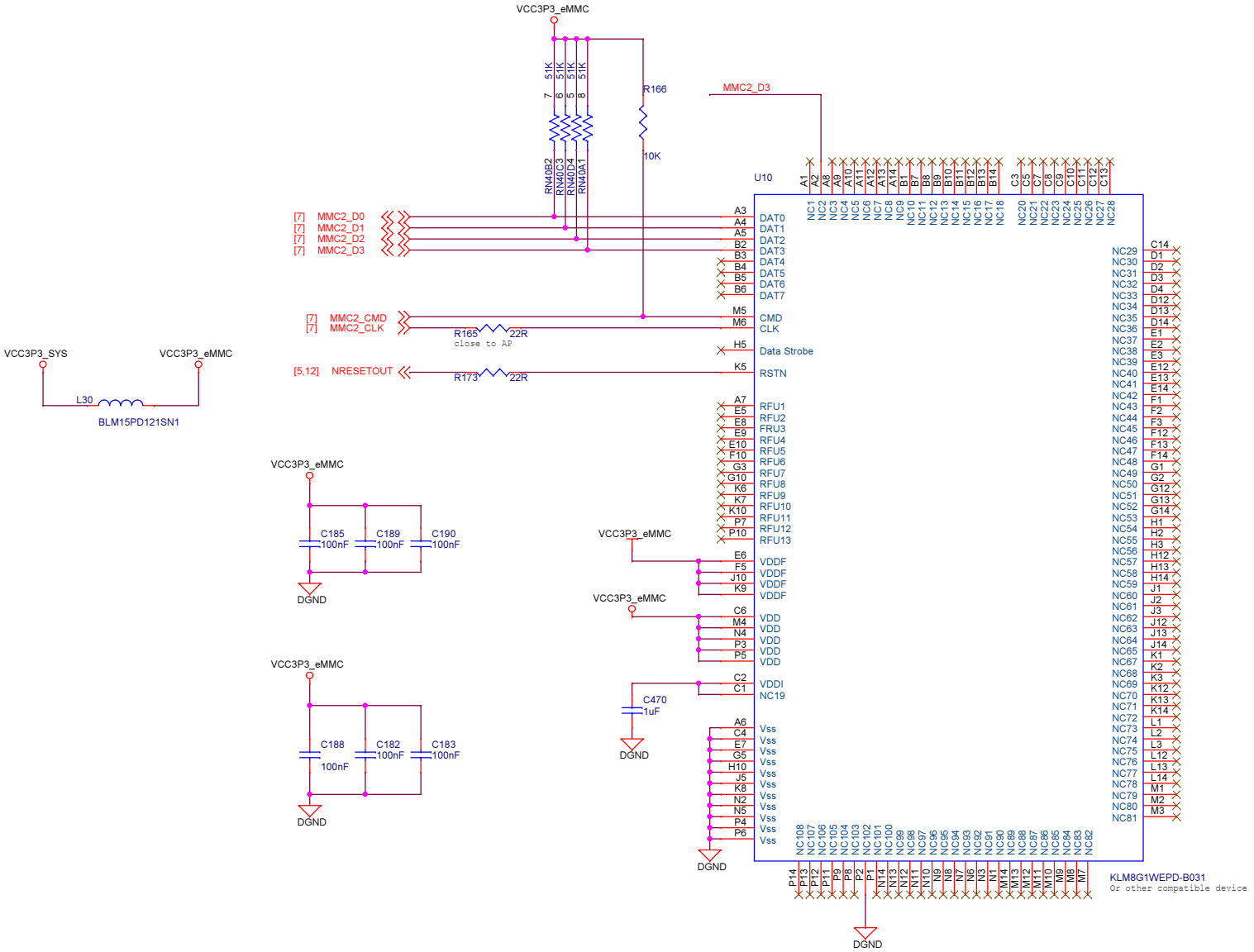


ADC, Line-IN



FRIENDLY ELEC

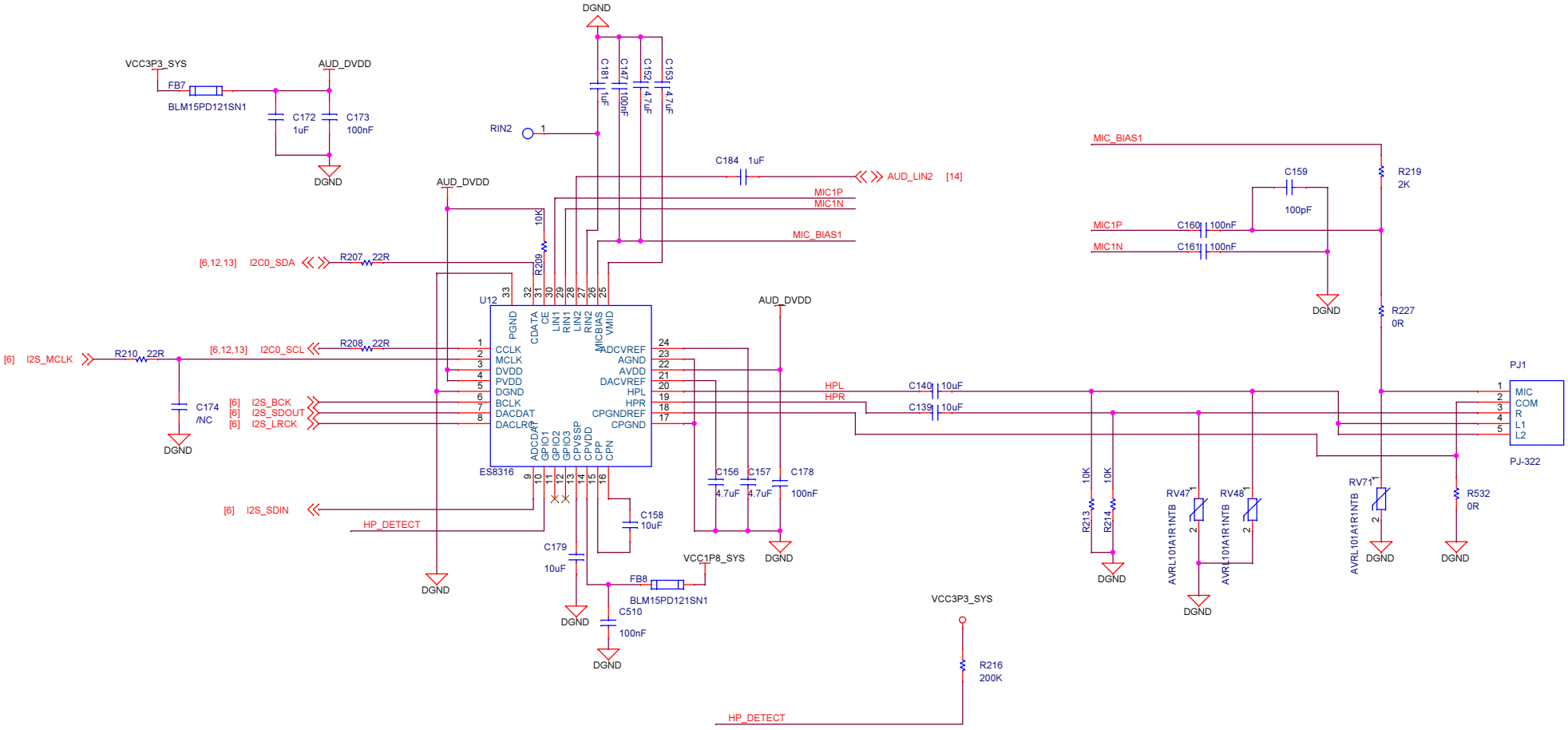
NanoPi S2		
Size A3	Document Number 12.USB-Host	Rev 1710
Date: Monday, December 25, 2017	Sheet 14 of 16	



FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 13.eMMC	Rev 1710
Date: Monday, December 25, 2017	Sheet 15 of 16	

Audio



FRIENDLY ELEC

NanoPi S2		
Size A3	Document Number 14.Audio	Rev 1710
Date: Monday, December 25, 2017	Sheet 16 of 16	