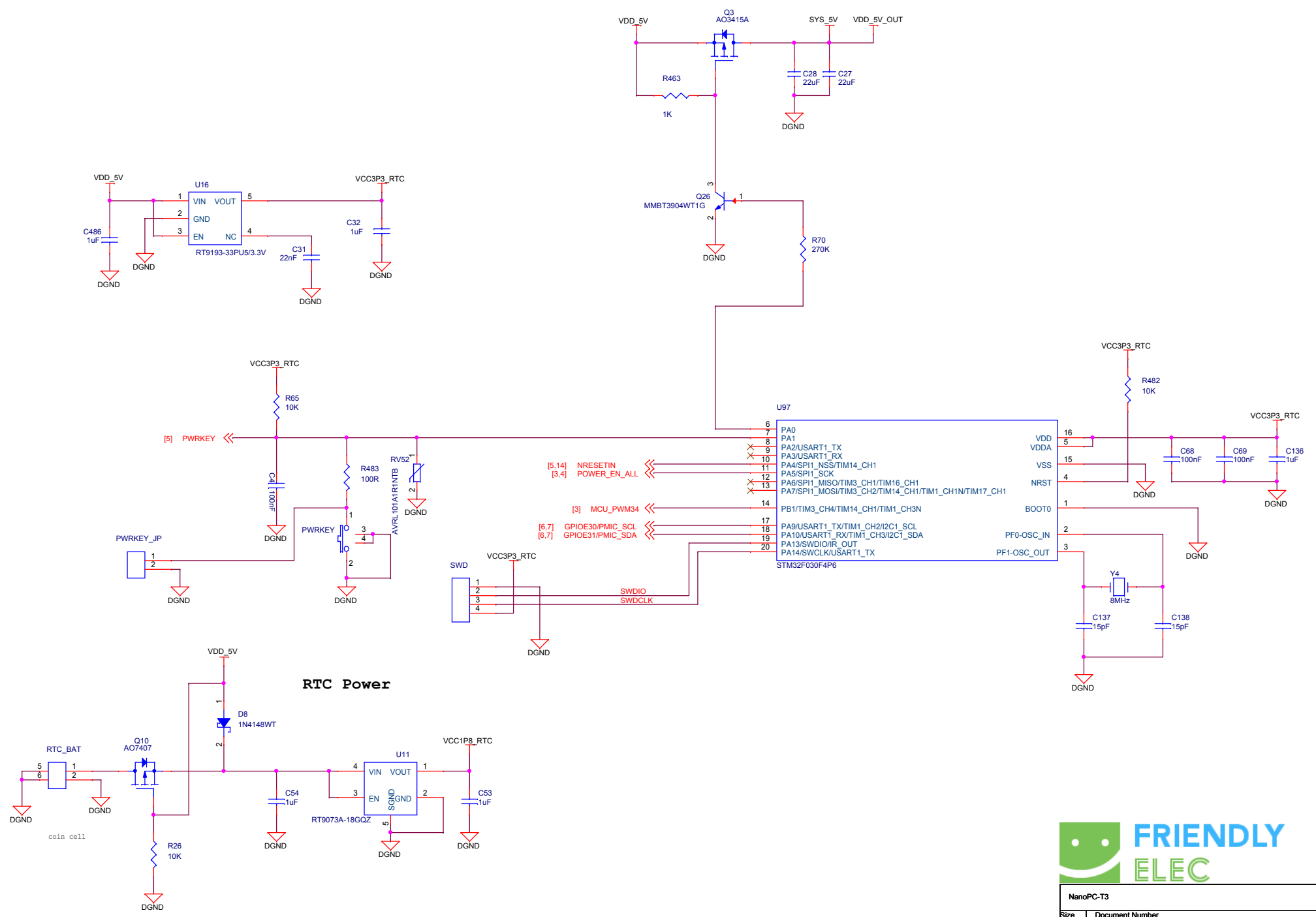
NanoPi Fire 3/2A

1709

2020/01/13:
R463 -> 1K, R70 -> 270K, R150 -> NC, C168 -> 10K
for S5P4418 R19 -> 100K/1%

FRIENDLY ELEC

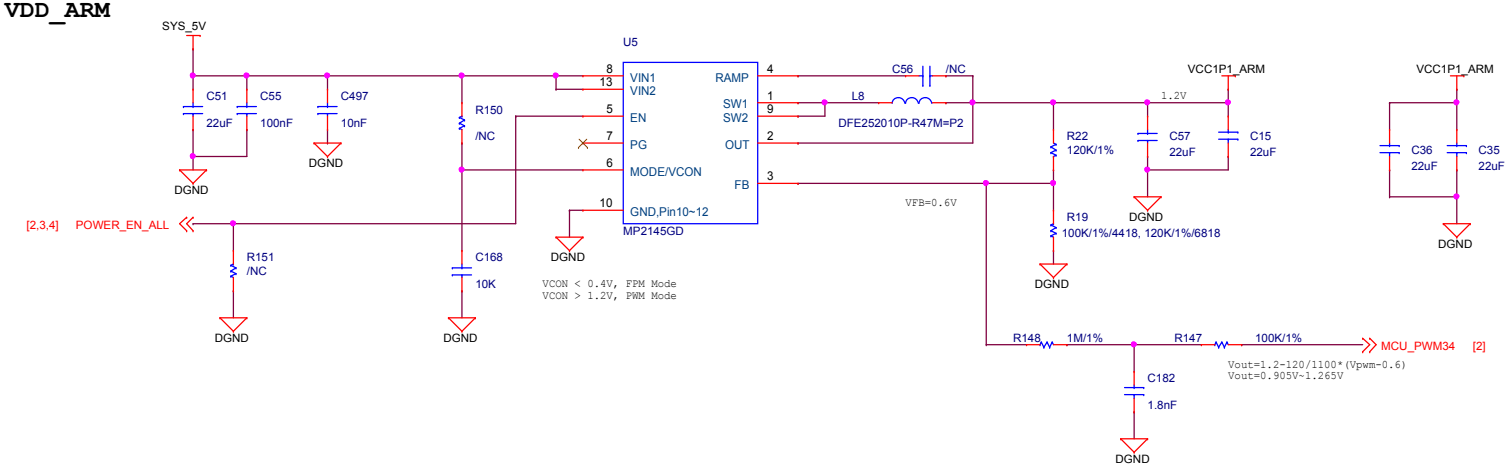
NanoPC-T3		
Size A3	Document Number 01:Title	Rev 1709
Date: Monday, January 13, 2020	Sheet 1 of 14	



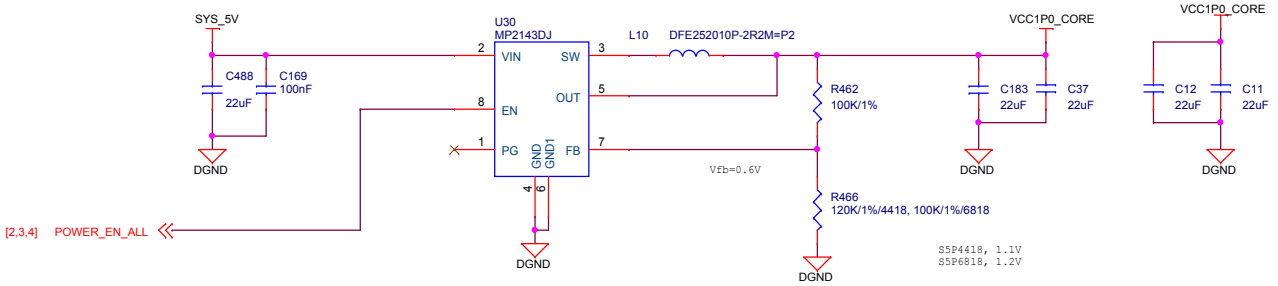
FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 02.Power control	Rev 1709
Date: Monday, January 13, 2020	Sheet 2 of 14	

VDD_ARM

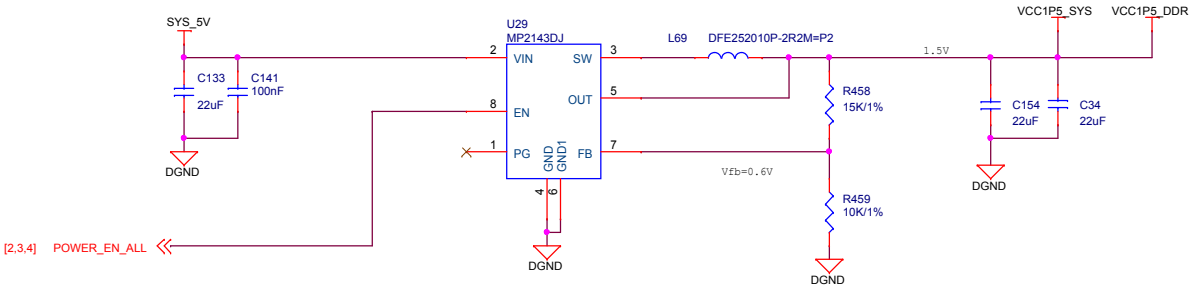


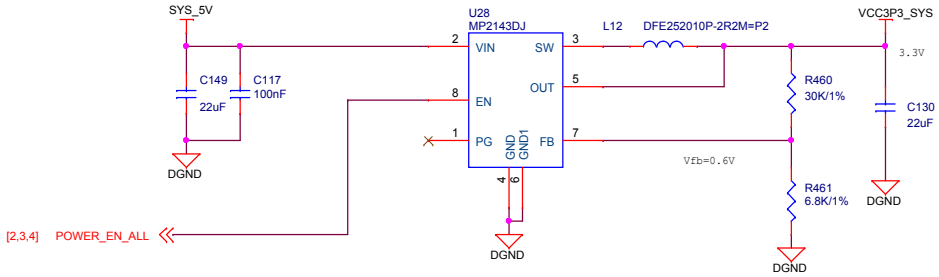
VDD_CORE

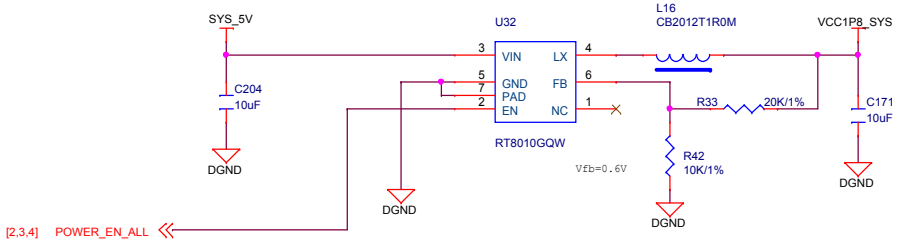


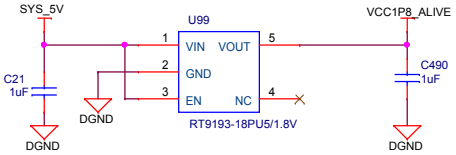
FRIENDLY ELEC

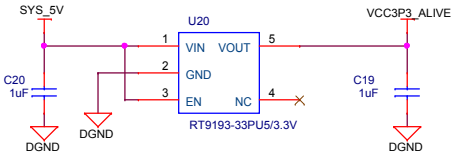
NanoPC-T3		
Size A3	Document Number 03.VDD_ARM/VDD_CORE	Rev 1709
Date: Monday, January 13, 2020	Sheet 3 of 14	

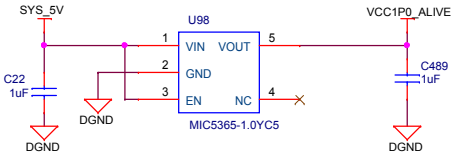








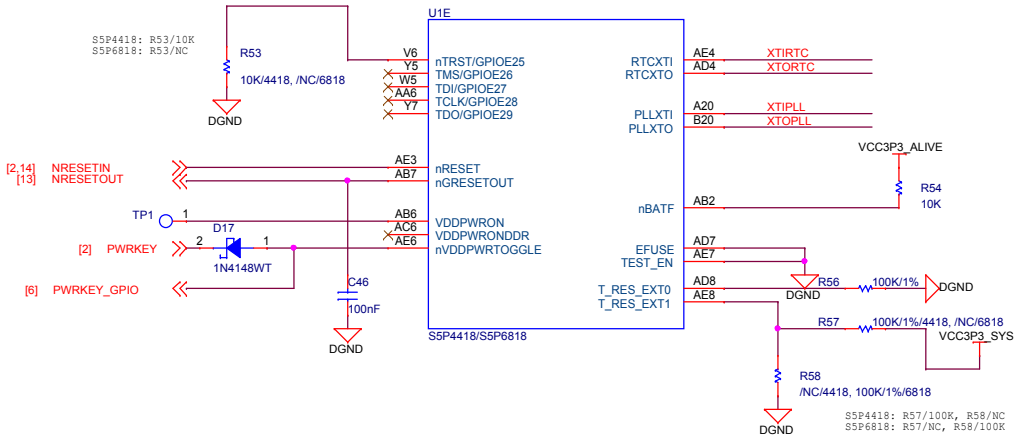


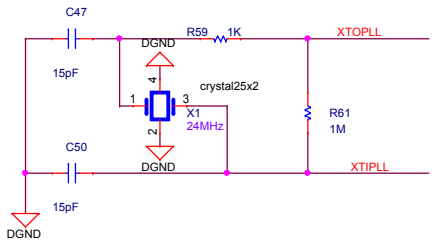


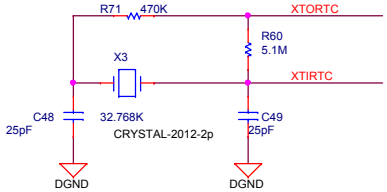
FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 04.VDD_DDR/3.3V	Rev 1709
Date: Friday, March 01, 2019	Sheet 4 of 14	

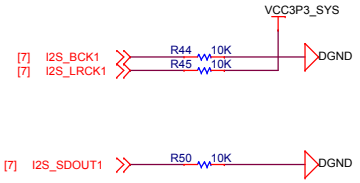
System Reset, Clocks

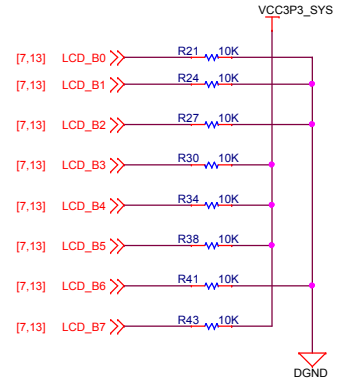






Boot Mode Config





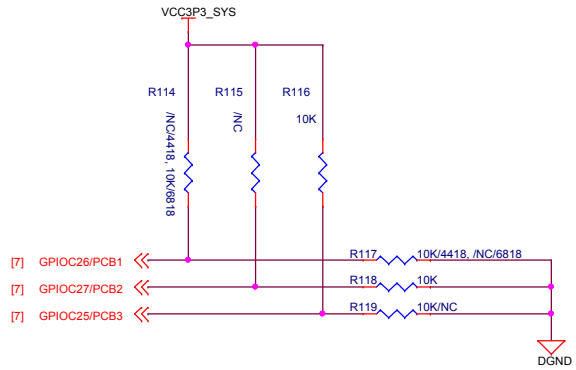
Boot media port select (SPI, eMMC)

	CH0	CH1	CH2
SD3	LOW	HIGH	LOW
CAM1_D3	LOW	LOW	HIGH

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		

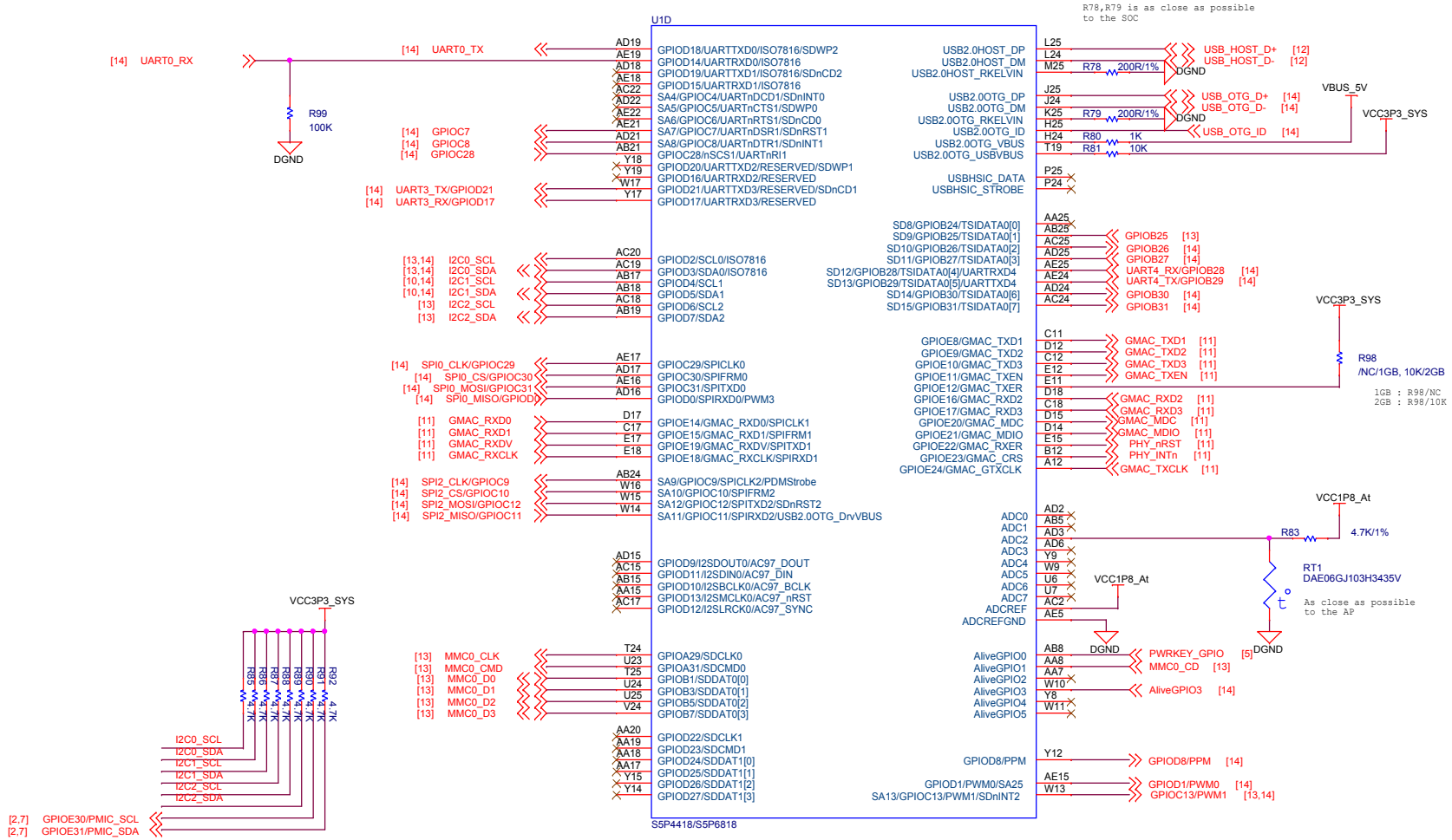
PCB Version



FRIENDLY ELEC

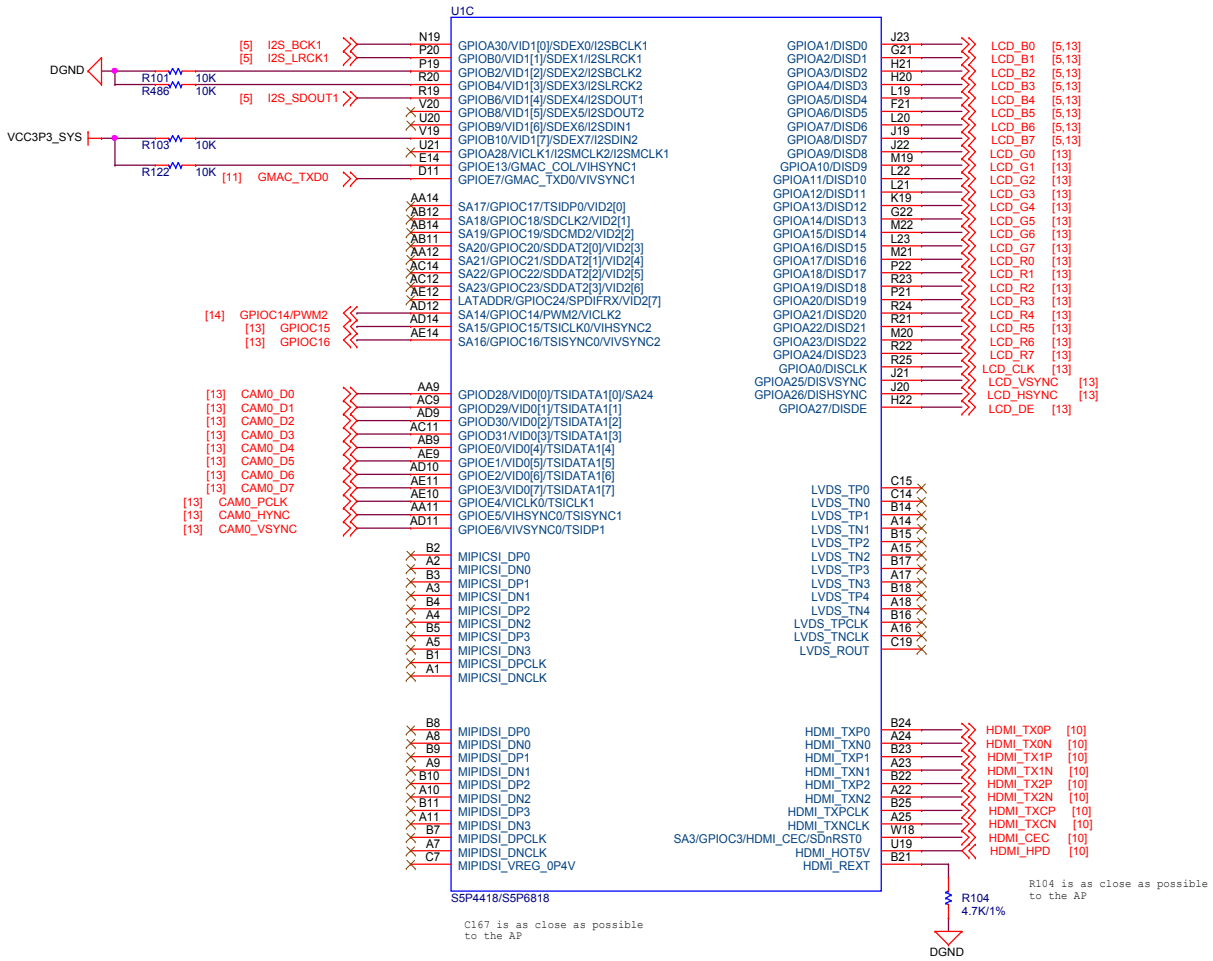
NanoPC-T3		
Size A3	Document Number 05.AP System Control	Rev 1709
Date: Monday, October 16, 2017	Sheet 5 of 14	

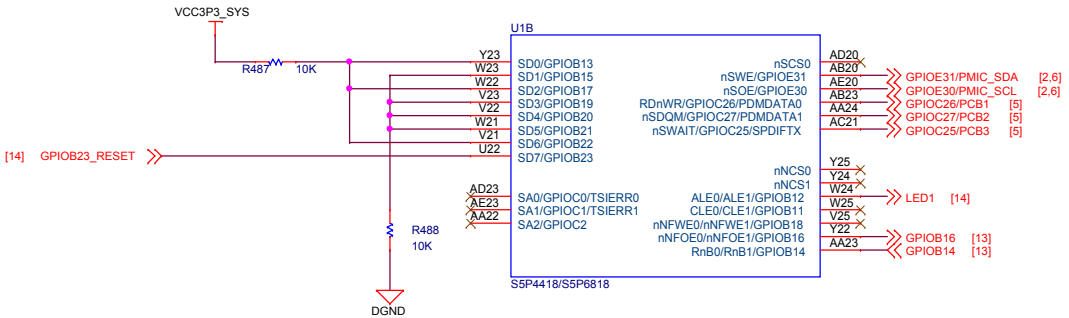
AP Peripherals



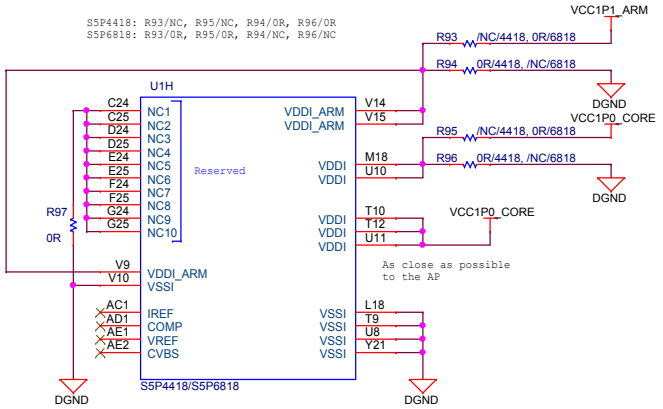
NanoPC-T3		
Size A3	Document Number 06.AP Peripherals	Rev 1709
Date: Friday, November 03, 2017	Sheet 6 of 14	

AP VIP&Display



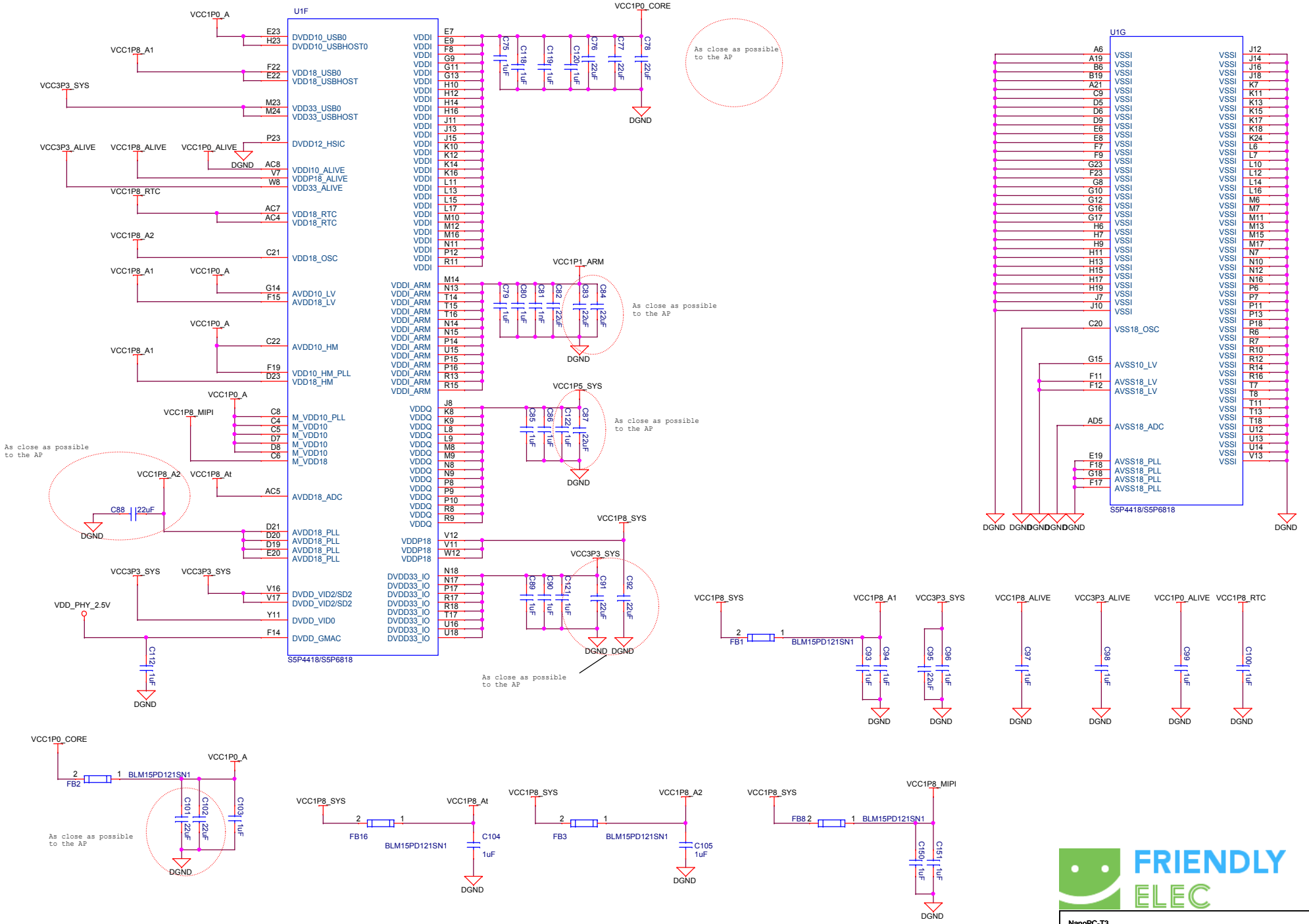


Reserved Function

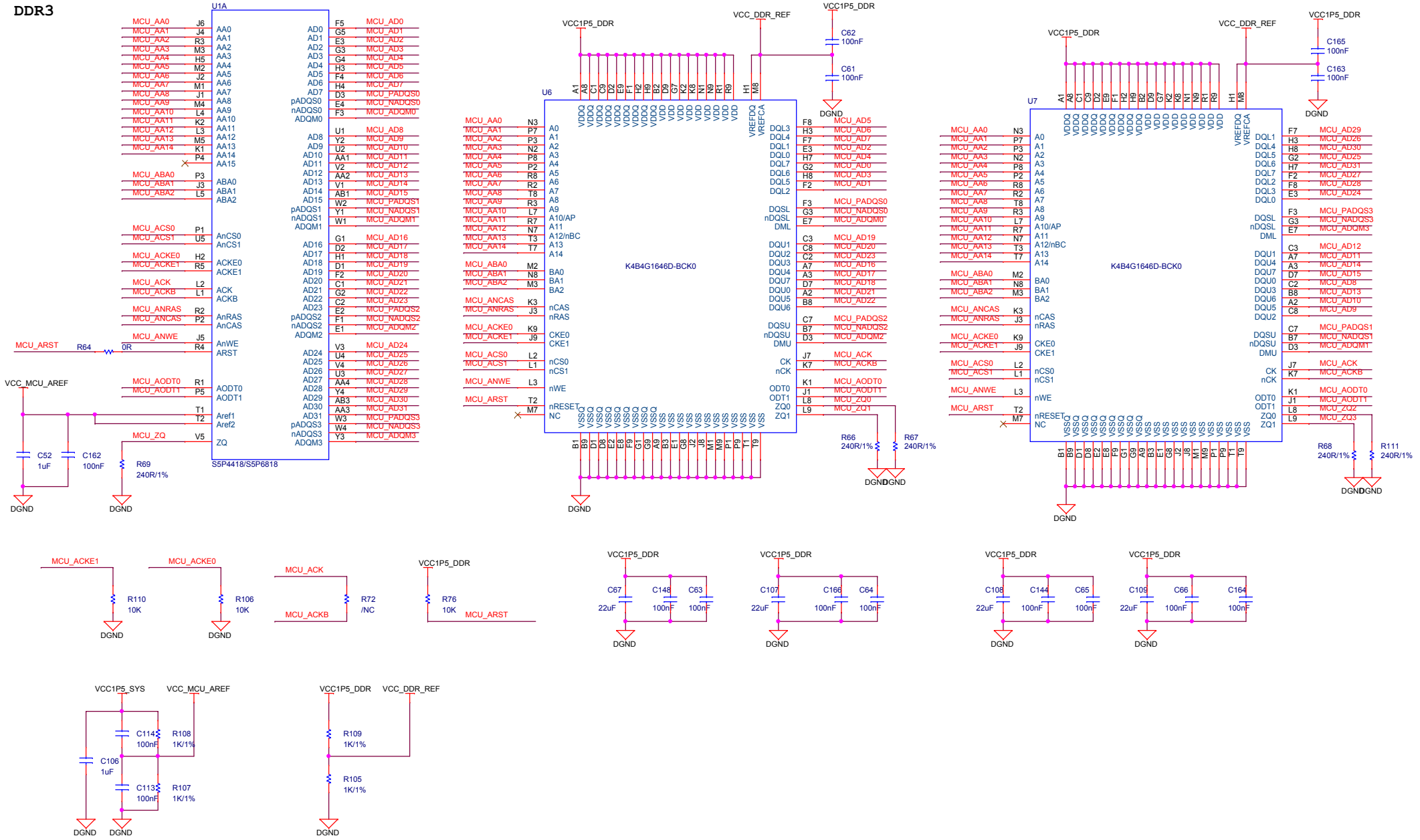


NanoPC-T3		
Size A3	Document Number 07.AP VIP&Display	Rev 1709
Date: Wednesday, September 27, 2017	Sheet 7 of 14	

AP Power

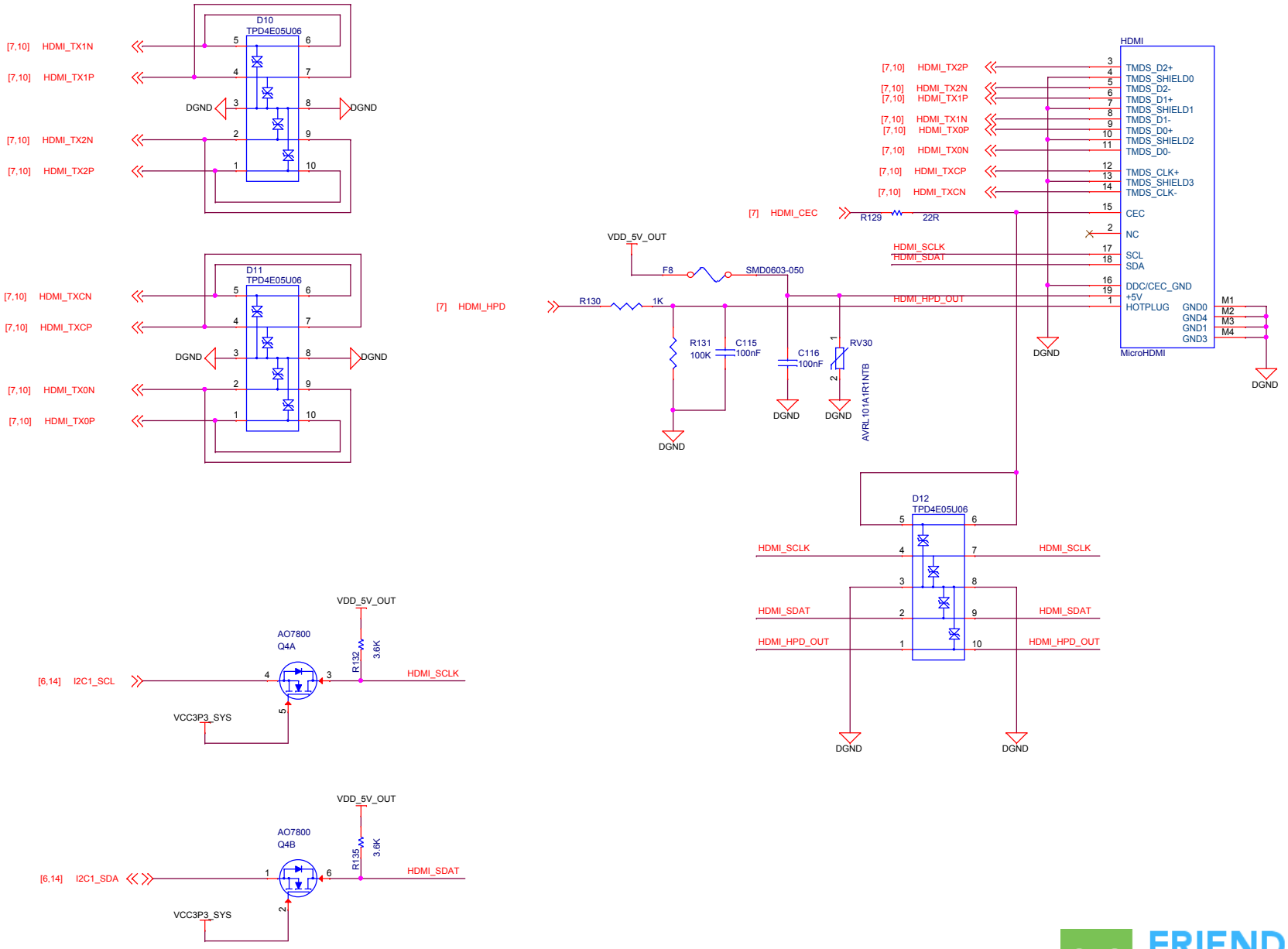

U1F
VCC1P0_A
VCC1P8_A1
VCC3P3_SYS
VCC3P3_ALIVE
VCC1P8_ALIVE
VCC1P0_ALIVE
VCC1P8_RTC
VCC1P8_A2
VCC1P8_MIPI
VCC1P8_At
VDD_PHY_2.5V
VCC1P0_CORE
VCC1P1_ARM
VCC1P5_SYS
VCC1P8_SYS
DVDD10_USB0
DVDD10_USBHOST0
VDD18_USB0
VDD18_USBHOST
VDD33_USB0
VDD33_USBHOST
DVDD12_HSIC
VDDI10_ALIVE
VDDP18_ALIVE
VDD33_ALIVE
VDD18_RTC
VDD18_OSC
AVDD10_LV
AVDD18_LV
AVDD10_HM
VDD10_HM_PLL
VDD18_HM
M_VDD10_PLL
M_VDD10
AVDD18_ADC
AVDD18_PLL
DVDD_VID2/SD2
DVDD_VID0
DVDD_GMAC
VDDI
VDDI_ARM
VDDQ
VDDP18
DVDD33_IO
S5P4418/S5P6818
As close as possible to the AP
DGND
U1G
VSSI
VSS18_OSC
AVSS10_LV
AVSS18_LV
AVSS18_ADC
AVSS18_PLL
S5P4418/S5P6818
FB1
FB2
FB16
FB3
FB8
BLM15PD121SN1
NanoPC-T3
Size A3
Document Number 08.AP Power
Rev 1709
Date: Monday, October 16, 2017
Sheet 8 of 14

DDR3



NanoPC-T3		
Size A3	Document Number 09.AP DDR III	Rev 1709
Date: Wednesday, September 27, 2017	Sheet 9 of 14	

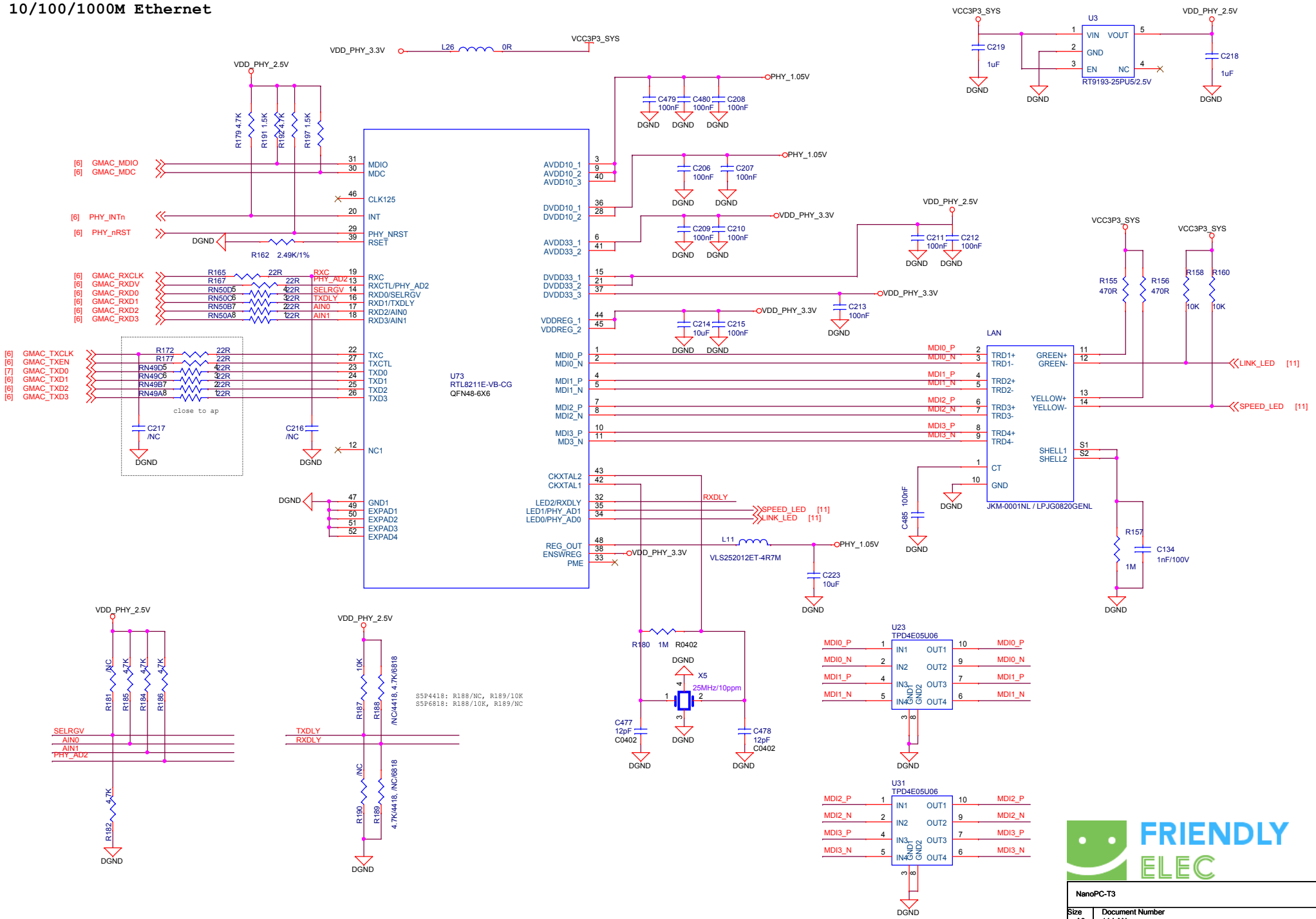
HDMI



FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 10.HDMI	Rev 1709
Date: Wednesday, September 27, 2017	Sheet 10 of 14	

10/100/1000M Ethernet

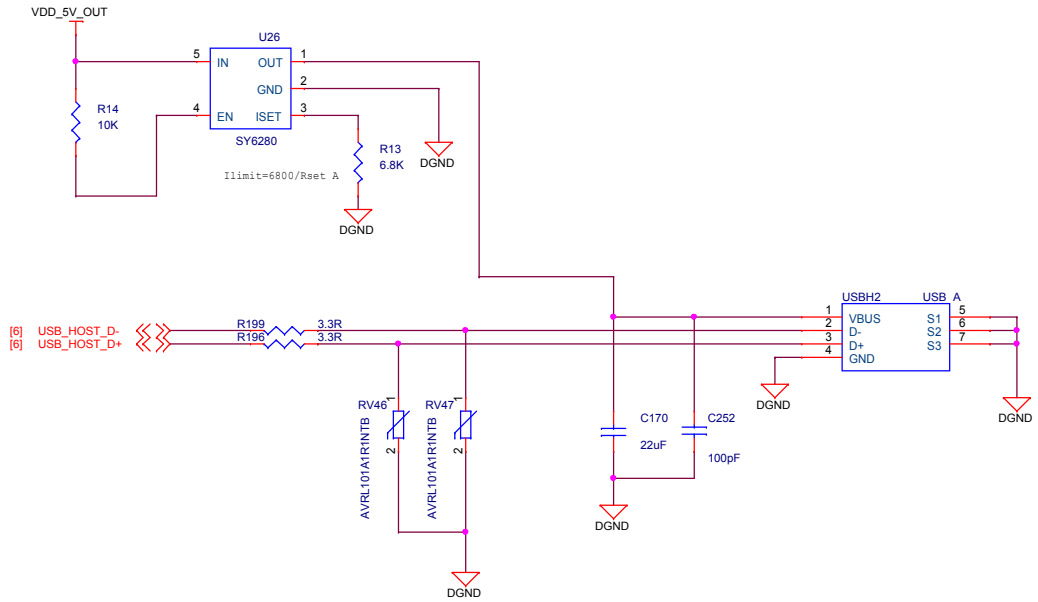


NanoPC-T3

Size	Document Number	Rev
A3	11.LAN	1709

Date: Monday, January 13, 2020 Sheet 11 of 14

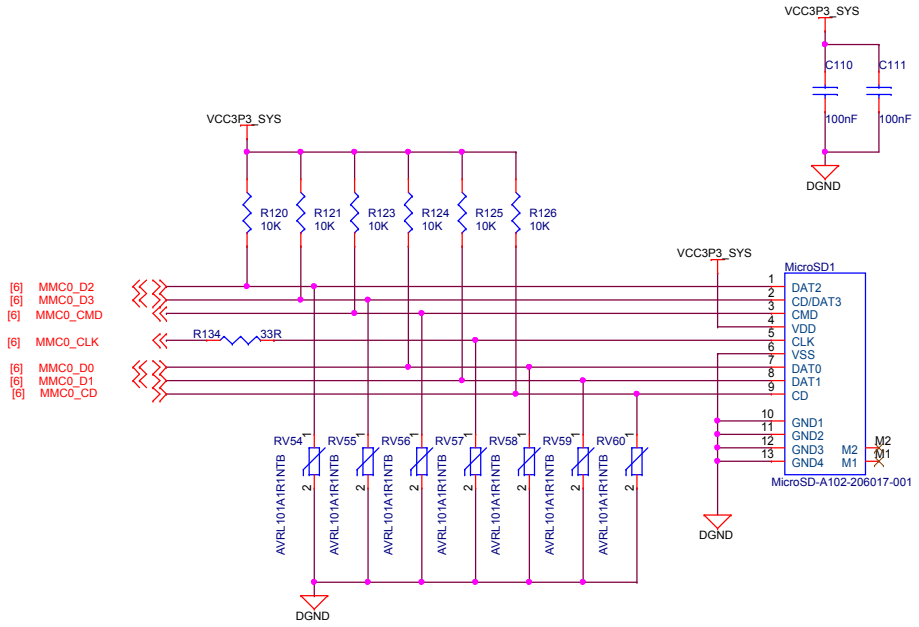
USB 2.0 Host



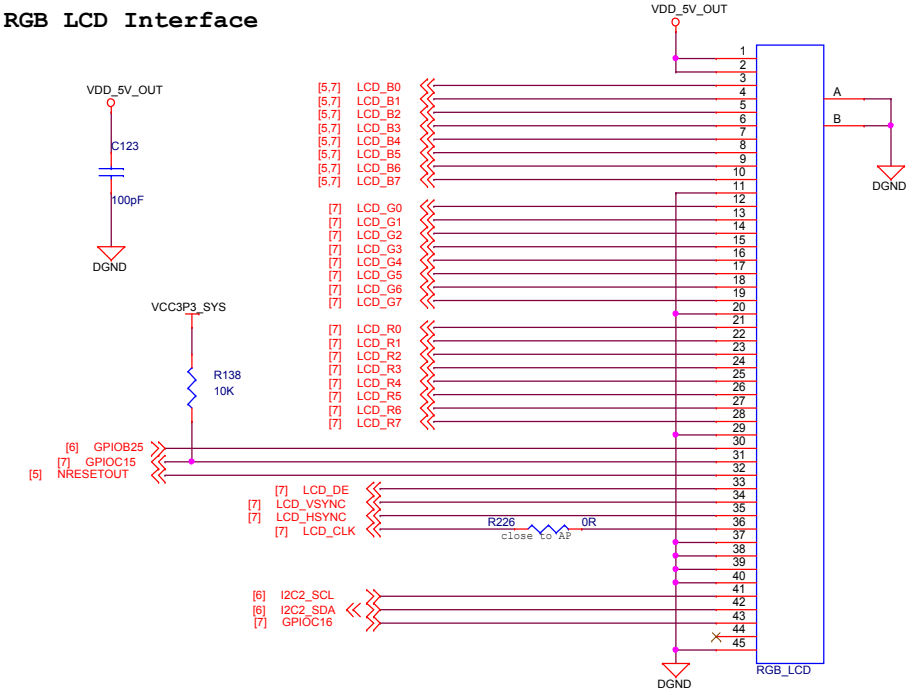
FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 12.USB-Host	Rev 1709
Date: Wednesday, September 27, 2017	Sheet 12 of 14	

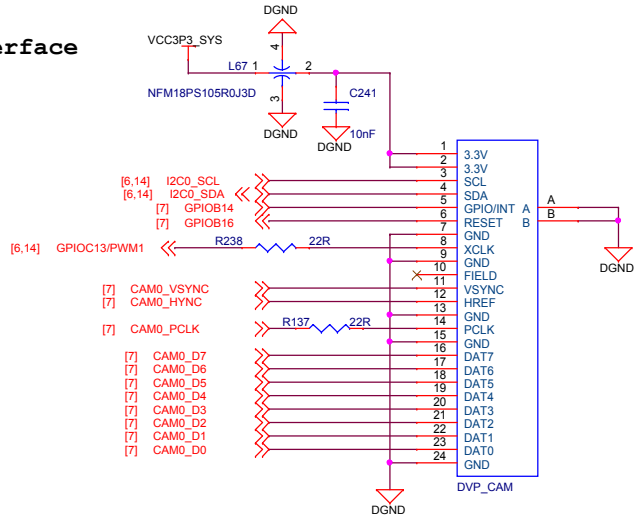
SDCARD



RGB LCD Interface



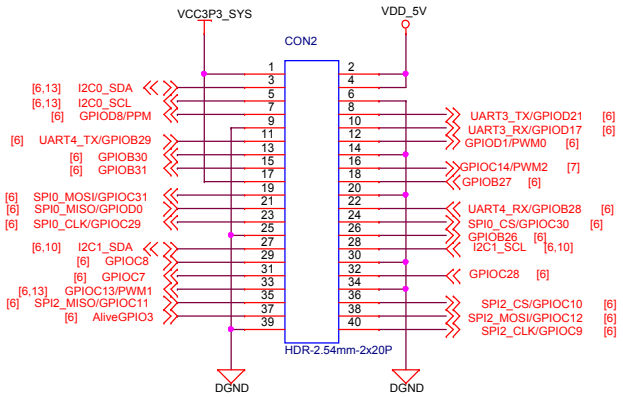
Camera Interface



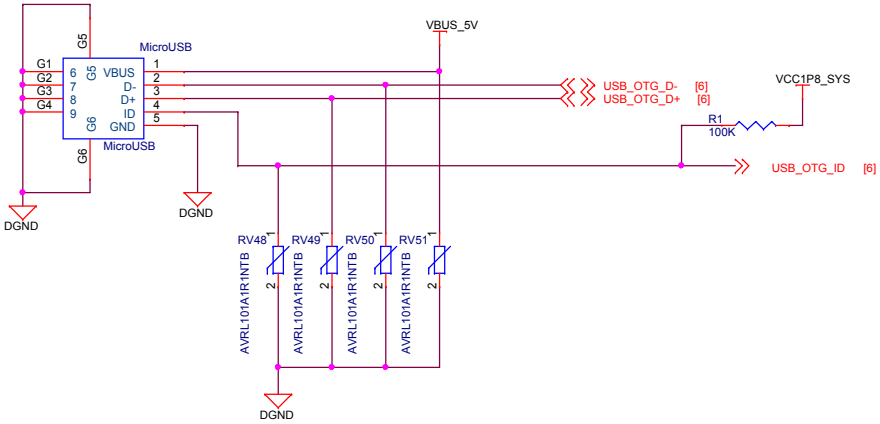
FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 13.MicroSD, RGB-LCD,LVDS&Camera	Rev 1709
Date: Wednesday, August 01, 2018	Sheet 13 of 14	

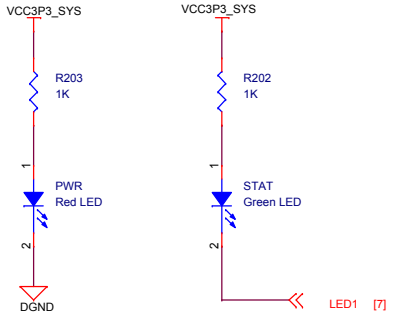
2.54mm Header

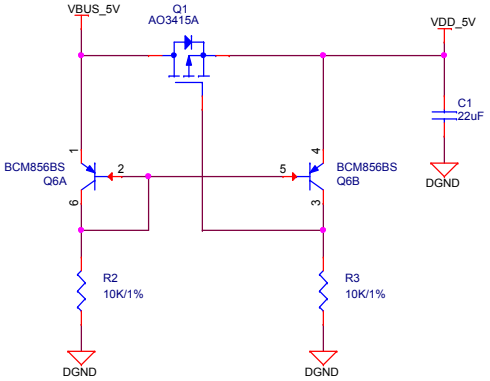


MicroUSB

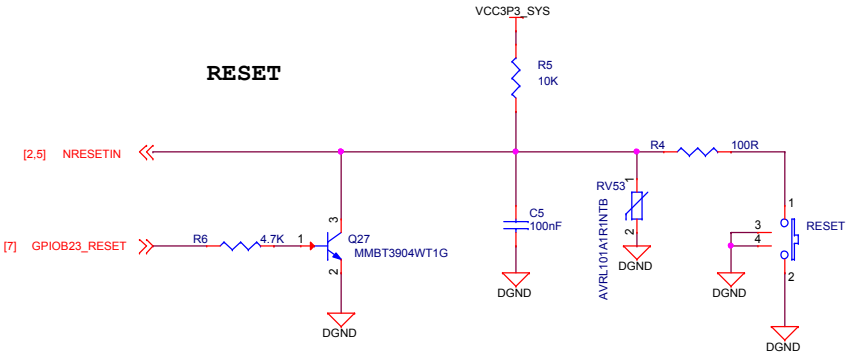


LEDs

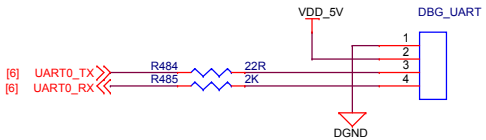




RESET



Debug UART



FRIENDLY ELEC

NanoPC-T3		
Size A3	Document Number 14.Header,USB,LEDs,Buttons,LVDS	Rev 1709
Date: Wednesday, September 27, 2017	Sheet 14 of 14	