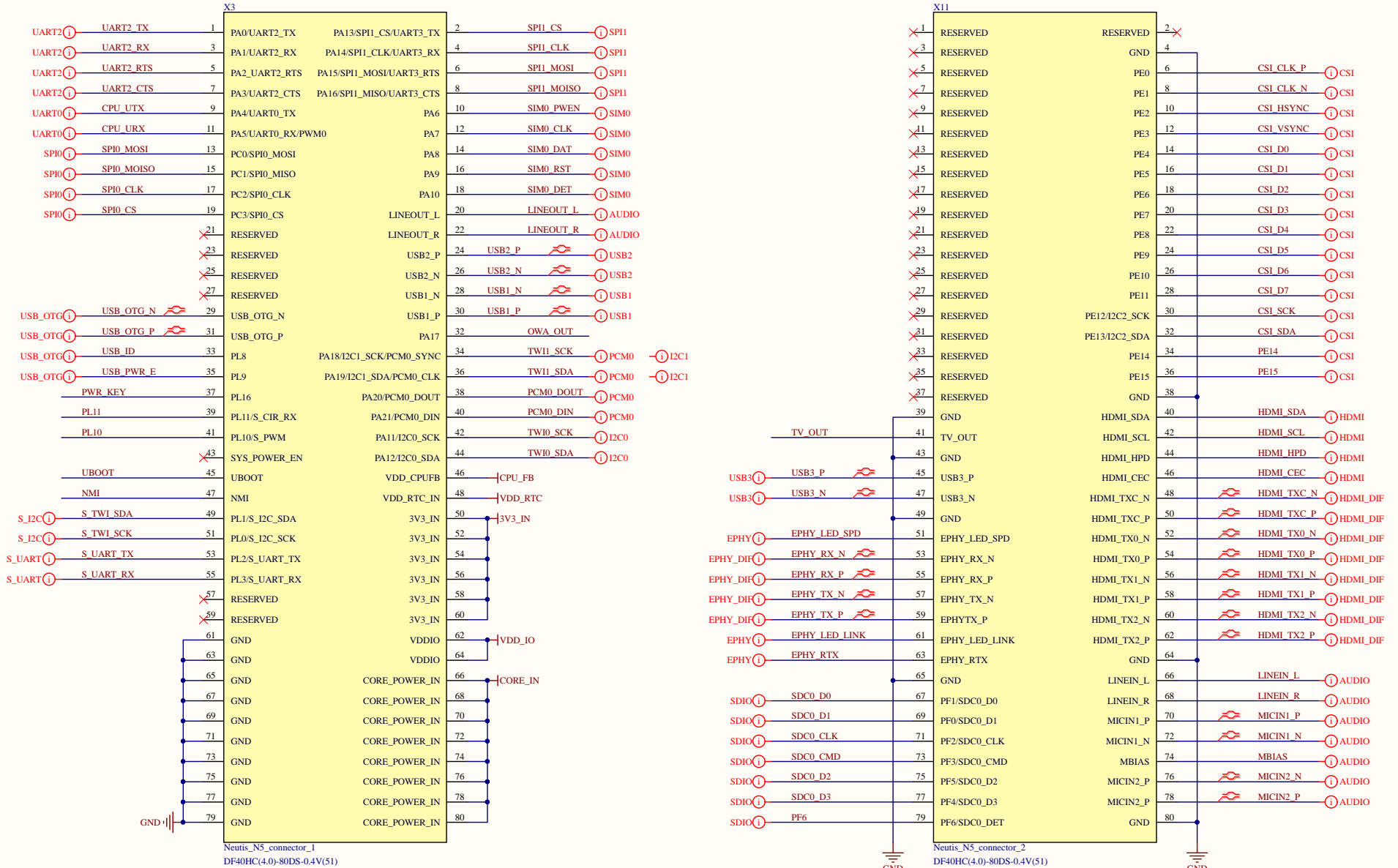
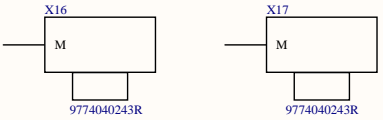


NEUTIS CONNECTORS

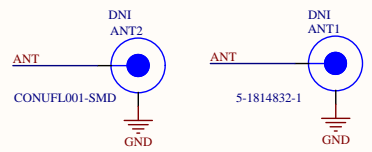


Neutis_N5_connector_1
DF40HC(4.0)-80DS-0.4V(51)

Neutis_N5_connector_2
DF40HC(4.0)-80DS-0.4V(51)

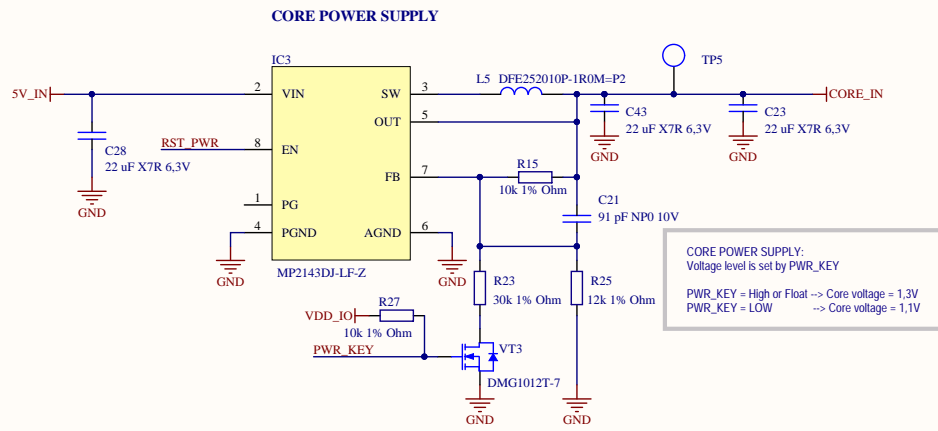


M2 STANDOFFS

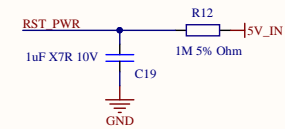
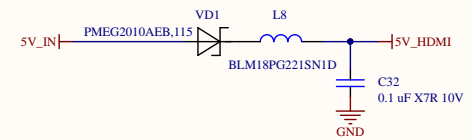
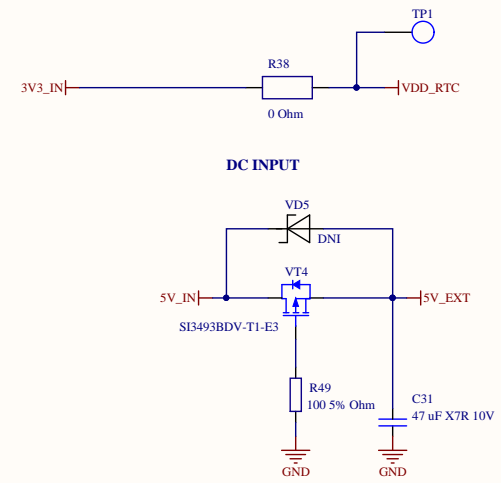


ANTENNA CONNECTORS

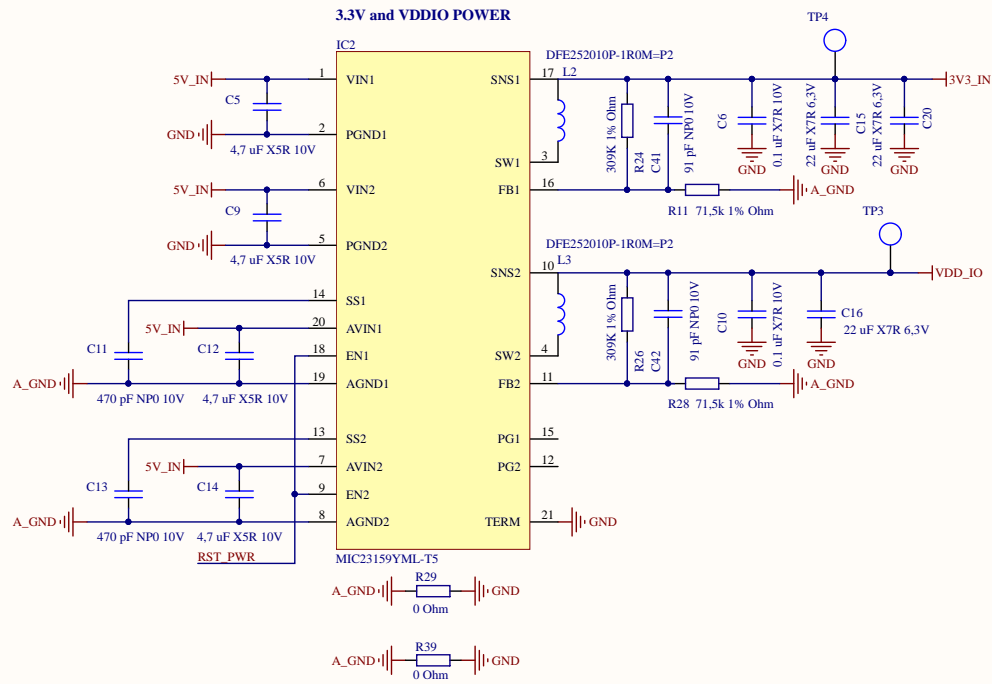
Use antenna connector for Neutis N5 without an internal Wi-Fi antenna



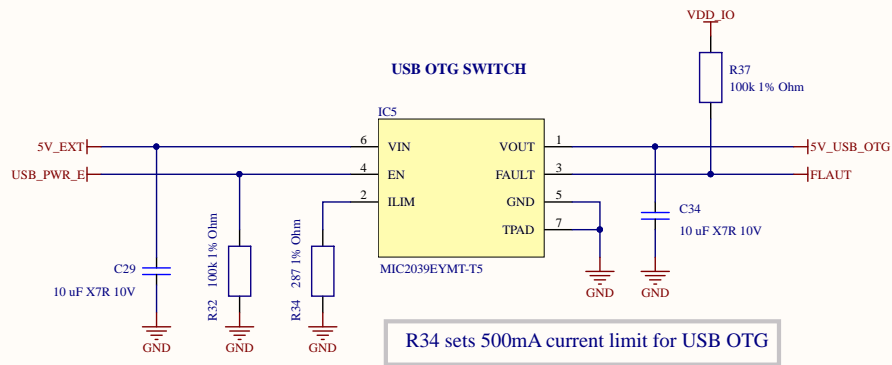
Connect R25 and VT3 source directly to pin 6 of IC3 (same as feedback in MP2143 datasheet)



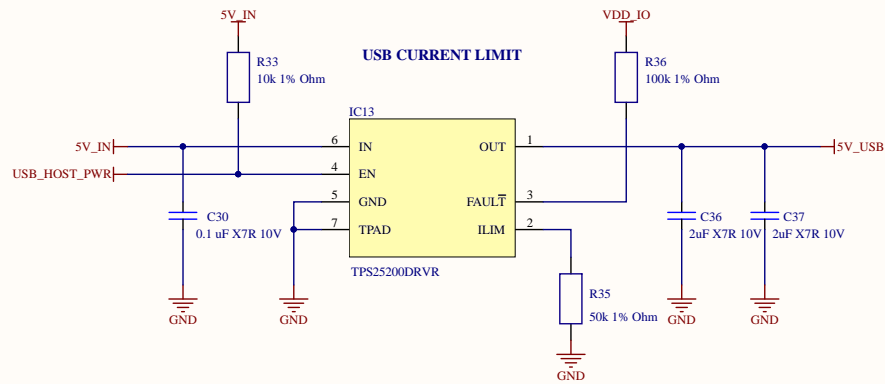
* R12 and C19 set 1 second delay for power reset
 * Reset delay must be at least 0.5 second for correct functioning



* Place DC/DCs as close as possible to Neutis N5 connector
 * A_GND must be connected to GND plane in one point
 * Power on sequence must be taken into account (refer to docs)

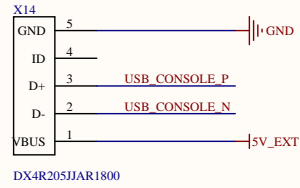


R34 sets 500mA current limit for USB OTG

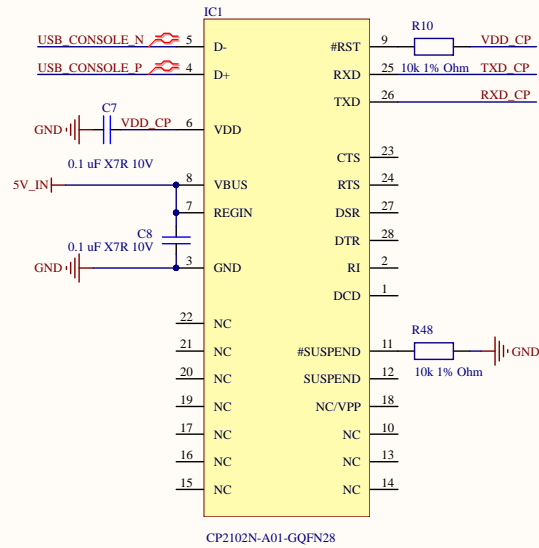


R35 sets 2000mA current limit for all three USB hosts

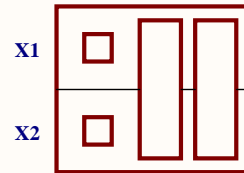
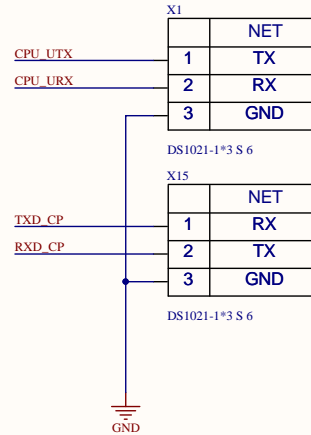
USB-Console



USB/UART

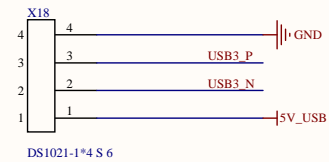


UART0-Jumpers

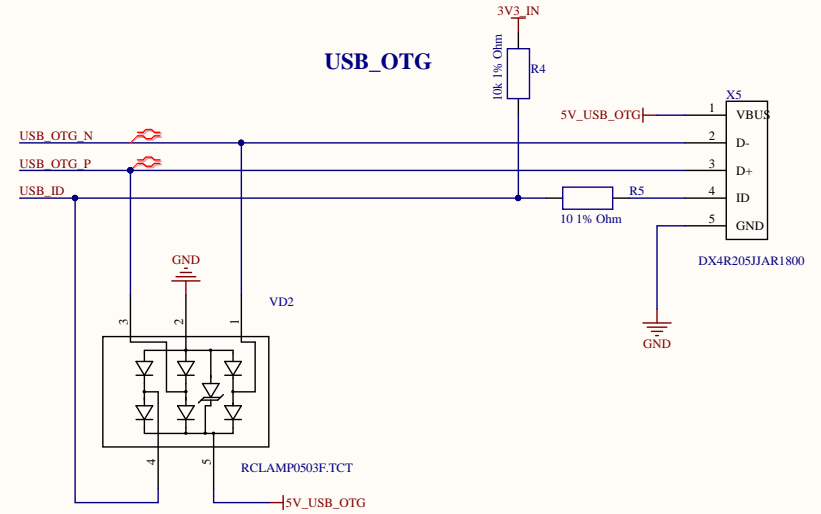


Place jumpers this way to connect CP2102 and UART0

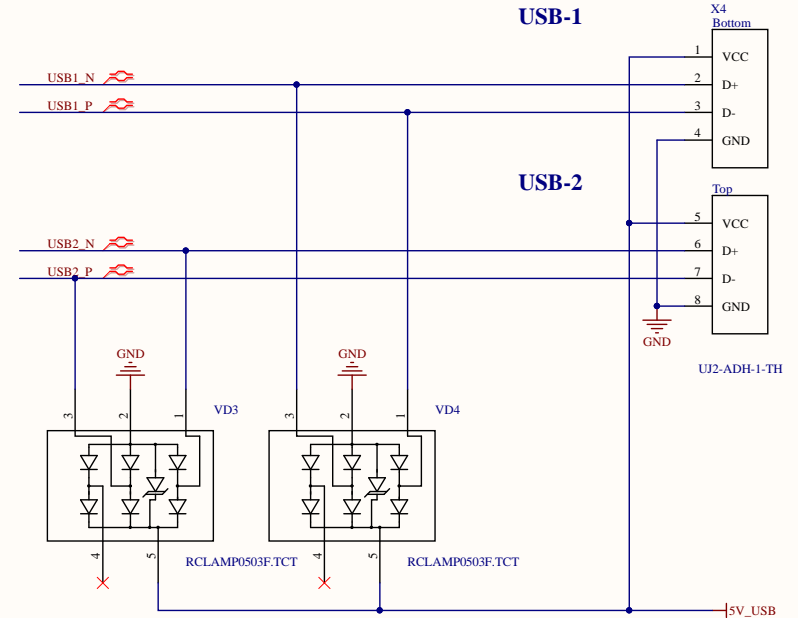
USB-3



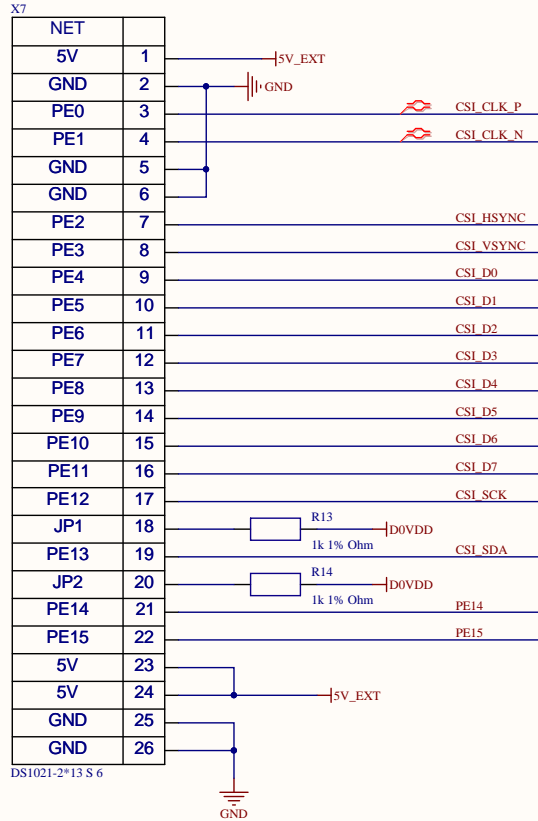
USB_OTG



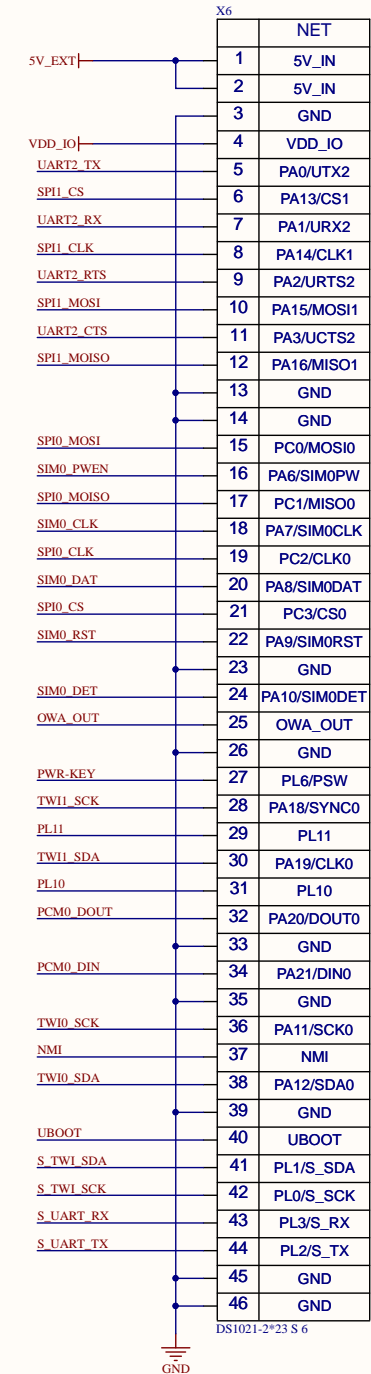
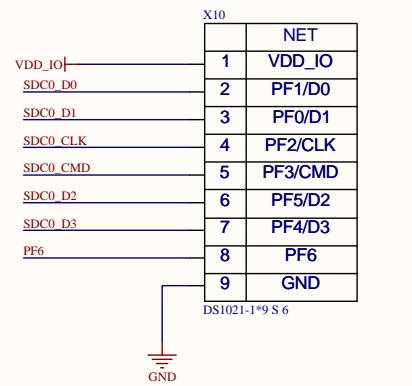
USB-1



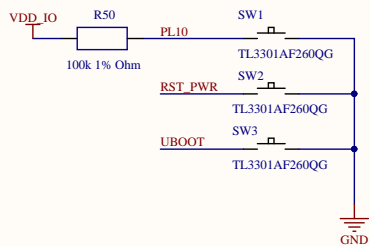
PORT_E / CSI PARALLEL



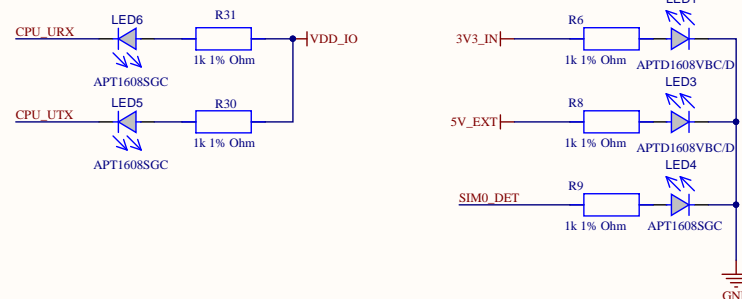
PORT_F / SDIO

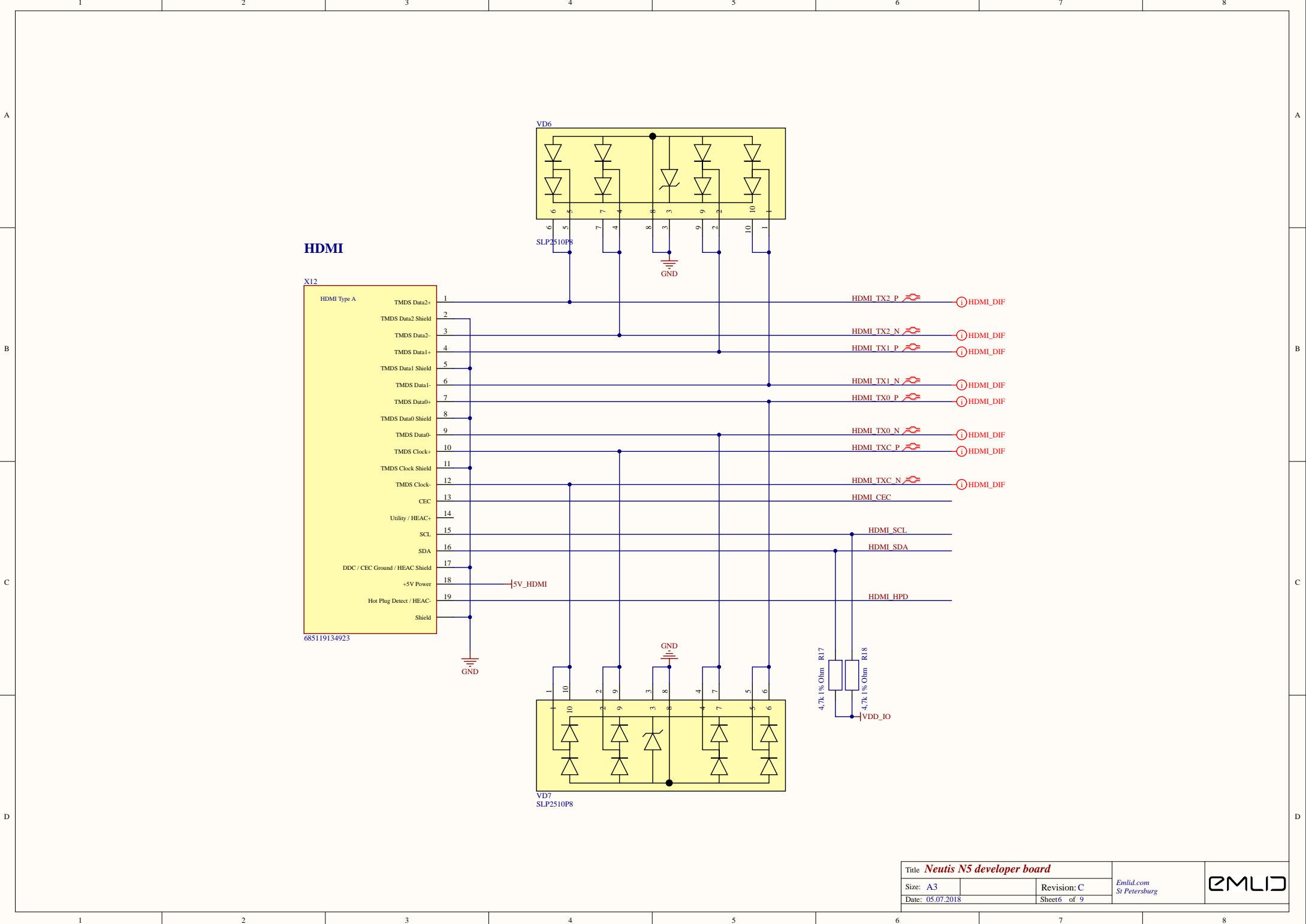


USER BUTTONS



LEDs



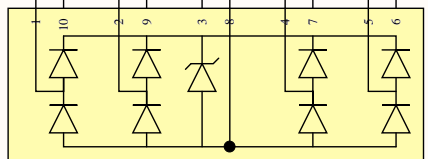
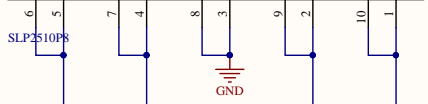
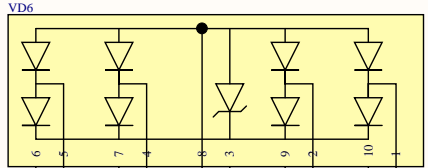


HDMI

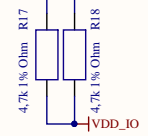
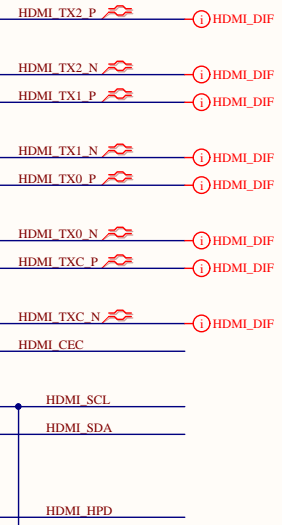
X12

HDMI Type A	
TMDS Data2+	1
TMDS Data2 Shield	2
TMDS Data2-	3
TMDS Data1+	4
TMDS Data1 Shield	5
TMDS Data1-	6
TMDS Data0+	7
TMDS Data0 Shield	8
TMDS Data0-	9
TMDS Clock+	10
TMDS Clock Shield	11
TMDS Clock-	12
CEC	13
Utility / HEAC+	14
SCL	15
SDA	16
DDC / CEC Ground / HEAC Shield	17
+5V Power	18
Hot Plug Detect / HEAC-	19
Shield	

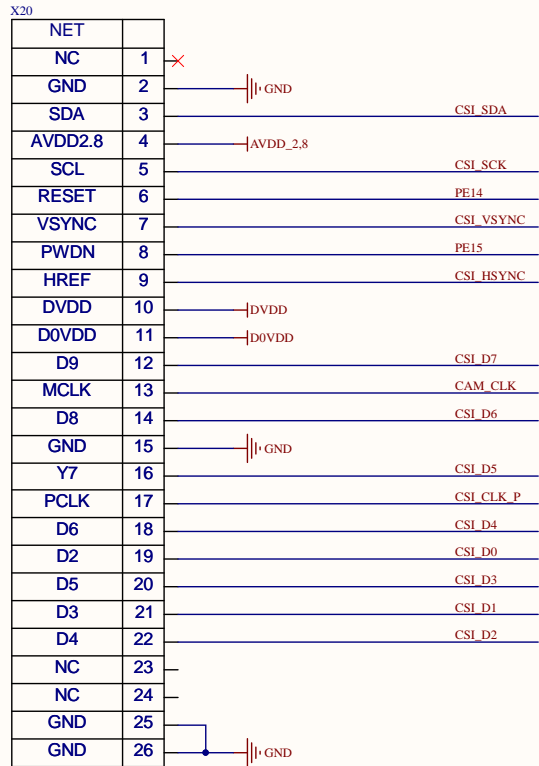
685119134923



VD7
SLP2510P8



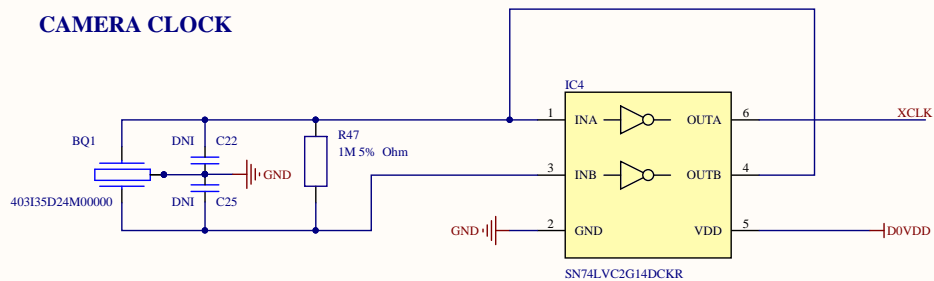
CSI PARALLEL



687124183622

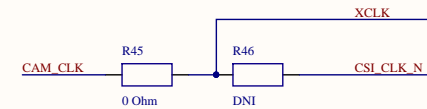
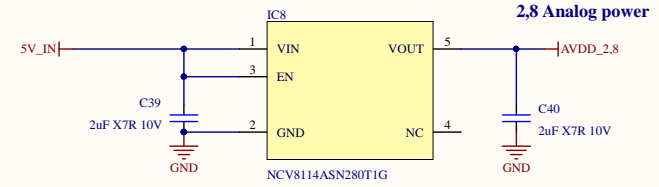
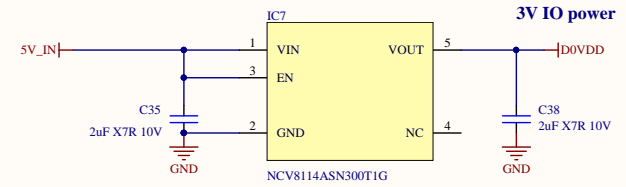
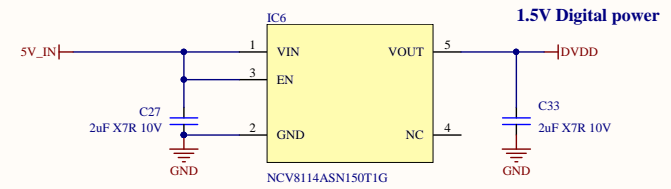
X20 pinout is only for ov5640 camera. Other cameras might have different pinout

CAMERA CLOCK



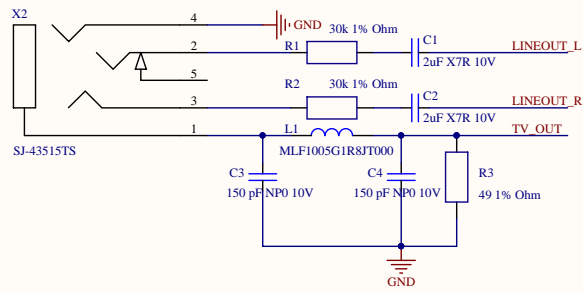
All these components must be DNI if clock from Neutis is used

CAMERA POWER

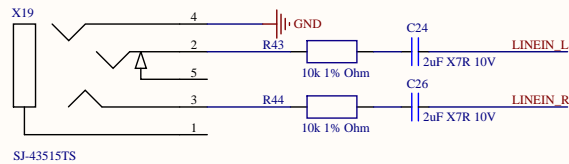


R46 must be soldered if clock from Neutis N5 is used

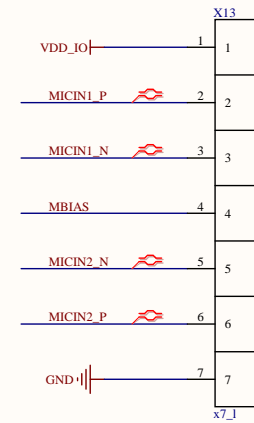
LINE_OUT/TV-OUT



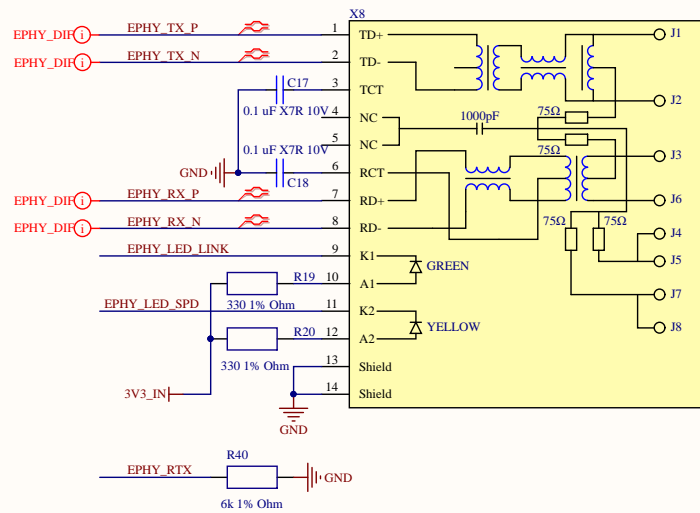
LINE-IN



Place all passive components as close as possible to connectors



100 BASE T ETHERNET



SD CARD

