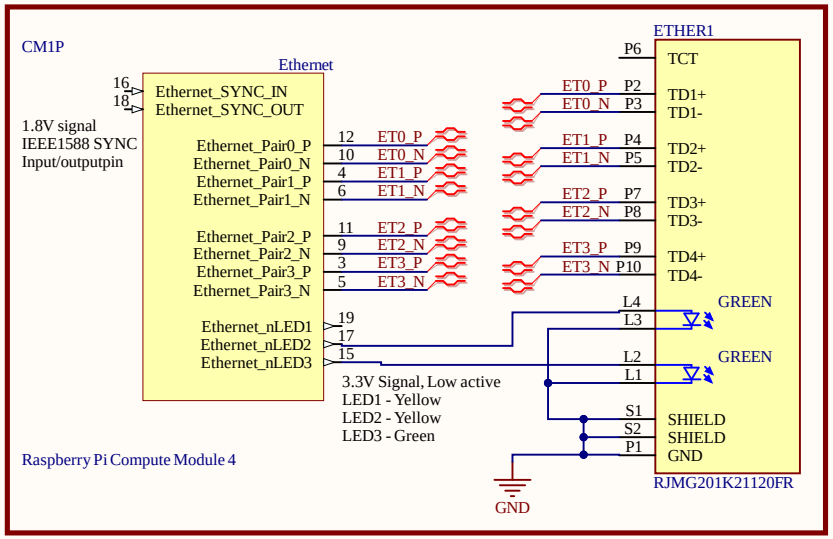
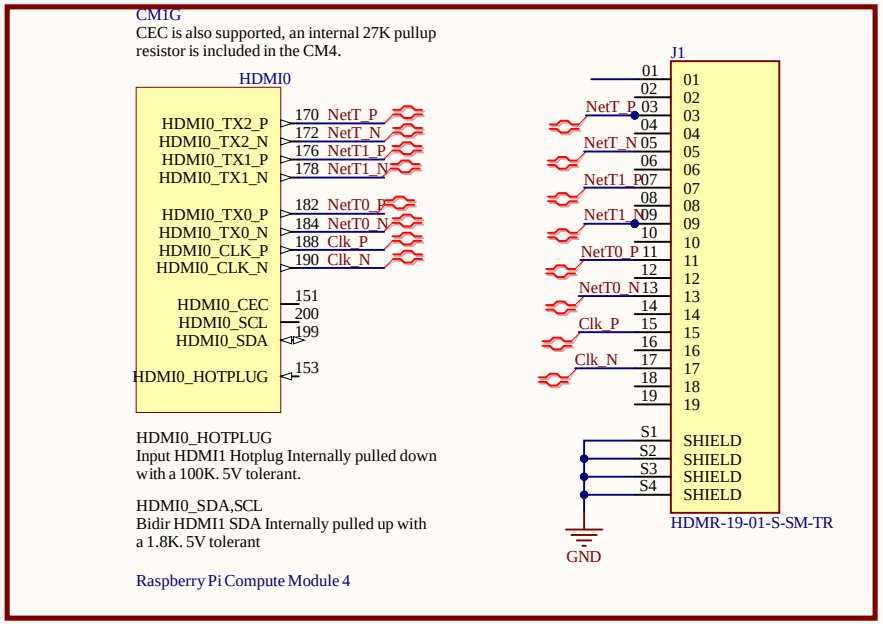
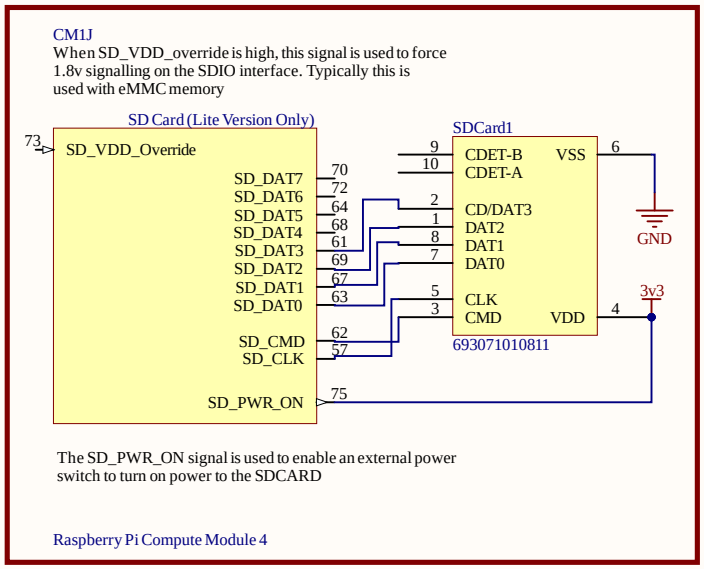
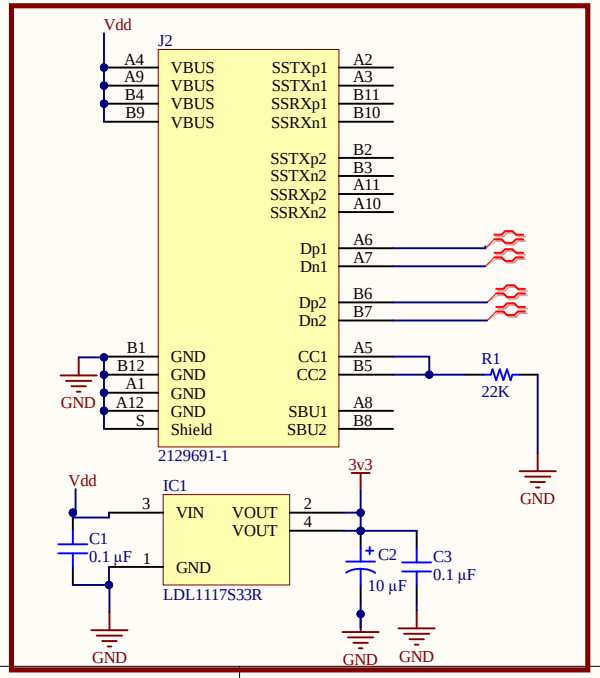
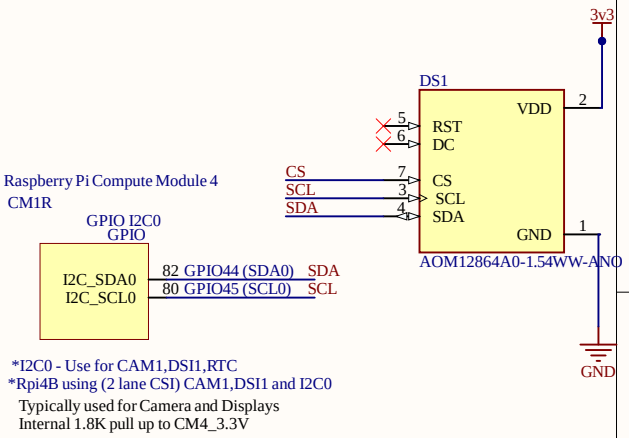


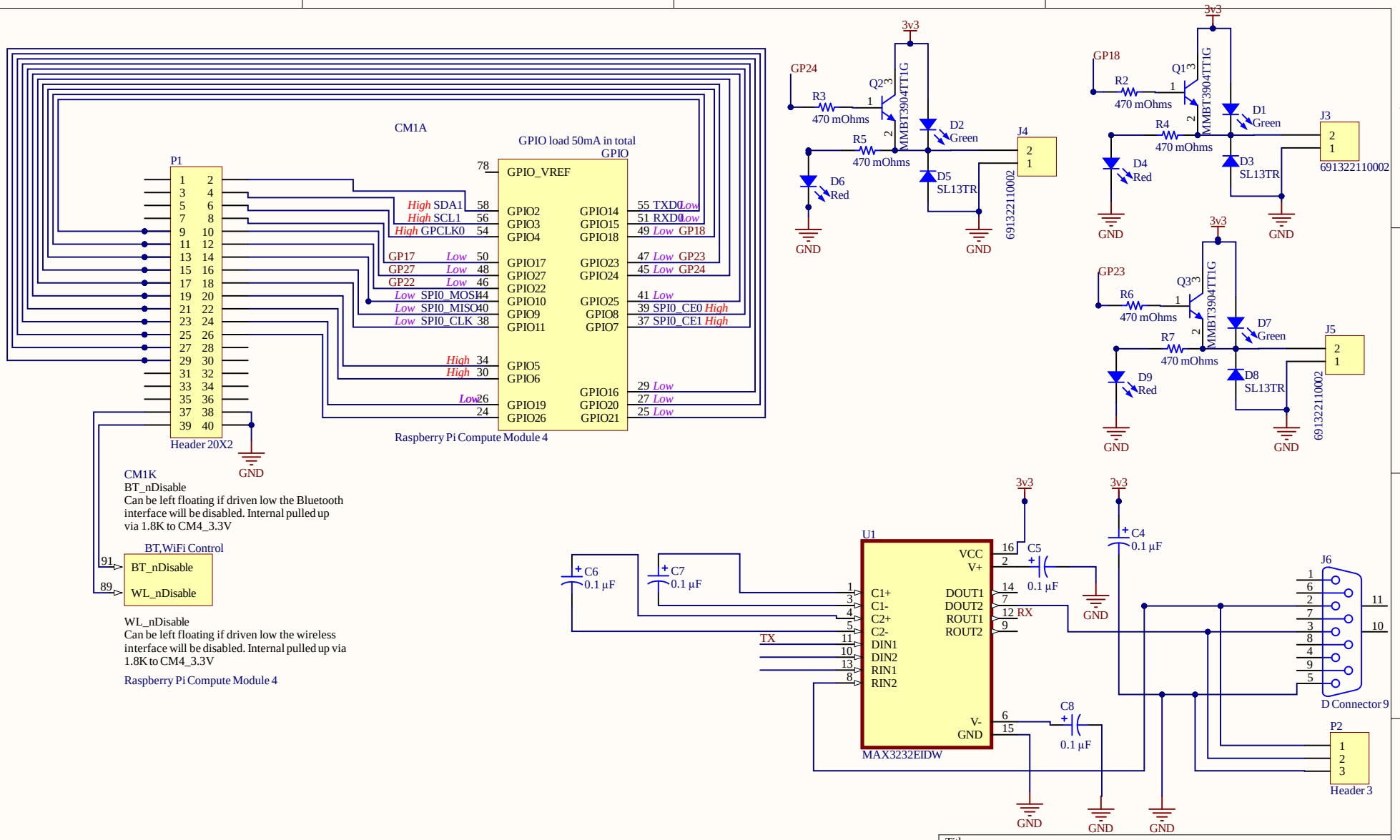




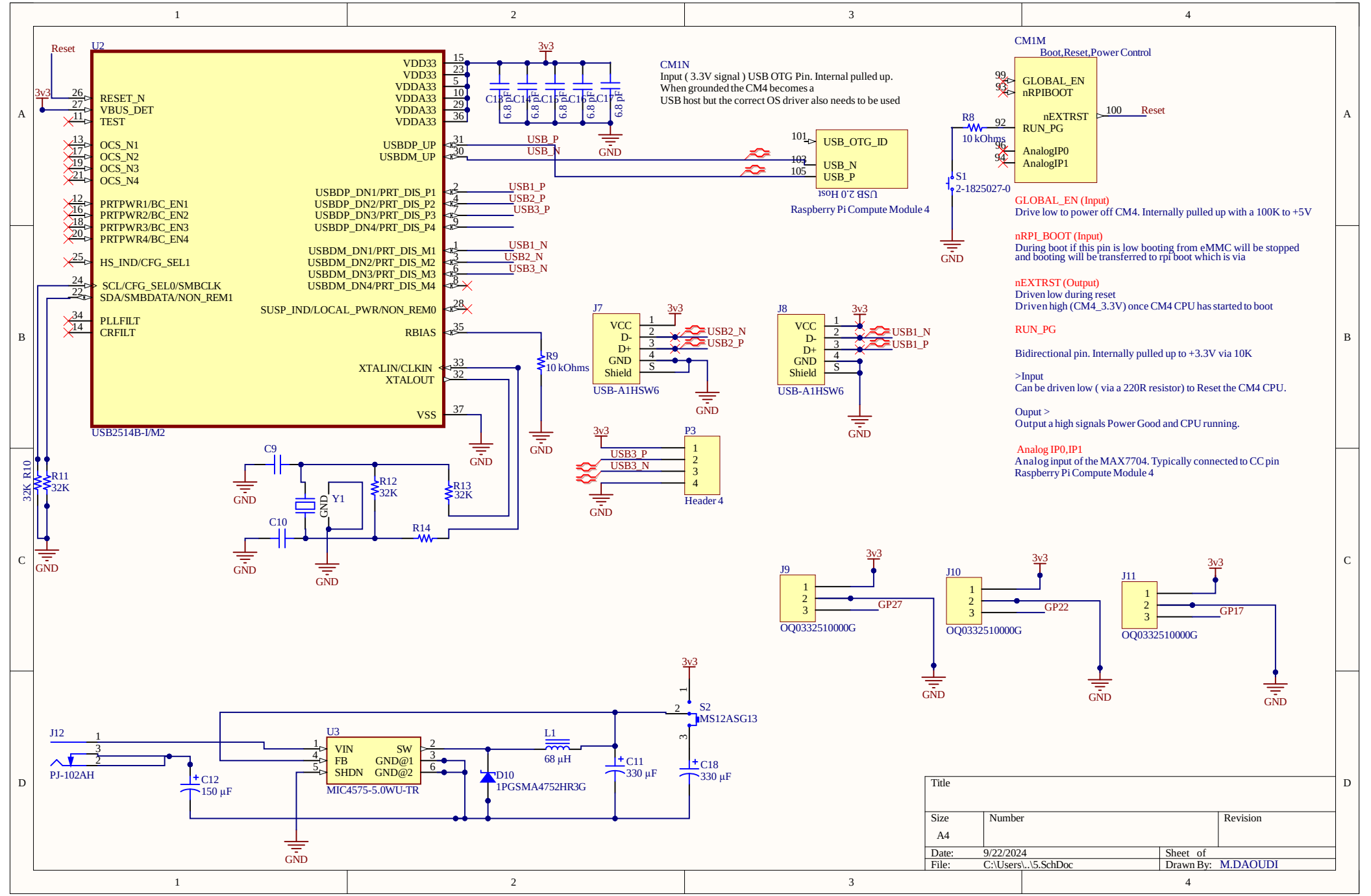


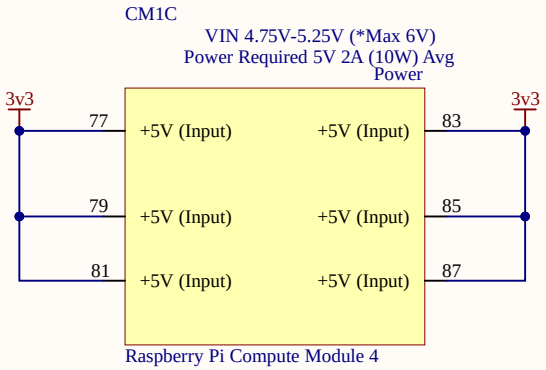


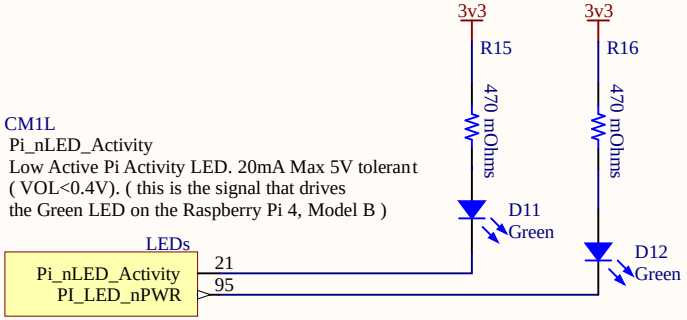
Title		
Size: A4	Number	Revision
Date: 9/22/2024		Sheet of
File: C:\Users\..\Sheet1.SchDoc		Drawn By: M.DAOUDI



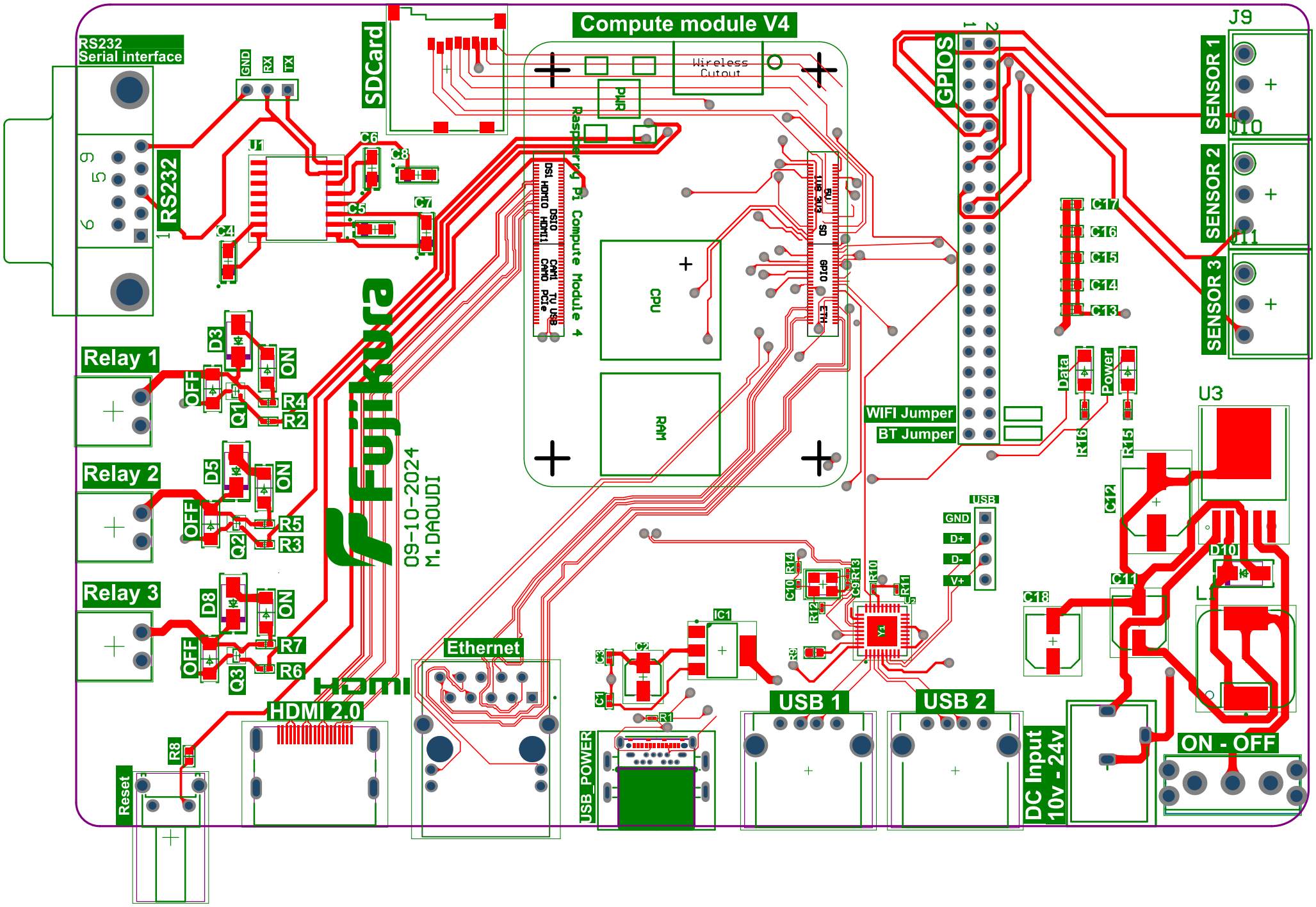
Title		
Size A4	Number	Revision
Date: 9/22/2024		Sheet of
File: C:\Users\..\Sheet4.SchDoc		Drawn By: M.DAOUDI


U2
USB2514B-I/M2
Reset
3v3
RESET_N
VBUS_DET
TEST
OCS_N1
OCS_N2
OCS_N3
OCS_N4
PRTPWR1/BC_EN1
PRTPWR2/BC_EN2
PRTPWR3/BC_EN3
PRTPWR4/BC_EN4
HS_IND/CFG_SEL1
SCL/CFG_SEL0/SMBCLK
SDA/SMBDATA/NON_REM1
PLLFILT
CRFILT
VDD33
VDD33
VDDA33
VDDA33
VDDA33
VDDA33
USBDP_UP
USBDM_UP
USBDP_DN1/PRT_DIS_P1
USBDP_DN2/PRT_DIS_P2
USBDP_DN3/PRT_DIS_P3
USBDP_DN4/PRT_DIS_P4
USBDM_DN1/PRT_DIS_M1
USBDM_DN2/PRT_DIS_M2
USBDM_DN3/PRT_DIS_M3
USBDM_DN4/PRT_DIS_M4
SUSP_IND/LOCAL_PWR/NON_REM0
RBIAS
XTALIN/CLKIN
XTALOUT
VSS
C15 6.8 pF
C14 6.8 pF
C15 6.8 pF
C16 6.8 pF
C17 6.8 pF
USB_P
USB_N
USB1_P
USB2_P
USB3_P
USB1_N
USB2_N
USB3_N
R9 10 kOhms
R11 32K
R10 32K
R12 32K
R13 32K
R14
C9
C10
Y1
GND
CM1N
Input (3.3V signal) USB OTG Pin. Internal pulled up.
When grounded the CM4 becomes a
USB host but the correct OS driver also needs to be used
USB_OTG_ID
USB_N
USB_P
USB 2.0 Host
Raspberry Pi Compute Module 4
CM1M
Boot,Reset,Power Control
GLOBAL_EN
nRPIBOOT
nEXTRST
RUN_PG
AnalogIP0
AnalogIP1
R8 10 kOhms
S1 2-1825027-0
GLOBAL_EN (Input)
Drive low to power off CM4. Internally pulled up with a 100K to +5V
nRPI_BOOT (Input)
During boot if this pin is low booting from eMMC will be stopped and booting will be transferred to rpi boot which is via
nEXTRST (Output)
Driven low during reset
Driven high (CM4_3.3V) once CM4 CPU has started to boot
RUN_PG
Bidirectional pin. Internally pulled up to +3.3V via 10K
>Input
Can be driven low (via a 220R resistor) to Reset the CM4 CPU.
Ouput >
Output a high signals Power Good and CPU running.
Analog IP0,IP1
Analog input of the MAX7704. Typically connected to CC pin
Raspberry Pi Compute Module 4
J7
J8
USB-A1HSW6
P3
Header 4
J9
J10
J11
OQ0332510000G
GP27
GP22
GP17
J12
PJ-102AH
U3
MIC4575-5.0WU-TR
VIN
SW
FB
GND@1
SHDN
GND@2
L1 68 µH
D10 1PGSMA4752HR3G
C11 330 µF
C18 330 µF
C12 150 µF
S2 MS12ASG13
Title
Size A4
Number
Revision
Date: 9/22/2024
File: C:\Users\..\5.SchDoc
Sheet of
Drawn By: M.DAOUDI





Title		
Size: A	Number	Revision
Date: 9/22/2024		Sheet of
File: C:\Users\..\6.SchDoc		Drawn By: M.DAOUDI


Compute module V4
RS232
Serial interface
RS232
SDCard
Wireless
Cutout
PWR
Raspberry Pi Compute Module 4
CPU
RAM
GPIOS
SENSOR 1
SENSOR 2
SENSOR 3
J9
J10
J11
WIFI Jumper
BT Jumper
Data
Power
Relay 1
Relay 2
Relay 3
ON
OFF
Fujikura
09-10-2024
M.DAOUDI
HDMI
HDMI 2.0
Ethernet
USB 1
USB 2
USB_POWER
DC Input
10v - 24v
ON - OFF
Reset
U3
GND
D+
D-
V+