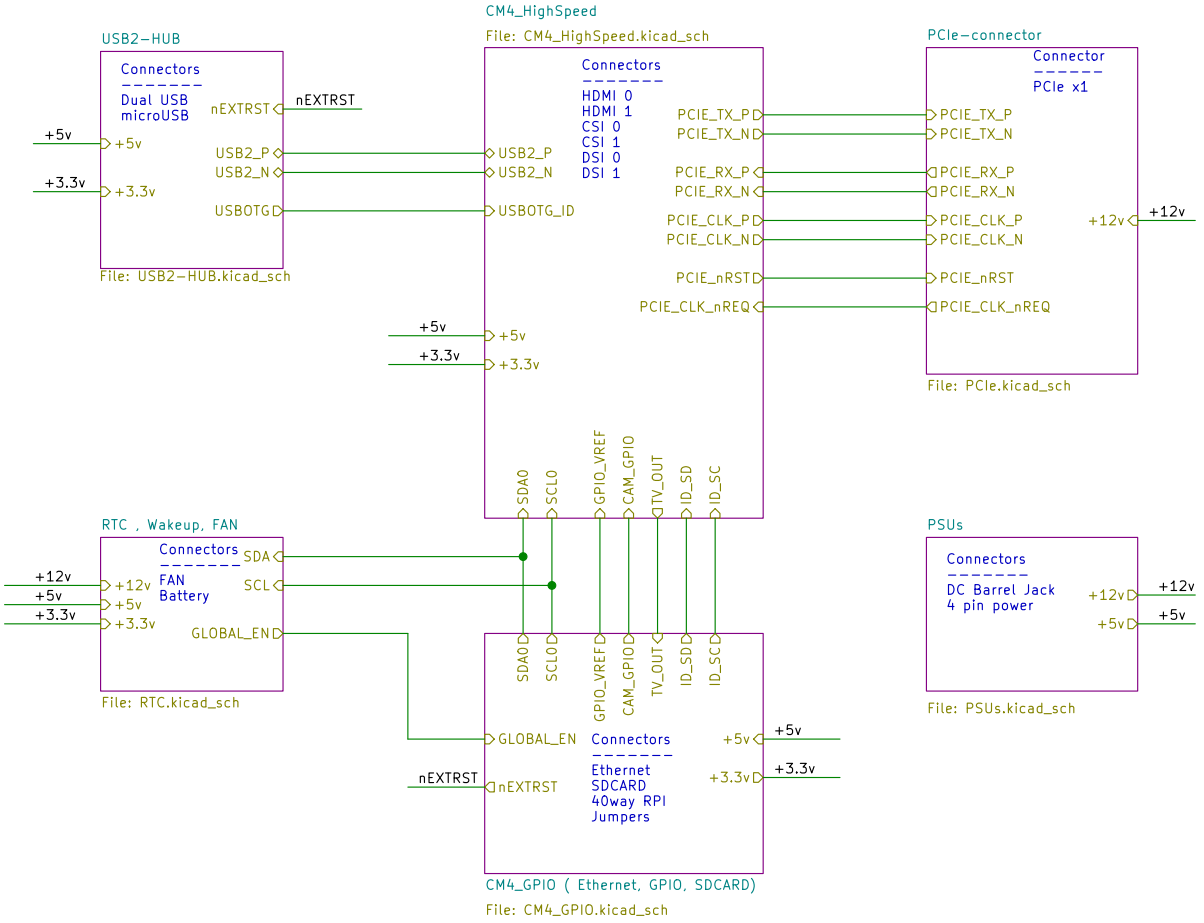

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole
H5 MountingHole
H6 MountingHole
H7 MountingHole
H8 MountingHole

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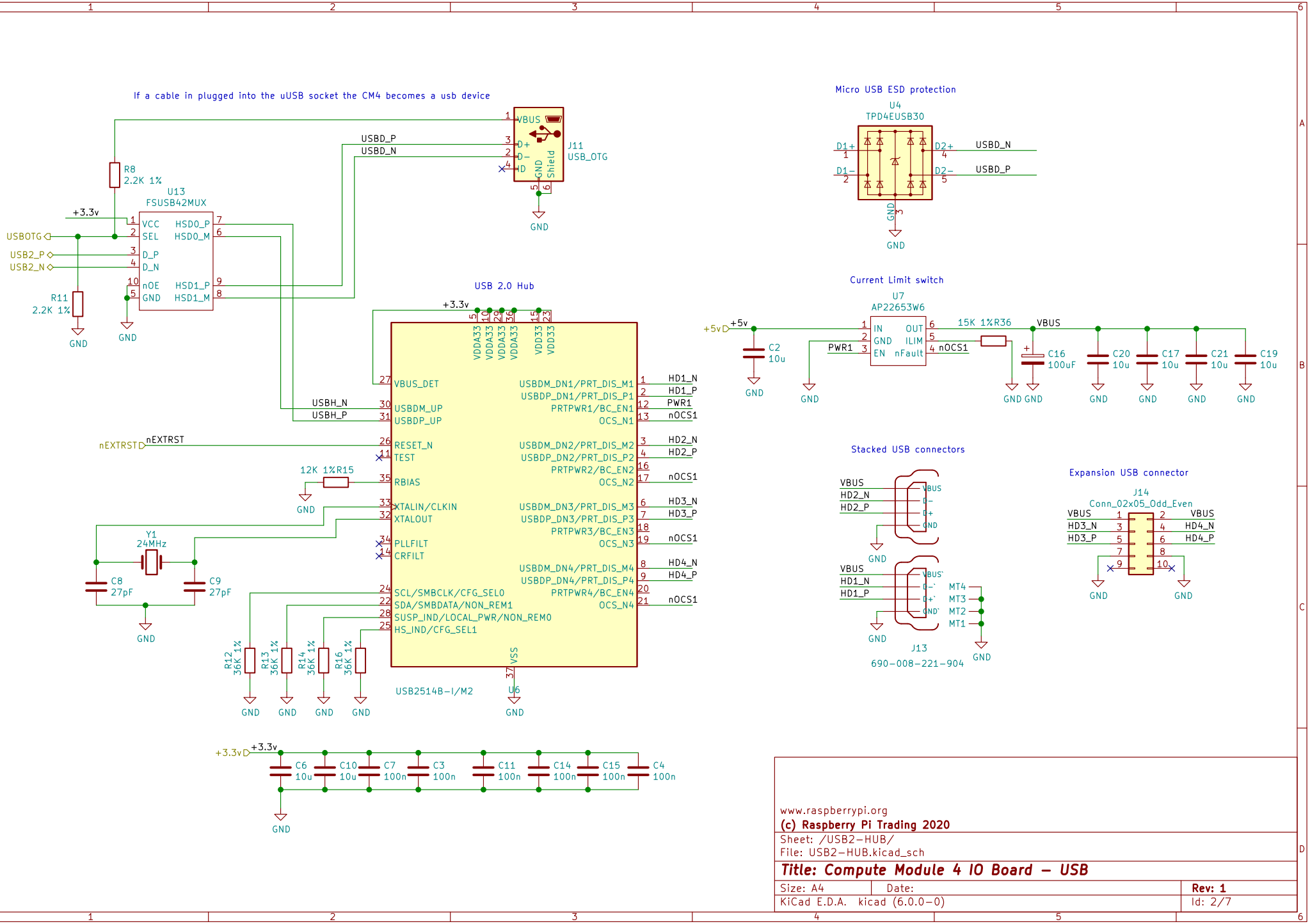
Sheet: /
File: CM4IOv5.kicad_sch

Title: Compute Module 4 IO Board – Top Level

Size: A4	Date:	**Rev: 1**
KiCad E.D.A. kicad (6.0.0-0)		Id: 1/7


If a cable in plugged into the uUSB socket the CM4 becomes a usb device
USB 2.0 Hub
Micro USB ESD protection
Current Limit switch
Stacked USB connectors
Expansion USB connector
USB2514B-I/M2
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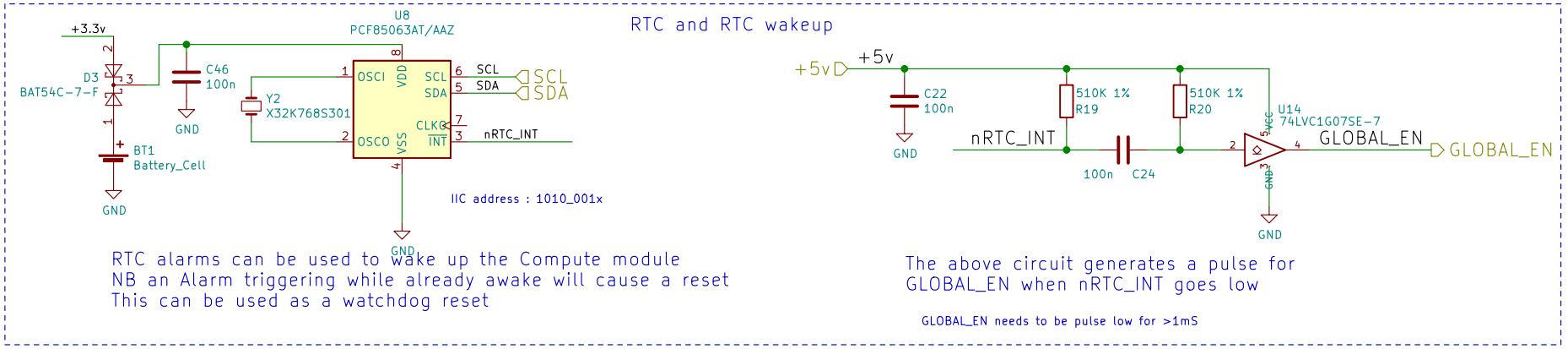
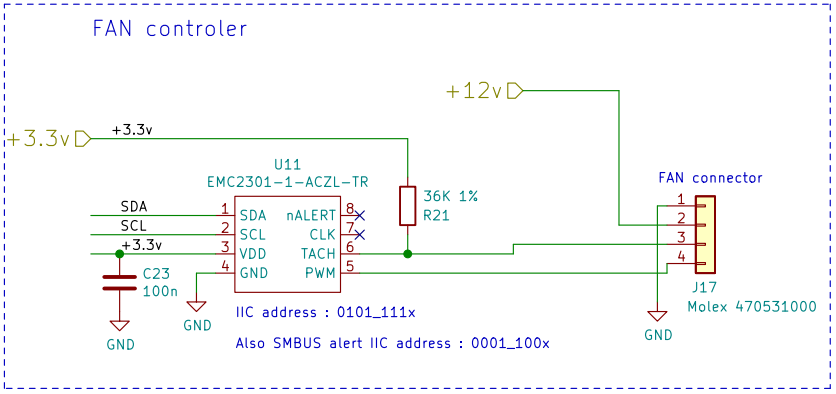
Sheet: /USB2-HUB/
File: USB2-HUB.kicad_sch
Title: Compute Module 4 IO Board - USB
Size: A4
Date:
Rev: 1
KiCad E.D.A. kicad (6.0.0-0)
Id: 2/7





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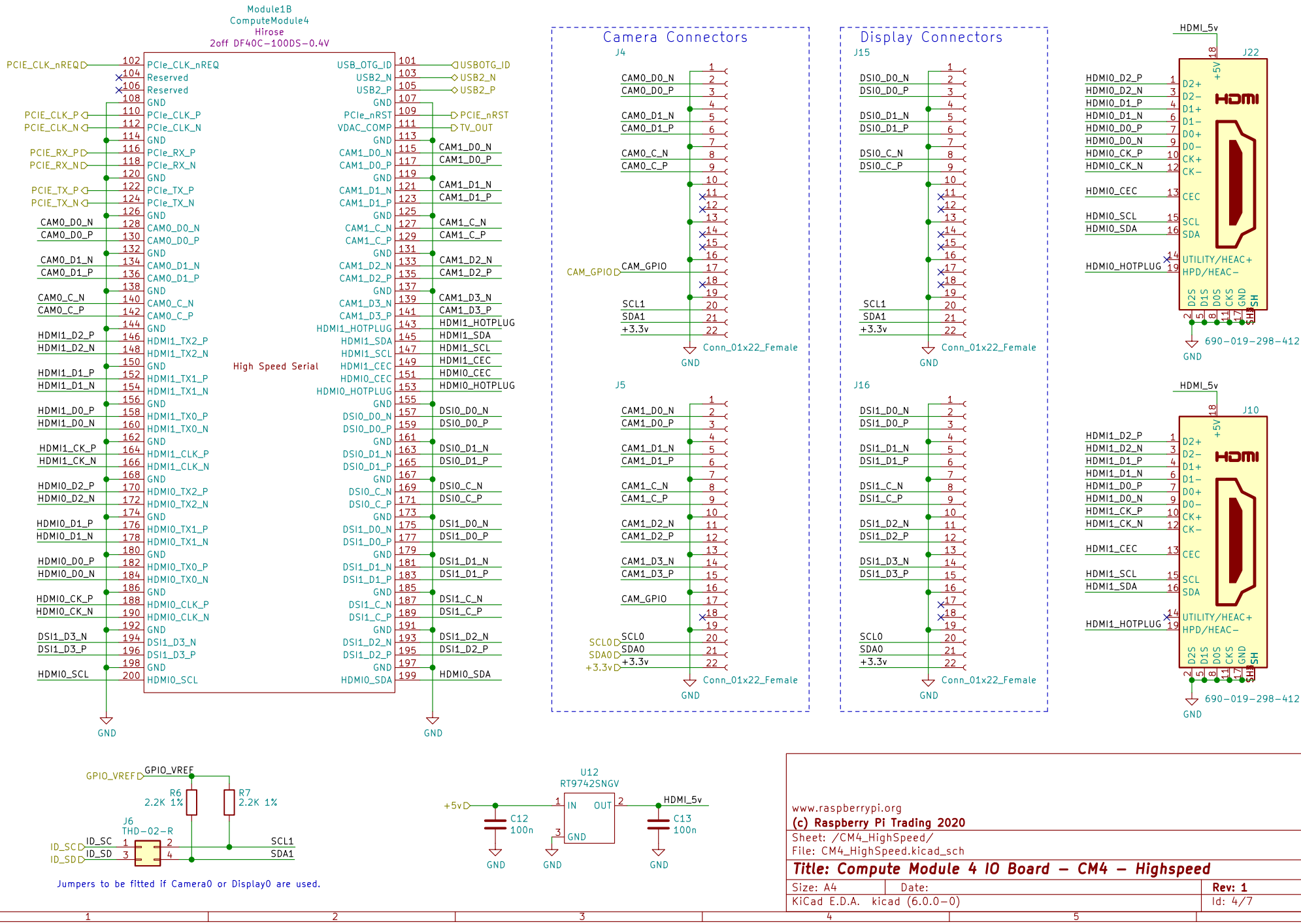
Sheet: /RTC , Wakeup, FAN/

File: RTC.kicad_sch

Title: Compute Module 4 IO Board – RTC – FAN

Size: A4	Date:	**Rev: 1**
KiCad E.D.A. kicad (6.0.0-0)		Id: 3/7


Module1B
ComputeModule4
Hirose
2off DF40C-100DS-0.4V
High Speed Serial
Camera Connectors
J4
J5
Display Connectors
J15
J16
Conn_01x22_Female
J22
J10
HDMI
690-019-298-412
U12
RT9742SNGV
R6
2.2K 1%
R7
2.2K 1%
J6
THD-02-R
Jumpers to be fitted if Camera0 or Display0 are used.
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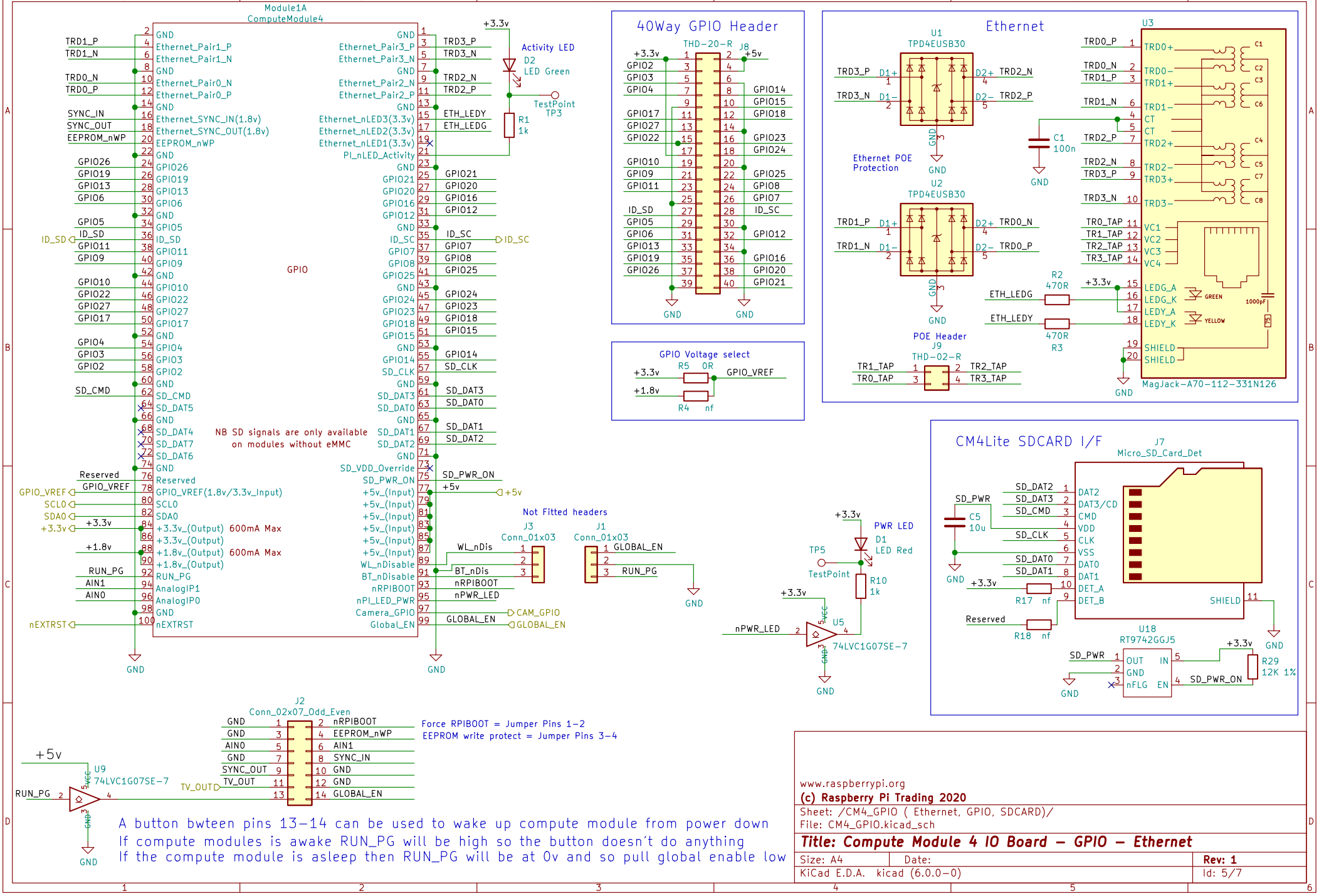
Sheet: /CM4_HighSpeed/
File: CM4_HighSpeed.kicad_sch
Title: Compute Module 4 IO Board – CM4 – Highspeed
Size: A4
Date:
Rev: 1
KiCad E.D.A. kicad (6.0.0-0)
Id: 4/7


Module1A
ComputeModule4
GPIO
NB SD signals are only available on modules without eMMC
Activity LED
D2
LED Green
TestPoint
TP3
R1
1k
40Way GPIO Header
THD-20-R
J8
GPIO Voltage select
R5 0R
R4 nf
GPIO_VREF
Ethernet
U1
TPD4EUSB30
U2
TPD4EUSB30
U3
Ethernet POE Protection
C1
100n
R2
470R
R3
470R
POE Header
J9
THD-02-R
MagJack-A70-112-331N126
Not Fitted headers
J3
Conn_01x03
J1
Conn_01x03
PWR LED
D1
LED Red
R10
1k
U5
74LVC1G07SE-7
CM4Lite SDCARD I/F
J7
Micro_SD_Card_Det
U18
RT9742GGJ5
R29
12K 1%
J2
Conn_02x07_Odd_Even
Force RPIBOOT = Jumper Pins 1-2
EEPROM write protect = Jumper Pins 3-4
U9
74LVC1G07SE-7
A button bwteen pins 13-14 can be used to wake up compute module from power down
If compute modules is awake RUN_PG will be high so the button doesn't do anything
If the compute module is asleep then RUN_PG will be at 0v and so pull global enable low
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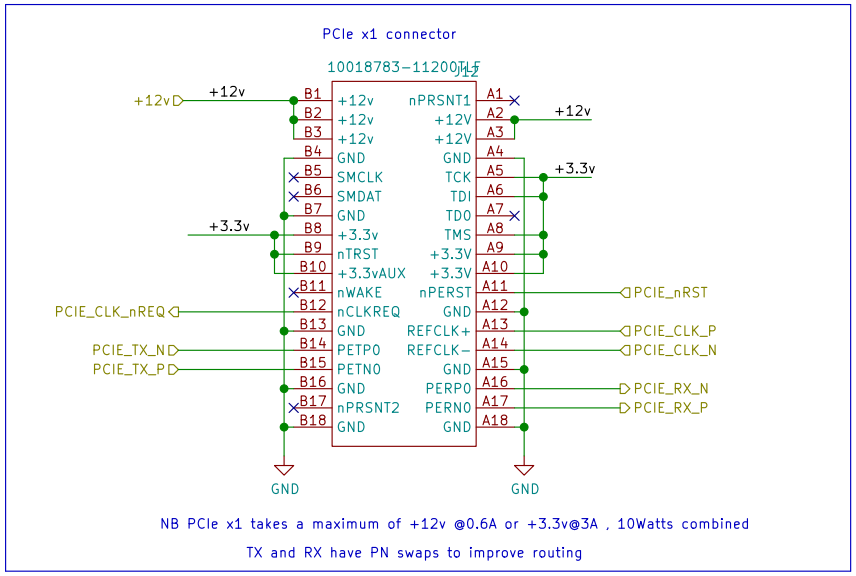
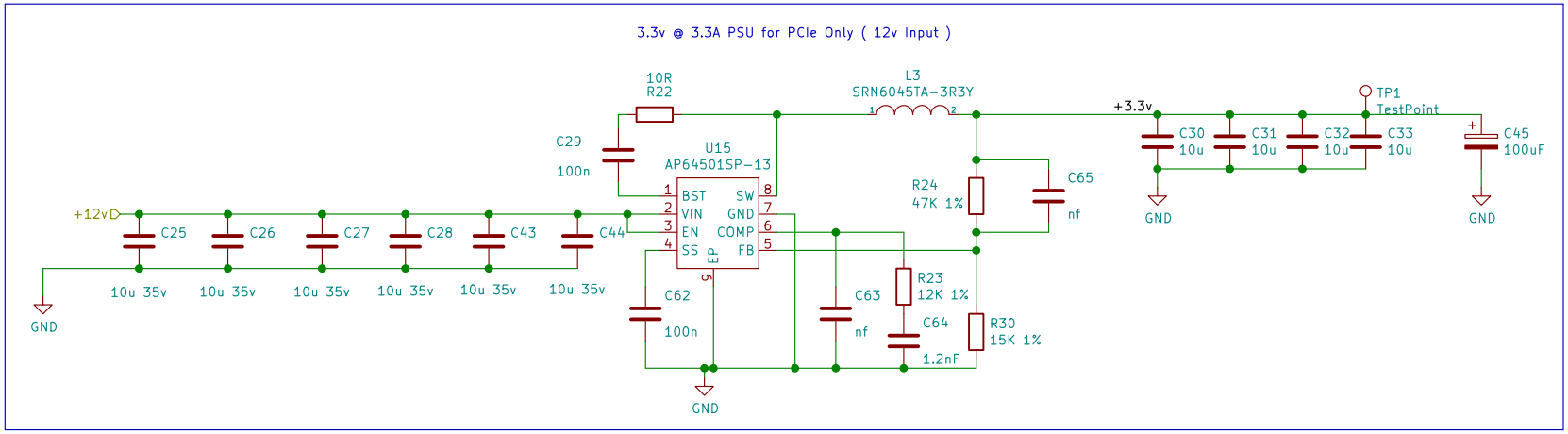
Sheet: /CM4_GPIO (Ethernet, GPIO, SDCARD)/
File: CM4_GPIO.kicad_sch
Title: Compute Module 4 IO Board - GPIO - Ethernet
Size: A4
Date:
Rev: 1
KiCad E.D.A. kicad (6.0.0-0)
Id: 5/7





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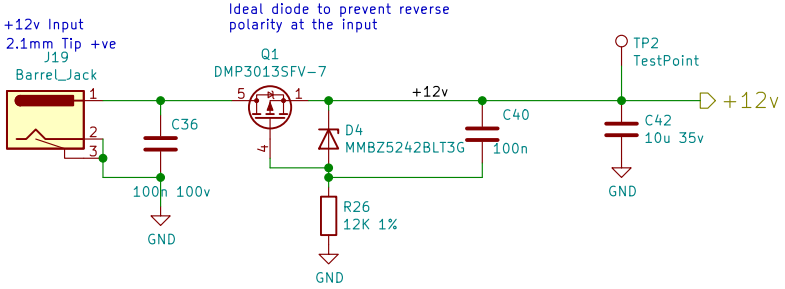
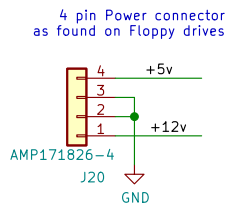
Sheet: /PCIe-connector/

File: PCIe.kicad_sch

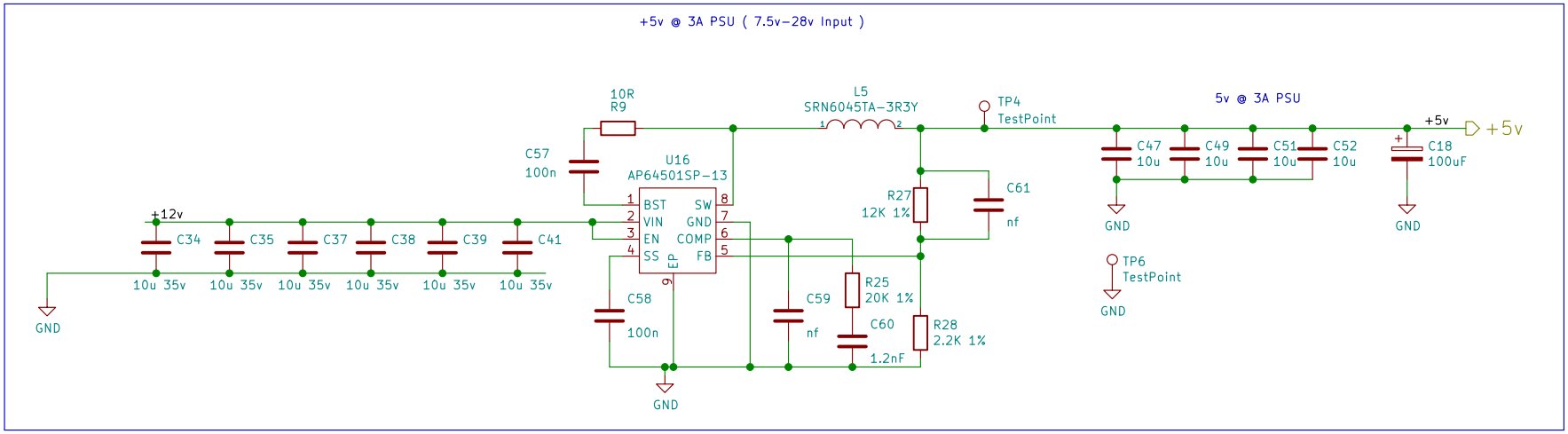
Title: Compute Module 4 IO Board - PCIe

Size: A4	Date:	Rev: 1
KiCad E.D.A. kicad (6.0.0-0)		Id: 6/7





Can be used to power other devices if total loading on PSUs aren't exceeded
Can be used to power the CM4IO board. NB +12v will also be available at the DC Jack
+12v is only needed for PCIe and the FAN. If these aren't used then +12v isn't needed



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Sheet: /PSUs/
File: PSUs.kicad_sch

Title: Compute Module 4 IO Board – PSUs

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.0-0)		Id: 7/7