Module1A
ComputeModule4-CM4

GPIO

EEPROM_nWP
SCL1 GPIO3
SDA1 GPIO2
RUN_PG

NB SD signals are only available on modules without eMMC

R3 470R
LED1 ACTIVITY1 LED

TP1 TestPoint +3.3VP
SCL0
SDA0
+3.3V_(Output) 600mA Max
+1.8V_(Output) 600mA Max

+5V

RadioOnOff1 Conn_01x03_Female

nRPIBOOT
nPI_LED_PWR
CAM_GPIO
Global_EN

PowerOnOff1 Conn_01x03_Female
BootEEprom1 Conn_01x03_Female

Global_EN
RUN_PG
nRPIBOOT
EEPROM_nWP

U1 74LVC1G07SE-7
J1 Conn_01x02_Female

+3.3VP
PWR_GO1 LED
R2 470R
nPI_LED_PWR
U2 74LVC1G07SE-7

Module1B
ComputeModule4-CM4

High Speed Serial

USB_OTG
USB_N
USB_P

R8 2.2K 1%
R6 2.2K 1%
U7 FSUSB42MUX
USBH_P
USBH_N
USBD_P
USBD_N
TRIG_OTG

R10 33R
R11 33R
R12 5.1k
R13 5.1k
R24 OTG
USB_C_Receptacle_USB2.0 J2

VBUS1 LED1 R25
PORT1 USB_A
VBUS_1

VBUS2 LED2 R26
PORT2 USB_A
VBUS_2

U8
TUSB4041IPAPR
DP1_P
DP1_N
DP2_P
DP2_N
MCU hooks in here when on Control board
DP4_P
DP4_N
Y1 24Mhz
R14 1M
C16 18pF
C17 18pF

R15 33R
R16 33R
R17 56R
R18 56R
56k resistor announces up to 0.9A @ 5V
VBUS_4
D7 R27
USB_C_Receptacle_USB2.0 J3

SCL1
SCL0
GPIO3
Select I2C bus on SBC
SDA1
SDA0
GPIO2
R9 9.53k
I2C1 I2C/SMB
R20 10k
SMBUS_N high = I2C device mode

U3
TPS2001CDGNR
R7 10k
C3 0.1uF
C8 150uF
C9 0.1uF
PWR_FLAG

U4
TPS2001CDGNR
R4 10k
C4 0.1uF
C10 150uF
C11 0.1uF

U5
TPS2001CDGNR
R5 10k
C5 0.1uF
C12 150uF
C15 0.1uF
The TPS2001 will block reverse current

R21 10k
C13 0.1uF
R23
AUTOEN1 AutoEn
AUTOEN low = enable charging
GANG1 Ganged
GANGED low = individual ctrl
PPOL1 PowerPol
PWRCTL_POL high = Active high (default)

Q1 DMP6023LE-13
Screw_Terminal_01x02 5V_Power_IN1
D1 BZT52C11-7-F
R1 10k
R28 LED_Small
TP_5.0 TestPoint
NCP1
C1 2.2uf
C2 2.2uf
R29 LED_Small
TP_3.3 TestPoint
C19 0.1uF
C20 0.1uF
C21 0.1uF
C22 0.1uF

U6
TPS74611PQWDRVRQ1
C6 0.1uF
C7 22uF (delayCap)
R19 10k
C14 150uF
TP_1.1 TestPoint
C23 0.1uF
C24 0.1uF
C25 0.1uF
C26 0.1uF
C27 0.1uF
C28 0.1uF

H1 MountingHole
H2 MountingHole
H3 MountingHole

Sheet: /
File: USB2_hub_proper (2).kicad_sch
Title: Alternate USB2 hub for P3K
Size: A2 | Date: 2024-09-11 | Rev:
KiCad E.D.A. eeschema 7.0.8 | Id: 1/1