

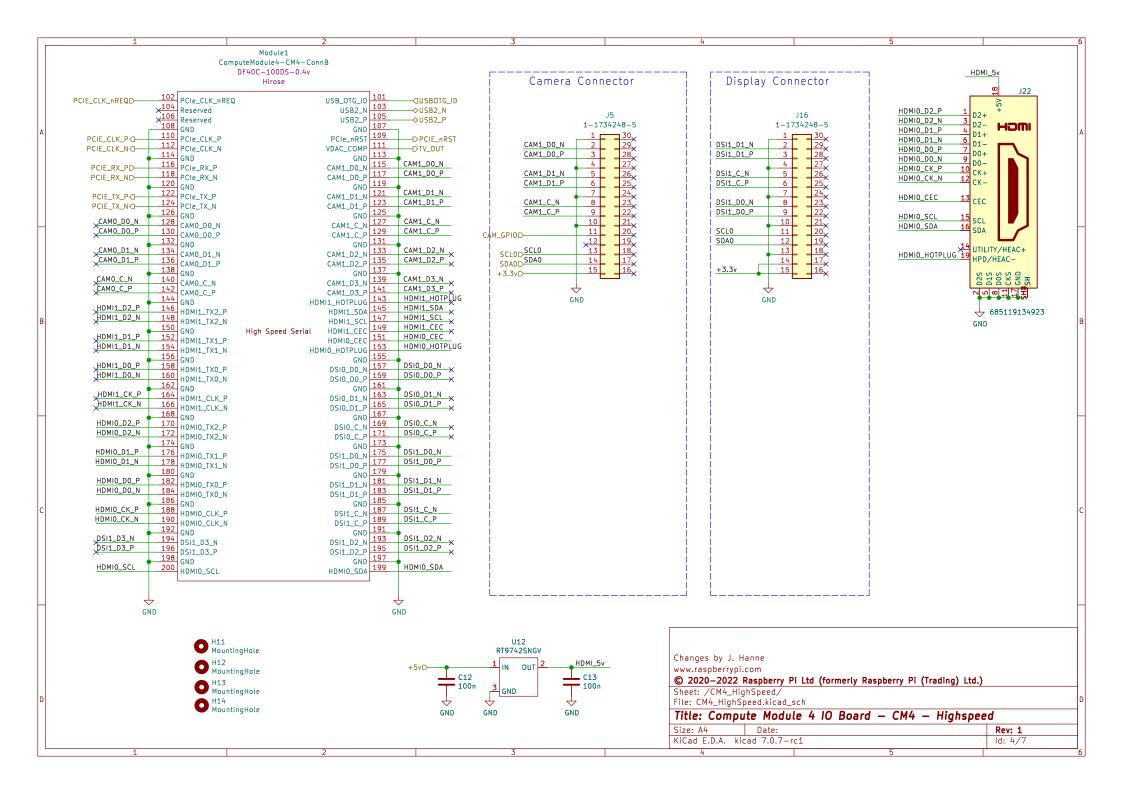
Changes by J. Hanne
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Sheet: /RTC , Wakeup, FAN/
File: RTC.kicad_sch

Title: Compute Module 4 IO Board - RTC - FAN

Size: A4 Date: Rev: 1

KiCad E.D.A. kicad 7.0.7-rc1 Id: 3/7



Module2 ComputeModule4-CM4-ConnA U3 40Way GPIO Header Ethernet 111 2 GND GND TRD3_P TRD1_P THD-20-R J8 TRD0_P TPD4EUSB30 Ethernet_Pair1_P Ethernet_Pair3_P Activity LED TRD1_N TRD3_N Ethernet_Pair1_N Ethernet_Pair3_N **▼** D2 GPI02 TRD0_N 4 8 GND LED Green TRD3_P D1 D2+ TRD2_N GND 10 Ethernet_Pair0_N GPI03 TRD1_P TRD0_N 9 TRD2_N TRD1+ Ethernet_Pair2_N TRD0_P 12 Ethernet_Pair0_P TRD2_P GPI04 8 GPI014 Ethernet_Pair2_P TRD2_P TRD3_N D1 14 GND
16 Ethernet_SYNC_IN(1.8v)
10 SYNC_OUT(1.8 q 10 GPI015 TRD1_N 6 GND 13 TestPoint TP3 TRD1 Ethernet_nLED3(3.3v) 15 ETH_LEDY SYNC_IN **GPI017** 12 GPI018 CT Ethernet_nLED2(3.3v) 17 ETH_LEDG SYNC_OUT GPI027 13 5 18 Ethernet_SYNC_OUT(1.8v) 14 CT EEPROM_nWP 20 EEPROM_nWP TRD2_P 7 Ethernet_nLED1(3.3v) 19 PI_nLED_Activity GPI022 16 GPI023 C1 TRD2 100n 22 GND GPI026 18 GPI024 Ethernet POE GPI026 GPI010 GND 23 19 20 TRD2_N Protection GND 26 GPI019 GPI019 GPI021 25 GPI021 27 GPI020 GPI09 21 22 GPI025 TRD3_P 9 TRD3+ GND U2 **GPI013** 28 GPI013 **GPI011** 23 24 GPI08 GPI020 TPD4EUSB30 TRD3_N 10 TRD3-GPI06 30 GPI06 GPI016 GPI07 GPI016 29 26 32 GND GPI05 27 29 28 ID_SC GPI012 31 GPI012 ID_SD TRO_TAP 11 VC1 GND 33 GPI05 TRD1_P D1 D2+ TRDO_N GPI05 30 TR1_TAP 12 VC2 — ID_SD (ID_SD 36 ID_SD ID_SC GPI06 31 32 GPI012 ID_SC 35 DID_SC TR2_TAP 13 VC3 -38 GPI011 GPI011 37 GPI07 GPI013 33 34 TRD1_N D1 TRD0_P GPI07 TR3_TAP 14 VC4 GPI08 39 36 GPI09 40 GPI09 GPI08 GPI019 GPI016 35 42 GND GPI010 **GPIO** 38 GPI025 GPI026 37 GPI020 R2 GPI025 GPI010 GND 43 39 40 GPI021 470R 16 LEDG_K GREEN GPI022 46 GPI022 GPI024 ETH_LEDG GPI024 45 1000pF| GPI023 47 GPI023 17 LEDY_A GPI027 48 GPI027 18 LEDY_K YELLOW GND GND GPI017 50 GPI017 GPI018 49 GPI018 ETH_LEDY GND 52 GND GPI04 GPI015 GPI015 51 470R GND 53 **GPI04** POE Headers 19 SHIELD R3 56 GPI03 20 SHIELD GPI03 GPI014 GPI014 55 GPIO Voltage select TRO TAP J25 58 GPI02 GPI02 SD_CLK R5 OR SD_CLK 57 GPIO_VREF +3.3vTR1_TAP Conn_01x04 GND 59 60 GND THD-02-RTR2_TAP LPJG0926HENL SD_CMD 62 SD_CMD TR1 TAP TR2_TAP SD_DAT3 61 SD_DAT3 <u>+1.8</u>v GND TR3 TAP 64 SD_DAT5 66 GND SD_DATO 63 SD_DATO TR0_TAP 4 TR3_TAP R4 nf GND 65 58 SD_DAT4 NB SD signals are only available SD_DAT1 67 SD_DAT2 69 SD_DAT2 SD_DAT7 on modules without eMMC CM4Lite SDCARD I/F DM3D-SF 72 SD_DAT6 GND GND SD_VDD_Override 73 SD_PWR_ON 76 Reserved Reserved SD_PWR_ON SD_DAT2 GPIO_VREF 78 GPIO_VREF (1.8v/3.3v_Input) 77 +5v +5v_(Input) DAT2 SCL0 SD_PWR SD_DAT3 DAT3/CD SCIDA +5v_(Input) 82 _{SDA0} SD_CMD SDA0 (+5v_(Input) +3.3vC5 CMD +3.3v +3.3v_(Output) 600mA Max PWR LED +3.3v← +5v_(Input) 10u VDD SD_CLK D1 +3.3v_(Output) +5v_(Input) CLK ∇ +1.8v +1.8v_(Output) 600mA Max +5v_(Input) 87 TP5 LED Red VSS WL_nDis 11 SD_DATO 90 +1.8v_(Output) WiFi_nDisable DATO RUN_PG 92 RUN_PG Conn_01x03 BT_nDis SD_DAT1 BT_nDisable 91 TestPoint DAT1 GND +3<u>.3v</u> 1 GLOBAL_EN R10 AIN1 94 AnalogIP1 nRPIBOOT 10 DET_A nRPIBOOT 96 AnalogIP0 nPWR_LED +3.3v 9 DET_B AIN0 nPI_LED_PWR R17 nf SHIELD 98 GND 100 nEXTRST RUN_PG Camera_GPIO 97 -DCAM_GPIO GLOBAL_EN 99 Reserved U5 nEXTRST< Global_EN -GGLOBAL EN nPWR_LED 2 U18 Δ GND R18 nf RT9742GGJ5 AINO +3.3v74LVC1G07SE-7 GND SD_PWR \rightarrow AIN1 \Leftrightarrow R29 Conn_01x03 GND GND J6 GND 12K 1% +SD_PWR_ON x³ nFLG EN GND 🕁 Conn_02x04_Odd_Even GND GND EEPROM_nWP TV_OUTD TV_OUT WL_nDis BT_nDis Conn_01x02 nRPIBOOT GND 🕁 +5v119 J3 Changes by J. Hanne GND SYNC_IN 2 J12 74LVC1G07SE-7 Conn_02x01 www.raspberrvpi.com Conn_01x03

2 GLOBAL_EN RUN_PG 2 © 2020-2022 Raspberry Pi Ltd (formerly Raspberry Pi (Trading) Ltd.) GND 🖶 Sheet: /CM4_GPIO (Ethernet, GPIO, SDCARD)/ File: CM4 GPIO.kicad sch A button between pins 1-2 can be used to wake up compute module from power down Title: Compute Module 4 10 Board - GPIO - Ethernet 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 Ov and so pull global enable low Size: A4 Date: Rev: 1 GND KiCad E.D.A. kicad 7.0.7-rc1 ld: 5/7

