RPi Female Header
(back)

+3.3V   P1   +5V
       NPTC202KFMS-RC

GPIO2(SDA1)   1   2
GPIO3(SCL1)   3   4
GPIO4(GCLK)   5   6
                 7   8   GPIO14(TXD0)
                 9   10   GPIO15(RXD0)
GPIO17(GEN0)   11   12   GPIO18(GEN1)(PWM0)
GPIO27(GEN2)   13   14
GPIO22(GEN3)   15   16   GPIO23(GEN4)
                 17   18   GPIO24(GEN5)
GPIO10(SPIO_MOSI) 19 20
GPIO9(SPIO_MISO) 21 22   GPIO25(GEN6)
GPIO11(SPIO_SCK) 23 24   GPIO8(SPIO_CE_N)
                 25   26   GPIO7(SPI1_CE_N)
ID_SD   27   28   ID_SC
GPIO5   29   30
GPIO6   31   32   GPIO12(PWM0)
GPIO13(PWM1)   33   34
GPIO19(SPI1_MISO) 35 36   GPIO16
GPIO26   37   38   GPIO20(SPI1_MOSI)
                 39   40   GPIO21(SPI1_SCK)

Used by Display

GND   GND

Optional Accessory
Connectors (back)

+3.3V   J4
GPIO14(TXD0) 1   Serial/GPIO
GPIO15(RXD0) 2
              3   Conn_01x04
GND   4

+3.3V   J2
GPIO3(SCL1)   1   I2C/GPIO
GPIO2(SDA1)   2
              3   Conn_01x04
GND   4

+3.3V   J3
GPIO25(GEN6) Runout 1   GPIO/Filament Sensor 1
              2
GND   3   Conn_01x03

+3.3V   J5
GPIO26   Runout 1   GPIO/Filament Sensor 2
              2
GND   3   Conn_01x03

+5V   J6
GPIO23(GEN4) Dir 1   Motor control connector
              2
GND   3   Conn_01x03

+5V   J7
             1   Power In
GND   2   Conn_01x02

RPi Passthru Header
(front)
         J1
+3.3V Conn_02x20_Odd_Even +5V
         Optional

                 1   2
GPIO2(SDA1)   3   4
GPIO3(SCL1)   5   6
GPIO4(GCLK)   7   8   GPIO14(TXD0)
                 9   10   GPIO15(RXD0)
GPIO17(GEN0)   11   12   GPIO18(GEN1)(PWM0)
GPIO27(GEN2)   13   14
GPIO22(GEN3)   15   16   GPIO23(GEN4)
                 17   18   GPIO24(GEN5)
GPIO10(SPIO_MOSI) 19 20
GPIO9(SPIO_MISO) 21 22   GPIO25(GEN6)
GPIO11(SPIO_SCK) 23 24   GPIO8(SPIO_CE_N)
                 25   26   GPIO7(SPI1_CE_N)
ID_SD   27   28   ID_SC
GPIO5   29   30
GPIO6   31   32   GPIO12(PWM0)
GPIO13(PWM1)   33   34
GPIO19(SPI1_MISO) 35 36   GPIO16
GPIO26   37   38   GPIO20(SPI1_MOSI)
                 39   40   GPIO21(SPI1_SCK)

GND   GND

LED
(front)

+3.3V   +3.3V

R7   R1
82 OHM 5%   82 OHM 5%

D1   D2
150060RS75000   150060YS75000
Red   Yellow

GPIO4(GCLK)   GPIO5

+3.3V

R8
68 OHM 5%

D3
150060VS75000
Green

GPIO24(GEN5)

Buttons
(front)

                    GPIO13(PWM1)
GPIO16 GPIO17(GEN0)   GPIO18(GEN1)(PWM0) GPIO12(PWM0)

SW1   SW2   SW3   SW4   SW5
Config   Cancel/Offline Next Flmnt 1 Flmnt 2
1   2   1   2   1   2   1   2   1   2
3   4   3   4   3   4   3   4   3   4

GND   GND   GND   GND   GND

ID_SD and ID_SC PINS:
These pins are reserved for HAT ID EEPROM.

At boot time this I2C interface will be
interrogated to look for an EEPROM
that identifies the attached board and
allows automagic setup of the GPIOs
(and optionally, Linux drivers).

DO NOT USE these pins for anything other
than attaching an I2C ID EEPROM. Leave
unconnected if ID EEPROM not required.

Mounting Holes

MK1   MK2
M2.5   M2.5

MK3   MK4
M2.5   M2.5

Proprietary
Designed by John Scimone
Autodrop3d
Sheet: /
File: AD3D Cloud Connect Board.sch
Title: Cloud Connect Board
Size: A4   Date: 2019-07-22   Rev: 0
KiCad E.D.A. kicad (5.0.2)-1   Id: 1/1