J101
USB4105-GF-A

FB103
BK2125HS601-T

PWR_FLAG
VREGIN

VBUS   A4
C116
0.01uF
GND

C113
4.7uF
0.1uF
C110
GND

CC1   A5
CC2   B5
D-   A7
D-   B7
D+   A6
D+   B6

SBU1   A8
SBU2   B8

SHIELD
S1
A1
GND

R108   R109
5.1K   5.1K
GND

GND

+3.3V
ADBUS0   1
ADBUS1   2
ADBUS2   3
ADBUS3   4
          5
VREGIN   6
          7
          8

J102
PinHeader Conn_01x08
1:+3.3V
2:SCLK/SCL
3:MOSI/SDA
4:MISO/SDA
5:CS/DB3
6:GND
7:GND
8:+5V

GND

IF THE I2C-PIN USE, SWITCH I2C ON.

+3.3V   +3.3V
R113   R105
1K   10K
                        RESET
D101
LED RED
               C120
               0.01uF
GND   GND

+3.3V
FB101
BK2125HS601-T PWR_FLAG
               VPHY
0.1uF
C111   C114
        4.7uF
GND

+3.3V
FB102
BK2125HS601-T PWR_FLAG
               VPLL
0.1uF
C112   C115
        4.7uF
GND

+3.3V
0.1uF
C119
4.7uF
C118
GND

C101
0.1uF
GND

C103
0.1uF
GND

VPLL
VPHY

PWR_FLAG
+3.3V

C106   C107   C108
0.1uF   0.1uF   0.1uF

U102
FT232HL

GND

VPHY VPLL VCCIO VCCIO VCCIO
3   8   12   24   46

VREGIN   40 VREGIN
VCCD   39
VCCCORE   38
VCCA   37

DM   6   DM
DP   7   DP

RESET   34 RESET

          5   REF

          45 EECS
          44 EECLK
          43 EEDATA

          1   XCSI

          2   XCSO

          42 TEST

ADBUS0   13 ADBUS0
ADBUS1   14 ADBUS1
ADBUS2   15 ADBUS2
ADBUS3   16 ADBUS3
ADBUS4   17 ADBUS4
ADBUS5   18 ADBUS5
ADBUS6   19 ADBUS6
ADBUS7   20 ADBUS7

ACBUS0   21 ACBUS0
ACBUS1   25 ACBUS1
ACBUS2   26 ACBUS2
ACBUS3   27 ACBUS3
ACBUS4   28 ACBUS4
ACBUS5   29 ACBUS5
ACBUS6   30 ACBUS6
ACBUS7   31 ACBUS7
ACBUS8   32 ACBUS8
ACBUS9   33 ACBUS9

AGND AGND AGND GND GND GND GND GND GND GND
4   9   41   10 22 23 35 36 47 48

R101
12K 1%
GND

+3.3V
R103
10K

+3.3V
R102   R107
10K   10K

+3.3V
C102
0.1uF

6
CS   CLK   4
GND   VCC   3
      DI   1
      DO

R106
2K

2
GND

U101
93LC56BT-I/OT

Y101
12MHz
GND

C104   C105
27pF   27pF
GND   GND

SW1
SW_DIP_x04

ADBUS1   1   8
ADBUS0   2   7   ADBUS2
ADBUS1   3   6
ADBUS2   4   5

S1 ON:I2C OFF:SPI
S2 SCLK ON:PULL-UP
S3 MOSI/SDA ON:PULL-UP
S4 MISO/SDA ON:PULL-UP

+3.3V +3.3V +3.3V
R114   R115   R116
4K7   4K7   4K7

HNZ
Sheet: /
File: i2cmaster.kicad_sch
Title: I2C-SPI-UART ADAPTER R2
Size: A4   Date: 2025-11-18   Rev: Rev.3
KiCad E.D.A. 9.0.6   Id: 1/1