Max Chip

File: maxchip.kicad_sch

teensy
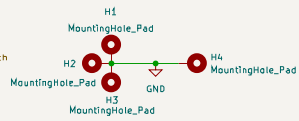
File: teensy.kicad_sch

pwr

File: pwr.kicad_sch

H1
MountingHole_Pad

H2
MountingHole_Pad

H3
MountingHole_Pad

H4
MountingHole_Pad

GND

Thawney LTD
Sheet: /
File: 16 channel spatialiserwith touch.kicad_sch
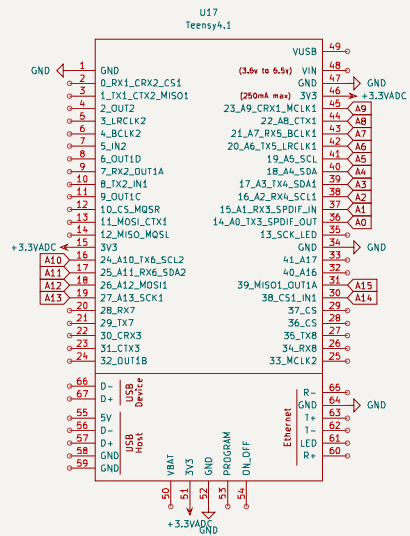Title: Spatial Haptics 16 Channel Transducer Driver With touch
Size: A3   Date: Rev: 0.1
KiCad E.D.A. 8.0.4   Id: 1/4

U17
Teensy4.1

GND 1 GND   VUSB 49
       2 0_RX1_CRX2_CS1   (3.6v to 6.5v) VIN 48
       3 1_TX1_CTX2_MISO1   GND 47 GND
       4 2_OUT2   (250mA max) 3V3 46 +3.3VADC
       5 3_LRCLK2   23_A9_CRX1_MCLK1 45 A9
       6 4_BCLK2   22_A8_CTX1 44 A8
       7 5_IN2   21_A7_RX5_BCLK1 43 A7
       8 6_OUT1D   20_A6_TX5_LRCLK1 42 A6
       9 7_RX2_OUT1A   19_A5_SCL 41 A5
      10 8_TX2_IN1   18_A4_SDA 40 A4
      11 9_OUT1C   17_A3_TX4_SDA1 39 A3
      12 10_CS_MQSR   16_A2_RX4_SCL1 38 A2
      13 11_MOSI_CTX1   15_A1_RX3_SPDIF_IN 37 A1
      14 12_MISO_MQSL   14_A0_TX3_SPDIF_OUT 36 A0
+3.3VADC 15 3V3   13_SCK_LED 35
      16 24_A10_TX6_SCL2   GND 34 GND
A10   17 25_A11_RX6_SDA2   41_A17 33
A11   18 26_A12_MOSI1   40_A16 32
A12   19 27_A13_SCK1   39_MISO1_OUT1A 31 A15
A13   20 28_RX7   38_CS1_IN1 30 A14
      21 29_TX7   37_CS 29
      22 30_CRX3   36_CS 28
      23 31_CTX3   35_TX8 27
      24 32_OUT1B   34_RX8 26
                           33_MCLK2 25

66 D- USB Device   R- 65
67 D+   GND 64 GND
55 5V USB Host   T+ 63
56 D-   T- 62
57 D+   LED 61
58 GND   Ethernet   R+ 60
59 GND

50 VBAT 51 3V3 52 GND 53 PROGRAM 54 ON_OFF
+3.3VADC GND

Power
+3.3VADC

J2 Conn_01x04   SPKRN1 / SPKRP1 / +3.3VADC / A0   R15 10K GND
J4 Conn_01x04   SPKRN3 / SPKRP3 / +3.3VADC / A2   R17 10K GND
J6 Conn_01x04   SPKRN5 / SPKRP5 / +3.3VADC / A4   R19 10K GND
J8 Conn_01x04   SPKRN7 / SPKRP7 / +3.3VADC / A6   R21 10K GND
J10 Conn_01x04   SPKRN9 / SPKRP9 / +3.3VADC / A8   R23 10K GND
J12 Conn_01x04   SPKRN11 / SPKRP11 / +3.3VADC / A10 R25 10K GND
J14 Conn_01x04   SPKRN13 / SPKRP13 / +3.3VADC / A12 R27 10K GND
J16 Conn_01x04   SPKRN15 / SPKRP15 / +3.3VADC / A14 R29 10K GND

J3 Conn_01x04   SPKRN2 / SPKRP2 / +3.3VADC / A1   R16 10K GND
J5 Conn_01x04   SPKRN4 / SPKRP4 / +3.3VADC / A3   R18 10K GND
J7 Conn_01x04   SPKRN6 / SPKRP6 / +3.3VADC / A5   R20 10K GND
J9 Conn_01x04   SPKRN8 / SPKRP8 / +3.3VADC / A7   R22 10K GND
J11 Conn_01x04   SPKRN10 / SPKRP10 / +3.3VADC / A9   R24 10K GND
J13 Conn_01x04   SPKRN12 / SPKRP12 / +3.3VADC / A11 R26 10K GND
J15 Conn_01x04   SPKRN14 / SPKRP14 / +3.3VADC / A13 R28 10K GND
J17 Conn_01x04   SPKRN16 / SPKRP16 / +3.3VADC / A15 R30 10K GND

J18
Barrel_Jack_Switch

VDD
Power

1
3
2

GND

VDD

C67
10uF 35V

C69
220n 35V

GND

U18
LMR33630BDDAR

2 VIN   BOOT 7
3 EN   SW   8
6 VCC   FB   5
   PGND PG   4
   AGND

C72
100n

L1
2.2uH 4A

+3.3V
Power

C73
100n

C74
10u

C75
10u

C76
100u

GND

C70
1uF

GND

GND

R31
100k 1%

R32
43.3k 1%

GND

VDD

C65
470uF 35V

C71
470uF 35V

GND

Title: Spatial Haptics 16 Channel Transducer Driver With touch
Size: A3   Date:
KiCad E.D.A. 8.0.4
Rev: 0.1
Id: 4/4