VCC

U1

IN OUT
GND
EN BP
3.3V

3.3V

R8
330

LED1
Power

GND

C6
10uF
C4
470pF
GND

C5
0.1uF
GND

C13
0.1uF
GND

C14
0.1uF
GND

C15
0.1uF
GND

U4

IN OUT
GND
EN BP
1.8V

GND

1.8V

C1
10uF
GND

C2
0.1uF
GND

C16
0.1uF
GND

GBUF
LEFT
RIGHT

J1

AUDIO-JACKPTH

JP1
2
1
Speaker

R6 20
R7 20
R9 10

C10
10nF
C11
10nF
C12
47nF
GND

3.3V   1.8V   3.3V

6 14 19   5 7 24 31   38 43 45

U3

30 S0   IOVDD1 IOVDD2 IOVDD3   CVDD1 CVDD2 CVDD3 CVDD4   AVDD1 AVDD2 AVDD3   RX 26 RX
29 SI   TX 27 TX
28 SCLK   LEFT 46 LEFT
23 XCS   RIGHT 39 RIGHT
13 XDCS/BSYNC   GBUF 42 GBUF
8   DREQ   MICP 1
RESET 3 XRESET   MICN 2
3.3V 32 TEST   LINEIN 48
18 XTAL1/MCLK   RCAP 44
17 XTAL2
15 VCO
9   GPIO2/DCLK   GPIO0/I2S_SCLK 33 GPIO0
10 GPIO3/SDATA   GPIO1/I2S_SDATA 34 GPIO1
11 GPIO6   GPIO4/I2S_LROUT 36
12 GPIO7   GPIO5/I2C_MCLK 25

C3 22pF
C8 22pF
Q1 12.288MHz
R1 1M
GND

R3
100k
GND

DGND1 DGND2 DGND3 DGND4 DGND5 DGND6   AGND1 AGND2 AGND3 AGND4

4 16 20 21 22 35   37 40 41 47

GND   GND

VS1053

C9
1.0uF
GND

R4 100k R12 100k
GND   GND

3.3V 3.3V

R2 100k R10 100k

RX
RESET
GPIO1
GPIO0

R5 100k R11 100k
GND   GND

GPIO0 low / GPIO1 high puts VS1053 in MIDI mode

U2

A0   RX
A1   TX
A2   D2   TX
A3   *D3   RX
A4   D4   RESET
A5   *D5
          *D6
RES   D7
VIN   D8
5V   *D9
3.3V   *D10
AREF   *D11
GND   D12
GND   D13

VCC

S2
Reset
GND

GND

ARDUINO_SHIELD

SFE   SFE

TITLE: MIDI Music Shield-v10

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