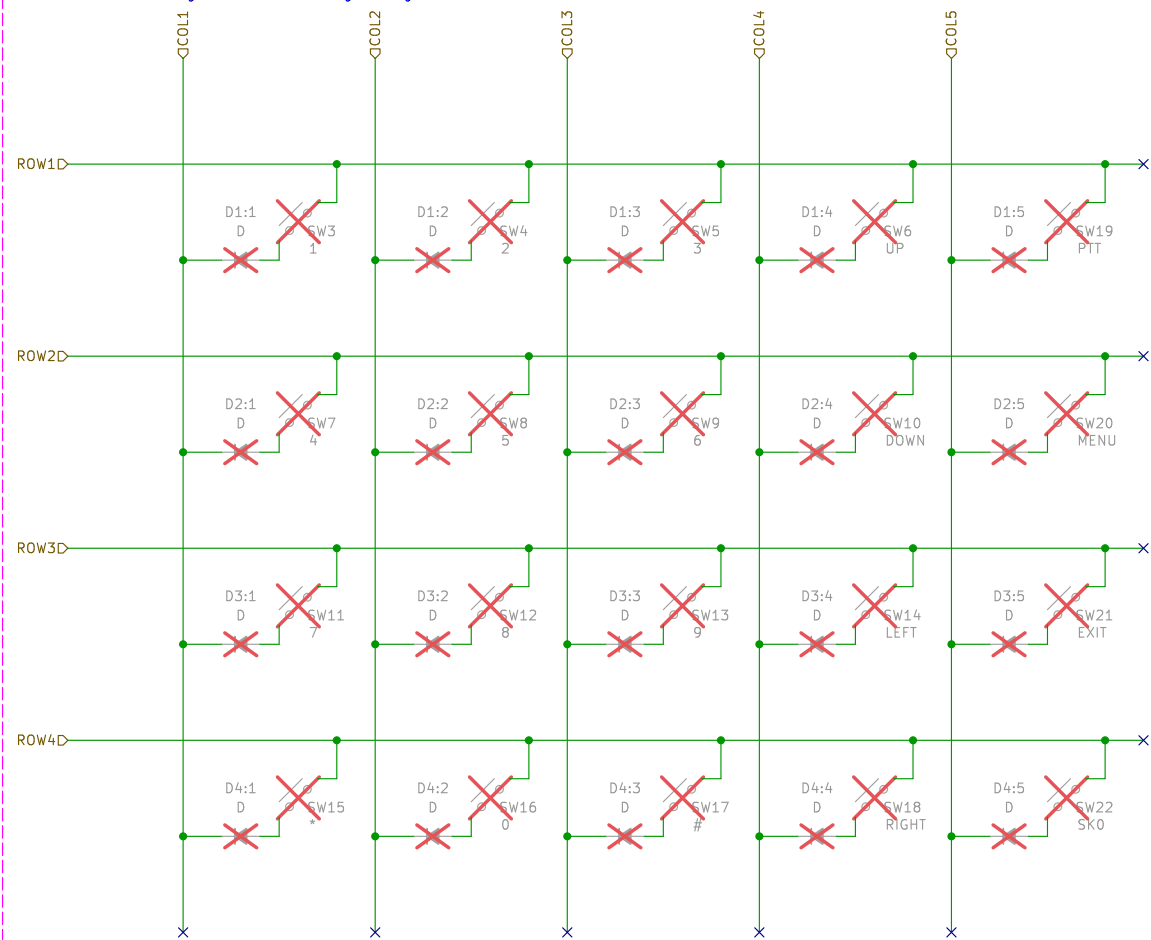


Keypad Matrix
Application Note: The ROW pins get pulled up by the GPIO expander, with one ROW being pulled down.
The scanner relies on the COL pins being read in as a logic swing to low.
Remarked as Domino Logic, a rail-to-rail logic swing occurs.



Keypad Daughterboard

Conn_01x08_Socket

ROW4D 1
ROW3D 2
ROW2D 3
ROW1D 4 J6
COL1D 5
COL2D 6
COL3D 7
COL4D 8

H1 MountingHole_2mm_M2_Pad_Via
H2 MountingHole_2mm_M2_Pad_Via

Sheet: /Keypad/
File: keypad.kicad_sch

Title:

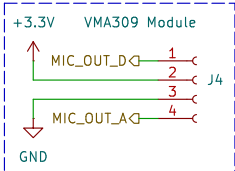
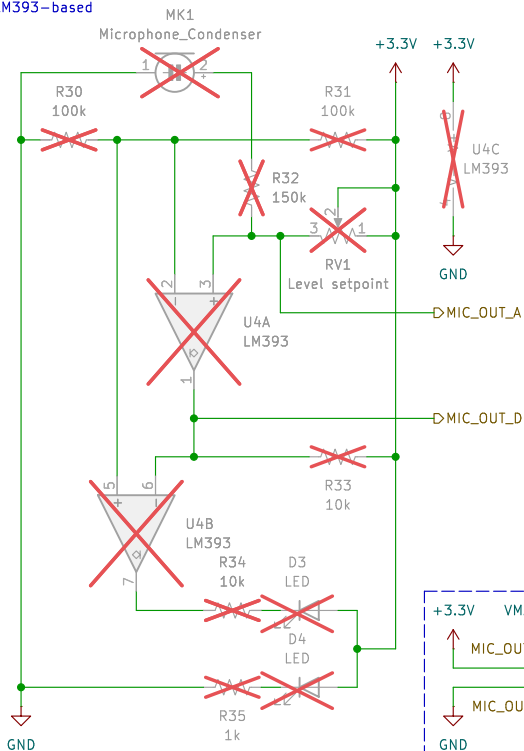
Size: A4
KiCad E.D.A. 9.0.2

Date:

Rev:

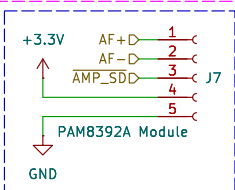
Id: 4/6

Microphone Module LM393-based

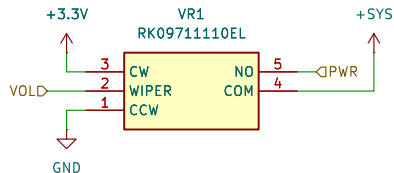


Received Audio Digitizer AF: RX audio from radio module

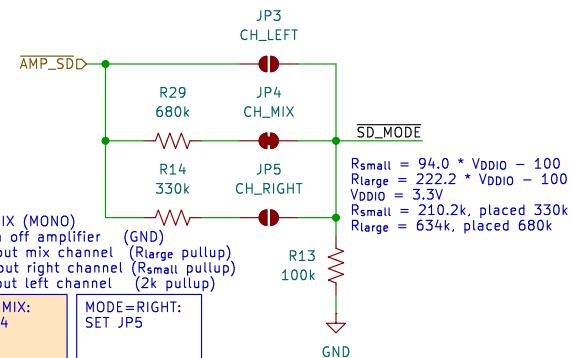
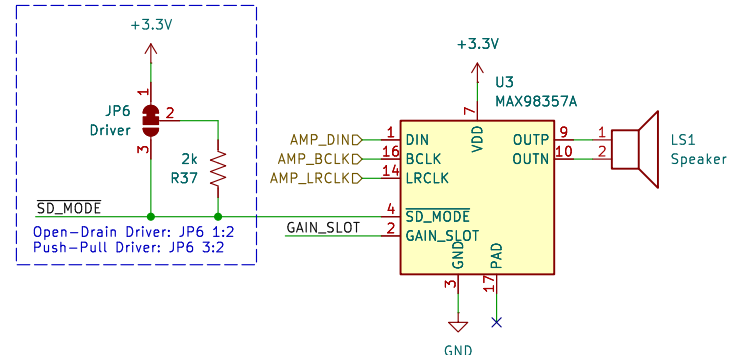
AF-
AF+



Volume Control Also acts as PWR



Digital Audio Amplifier over I2S0

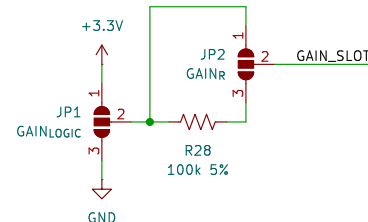


CHANNEL MODE SELECT: MIX (MONO)
SD < 0.16V = Turn off amplifier (GND)
SD 0.16V to 0.77V = Output mix channel (Rlarge pullup)
SD < 0.16V = Output right channel (Rsmall pullup)
SD > 1.4V = Output left channel (2k pullup)

MODE=LEFT: SET JP3
MODE=MIX: SET JP4
MODE=RIGHT: SET JP5

GAIN SLOT SELECT: GAIN=9dB

GAIN=15dB: GAINLogic = LOW GAINr = 100k JP1 3:2, JP2 3:2
GAIN=12dB: GAINLogic = LOW GAINr = 0R JP1 3:2, JP2 1:2
GAIN=9dB: GAINLogic = NC GAINr = 0R JP1 NC, JP2 NC
GAIN=6dB: GAINLogic = HIGH GAINr = 0R JP1 1:2, JP2 1:2
GAIN=3dB: GAINLogic = HIGH GAINr = 100k JP1 1:2, JP2 3:2



Sheet: /Audio Subsystem/
File: audio_subsystem.kicad_sch

Title:

Size: A4

Date:

Rev:

KiCad E.D.A. 9.0.2

Id: 5/6

