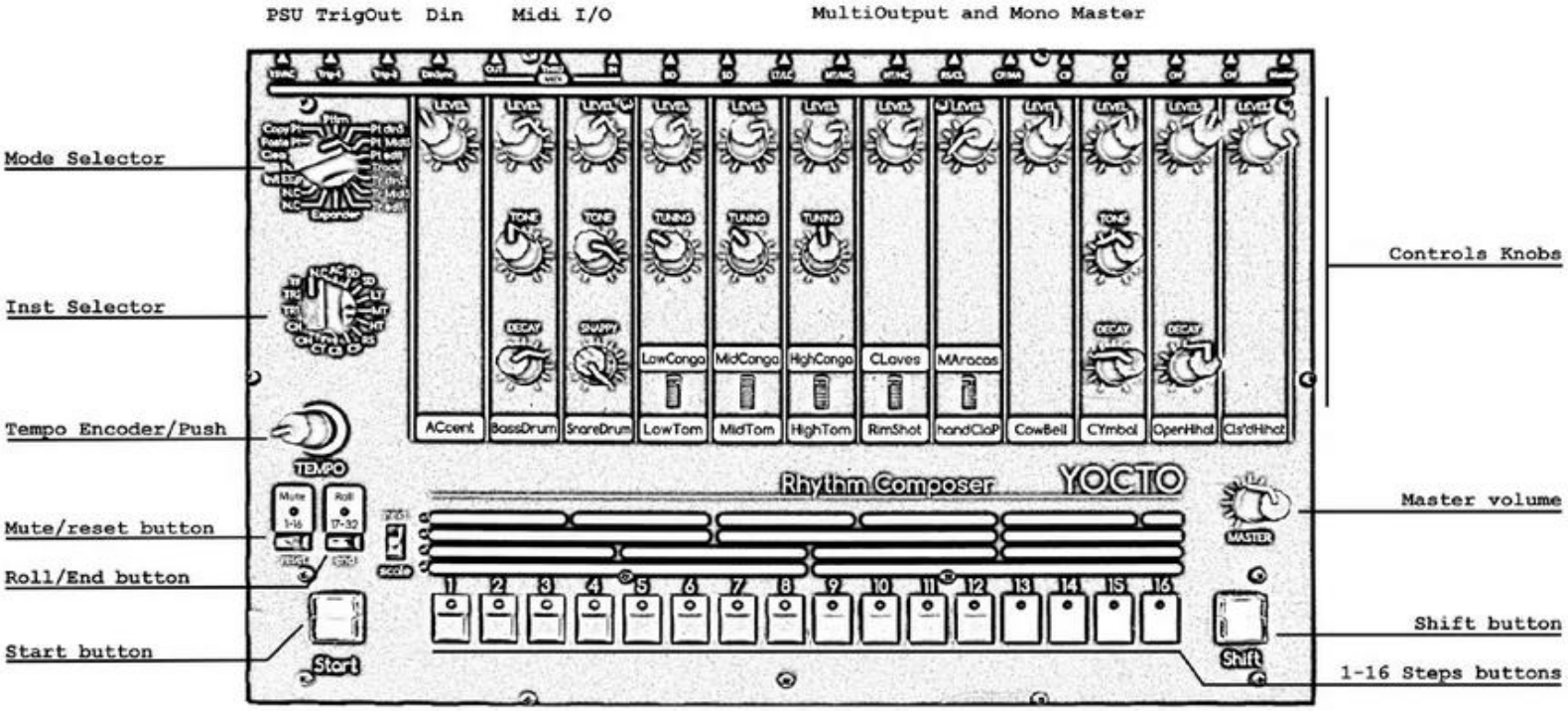
Yocto v1.0

User Manual & Service Manual



1. Description



• **Feature :**

-11 drums 100% analog cloned **the TR-808**
-A common Accent for all drums
-16 banks of 16 patterns from 1 to 32 steps
-16 songs of 256 patterns
-11 separate OUT, one for each drum
-A Mono Master OUT
-2 Trigs Output (5V S-trig ~1ms) that allow you to trig a external instrument (a optional third Trig OUT are present on the IO Board)
-Midi IN, OUT, THRU (Midi THRU Hardware)
-Din sync24 IN/OUT to synchronize other machines with same standard
-Software Update via Sysex

2. PATTERN :

a. Mode « Pttrn » :

First choose the pattern you want to play with **STEPS BUTTONS**. If you want to change pattern bank, hold **SHIFT** and choose an other pattern bank. When you are holding **SHIFT**, mute, roll and scale leds are switched on indicating you are choosing a bank number.
Press **START** to listen select pattern.

Press **MUTE**. Mute led is blinking. Press one of the 16 steps buttons (1 is the accent, 2 the bassdrum, 3 the snaredrum…) to mute them. Press again to unmute. **PUSH ENCODER** unmute all instruments.
Press **SHIFT** to exit Mute mode.

Press **ROLL**. Roll led is blinking. Press one of the 12 first steps buttons (1 is the accent, 2 the bassdrum, 3 the snaredrum…) to roll them. Release and roll stop. You can change roll scale with the rotary encoder.
Press **SHIFT** to exit.

You got a Tap Tempo on **PUSH ENCODER** when you are in play mode.

You can choose more than one pattern to play. Hold the first pattern and press a second one. Now all patterns are read one after the other.

You can switch between Play Mode and Edit Mode when sequencer is running.

b. Mode « Pt dinS » :

Same as **"Pttrn"** but in DIN Sync slave. In this mode Yocto are waiting for a DIN clock signal.

c. Mode « Pt MidiS » :

Same as **"Pttrn"** but in MIDI Sync slave. In this mode Yocto are waiting for a MIDI clock signal.

d. Mode « Pt Edit » :

Select bank (**SHIFT**) and pattern you want to edit.
Press **START**. Select an instrument with **INST SELECTOR** and edit steps you want to trig current instruments.
Press **SCALE** to change scale. (1/32, 1/16, 1/16t or 1/8).
To change number of step hold **SHIFT** and press one of the 16 steps buttons. If you want more than 16 steps push **17-32 BUTTON** then hold **SHIFT** and press one of the 16 steps buttons.
If pattern is more than 16 steps, first part and second part switch automatically. If you want to switch them manually push **1-16 BUTTON and 17-32 BUTTON together.**
When sequencer is running you can clear current step of selected drum with a **PUSH ENCODER.**

3. TRACK:

a. TRACK Play:

Choose one of the 16 tracks with **INST SELECTOR.**
Press **START** you listen to current selected track.
When sequencer is not running push **RESET** to return to the beginning of the track.
Four scale leds show you track position in binary. (no led > position 1, first led on > position 2, second led on > position 3, first and second led on > position 4 …).

b. Mode « Tr dinS » :

Same as **"TRACK"** but in DIN Sync slave. In this mode Yocto are waiting for a DIN clock signal

c. Mode « Tr MidiS » :

Same as **"TRACK"** but in MIDI Sync slave. In this mode Yocto are waiting for a MIDI clock signal

d. Mode « Tr edit » :

First select one of the 16 tracks with **INST SELECTOR.**
Press **RESET** to return to the beginning of the track.
Select the first pattern you want. You can change bank by pressing **SHIFT.** Then press **NEXT.** Now select second pattern of the track.

Press **NEXT**. Four scale leds show you track position in binary. (no led > position 1, first led on > position 2, second led on > position 3, first and second led on > position 4 …).
If you select the last pattern of the track, press **NEXT** then **END** to mark the end of the track.

4. Utility:

a. Copy pattern:

Select pattern you want to copy in the buffer. Press **START**. Steps leds scroll.

b. Paste pattern:

Select pattern you want to paste the buffer. Press **START**. Steps leds scroll.

c. Clear pattern:

Select pattern you want to clear. Press **START**. Steps leds scroll.

d. Init EEPROM:

Hold **START and SHIFT.** When you initialise EEPROM, Factory preset are copied in Bank 01 and all others patterns are cleared with 16 steps and 1/16 scale, Tracks are cleared and default Note Number are restored for the Expander mode as follow:

INSTRUMENT	MIDI Note
BD	C2
SD	D2
LT	F2
MT	G2
HT	B2
RS	C#2
CP	D#2
CB	G#3
CY	C#3
OH	A#2
CH	F#2

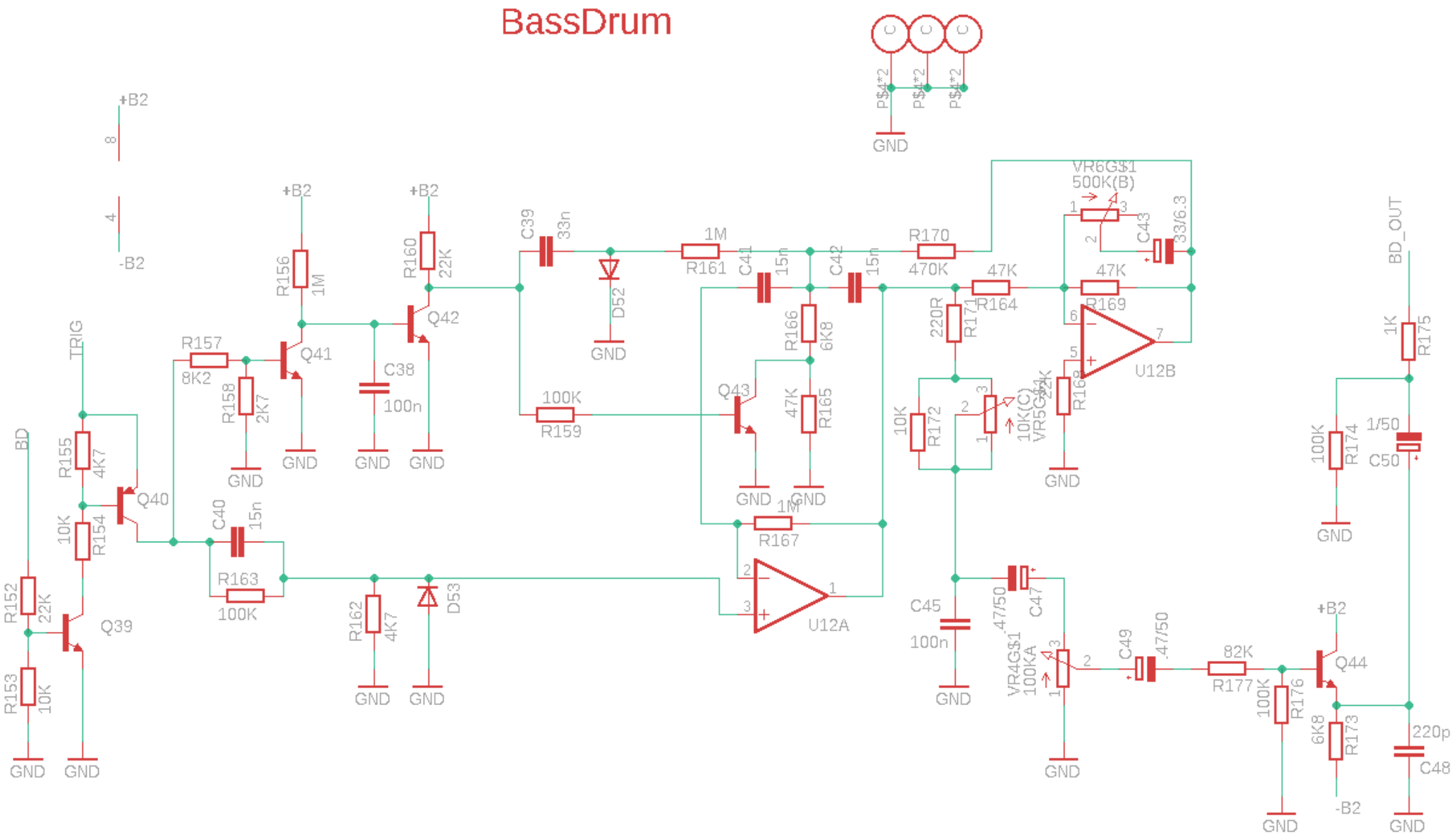
5. Expander:

Select Input MIDI channel with steps buttons. To assign Midi note, select an instrument with **INST SELECTOR**, hold **SHIFT** and send the MIDI note you want to trig the current select instrument (Midi note are hold in the EEprom). Mute led indicate Midi activity.

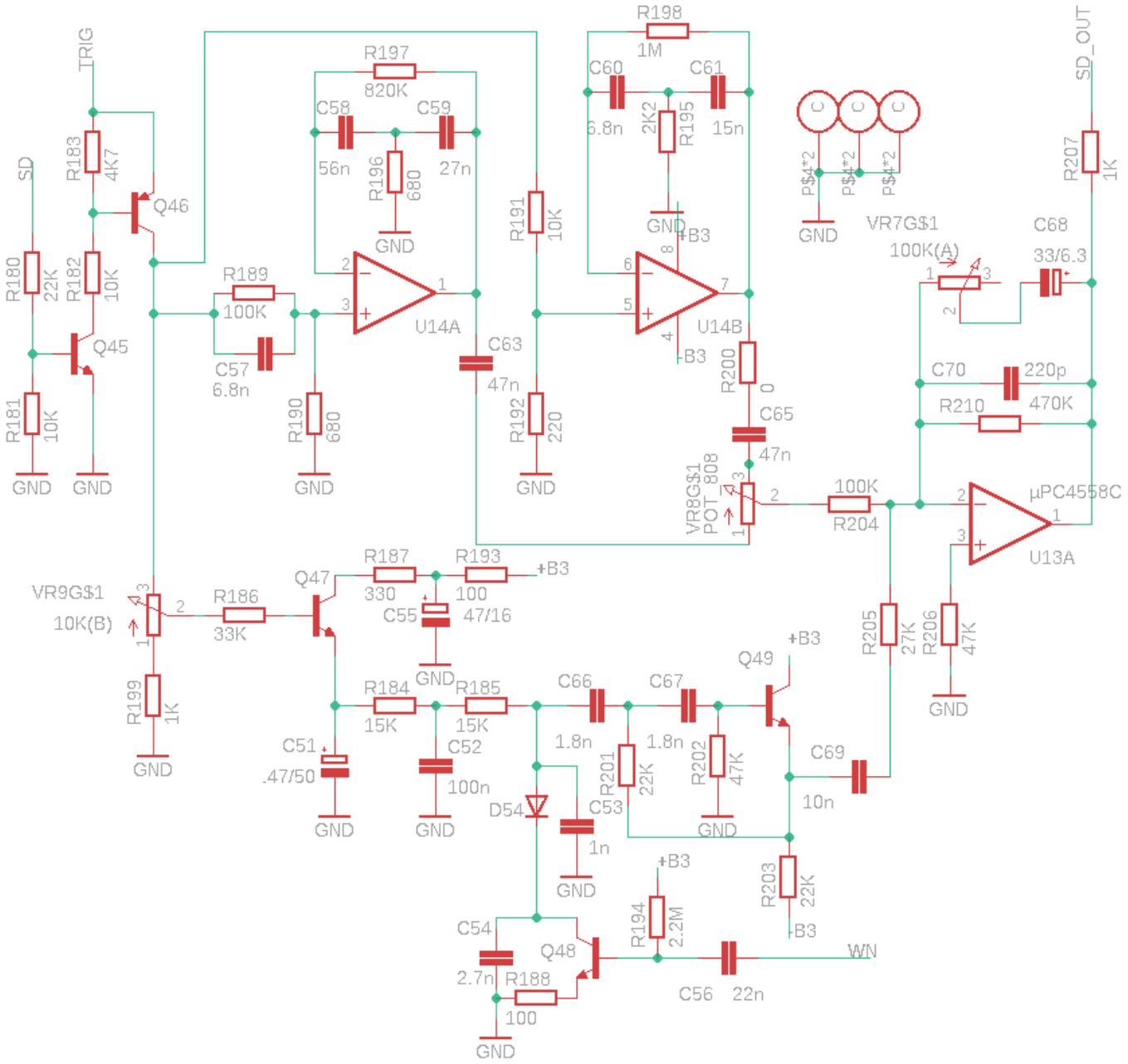
6. Sysex software update:

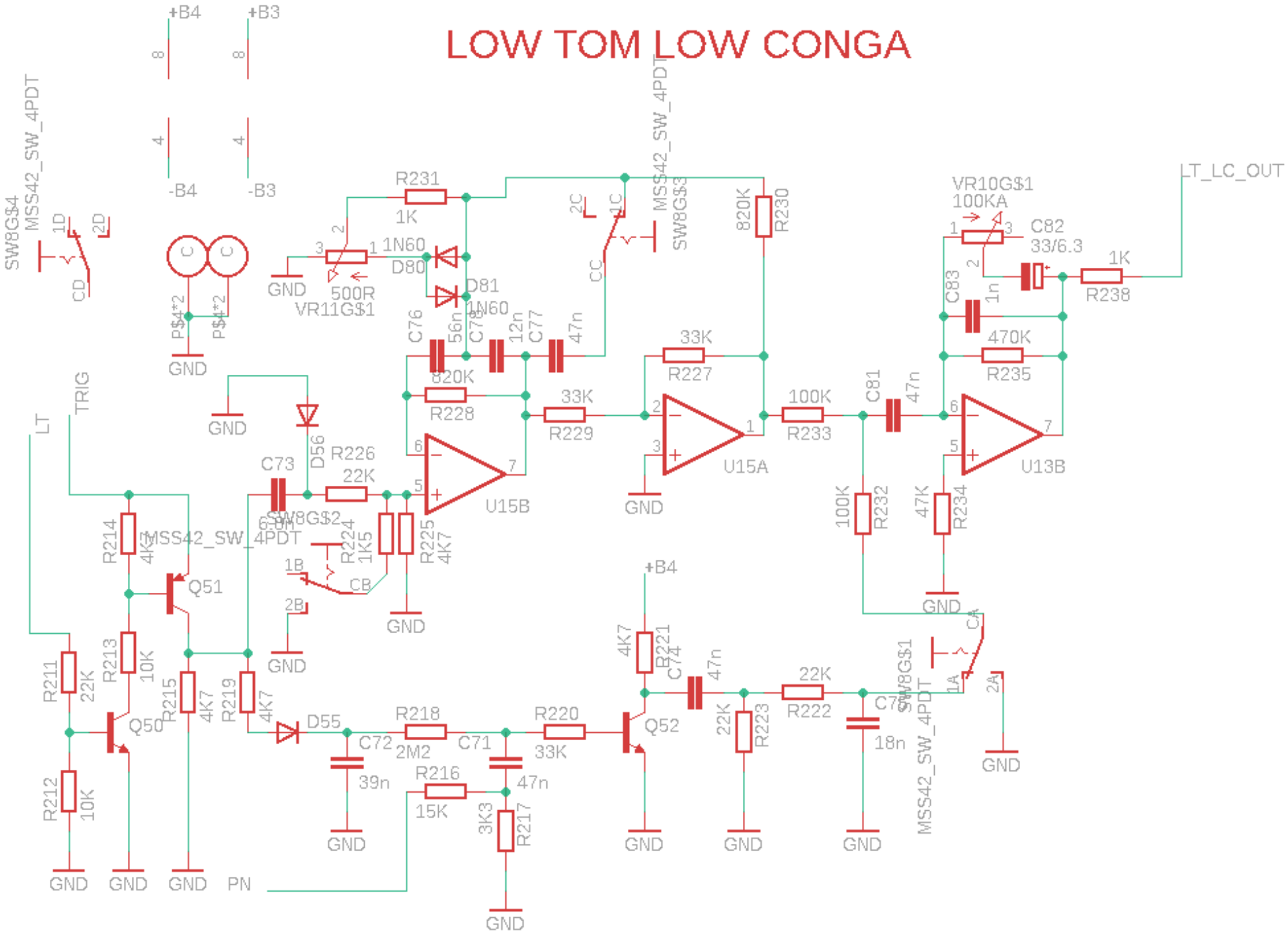
To update Yocto software, turn off Yocto then turn on while holding step button 1, 3, 5. All steps leds will blink two times.
Yocto are now waiting for Sysex. We recommended MIDI-OX as Sysex loader. (http://www.midiox.com/)
To know your Yocto software version, select Init EEP mode and press **RESET**, you will hear two kick that indicate you are in version 2.0

Service Manual

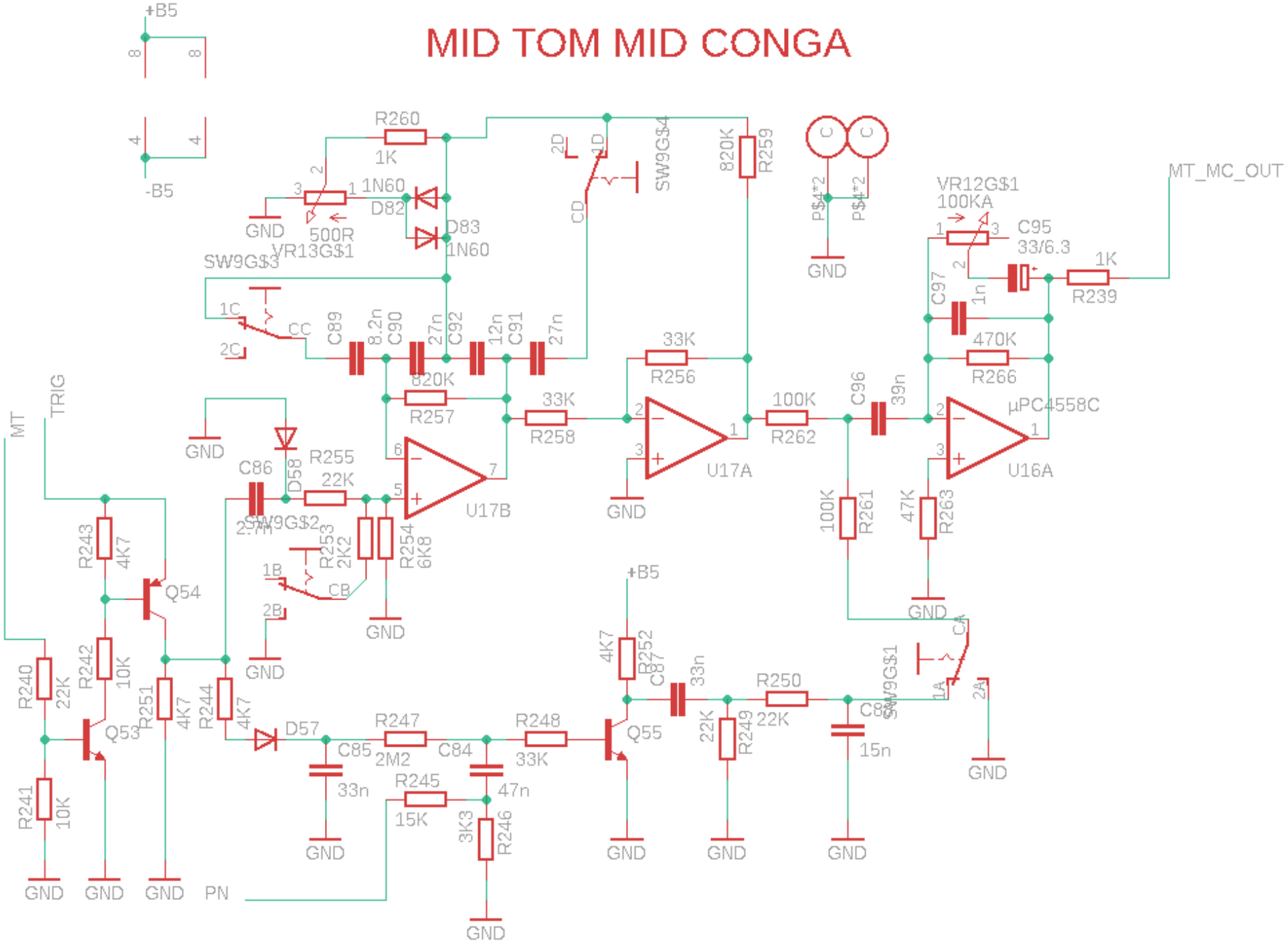

BassDrum
+B2
8
4
-B2
TRIG
BD
R155
4K7
Q40
10K
R154
R152
22K
Q39
R153
10K
GND
R157
8K2
R158
2K7
R156
1M
Q41
+B2
R160
22K
Q42
C38
100n
C39
33n
D52
100K
R159
1M
R161
C41
15n
C42
15n
R166
6K8
Q43
47K
R165
1M
R167
U12A
C40
15n
R163
100K
R162
4K7
D53
R170
470K
47K
R164
220R
R171
10K
R172
10K(C)
VR5G$1
22K
R168
47K
R169
U12B
VR6G$1
500K(B)
C43
33/6.3
C45
100n
C47
.47/50
VR4G$1
100KA
C49
.47/50
82K
R177
100K
R176
Q44
6K8
R173
-B2
220p
C48
BD_OUT
1K
R175
100K
R174
1/50
C50
C
P$1*2
P$2*2
P$3*2

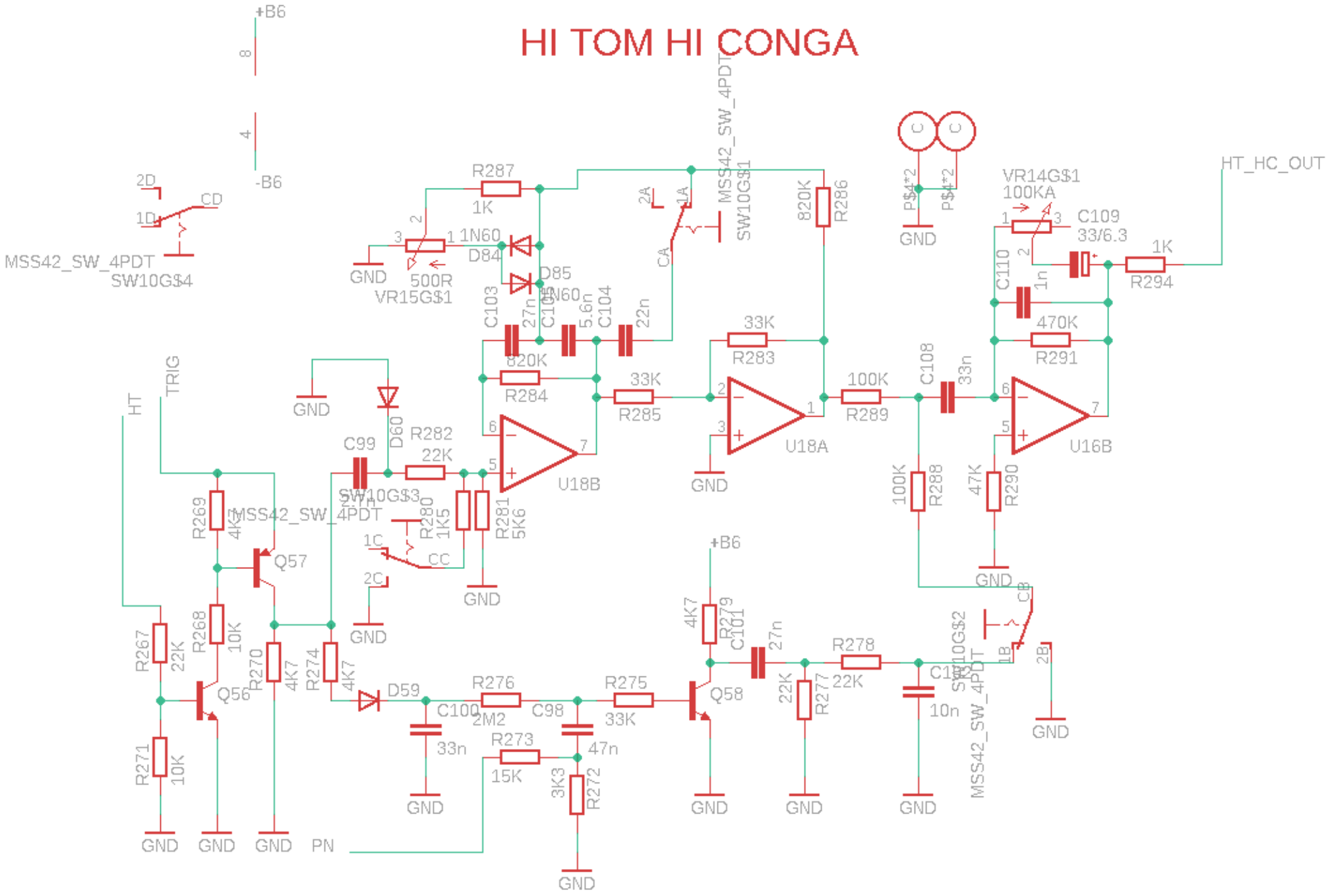
SNARE DRUM


TRIG
SD
R183
4K7
Q46
R180
22K
R182
10K
Q45
R181
10K
GND
GND
R189
100K
C57
6.8n
R197
820K
C58
56n
C59
27n
R196
680
GND
U14A
R190
680
GND
R191
10K
C63
47n
R192
220
GND
R198
1M
C60
6.8n
C61
15n
2K2
R195
GND
+B3
U14B
-B3
R200
0
C65
47n
VR8G$1
POT_808
100K
R204
VR7G$1
100K(A)
C68
33/6.3
C70
220p
R210
470K
µPC4558C
U13A
R205
27K
R206
47K
GND
SD_OUT
R207
1K
P$4*2
P$4*2
P$4*2
GND
VR9G$1
10K(B)
R186
33K
Q47
R187
330
R193
100
+B3
C55
47/16
GND
R199
1K
GND
R184
15K
R185
15K
C66
1.8n
C67
1.8n
Q49
+B3
C51
.47/50
GND
C52
100n
GND
D54
C53
1n
GND
R201
22K
R202
47K
GND
C69
10n
R203
22K
+B3
R194
2.2M
+B3
C54
2.7n
Q48
R188
100
GND
C56
22n
WN

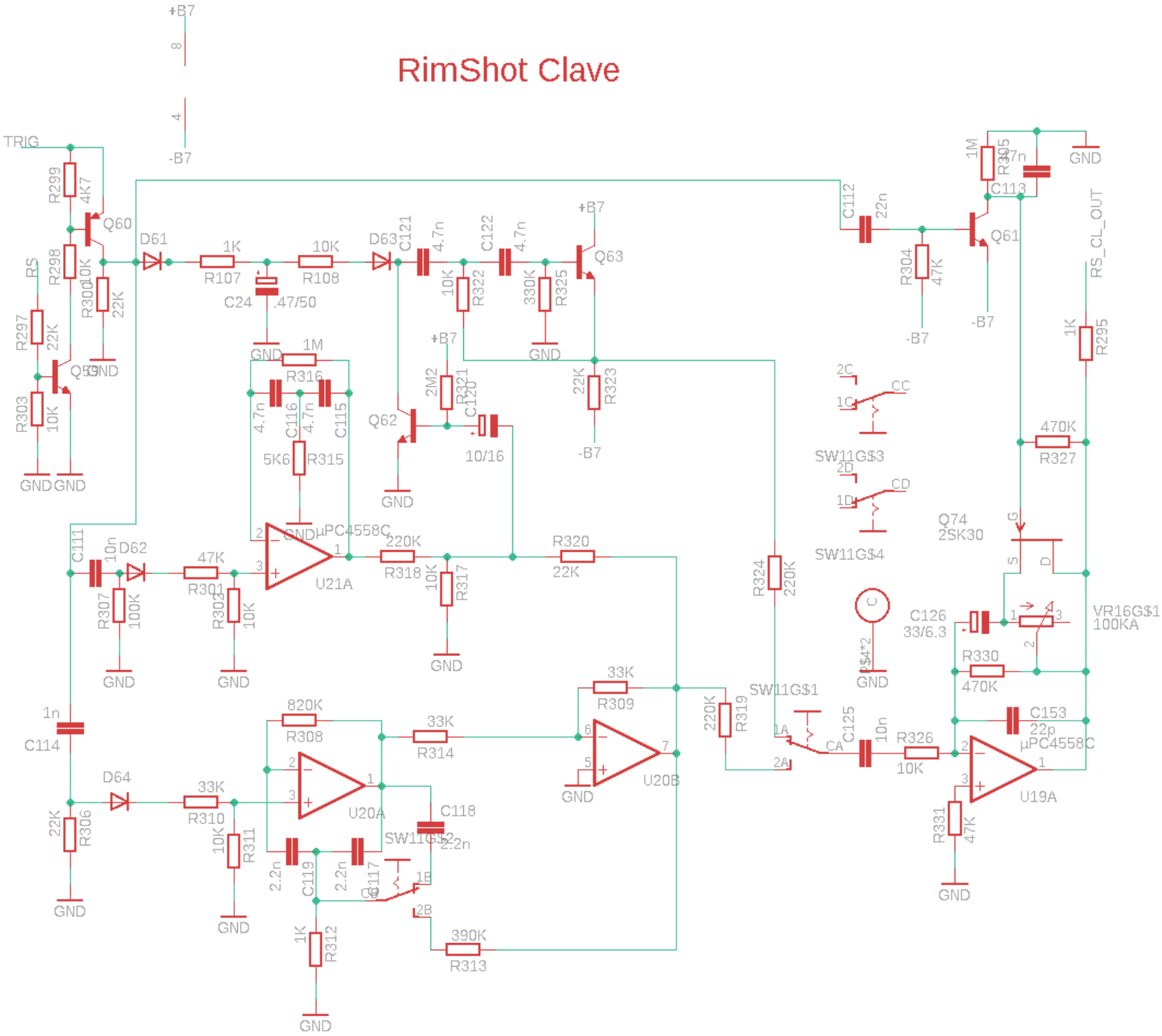

LOW TOM LOW CONGA
+B4
+B3
-B4
-B3
SW8G$4
MSS42_SW_4PDT
1D
2D
CD
P$4*2
GND
R231
1K
1N60
D80
D81
500R
VR11G$1
C76
56n
C77
12n
47n
820K
R228
33K
R229
U15B
R227
U15A
820K
R230
100K
R233
C81
47n
VR10G$1
100KA
C82
33/6.3
1K
R238
LT_LC_OUT
C83
1n
470K
R235
U13B
100K
R232
47K
R234
LT
TRIG
C73
6.8n
D56
R226
22K
SW8G$2
MSS42_SW_4PDT
R214
4K7
Q51
R224
1K5
R225
4K7
R213
10K
R215
4K7
R219
4K7
R211
22K
R212
10K
Q50
D55
R218
2M2
C72
39n
C71
47n
R220
33K
R216
15K
3K7
R217
PN
R221
4K7
C74
47n
Q52
22K
R223
22K
R222
C75
18n
SW8G$1
MSS42_SW_4PDT
MSS42_SW_4PDT
SW8G$3

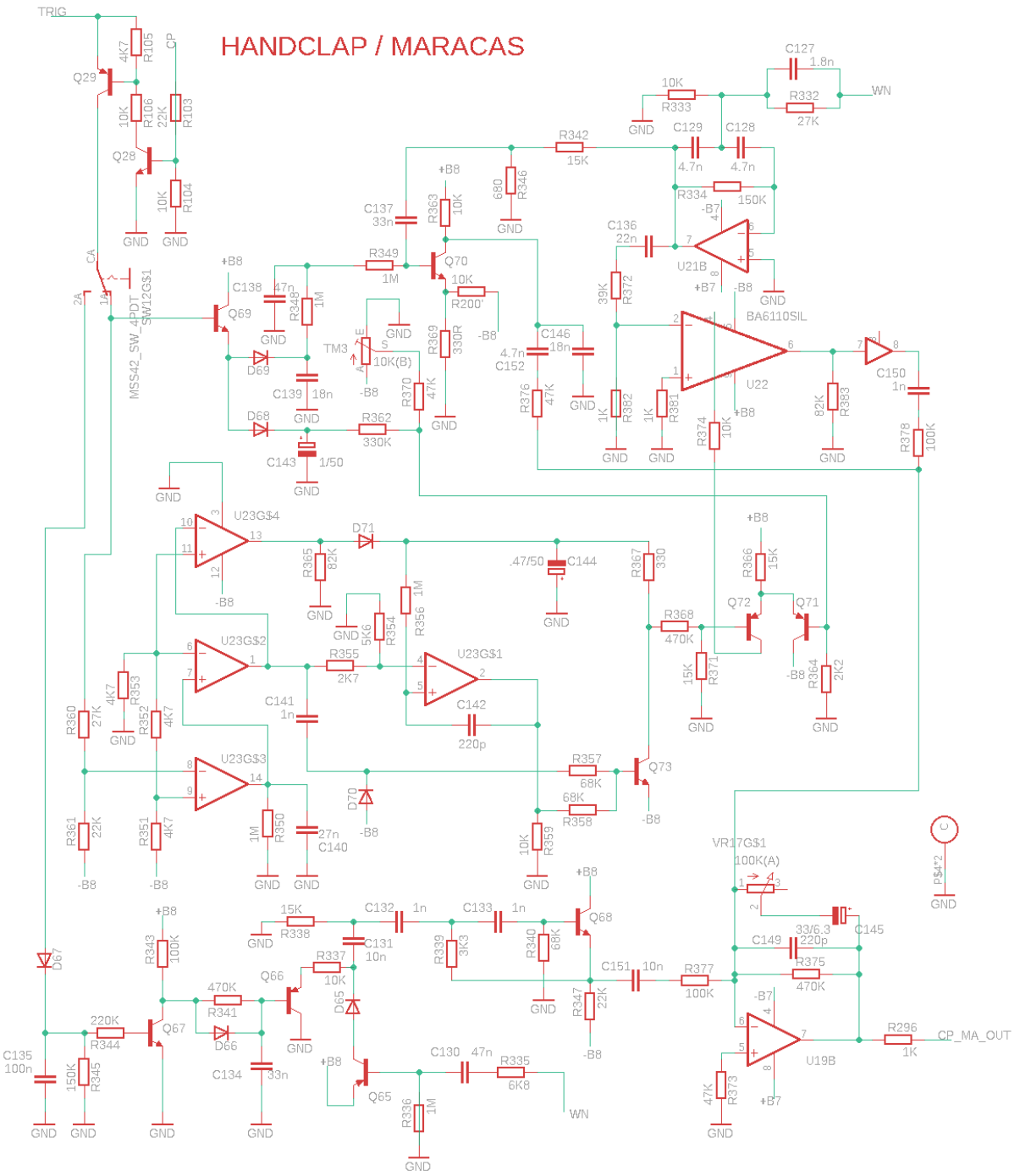
MID TOM MID CONGA

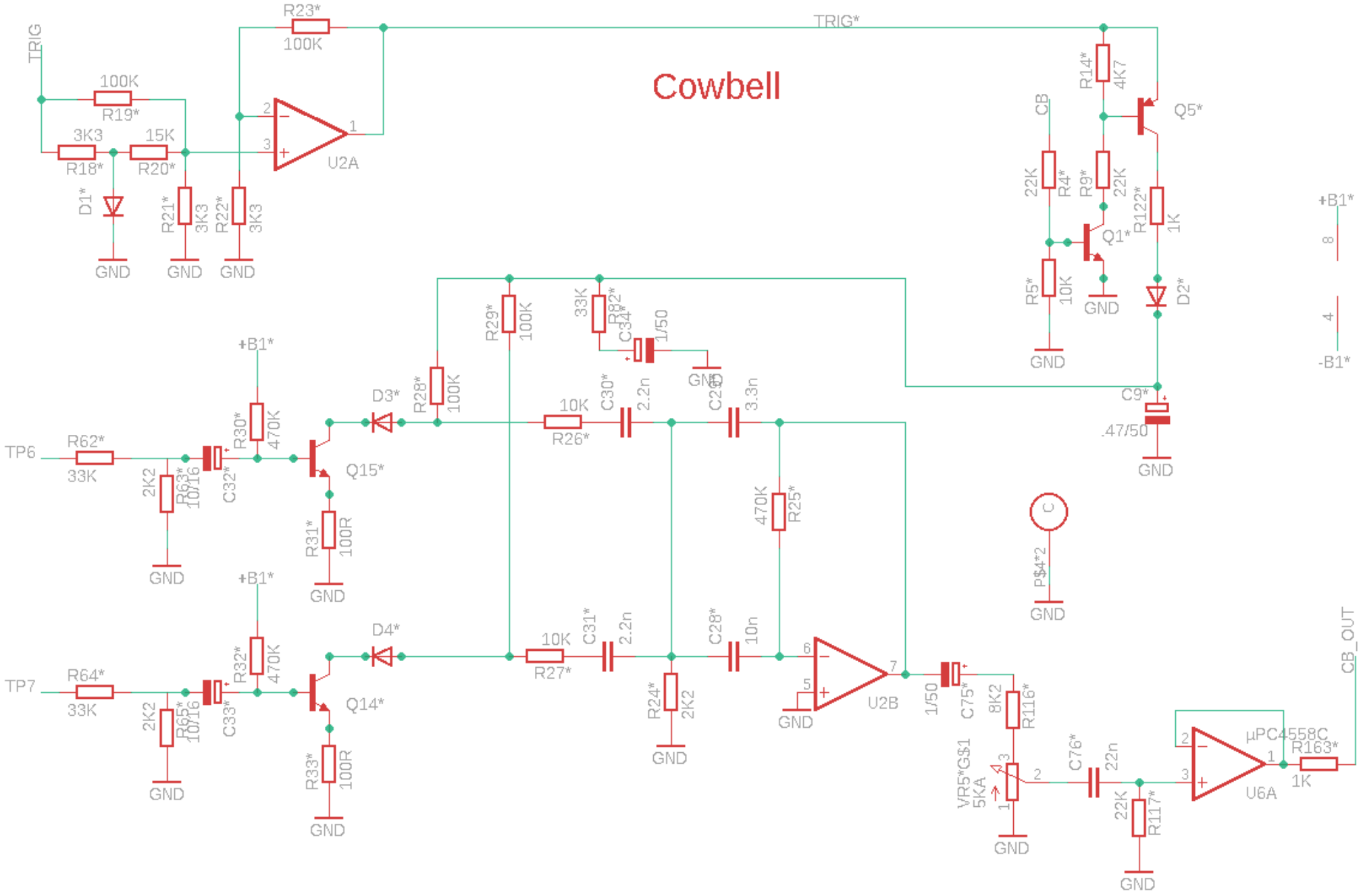


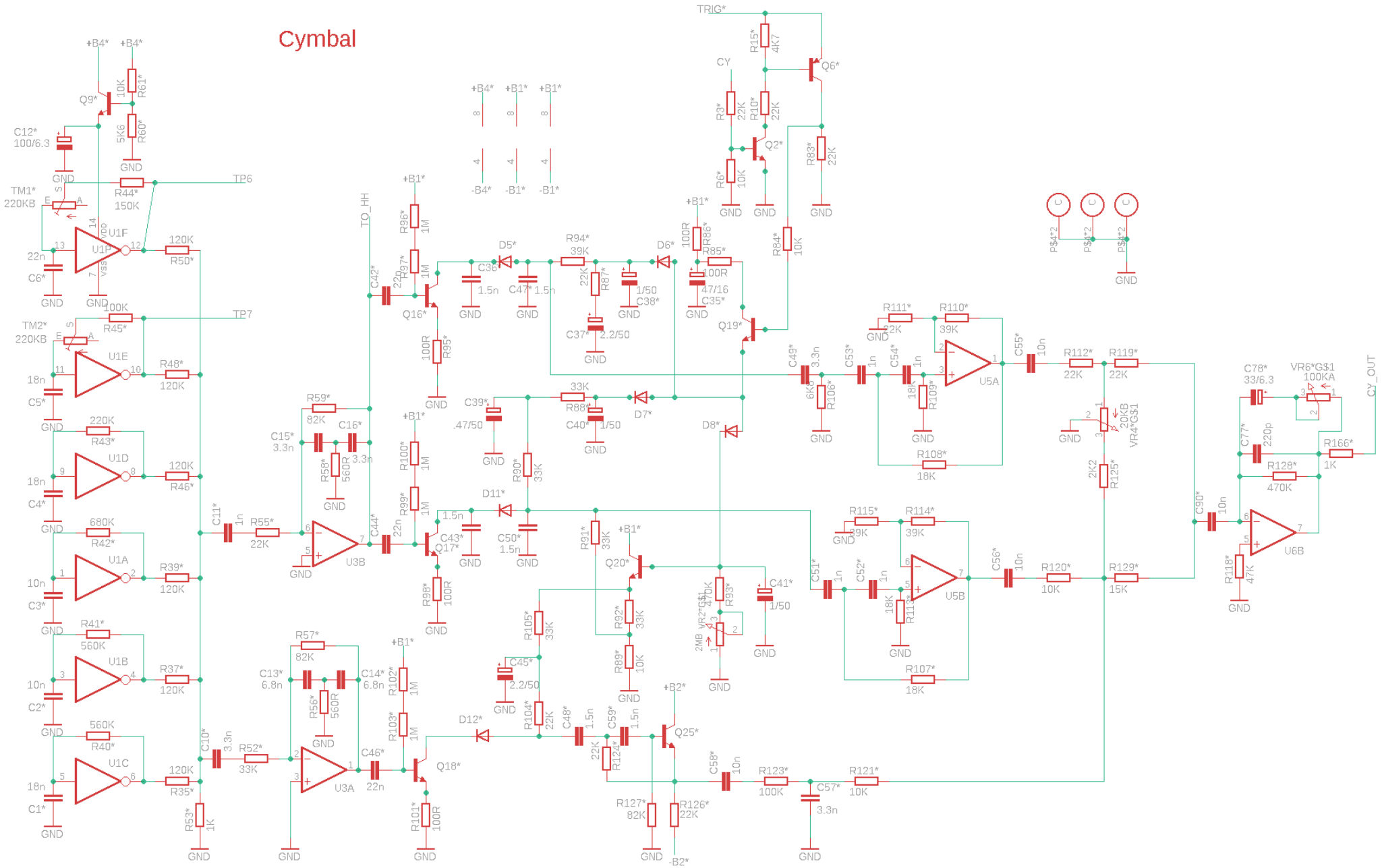

HI TOM HI CONGA
+B6
-B6
MSS42_SW_4PDT
SW10G$4
R287
1K
500R
VR15G$1
1N60
D84
D85
C103
27n
C105
5.6n
C104
22n
820K
R284
33K
R285
820K
R286
MSS42_SW_4PDT
SW10G$1
33K
R283
U18A
U18B
100K
R289
C108
33n
100K
R288
47K
R290
VR14G$1
100KA
C109
33/6.3
1K
R294
HT_HC_OUT
C110
1n
470K
R291
U16B
HT
TRIG
GND
D60
R282
22K
C99
MSS42_SW_4PDT
SW10G$3
R280
1K5
R281
5K6
R269
4K7
Q57
R267
22K
R268
10K
R270
4K7
R274
4K7
Q56
R271
10K
D59
R276
2M2
C100
33n
C98
R275
33K
R273
15K
47n
R272
3K3
PN
Q58
4K7
R279
C101
27n
R278
22K
R277
22K
10n
MSS42_SW_4PDT
SW10G$2
2B
GND

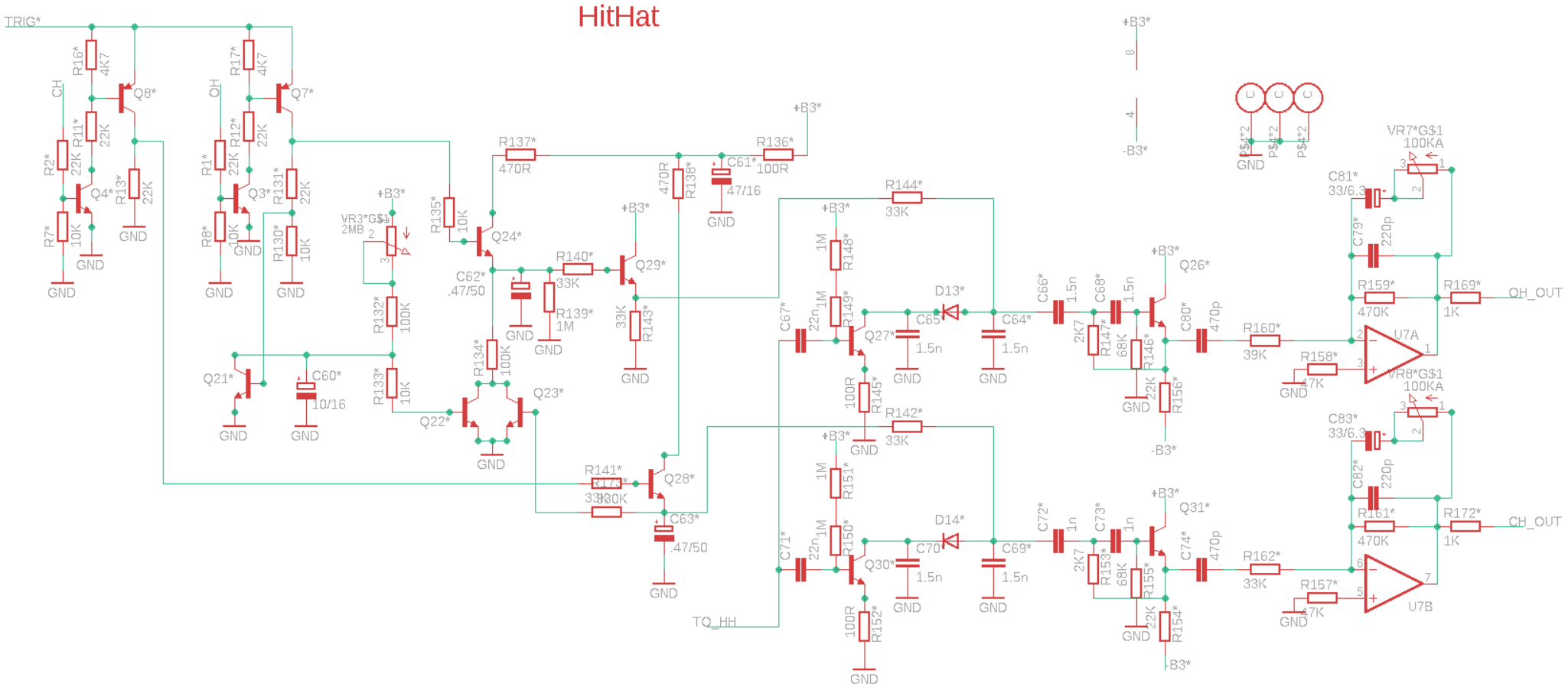
RimShot Clave

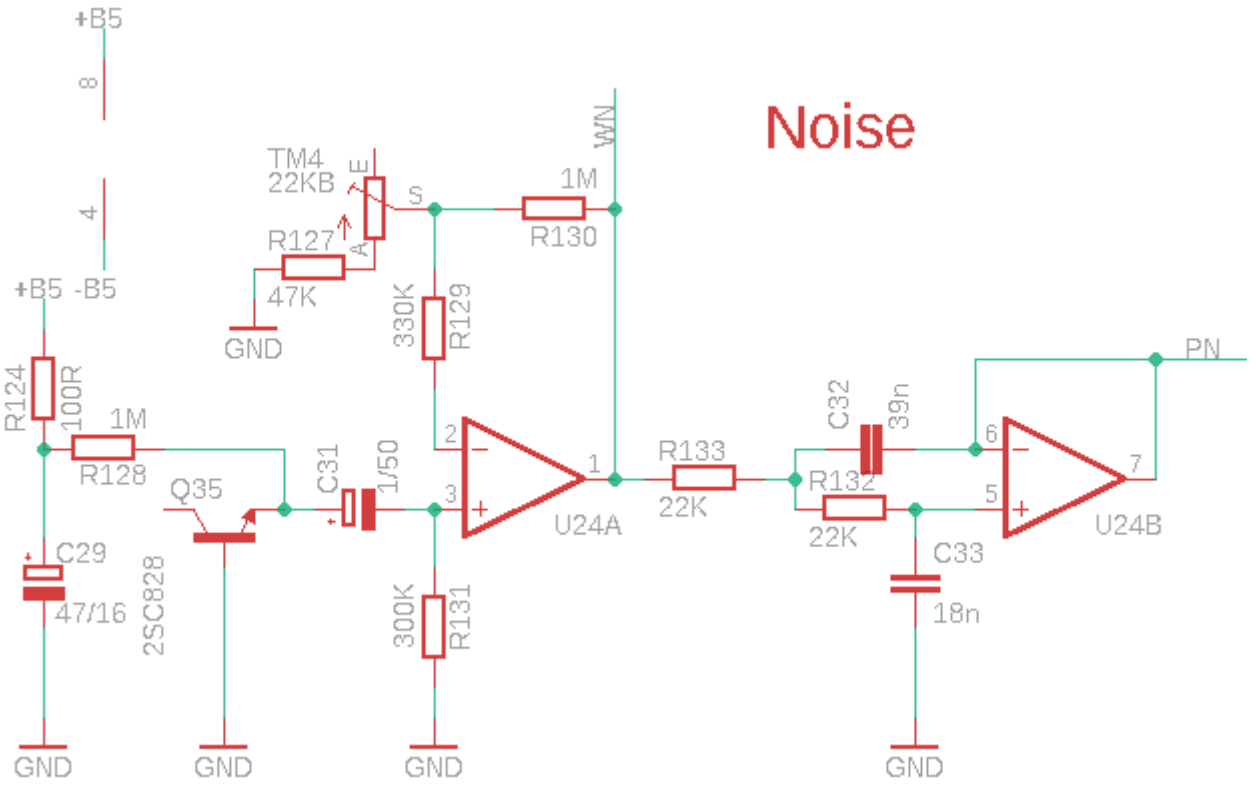


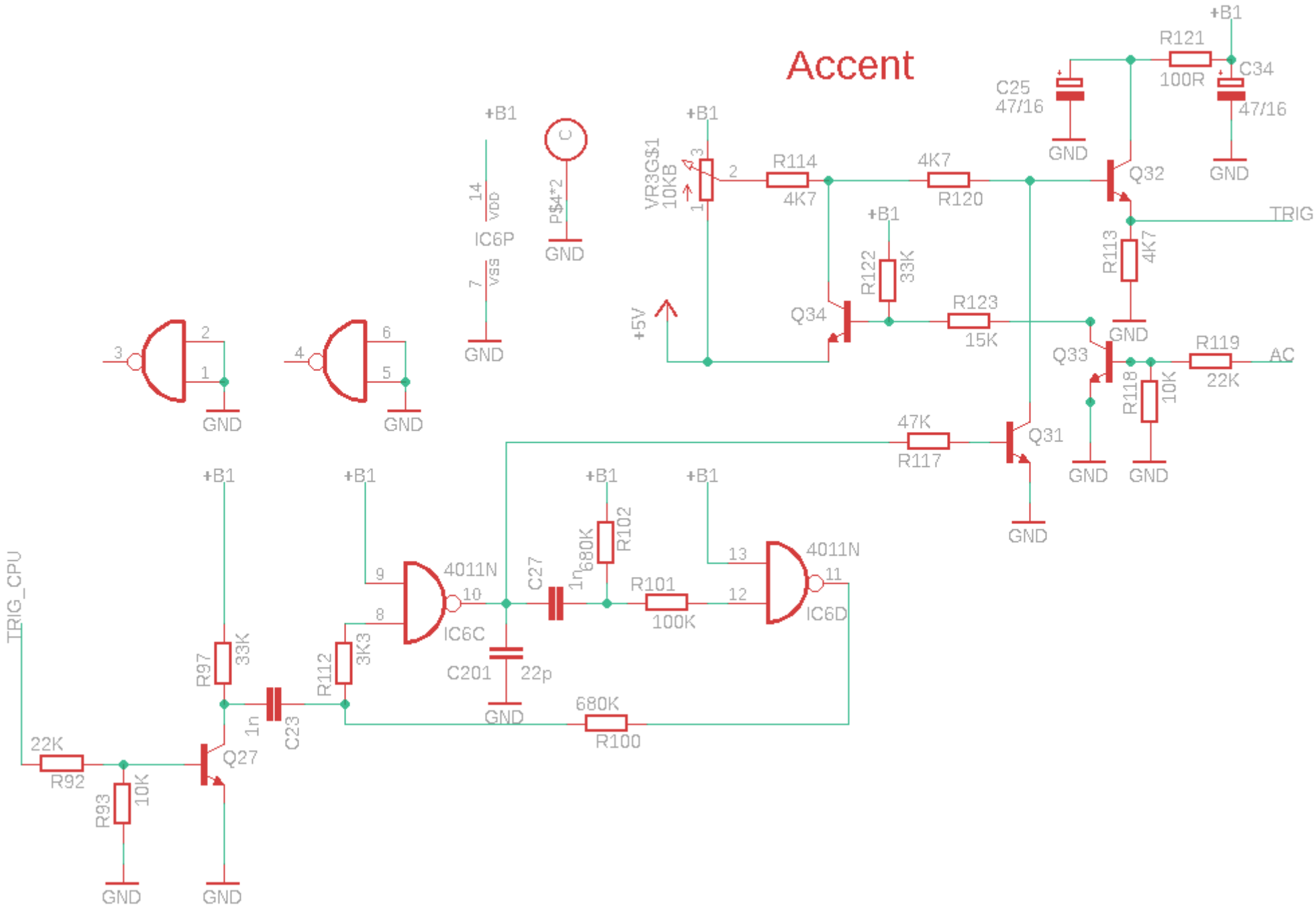

HANDCLAP / MARACAS
TRIG
Q29
Q28
R105
R106
R103
R104
CP
CA
MSS42_SW_4PDT
SW12G$1
Q69
Q70
Q71
Q72
Q73
Q65
Q66
Q67
Q68
D65
D66
D67
D68
D69
D70
D71
TM3
10K(B)
R200
U23G$1
U23G$2
U23G$3
U23G$4
U21B
U22
BA6110SIL
U19B
VR17G$1
100K(A)
C127
1.8n
R332
27K
WN
R333
10K
C128
C129
4.7n
R334
150K
R342
15K
R346
680
C136
22n
R372
39K
C137
33n
R363
C138
47n
R349
1M
R369
330R
R370
47K
C139
18n
R362
330K
C143
1/50
C146
18n
C152
4.7n
R376
47K
R382
1K
R384
1K
R374
10K
R383
82K
C150
1n
R378
100K
R365
82K
R354
5K6
R356
1M
C144
.47/50
R367
330
R366
15K
R368
470K
R371
15K
R364
2K2
R355
2K7
C142
220p
C141
1n
R360
27K
R352
4K7
R353
4K7
R361
22K
R351
4K7
R350
1M
C140
27n
R357
68K
R358
68K
R359
10K
C132
1n
C133
1n
R338
15K
C131
10n
R337
10K
R339
3K3
R340
68K
R347
22K
C151
10n
R377
100K
C149
33/6.3
220p
C145
R375
470K
R296
1K
CP_MA_OUT
R373
47K
C130
47n
R335
6K8
R336
1M
R343
100K
R341
470K
R344
220K
R345
150K
C135
100n
C134
33n
P$4*2
GND
+B8
-B8
+B7
-B7


Cowbell
TRIG
TRIG*
R23*
100K
100K
R19*
3K3
R18*
15K
R20*
D1*
R21*
3K3
R22*
3K3
U2A
GND
GND
GND
R14*
4K7
Q5*
CB
22K
R4*
R9*
22K
R122*
1K
Q1*
R5*
10K
GND
GND
D2*
+B1*
8
4
-B1*
C9*
.47/50
GND
+B1*
R29*
100K
33K
R82*
C34*
1/50
GND
D3*
R28*
100K
10K
R26*
C30*
2.2n
C29*
3.3n
470K
R25*
TP6
R62*
33K
2K2
R63*
C32*
R30*
470K
Q15*
R31*
100R
GND
GND
+B1*
D4*
TP7
R64*
33K
2K2
R65*
C33*
R32*
470K
Q14*
R33*
100R
GND
GND
10K
R27*
C31*
2.2n
C28*
10n
R24*
2K2
GND
U2B
GND
C
P$4*2
GND
1/50
C75*
8K2
R116*
VR5*G$1
5KA
GND
C76*
22n
22K
R117*
GND
μPC4558C
U6A
R163*
1K
CB_OUT

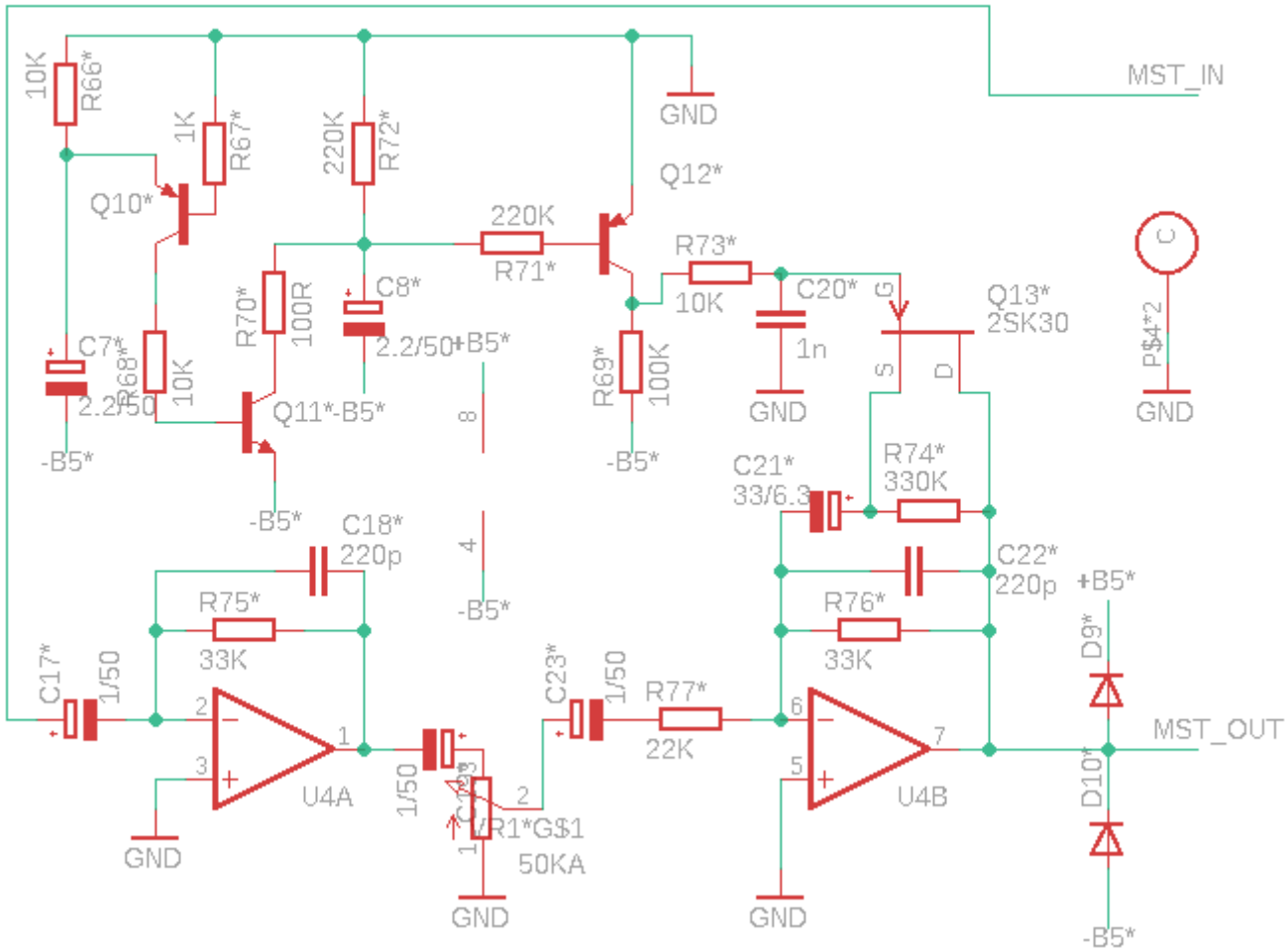

Cymbal
+B4*
+B1*
-B4*
-B1*
-B2*
GND
TRIG*
CY
CY_OUT
TO_HH
TP6
TP7
TM1*
220KB
TM2*
220KB
U1A
U1B
U1C
U1D
U1E
U1F
U3A
U3B
U5A
U5B
U6B
Q2*
Q6*
Q9*
Q16*
Q17*
Q18*
Q19*
Q20*
Q25*
D5*
D6*
D7*
D8*
D11*
D12*
C12*
100/6.3
R44*
150K
R45*
100K
R43*
220K
R42*
680K
R41*
560K
R40*
560K
R50*
120K
R48*
120K
R46*
120K
R39*
120K
R37*
120K
R35*
120K
R53*
1K
R55*
22K
R52*
33K
R59*
82K
R58*
560R
R57*
82K
R56*
560R
R94*
39K
R88*
33K
R90*
33K
R91*
33K
R92*
33K
R105*
33K
R89*
10K
R104*
22K
R124*
22K
R127*
82K
R126*
22K
R123*
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4K7
R3*
22K
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R6*
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1M
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1M
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1M
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100R
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6K8
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18K
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39K
R114*
39K
R113*
18K
R107*
18K
R112*
22K
R119*
22K
R125*
2K2
R120*
10K
R129*
15K
R128*
470K
R166*
1K
R118*
47K
C78*
33/6.3
C77*
220p
C90*
10n
C55*
10n
C56*
10n
C58*
10n
C57*
3.3n
C49*
3.3n
C53*
1n
C54*
1n
C51*
1n
C52*
1n
C36*
1.5n
C47*
1.5n
C38*
1/50
C37*
2.2/50
C35*
47/16
C39*
.47/50
C40*
1/50
C41*
1/50
C43*
1.5n
C50*
1.5n
C45*
2.2/50
C48*
1.5n
C59*
1.5n
C42*
22n
C44*
22n
C46*
22n
C11*
1n
C10*
3.3n
C15*
3.3n
C16*
3.3n
C13*
6.8n
C14*
6.8n
C12*
100/6.3
C6*
22n
C5*
18n
C4*
18n
C3*
10n
C2*
10n
C1*
18n
VR4*GS1
20KB
VR2*GS1
2MB
VR6*GS1
100KA
PS4*2

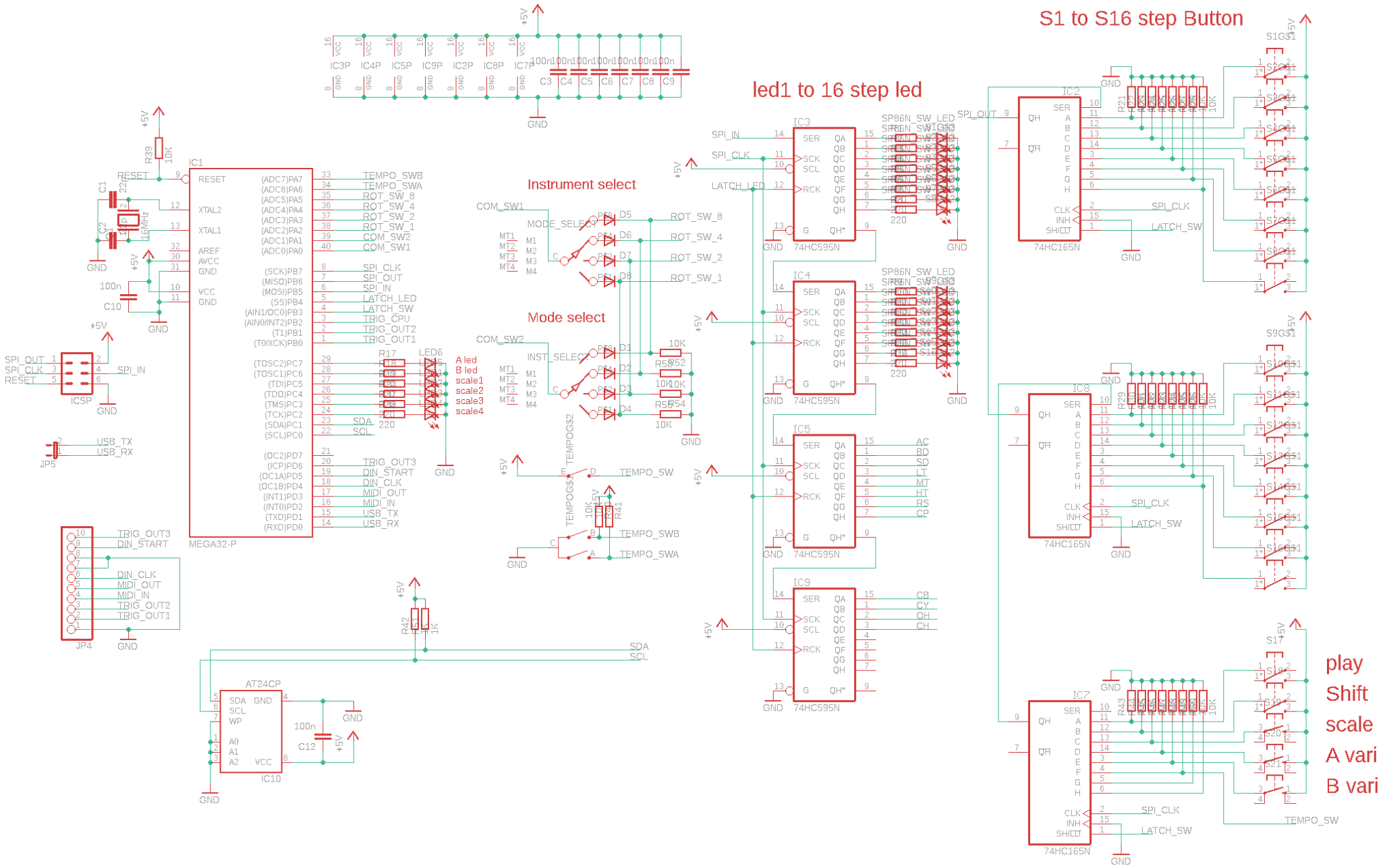

HitHat
TRIG*
CH
OH
R16* 4K7
R17* 4K7
Q8*
Q7*
R2* 22K
R11* 22K
R1* 22K
R12* 22K
Q4*
Q3*
R13* 22K
R131* 22K
R7* 10K
R8* 10K
R130* 10K
GND
+B3*
VR3*G$1 2MB
R135* 10K
R132* 100K
R133* 10K
Q21*
C60* 10/16
Q22*
R134* 100K
Q23*
Q24*
C62* .47/50
R137* 470R
R140* 33K
R139* 1M
Q29*
R143* 33K
R138* 470R
C61* 47/16
R136* 100R
R141* 33K
R144* 33K
Q28*
C63* .47/50
TQ_HH
C67* 22n
1M R148*
R149*
Q27*
C65 1.5n
D13*
C64* 1.5n
100R R145*
R142* 33K
C71* 22n
1M R151*
R150*
Q30*
C70 1.5n
D14*
C69* 1.5n
100R R152*
C66* 1.5n
C68* 1.5n
2K7 R147*
68K R146*
22K R156*
Q26*
C80* 470p
R160* 39K
C72* 1n
C73* 1n
2K7 R153*
68K R155*
22K R154*
Q31*
C74* 470p
R162* 33K
-B3*
C
PS*2
R158* 47K
R157* 47K
VR7*G$1 100KA
C81* 33/6.3
C79* 220p
R159* 470K
R169* 1K
U7A
OH_OUT
VR8*G$1 100KA
C83* 33/6.3
C82* 220p
R161* 470K
R172* 1K
U7B
CH_OUT


Noise
+B5
8
4
+B5 -B5
TM4
22KB
E
S
A
R127
47K
GND
WN
1M
R130
330K
R129
R124
100R
1M
R128
Q35
C31
1/50
2SC828
C29
47/16
GND
GND
GND
2
3
1
U24A
300K
R131
R133
22K
C32
39n
R132
22K
C33
18n
GND
6
5
7
U24B
PN

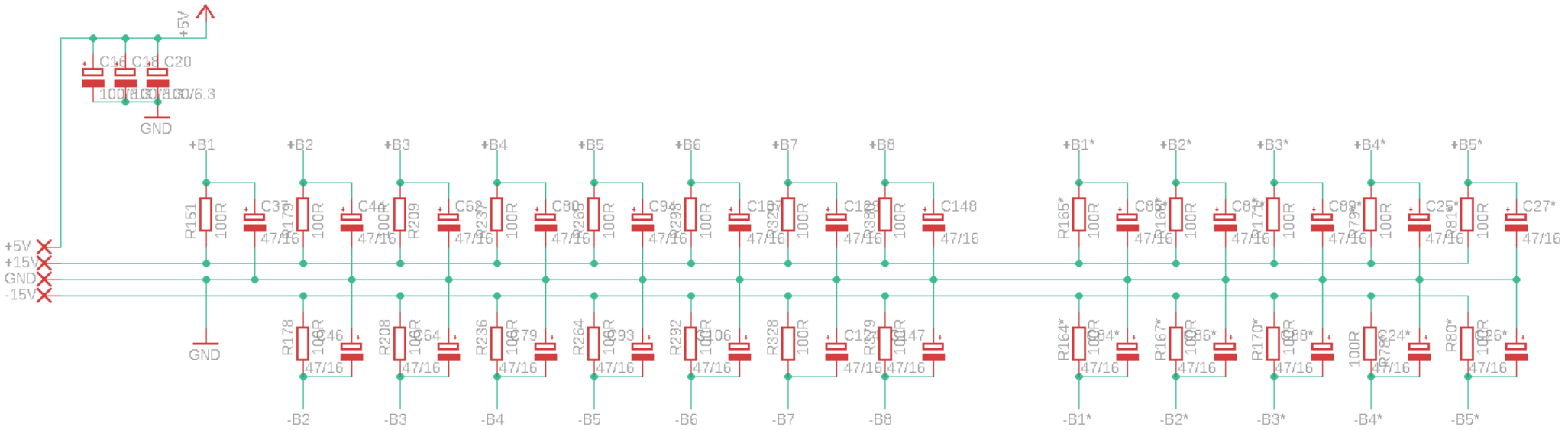

Accent
+B1
R121
100R
C34
47/16
C25
47/16
GND
GND
GND
Q32
TRIG
R113
4K7
GND
VR3G$1
10KB
R114
4K7
4K7
R120
+B1
R122
33K
Q34
R123
15K
+5V
Q33
R119
22K
AC
R118
10K
GND
GND
47K
R117
Q31
GND
+B1
C
P$4*2
GND
IC6P
14
VDD
7
VSS
GND
GND
GND
GND
+B1
+B1
+B1
+B1
4011N
9
10
8
IC6C
C27
1n
680K
R102
R101
100K
13
12
4011N
11
IC6D
C201
22p
GND
680K
R100
TRIG_CPU
22K
R92
R93
10K
GND
GND
+B1
R97
33K
1n
C23
R112
3K3
Q27

Master Volume

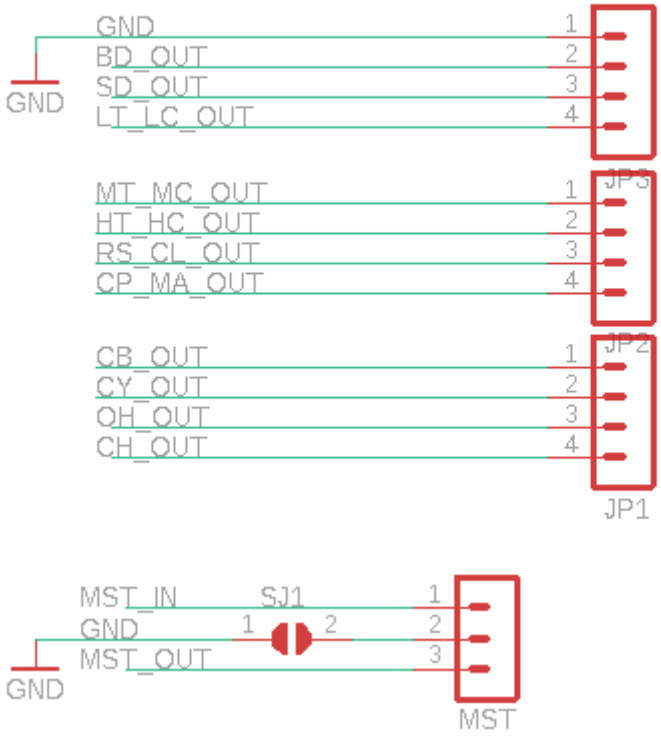



S1 to S16 step Button
led1 to 16 step led
Instrument select
Mode select
play
Shift
scale
A vari
B vari
MEGA32-P
74HC595N
74HC165N
AT24CP
ICSP
SP86N_SW_LED
TEMPO_SWB
TEMPO_SWA
TEMPO_SW
ROT_SW_8
ROT_SW_4
ROT_SW_2
ROT_SW_1
SPI_CLK
SPI_OUT
SPI_IN
LATCH_LED
LATCH_SW
TRIG_CPU
TRIG_OUT1
TRIG_OUT2
TRIG_OUT3
DIN_START
DIN_CLK
MIDI_OUT
MIDI_IN
USB_TX
USB_RX
SDA
SCL
A led
B led
scale1
scale2
scale3
scale4
COM_SW1
COM_SW2
MODE_SELECT
INST_SELECT
AC
BD
SD
LT
MT
HT
RS
CP
CB
CY
OH
CH
GND
+5V

PSU


+5V
C16
C18
C20
GND
+B1
+B2
+B3
+B4
+B5
+B6
+B7
+B8
+B1*
+B2*
+B3*
+B4*
+B5*
+5V
+15V
GND
-15V
R151
100R
C39
47/16
R179
C44
R209
C68
R237
C80
R265
C94
R293
C106
R321
C121
R349
C148
R165*
C85*
R166*
C87*
R173*
C89*
R179*
C25*
R181*
C27*
GND
R178
C46
R208
C64
R236
C79
R264
C93
R292
C106
R328
C127
R357
C147
R164*
C84*
R167*
C86*
R170*
C88*
C24*
R80*
C26*
-B2
-B3
-B4
-B5
-B6
-B7
-B8
-B1*
-B2*
-B3*
-B4*
-B5*

Connector


GND
BD_OUT
SD_OUT
LT_LC_OUT
1
2
3
4
GND
JP3
MT_MC_OUT
HT_HC_OUT
RS_CL_OUT
CP_MA_OUT
1
2
3
4
JP2
CB_OUT
CY_OUT
OH_OUT
CH_OUT
1
2
3
4
JP1
MST_IN
GND
MST_OUT
SJ1
1
2
1
2
3
GND
MST