LEFT LED

RIGHT LED

+5v

BEAT

L1 L2 L3 L4 L5 L6

IC6 CD4050

RP1 10K

ROTARY SWITCHES

Triggering Fltrtyp LFOwave Function Wvefrm2 Octveshft GlideTyp Wvefrm1

CCW

S10 S9 S8 S11 S5 S6 S7 S4

To Keybd and wheels

PL3
17-pin header

PA7 PA6 PA5 EKb +5V PA4 -5V PA3 PA2 PA1 PA0 MOD BEND GND PB5 PB4 PB3

EKb +5v -5v

R10 1.5K

R9 1.5K

R9, R10 1.0K on later units

TUNE DETUNE VOLUME PW WHL FILTER

R8 100

VR17 VR18 VR21 VR19 VR20

IC10 CD4051B

BEND AMT WHL PITCH GLIDE OSC BAL NOISE BAL Q (RES) LFO RATE FLTR SEP

VR2 VR7 VR8 VR3 VR9 VR12 VR10 VR11

IC8 CD4051B

VCF ENV

INTRO ENV FLTR FLTR FREQ PITCH MOD ATT2 REL2 DECAY2 SUST2

VR23 VR25 VR24 VR22 VR26 VR29 VR27 VR28

IC11 CD4051B

VCA ENV

TEMPO FLTR MOD GATE TIME ATT1 REL1 DECAY1 SUST1

VR5 VR4 VR6 VR13 VR16 VR14 VR15

IC9 CD4051B

IC7 CD4051B

PA1 PA0

Enable Rotary Sw

RP2 100K

EKb

RP3 10K

Pin is closer to corner of pcb.

PL4
23-pin header

BUR BVR PA7 PA6 PA5 PA4 PA3 PA2 PA1 PA0 EKb ERb +5V PB0 PB1 PB2 ADCIN PB3 PB4 PB5 EAb EPb GND -5V

Enable eight pushbuttons

Enable ADC and four pushbuttons

PA1 PA0

IC12 IC13 CD4051B

S16 S17 S18 S12 S15 S23 S14 S13

VOICE STORE SEQ TUNE/TRNSP WVEFRM2 STEPUP WVEFRM1 OSC2INT

S22 S19 S21 S20

STEPDN REPEAT DELETE INSERT

R7 470

D1 1N914

D2 1N914

R5 1K

R6 10K

D3 1N914

(BACKUP/RESET)

BATTERY LEVEL DETECT
MAYBE NOT IN THE FIRMWARE

B1 3.6V

PL2
5-pin hdr

FROM TRANSFORMER

BR1
Bridge

C5 2200 uF 16V

C6 2200 uF 16V

C7 1000 uF 16V

REG1 LM309K

REG2 79L05

C4 100uF 16V

C3 100uF 16V

+5v -5v

Schematic capture August 2020 by R Grieb from hand-drawn schematics and compared to V1.3 control board.
A few resistor values were changed to reflect components on the board.

Oxford Synthesiser Company		
OSCar Control 5		
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