CTC chip counter output drives address
to RAM chip during Z80 refresh time
to read out oscillator waveform data

Skips samples at higher frequencies
As circuit cannot run at 256 times oscillator frequency

VCO output is 32x timer output frequency

Timer output is at 8x oscillator frequency
for some notes. Probably at 4X for higher notes.
And 2X for even higher notes.

Pin 1 is closer to corner of pcb.

During osc waveform update,
IC17 has less than 240 nSec
for access time, so SRAM access time spec
should be maybe 100 nSec or so.

Note: -3 does not mean 300 nSec in this case.

IC42-6 not connected
if MIDI installed

D9 was removed on some units.
Presumably this was to reduce standby
current drawn from the battery.

Not having this diode can allow IC17
VCC to go way too high. (above 8V!)

It seems that 6116 SRAM chips somehow
limited VCC to just above 5 volts, but
some modern SRAM chips do not have this
protection

TR1 pinout: C-B-E

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

Oxford Synthesiser Company		
OSCar Processor board		
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