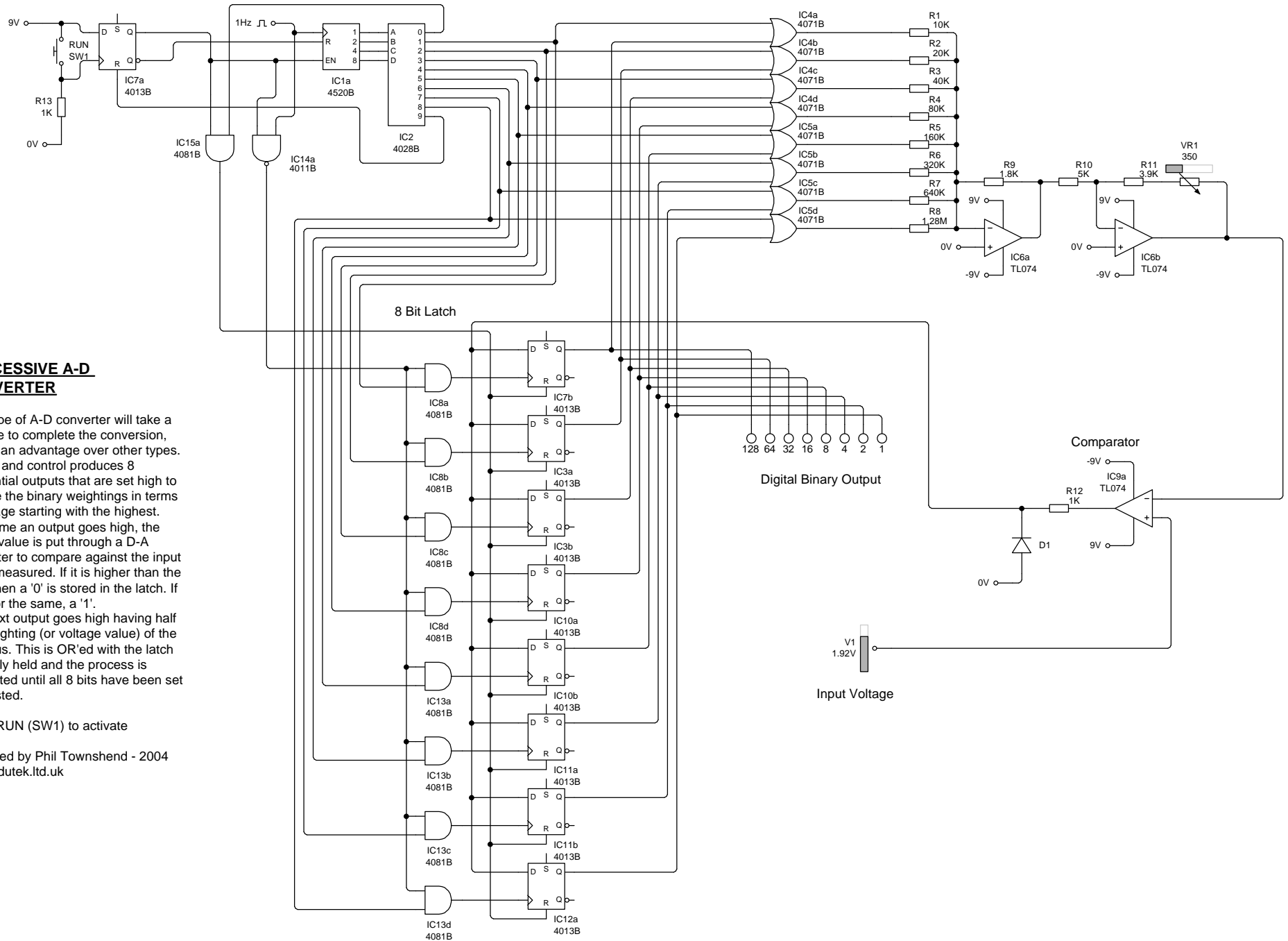


Timing And Control Logic

OR Gates

Digital to Analogue Converter - DAC



SUCCESSIVE A-D CONVERTER

This type of A-D converter will take a set time to complete the conversion, having an advantage over other types. Timing and control produces 8 sequential outputs that are set high to provide the binary weightings in terms of voltage starting with the highest. Each time an output goes high, the binary value is put through a D-A converter to compare against the input being measured. If it is higher than the input then a '0' is stored in the latch. If lower or the same, a '1'. The next output goes high having half the weighting (or voltage value) of the previous. This is OR'ed with the latch currently held and the process is repeated until all 8 bits have been set and tested.

Press RUN (SW1) to activate

Designed by Phil Townshend - 2004
www.edutek.ltd.uk