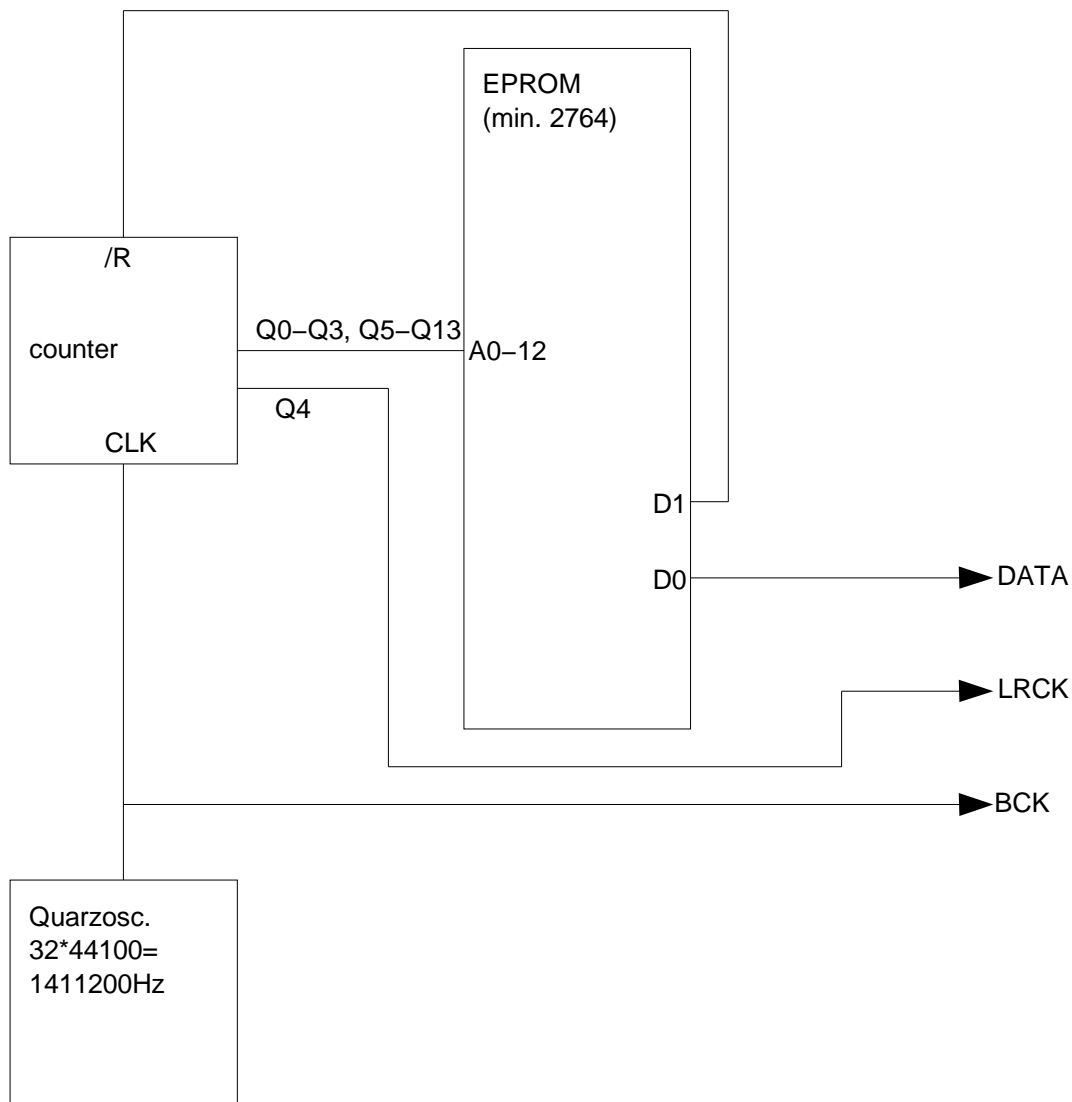


digital 1kHz sinwave generator

Block diagram



Description

For 1000Hz with a sampling frequency of 44100Hz each wave is 44.1 samples long. Therefore you need 441 samples for 10 waves. For serial format we need 2x 16 bits. They are both (left and right) the same, that's why Q4 from the counter doesn't go to the eprom. Q5-Q13 from the counter connect A4-A12 of the eprom, counting the sampling-words. After 441 samples eprom output D1 resets the counter. D2-D6 are unused (maybe for other waveforms, 100Hz or something you like).