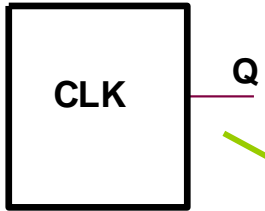


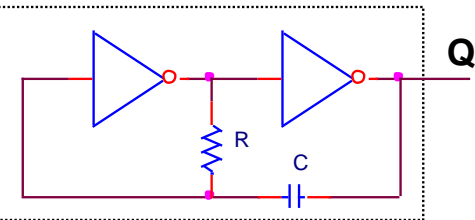
CLOCK circuits

Symbol



Internal design

Simplest circuit

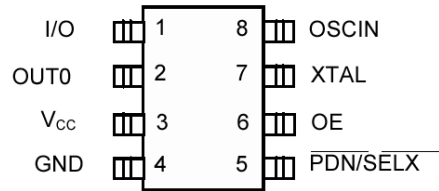


$$f_{CLK} \approx \frac{0,31}{R \cdot C}$$

Commercial chips

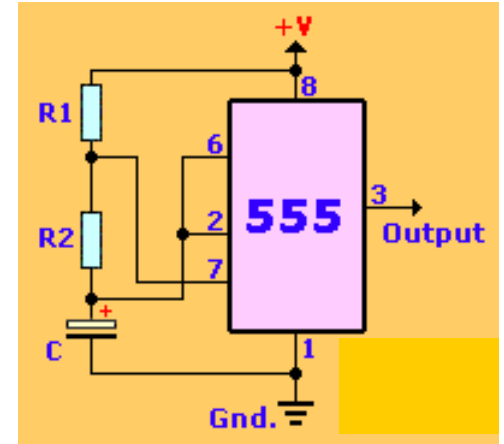
DS1073

Programmable chip



555

$$f = \frac{1}{\ln 2 \cdot (R_1 + 2R_2) \cdot C}$$



- Dual fixed-frequency outputs (30kHz to 100MHz)
- User-programmable on-chip dividers (from 1 to 513)
- User-programmable on-chip pre-scaler (1, 2, 4)
- No external components

