

$$C\frac{\mathrm{d}u_C}{\mathrm{d}t} = i$$

$$L\frac{\mathrm{d}i}{\mathrm{d}t} = u_L$$

$$0 = u_R - Ri$$

$$0 = u_R + u_C + u_L - u_1$$

$$0 = u_R + u_C - u_2$$