

CAPACITANCE AND INDUCTANCE

MEASUREMENT CIRCUIT FOR MULTIMETERS

METRAWAVE

MAIN CIRCUITS

01

COLPITTS OSCILLATOR CIRCUIT

02

SLOPE DETECTOR AND
SMOOTHNING CIRCUIT

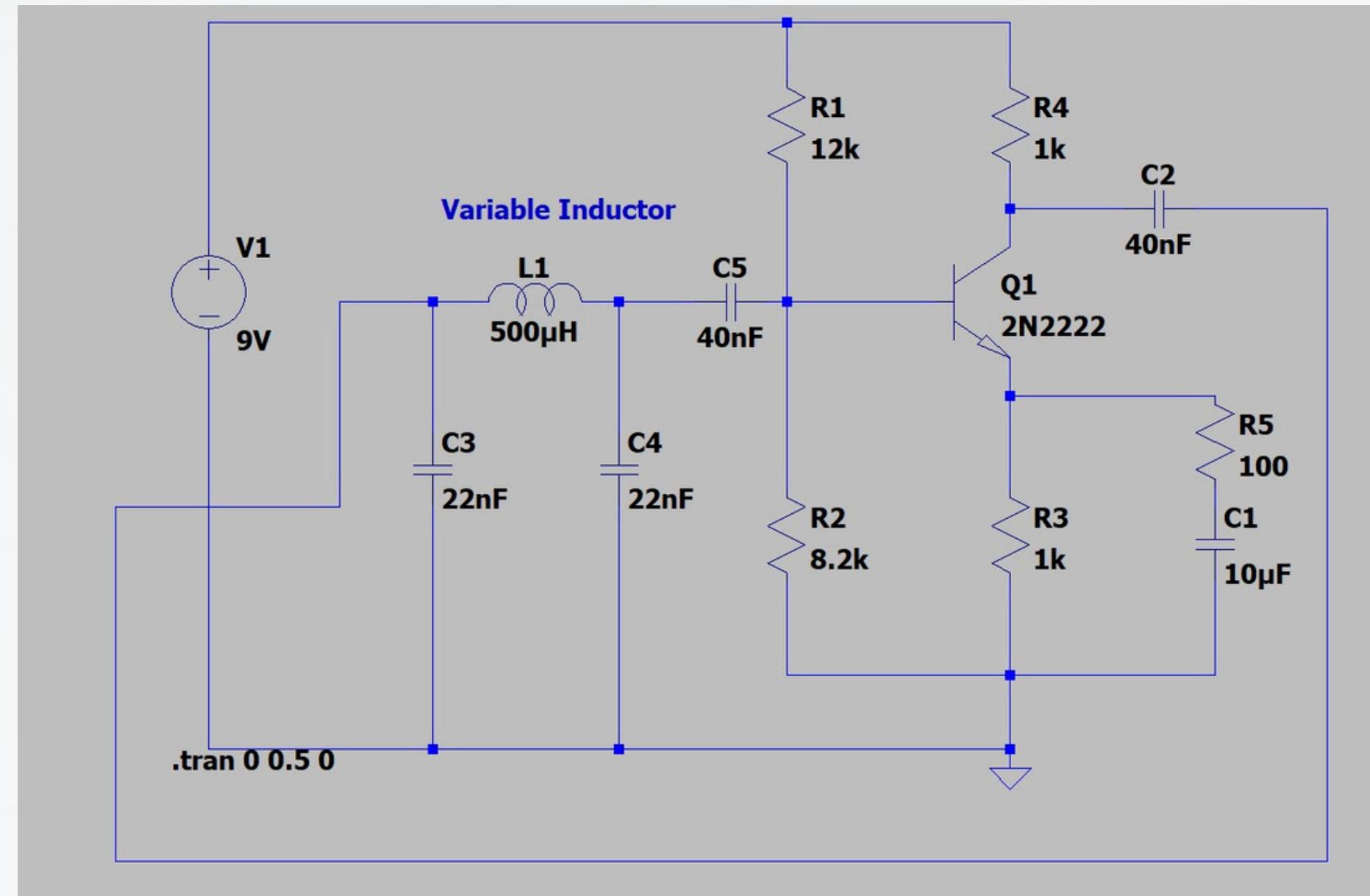
03

MULTIVIBRATOR CIRCUIT

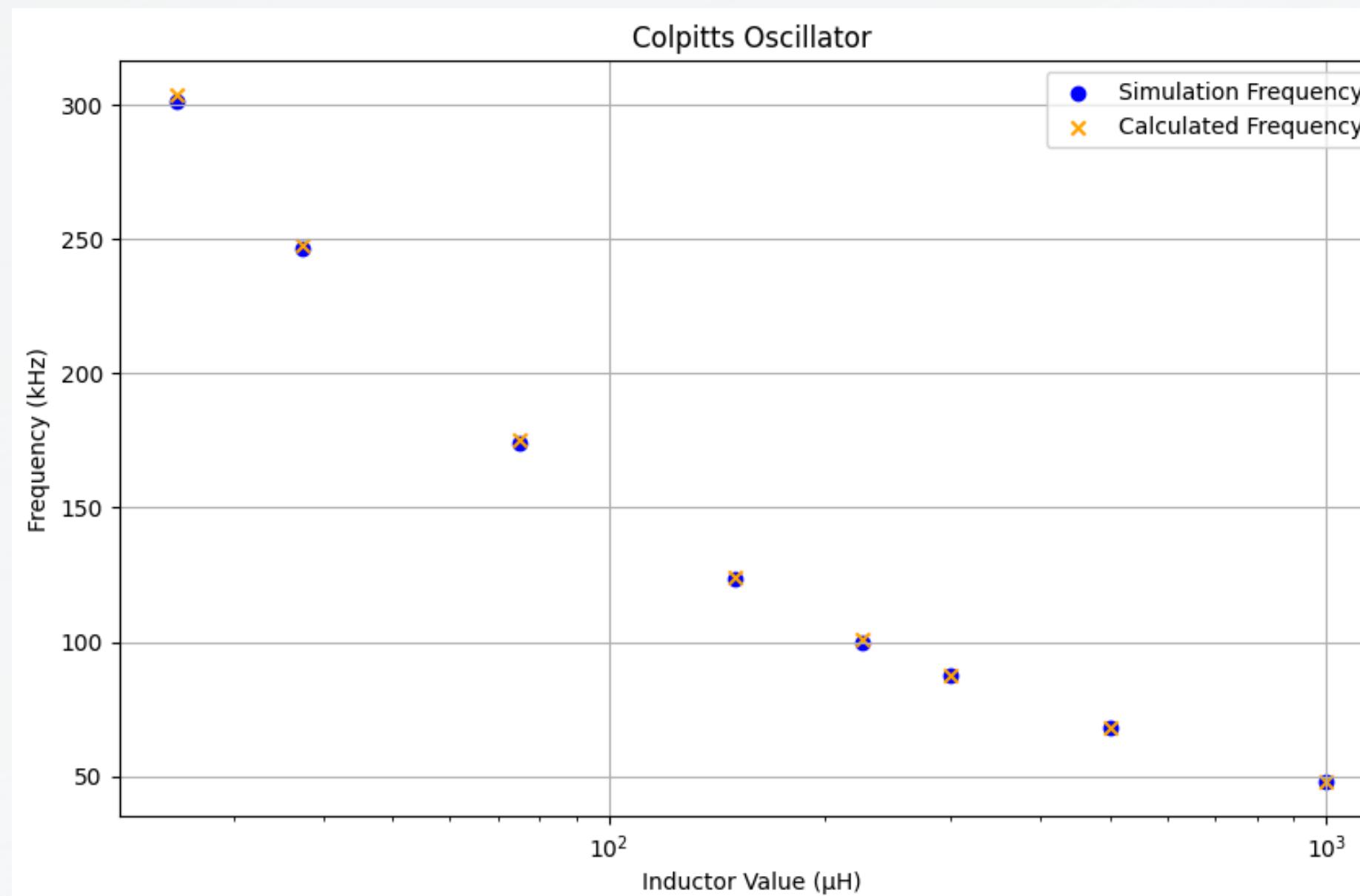
04

DISPLAY UNIT

COLPITTS OSCILLATOR CIRCUIT

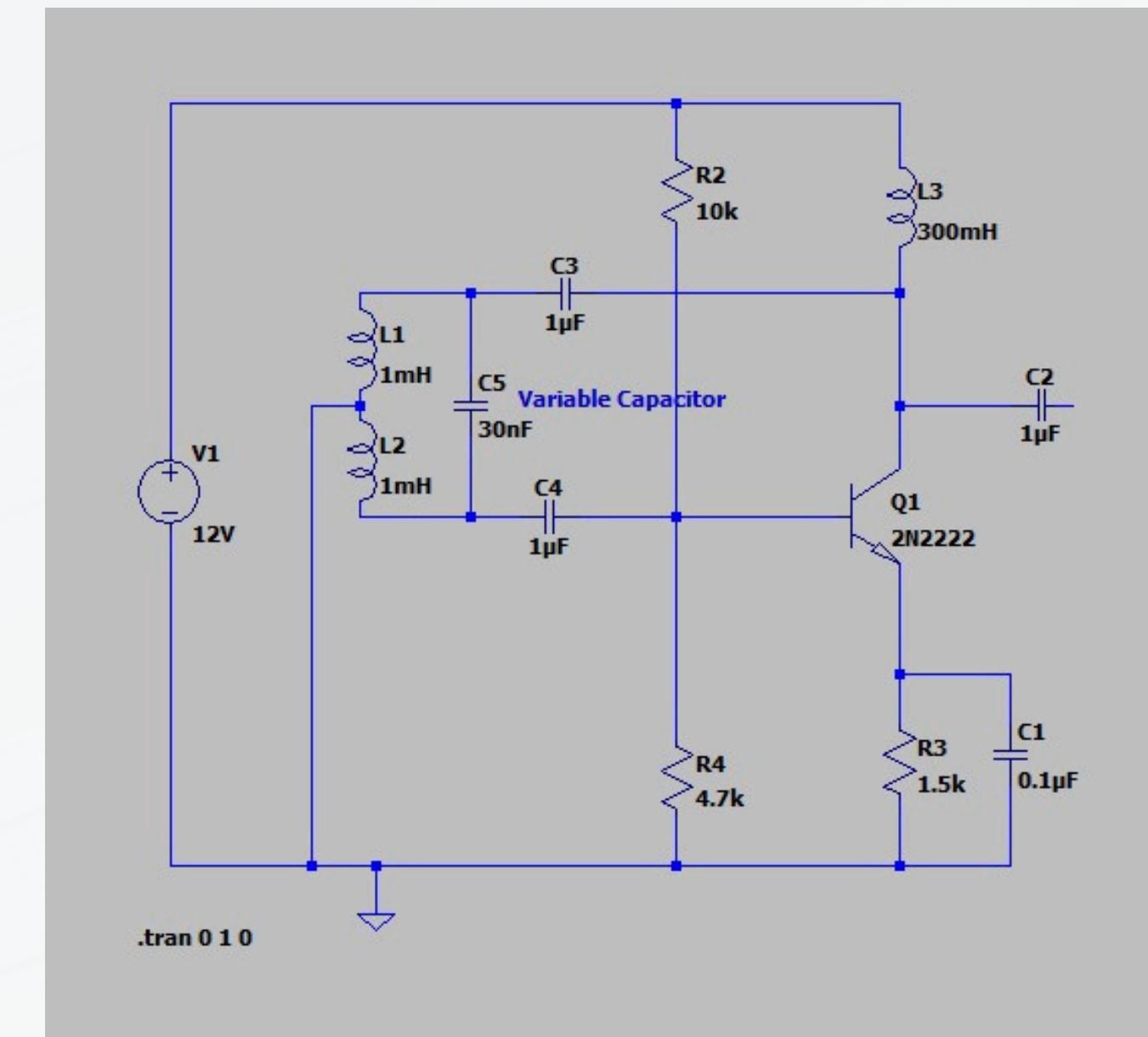


COLPITTS OSCILLATOR CIRCUIT - CALCULATIONS

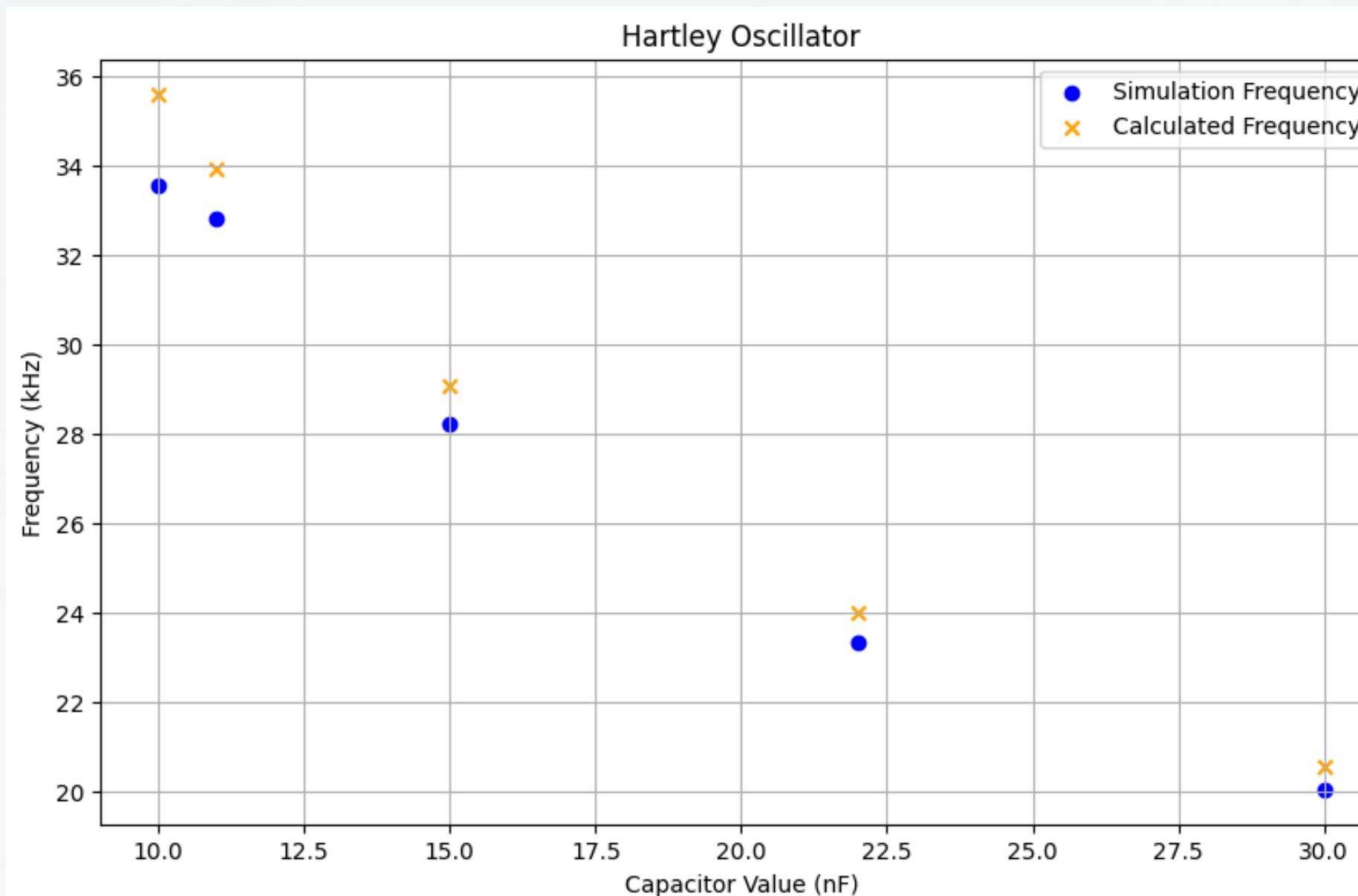


$$f = \frac{1}{2\pi\sqrt{L \cdot C_{eq}}}$$

HARTLEY OSCILLATOR CIRCUIT

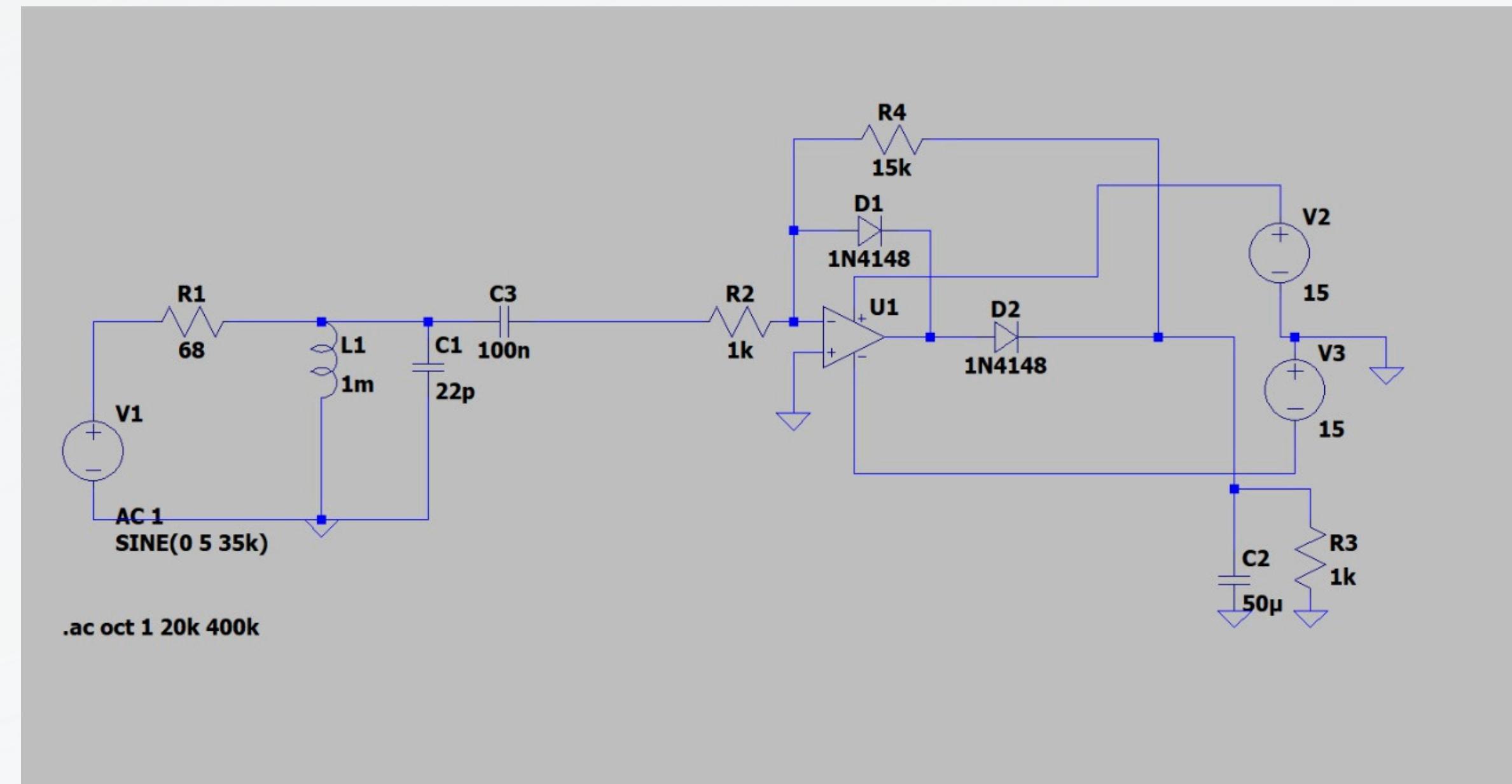


HARTLEY OSCILLATOR CIRCUIT - CALCULATIONS

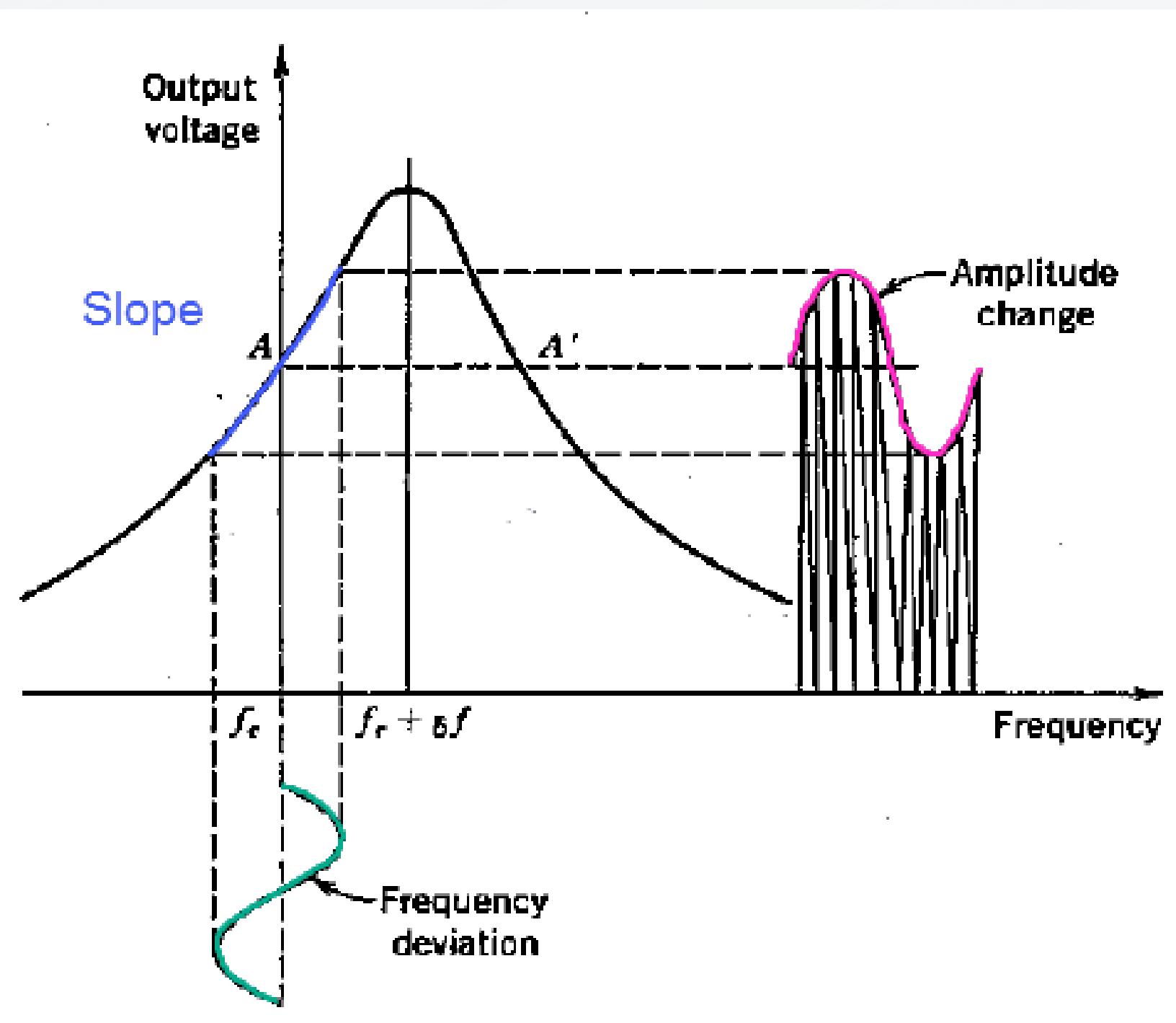


$$f = \frac{1}{2\pi\sqrt{L_{eq} \cdot C}}$$

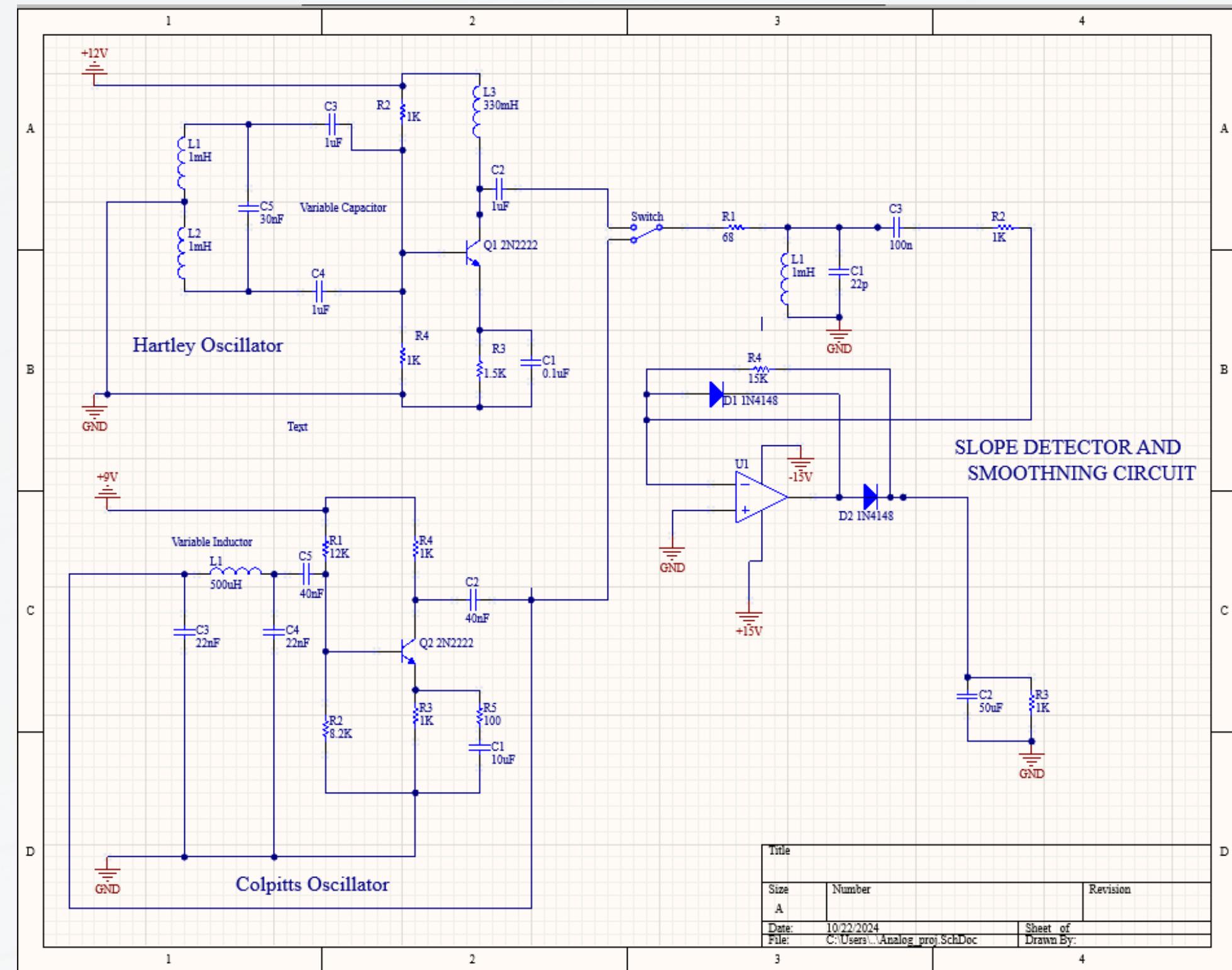
SLOPE DETECTOR AND SMOOTHING CIRCUIT



SLOPE DETECTOR AND SMOOTHING CIRCUIT - GRAPH



SCHMATIC DIAGRAM



THANK YOU

