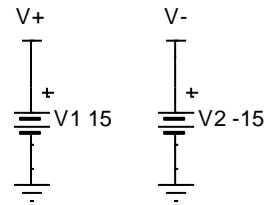
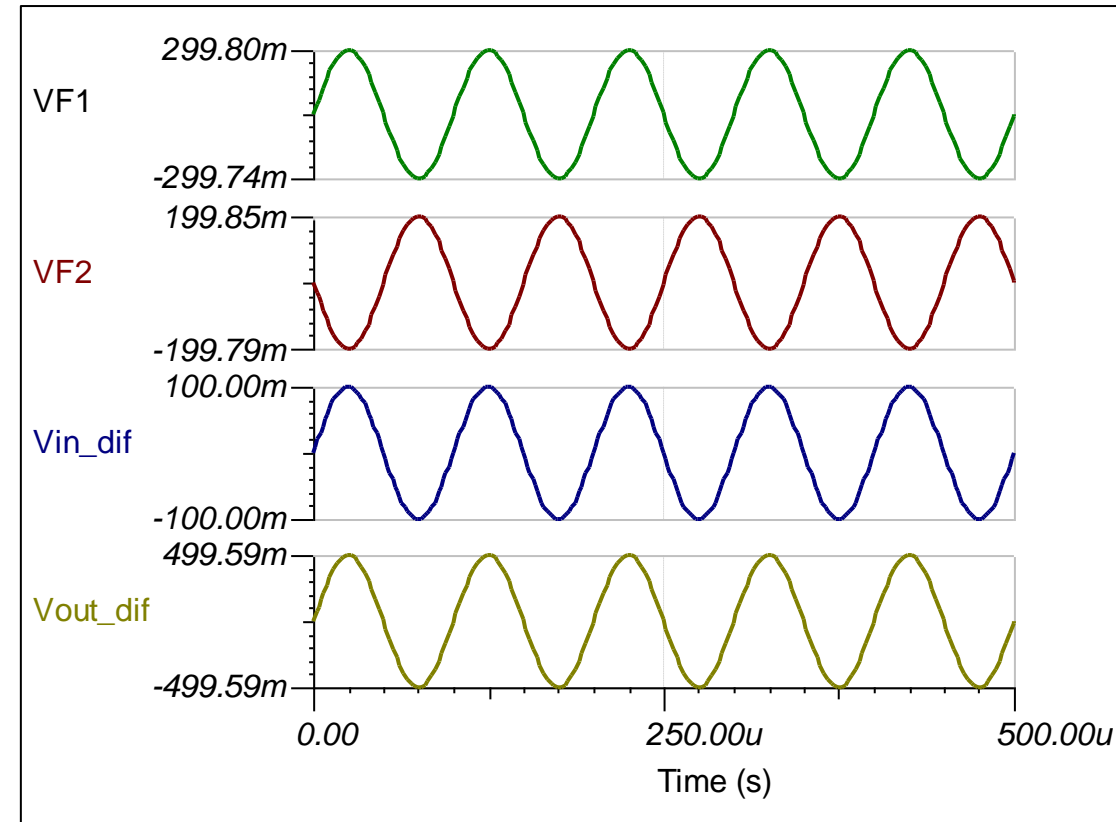
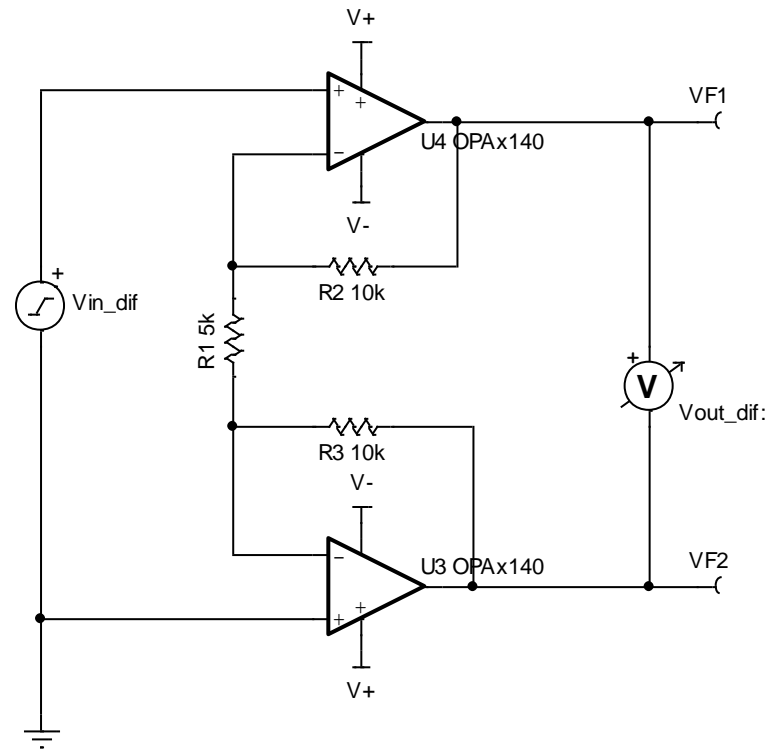


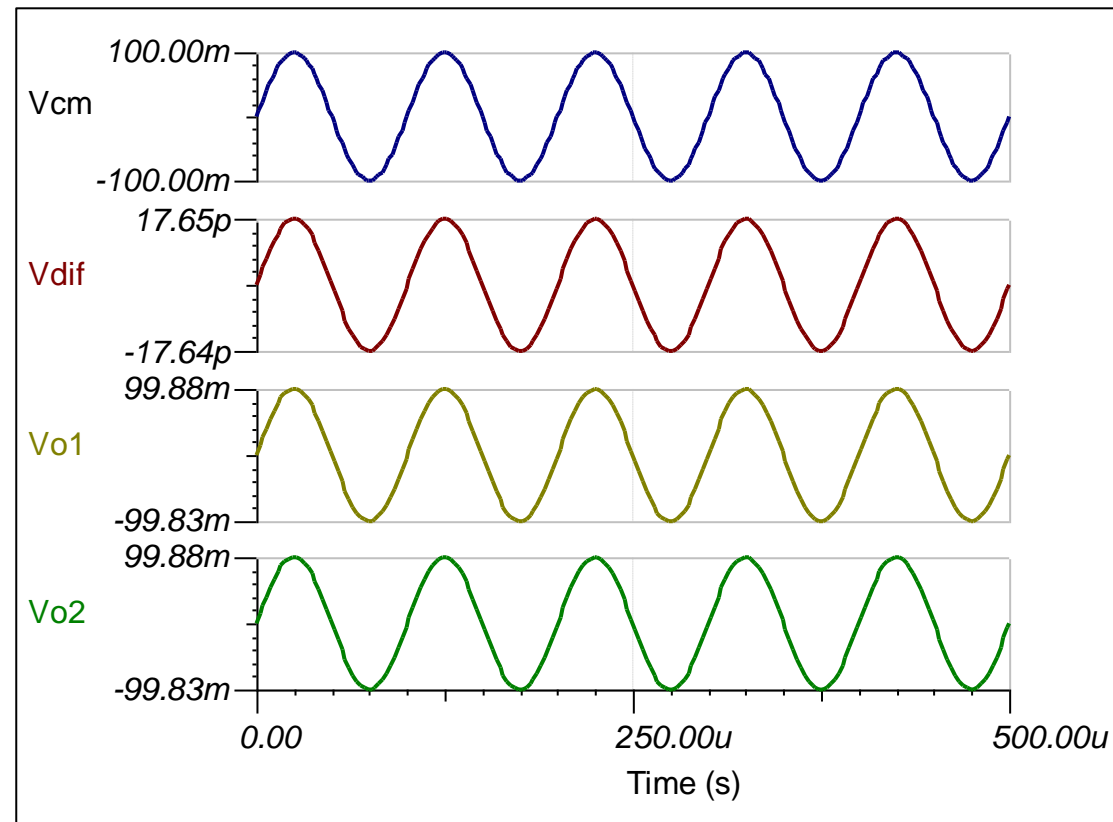
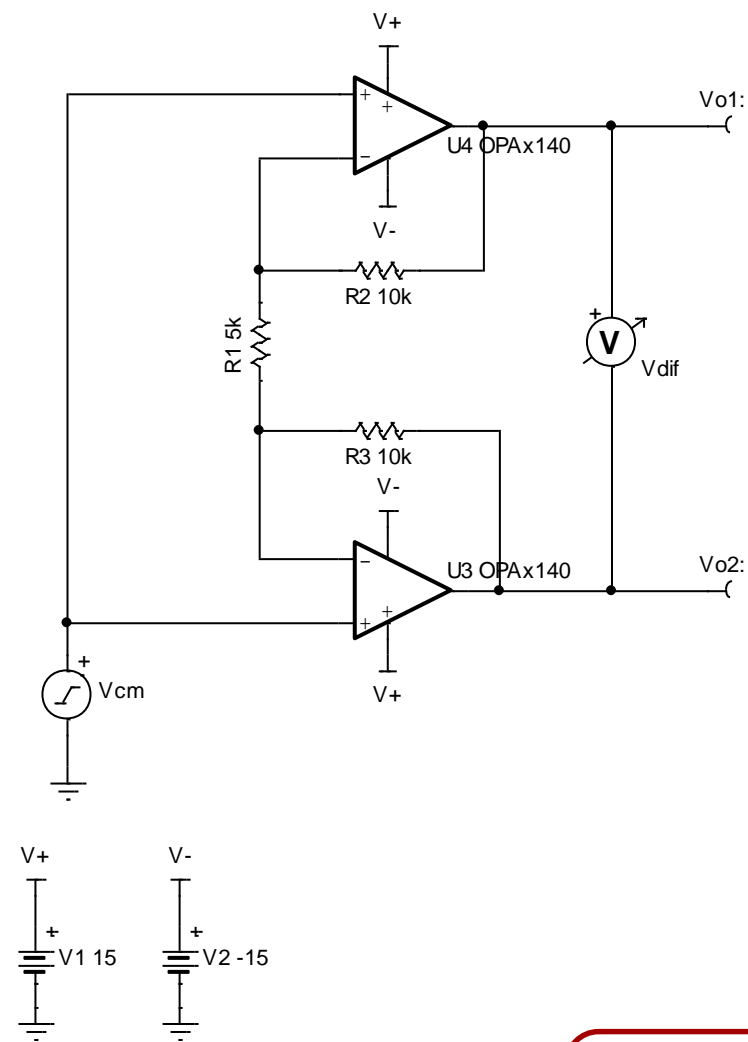
CMRR for discrete INA and PGA855

Differential gain of 5V/V



$$\begin{aligned} V_{in_dif} \times G &= V_{out_dif} \\ 100\text{mV} \times 5 &= 500\text{mV} \end{aligned}$$

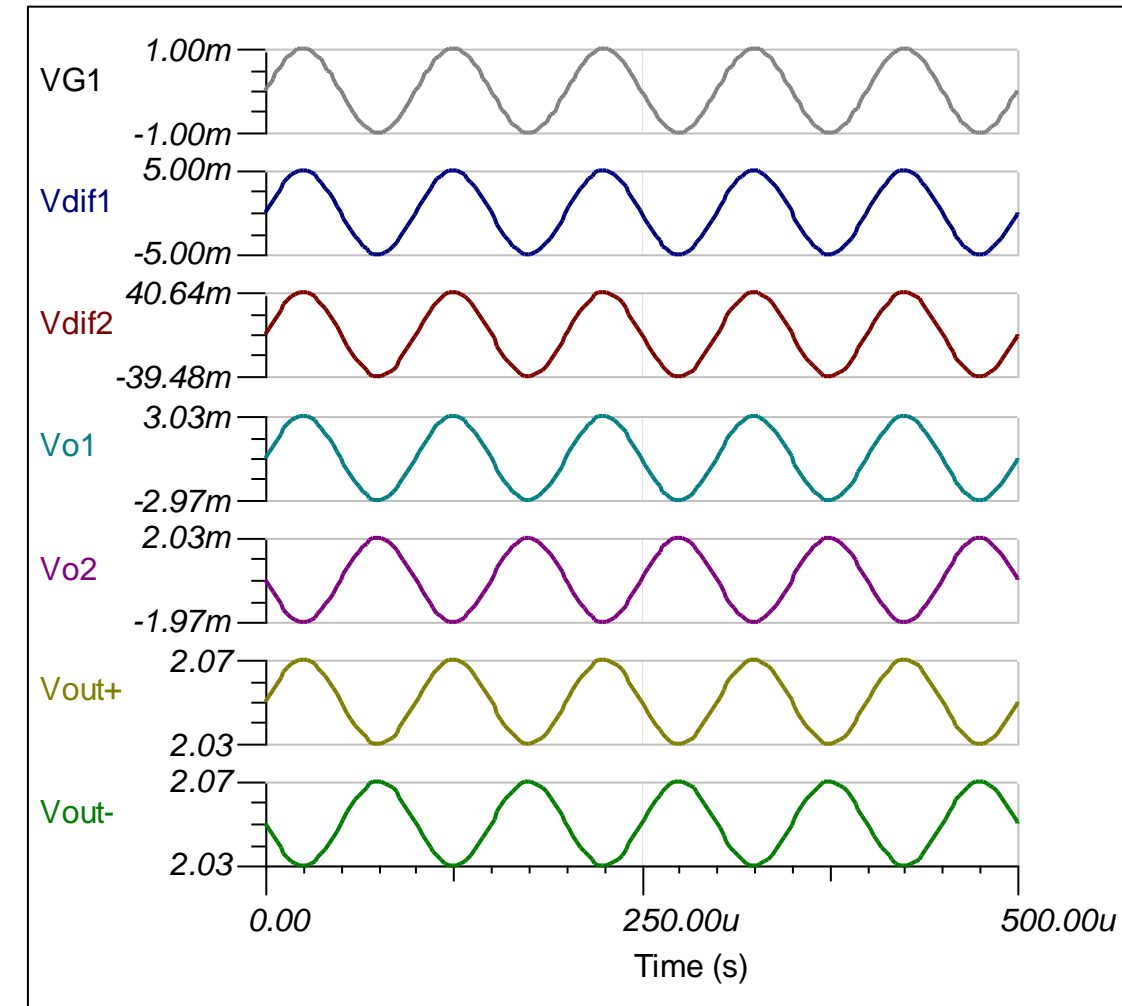
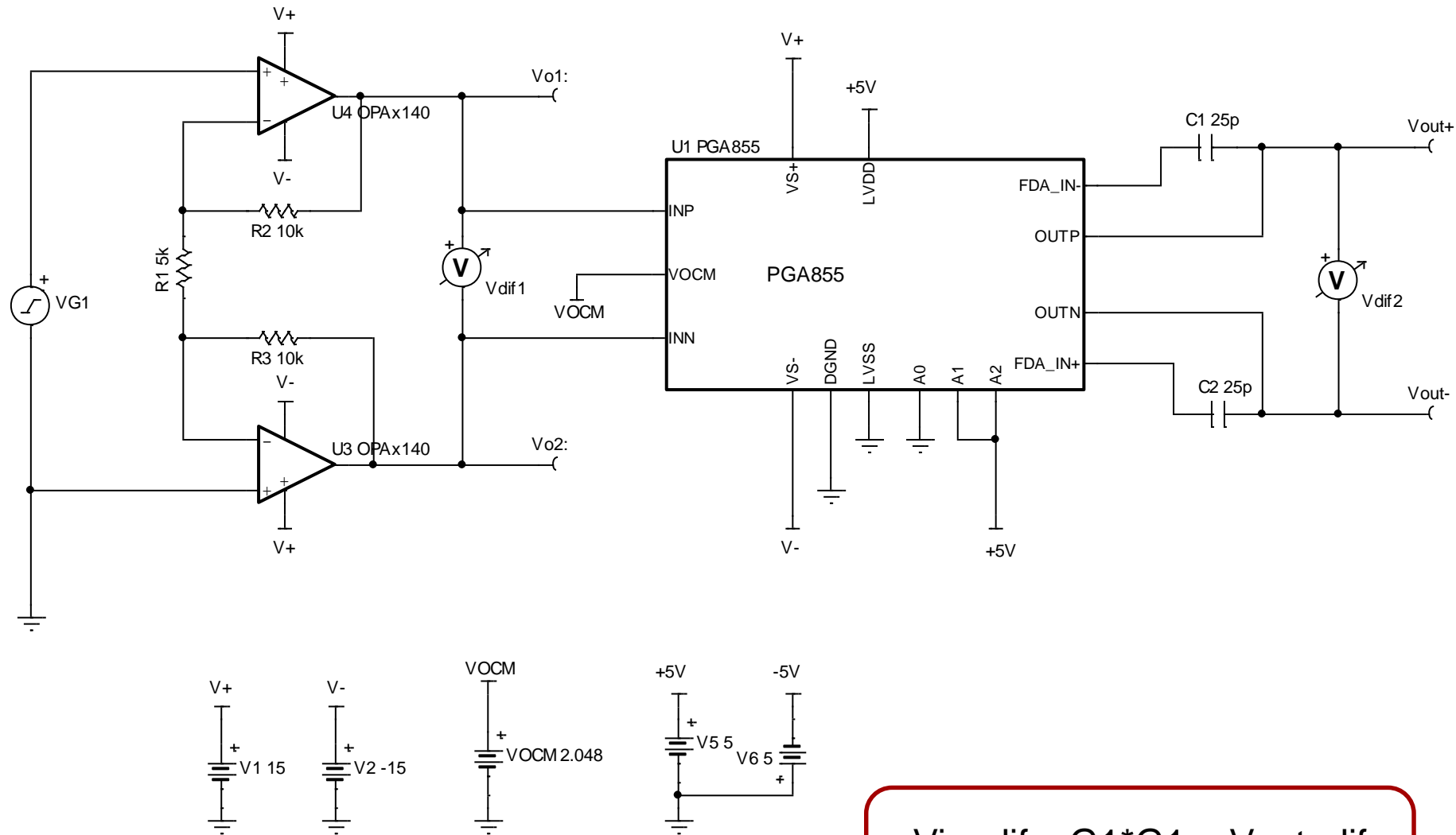
Common mode gain of 1V/V



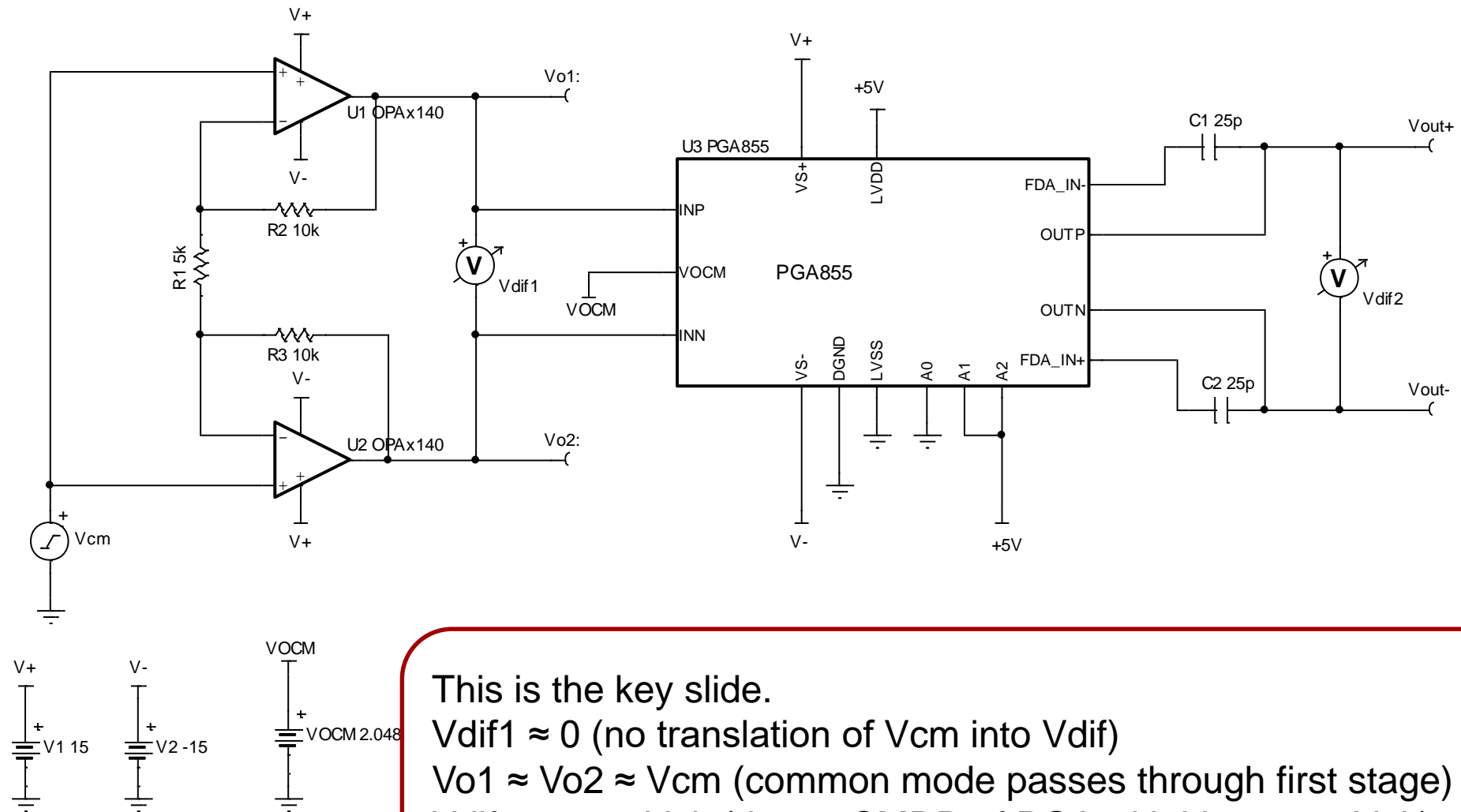
$$V_{cm} \times G_{cm} = V_{out_cm} = (100mV \times 1V/V) \approx 100mV (99.88mV)$$

$$V_{out_dif} \approx 0$$

Discrete INA + PGA855 (Differential response)



Discrete INA + PGA855 (common mode response)



This is the key slide.
 $V_{dif1} \approx 0$ (no translation of V_{cm} into V_{dif})
 $V_{o1} \approx V_{o2} \approx V_{cm}$ (common mode passes through first stage)
 $V_{dif2} = 561 \mu V_{pk}$ (due to CMRR of PGA with $V_{cm} = 1 mV_{pk}$)

