

Differential Signalling

Exercise 1: What are the differential and common-mode voltages for this example?

| '1' | '0' |
|--|--|
| $V_A = +5$ | $V_A = 0$ |
| $V_B = 0$ | $V_B = +5$ |
| $V_{cm} = \frac{5+0}{2} = 2.5 \text{ V}$ | $V_{cm} = \frac{0+5}{2} = 2.5 \text{ V}$ |
| $V_{diff} = 5-0 = 5 \text{ V}$ | $V_{diff} = 0-5 = -5 \text{ V}$ |