DIGITAL VOLT METRE

Assume V_{22} is the Voltage across 22KΩ resistor

$$V_{22} = \left(\frac{V_{in}}{100K + 10K + 22K}\right) \times 22K$$

$$V_{22} = \left(\frac{V_{in}}{132K}\right) \times 22K$$

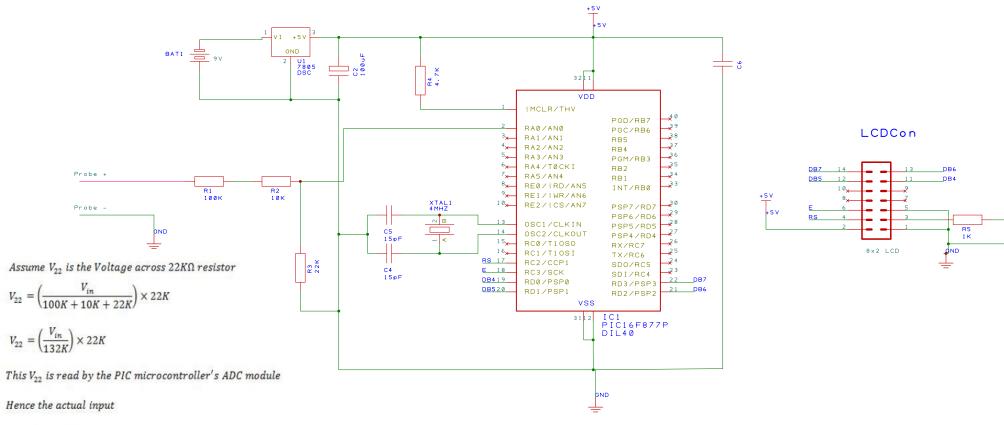This V_{22} is read by the PIC microcontroller's ADC module

Hence the actual input

$$V_{in} = \frac{V_{22} \times 132K}{22K}$$

$$= 6 \times V_{22}$$

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