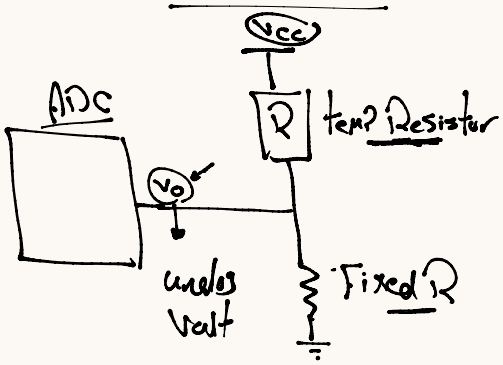
temp sensor

- single Ended.
  - Resistor → Rt
  - use Resistor to create Sensor

Analog signal → S → Analog volt

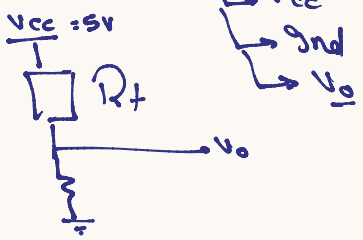
temp signal → temp sen → Analog volt

- Voltage divider



LM35 → 3 Pin

- Vcc
- Gnd
- Vo



1 °C → 10 mV

Analog = ((uint32) digital * 5000) / 1024.

temp & Analog volt

temp = Analog volt mV / 10 mV = ☐

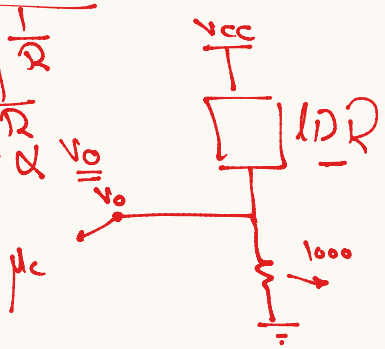
if (temp == 25)

Thermistor → NTC :. negtive temp Coefficient

- $R_t \propto \frac{1}{T}$
- temp ↑ ≃ Rt ↓
- temp ↓ ≃ Rt ↑
- NTC → Range
  - -40 : 140
- chip | Normal temp

LDR :. lighte dependent Resistor

- Connection
  1. light $\propto \frac{1}{R}$
  2. Vo $\propto \frac{1}{R}$
  3. light $\propto$ Vo



PTC :. Positive temp Coefficient

$R_t \propto$ temp

- measure less than -40 °C
- Measure more than 150 °C