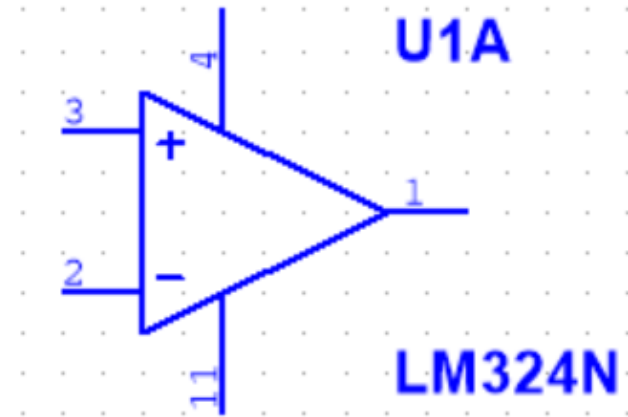
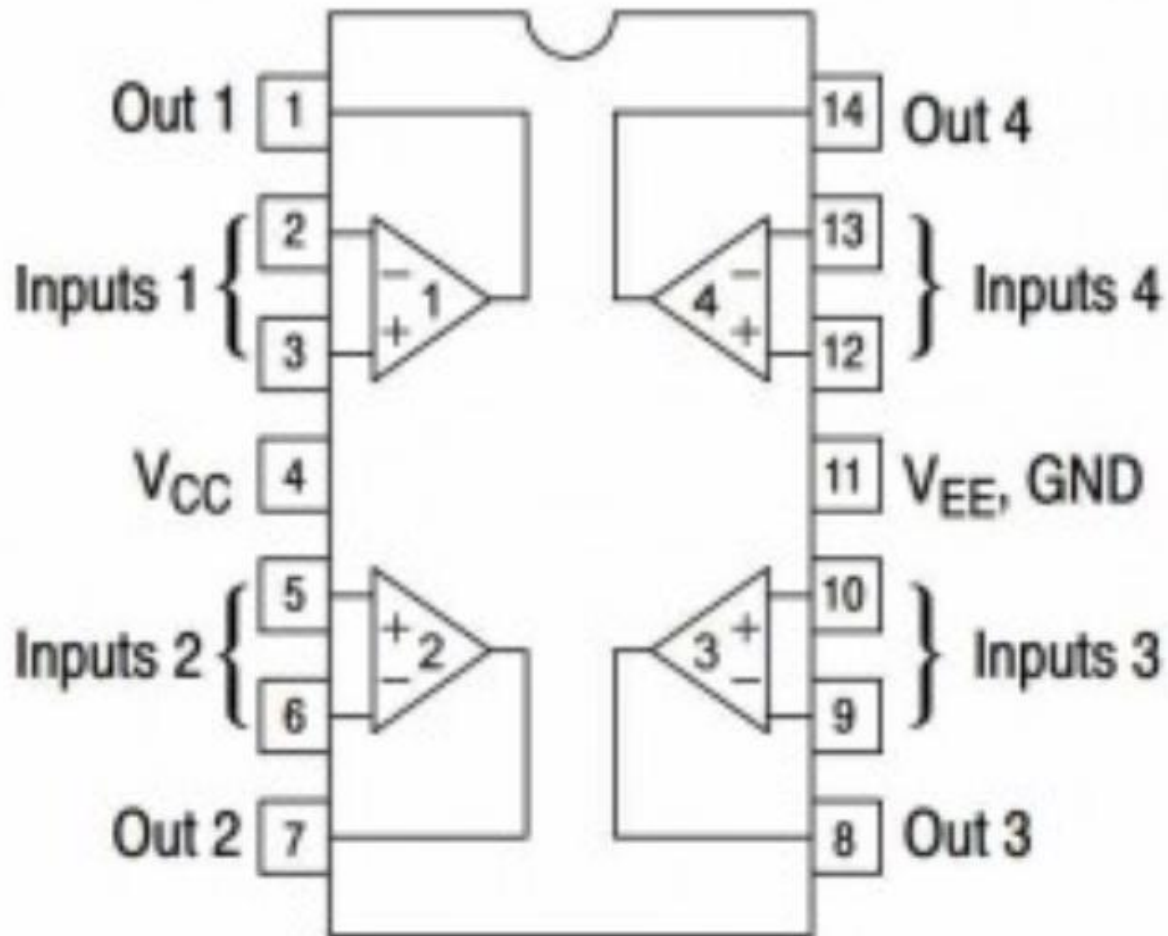


LM324

LM324 quad op-amp



회로상 op-amp 표시

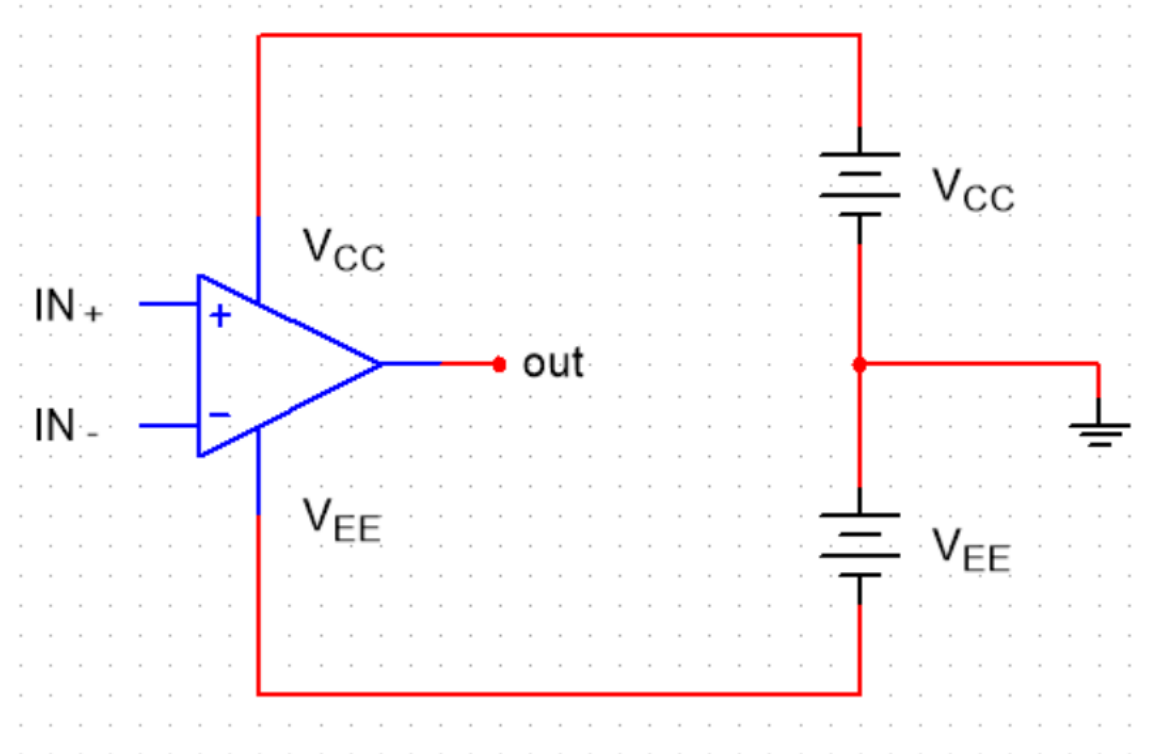
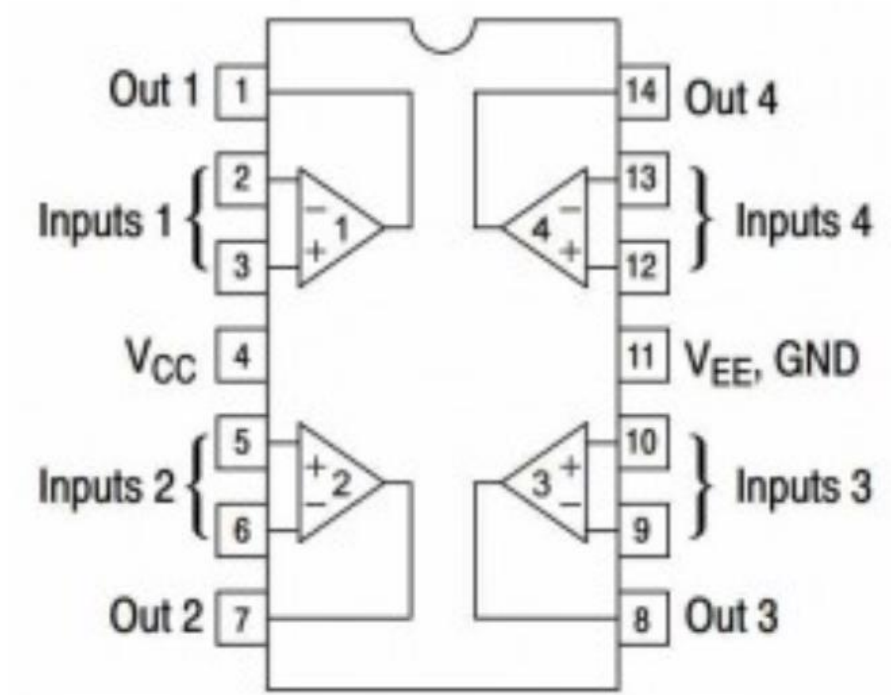
1번 핀 : 출력

2번 핀 : IN₋ (반전 입력)

3번 핀 : IN₊ (비반전 입력)

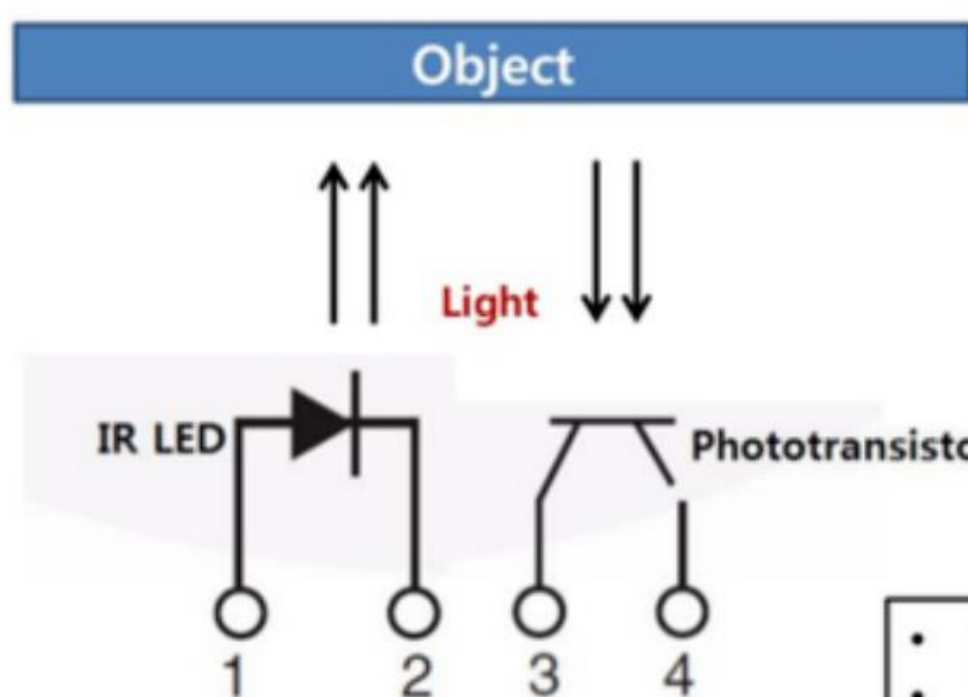
$$V_O = A_O(IN_+ - IN_-)$$

A_O는 op-amp의 이득



op-amp 이중 전원

적외선 동작



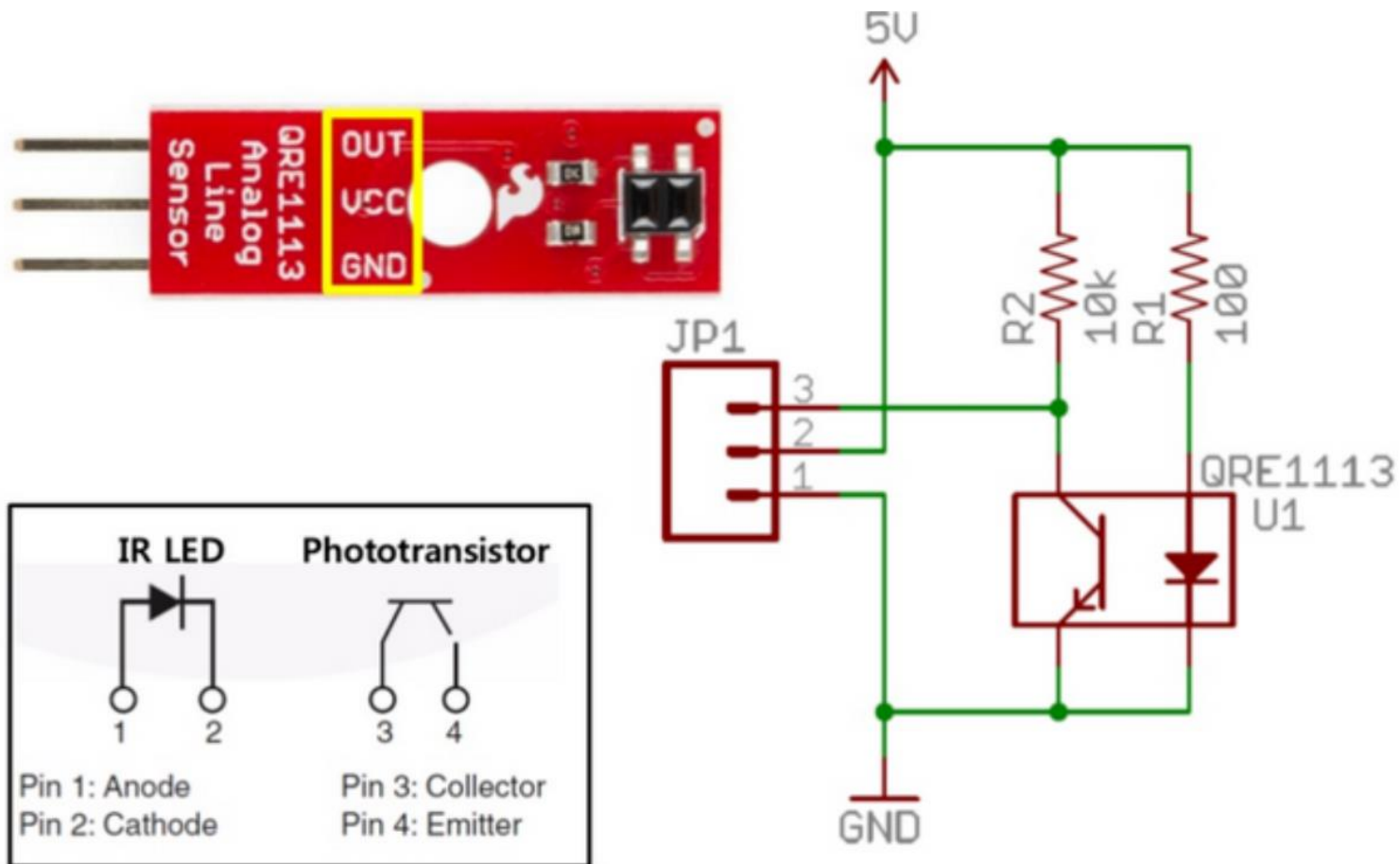
Pin 1: Anode Pin 3: Collector
Pin 2: Cathode Pin 4: Emitter



- IR LED : 적외선 방출
- Phototransistor: 물체로부터 반사되는 적외선 감지
- 3.3VDC or 5VDC operating voltage
- 25mA supply current
- **Optimal sensing distance: 0.125" (3mm)**
- Output: Analog 정수 값 (0 ~ 1024)
- 반사되는 빛이 많을수록, output 값이 작음

적외선 회로도

적외선 센서 회로도



Altium 적외선 회로 작업

