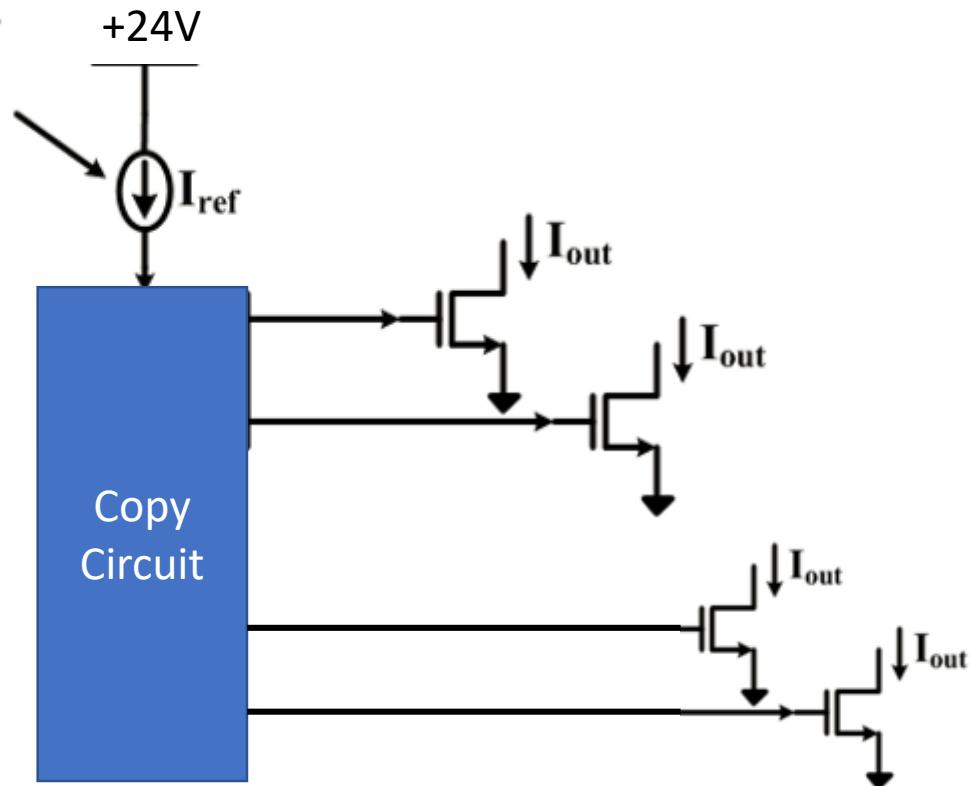


Precision off-chip source or fancy on-chip analog circuit



Vref of the current mirror is 2.5V and Vout is 15V. Both 2.5V and 15V need to be generated by DC/DC. (24V DC input. Buck regulator needed)

The emitter of Q1 (reference side) is connected to current sink input. The target gain is x4.

I_{out} can be monitored so that the gain accuracy and the matching of the transistor is not necessary. End application is for transceiver 100G/200G/400G bps application.