

Op amps and Compensation



Component

École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications



Semester
Printemps

In brief

> **Code:** N6EE03B

Presentation

Objectives

- Optimize the stability of a closed-loop system based on a circuit designed with operational amplifiers.

Description

Ideal and real operational amplifier characteristics:

- main parameters of the open-loop amplifier,
- basic closed-loop circuits with negative feedback,
- properties of the gain-bandwidth product,

Stability of a closed-loop circuit:

- compensation according to gain and frequency, phase margin.
Slew rate.