

Lecture 19 -- Cascodes, Mirror, EF and CB Dynamics

What amplifiers comprise a cascode?

What is the R_{in} , R_{out} and A_v of a cascode?

How does a cascode improve bandwidth?

What dominates the dynamics of a current mirror? Do we want mirrors fast or slow?

Draw a dynamic model for a common base amplifier?

What is the transfer function of an emitter follower? What part of it confounds bandwidth estimation techniques?

What's a surprising fact about EF output impedance?

Under what conditions does the EF present a negative real input impedance?

Why does it take an especially long time to get a BJT out of saturation?

What are the physical mechanisms for MOSFET capacitance?

If we get there:

What is a differential representation of a pair of signals?