

# Amplifier Topologies

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# Chapter 1

## Basic Single BJT

### 1.1 Common-Emitter

### 1.2 Common-Base

### 1.3 Common-Collector

AKA emitter follower

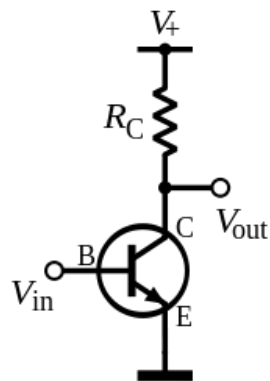


Figure 1.1:

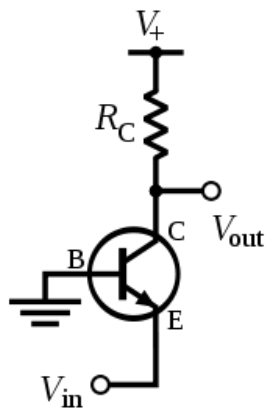


Figure 1.2:

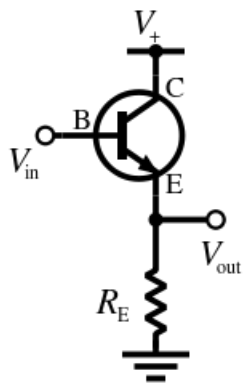


Figure 1.3:

## Chapter 2

# Basic Single FET

[1] [2]

**2.1 Common-Source**

**2.2 Common-Gate**

**2.3 Common-Drain**

## Chapter 3

# Multisection BJT Amps

### 3.1 Cascade

### 3.2 Cascode

### 3.3 Darlington

### 3.4 Differential Emitter-Coupled

AKA Long-tail

### 3.5 Current Mirrors

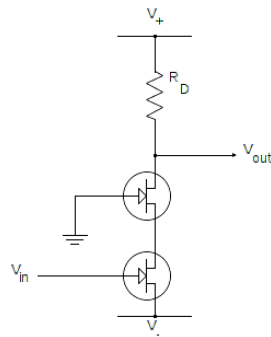


Figure 3.1:

## Chapter 4

# Amplifier Concepts

### 4.1 Emitter Degeneration

### 4.2 Bootstrapping

# Bibliography

- [1] Dennis Feucht. *Designing Amplifier Circuits*. Raleigh, NC: SciTech Pub, 2010. ISBN: 1891121863.
- [2] Paul Horowitz. *The Art of Electronics*. New York, NY, USA: Cambridge University Press, 2015. ISBN: 0521809266.