E157 Lecture 8 Day Plan

Any questions before quiz

Quiz + Team Quiz + Talk through solution

Design a L-match checking against https://www.smithchart.net

- 5Grad/s, Rl=10 ohm
- Qdesired = sqrt(3)
- Lseries = 4nH, Cshunt = 8pF

Lab practice discussion – designing a match empirically.

Parasitics discussion – amplifiers have shunt C, and vias have series L

Matching networks with transmission lines – impedance cancellation, single stub

Tapped Capacitors, Tapped Inductors and Transformers

Design a T-match checking against https://www.smithchart.net – note compound Q=

Check-in, office hours