



# Lab. activity

## Activity #1: transmission lines

- Estimate, for two coax. cables
  - impedance
  - propagation delay
  - $L$ ,  $C$ , and  $R$
- Use TDR to see the effects of various local impedance changes

## Activity #2: fast opamps

Analyse the stability of two opamps at different gains

### ■ LT1222

- Gain-Bandwidth: 500 MHz
- Gain of 10 Stable Uncompensated
- Slew Rate: 200 V/ $\mu$ s

### ■ AD8099

- Gain bandwidth product (GBWP): 3.8 GHz
- Slew rate
  - 475 V/ $\mu$ s ( $G = +2$ )
  - 1350 V/ $\mu$ s ( $G = +10$ )
- Custom external compensation, gain range  $-1$ ,  $+2$  to  $+10$