

EE5780 Advanced VLSI CAD

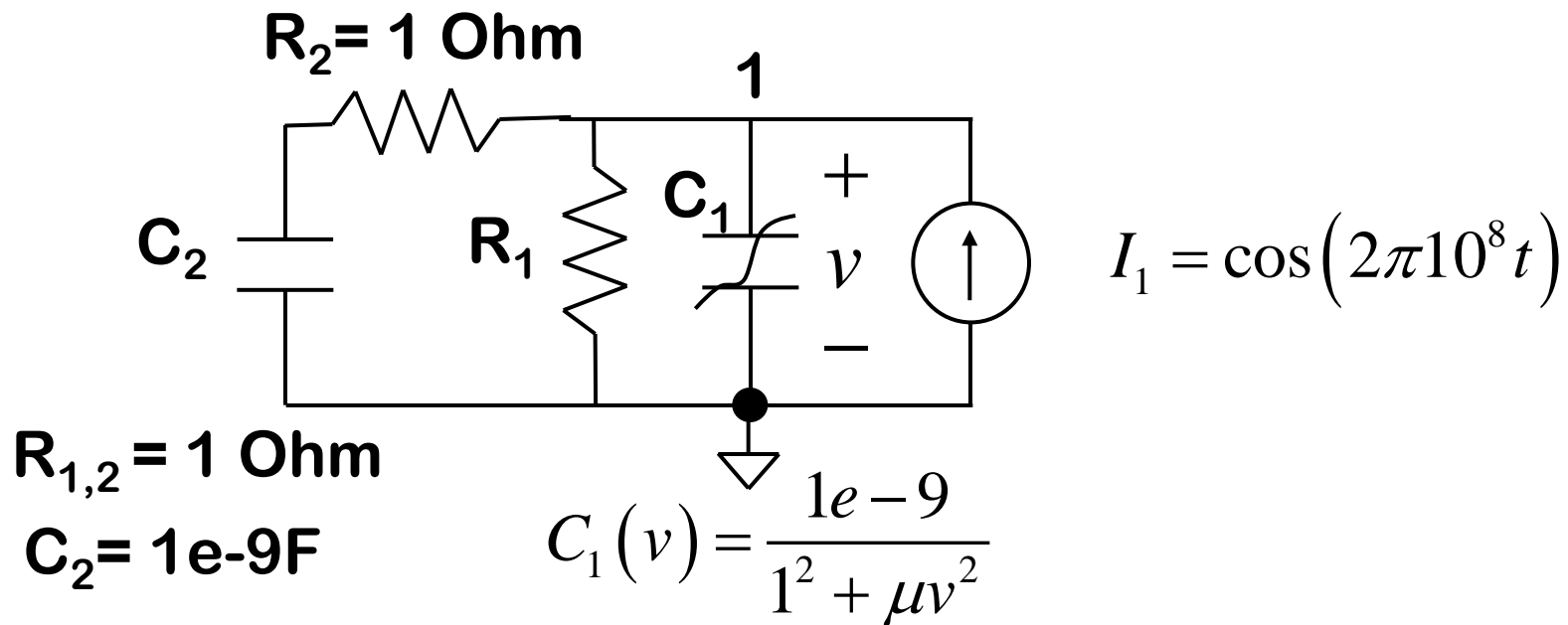
Project 2

Topic 1: Model Order Reduction Methods

- AWE: uses explicit moment matching scheme to extract dominant poles and zeros
 - >Good for low order models but may have troubles for high order models

- PRIMA: use the Krylov subspace (moments) for the congruence transformation
 - >Good for high order models but may get large errors for low order ones
 - >Can exploit multi-point moment matching scheme

Topic 2: Harmonic Balance Methods



- If we consider 4 frequencies, the problem dimension is a 4x2 (complex equation formulation)

■ Topic 3: thermal analysis problem in 2D

$$R_x = R_y = 0.1 \text{ C/W}$$

Reflective boundary condition

