

**Parallel-Plate Capacitive Nonlinearity**

UC Berkeley

- **Example:** clamped-clamped laterally driven beam with balanced electrodes
- **Nomenclature:**

$V_a$  or  $v_A$       $v_a = |v_a| \cos \omega t$   
 $V_A$      }  $V_A + v_a = \text{total signal}$   
 $N_a$   
 $V_a$  or  $v_A = V_A + v_a$   
 Total Value     AC or Signal Component (lower case variable; lower case subscript)  
 DC Component     (upper case variable; upper case subscript)

Electrode     Conductive Structure  
 $d_1$       $k_m$   
 $m$       $x$   
 $F_{dl}$   
 $v_1$       $V_1$       $V_p$

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