



An Introduction to Electronics Systems Packaging

Video Course -2012

L Umanand, DESE, Indian Institute of Science, Bangalore 12

Quiz for Module 4

Electrical Design considerations in systems packaging

Video Sequence 15-18

1. Find the track resistance for a 1mm wide conductor 10cm long on a PCB with copper foil of (i) 35 μm thickness, (ii) 70 μm thickness and (iii) 105 μm thickness?
 2. What is the variation in track resistance for the case of problem (1) if the temperature variation of the immediate neighborhood of the PCB is from 25 degC to 60 degC.
 3. Plot the nomograph of coupling capacity and track spacing.
 4. Plot the relationship of inductance per unit length and conductor spacing.
 5. Discuss analog ground and digital ground on a mixed signal PCB.
 6. Discuss the concept of guard lines.
 7. How does one take care of electrostatic shielding on a PCB?
 8. What is the effect of ground lines on the cross talk between the signal conductors?
-
-