

LECTURE-10

Packaging Technology

- Dual In-line Package
- Pin Grid Array Package
- Chip Carrier Package

Factors affecting selection of IC package

- Relative cost
- Reliability
- Weight of the package
- Ease of fabrication
- Power to be dissipated
- Need of external heat sink

Temperature Ranges

1. Military temperature range : -55°C to $+125^{\circ}\text{C}$ (-55°C to $+85^{\circ}\text{C}$)
2. Industrial temperature range : -20°C to $+85^{\circ}\text{C}$ (-40°C to $+85^{\circ}\text{C}$)
3. Commercial temperature range: 0°C to $+70^{\circ}\text{C}$ (0°C to $+75^{\circ}\text{C}$)

Computer-Aided Design Technology

- High level synthesis
- Logic synthesis
- Circuit optimization
- Layout
- Simulation