Humidity Specifications

Last updated 1/10/24

Humidity Specifications

- Humidity
  - Integrated circuits typically are not perfectly hermitically sealed.
  - In high humidity conditions, water vapor can enter the package and cause corrosion → failure over time
  - One solution is to bake the parts prior to usage
    - This forces the water vapor out of the part
    - Parts are characterized by their Moisture Sensitivity Level (MSL)
      - The time a part can be outside a 'dry' storage environment before it must be baked to remove excess water vapor

        MSL 6 – Mandatory bake before use
        MSL 5A – 24 hours
        MSL 5 – 48 hours
        MSL 4 – 72 hours
        MSL 3 – 168 hours
        MSL 2A – 4 weeks
        MSL 2 – 1 year
        MSL 1 – Unlimited floor life