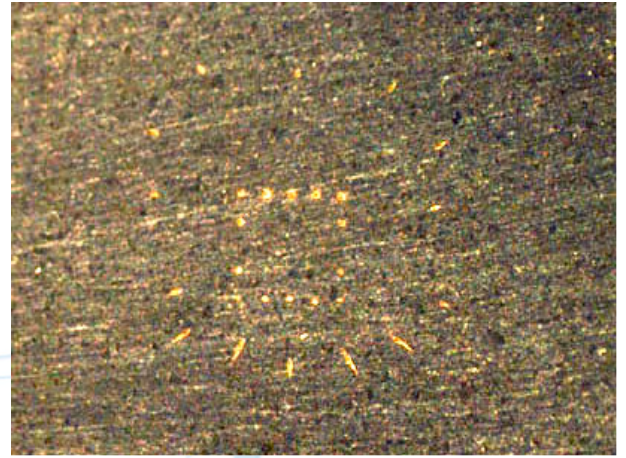
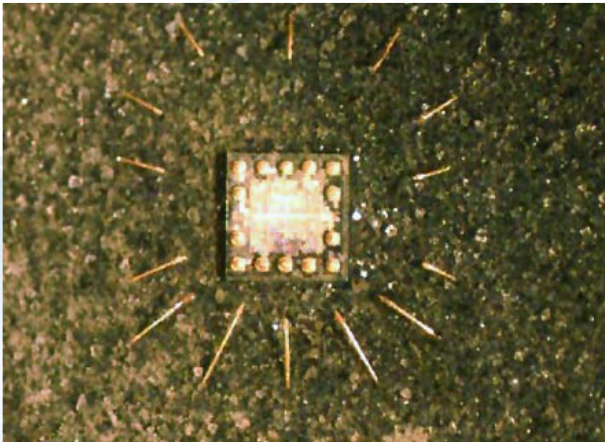


DECAPSULATION SERVICES

Semiconductor and integrated circuit components are generally manufactured in such a way that they are made as durable and modular as possible. A wide variety of chip types and functions can often be packaged nearly identically. Often, the components inside these ruggedized packages need to be directly examined, in order to investigate potential faults, fraud, or incorporated materials of a part. Wire bonds, markings on individual chip components, underlying ASIC or conductive layers and power distribution layers can be examined directly. MicroVision Laboratories offers services that combine a series of preparation methods in order to reveal crucial information about the components included in a chip package. Stereoscopic microscope images, reflected light images, and subsequent SEM images of the package can all be created in order to answer important questions about the nature of a supplied part.



Wire bonds Exposed in package



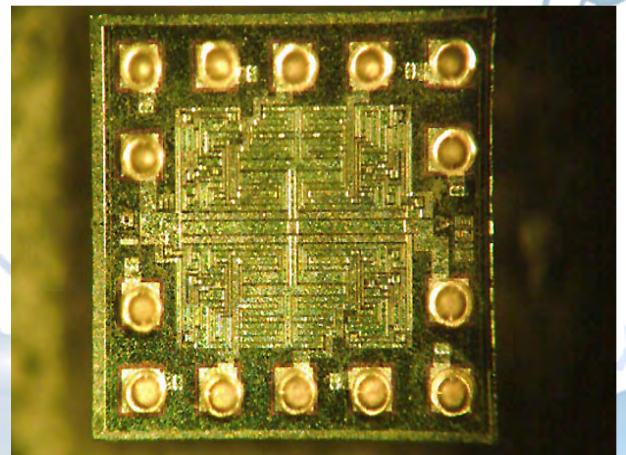
Top of Die Exposed from Package

Advantages:

- Materials directly examined in order to confirm the components included in the package
- Part numbers, package identification and serials documented
- Wire bonds and the mounting of components easily checked for continuity and security
- Metals in the package can be checked with EDX
- Varying layers in the package systematically examined in order to document faults or failures

Application Fields:

- Electronic Device Manufacture
- Purchasing and Equipment Validation
- Medical and Imaging Devices
- Computer Manufacturing
- Failure Analysis



Chip Exposed with bonds

Learn more at <http://www.MicroVisionLabs.com>