



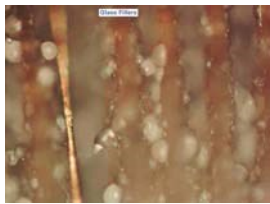
## Failure Analysis Laser Inspection Tool



## The Widest Range of Failure Analysis Products available

Each model of our FA-LIT laser system has been carefully designed with a specific purpose in mind. After extensive processing of customer samples, we can effectively determine which FA-LIT laser system will produce the most successful results for your application. We'll even design a fully customized FA-LIT laser system to meet your individual needs if your application goes beyond the scope of our standard product.

## New Safer Process for Copper Wire Device



We've recently developed an additional patent pending technique for removing the newer mold compounds associated with copper wire and bonds. This compound typically has larger fillers and much more fillers material making it difficult even for laser decapping. The greater laser power is required to remove this new compounds, can sometimes damage very thin wires or leaves excess mold compound around the wires. Our new process totally eliminates this problem and can even enhance results on traditional mold compounds.



## PATENTED LASER TECHNOLOGY

**United States** 7,271,012

**Japan** 4,843,488

**China** ZL200480022971.0

**Philippines** 1-2006-500131

**Europe** 04778639.7 (pending)

**Canada** 2,532,959 (pending)

**Korea** 10-2006-7000841 (pending)

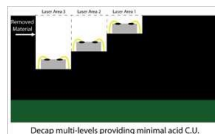
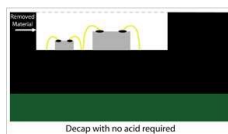
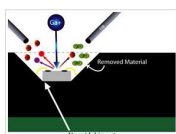
## Gel Compound Removal (All the Way to the Die)

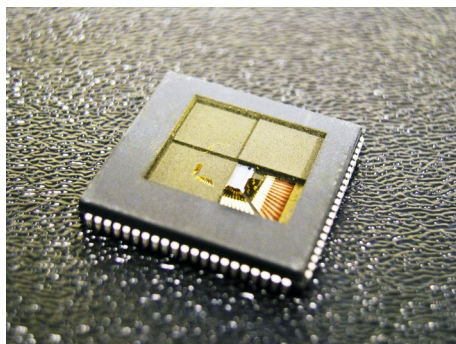
More and more ICs are using a clear gel to cover the die.



These gels cannot be removed with chemical or even standard old method of laser decapsulation. Our new developments have enabled us to clearly remove gel all the way to the die with amazing

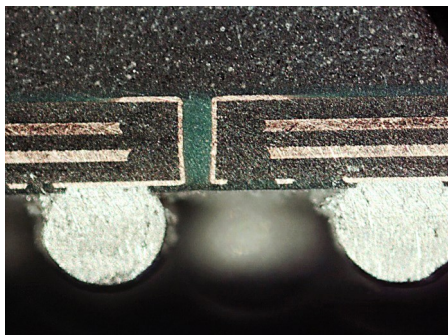
results. Our method allow for processing within seconds versus the usual hours and days when using acid.





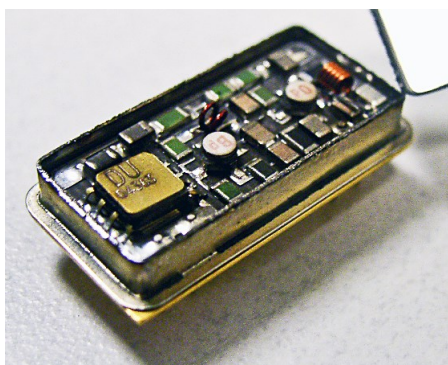
## LAYER-BY-LAYER DECAPSULATION

Decapsulation is a process that most Failure Analysis labs use on a routine basis. The FA-LIT uses our patented laser technology to allow an opener to remove individual layers of the mold compound all the way through the lead frames to the substrate. The entire process is 100% controllable by the operator through our Graphic User Interface. The FA-LIT laser can accurately remove the entire compound, individual layers or section of mold compound (operator defined). The FA-LIT offers a safe and more accurate process for IC decapsulation.



## CROSS-SECTIONING

Diamond saws and other mechanical methods of cross-sectioning put physical stress into a part. It is then difficult to determine whether the defect (such as delamination) was already there or caused by the process itself. Laser cutting presents no such problems. There is no mechanical force introduced with laser. Therefore, cross-sections can be much closer to actual defect diminishing the polishing time or in many cases eliminating polishing altogether.



## COMPONENT DELIDDING

Lids and covers over components that need to be analyzed have always been a problem in the Failure Analysis Lab. Mechanical micro routers can damage internal parts, require complicated fixturing, and even destroy samples. With the FA Laser this process is quick, simple and successful. A Green Laser (532nm) can be used to cut the top of a lid completely off. IR laser energy can be used to heat adhesive areas to easily remove covers. DE-lidding is one of our most successful unique features.

## LIMITLESS CONFIGURATION OPTIONS

- ◆ Choose between Desktop or Standalone Models.
- ◆ Multiple Laser Type and Wavelengths available for processing each unique application.
- ◆ Dual laser systems capable of multifunctional Failure Analysis tasks.
- ◆ Cold plate option for processing sensitive materials by effectively controlling the part temperature.
- ◆ Various X/Y Table and part placement options available

## NEW FEATURES

### Self Centering Part Fixture

**Auto Focus:** Automatically sets laser and vision focus to any part.

**Auto Z Drop:** Automatically drops laser focus as you process thicker ICs (Always in Focus System).

**High Resolution Camera:** With Digital Zoom for after process inspection, small feature isolation and clearer sharper images



**Low Resolution**

*Out of Focus Image lacks the clarity needed for proper inspection results*



**High Resolution**

*Up-close image stays sharp and details for accurate inspection*



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