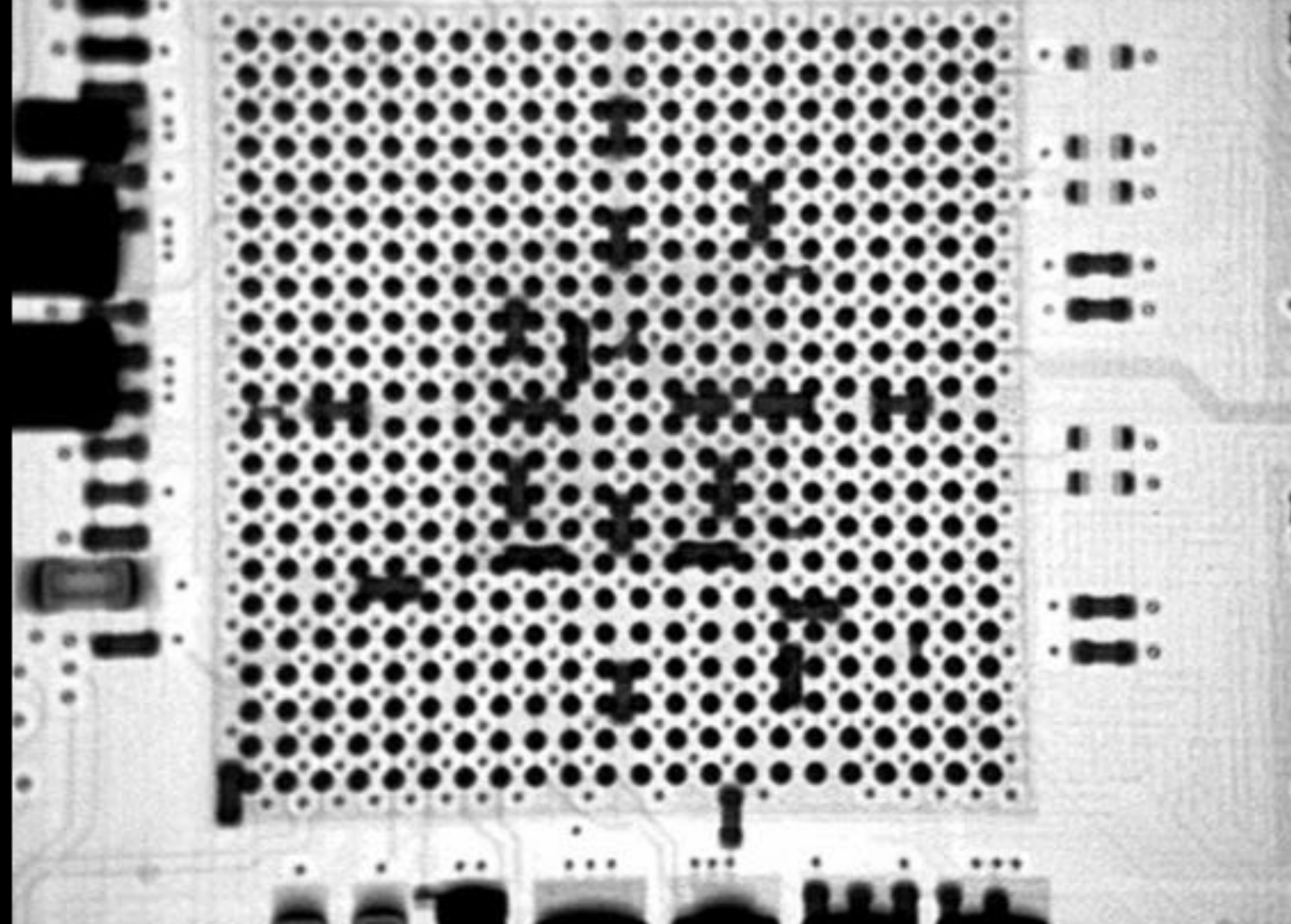




## ***Outsource with Confidence!***



### **In this TCM eNews Edition:**

- **X-Ray BGA's**
- **Gerber Files for Production.**
- **PCB Fiducials (Design Talk)**
- **Excess Stock**

### **X-Ray BGA's**

TCM is extremely proud of its near perfect success rate of placing and loading BGA's correctly however from time to time engineering do want to take a closer look for various reasons. TCM, in partnership with DSTO in Adelaide, can offer an X-ray BGA imaging service. The service is competitively priced however the lead-time can sometimes be long so if you do have a specific product in mind you would like X-rayed then please speak with your TCM representative as soon as possible.

### **Gerber Files for Production**

Recently, TCM found the transition of a customer's PCB file to our PCB manufacturer altered slightly causing particular vias to be missed. The investigation found that TCM's approved PCB vendors do not always utilise the latest PCB design packages. In order to overcome this potential problem, TCM recommends that clients provide Gerber files for PCB manufacture.



For Surface Mount assemblies, TCM does request your .PCB file, however this is purely for SMD machine set up in order to save time and reduce your tooling (NRE) costs. To help protect your IP it is not recommended that we send these files to our PCB vendors.

In summary:  
.PCB File – TCM SMD Machine programming only.  
Gerber File – PCB Manufacturing file.

### **PCB Fiducials**

A note for all our PCB design engineers: In order to improve accuracy for SMD component placement, we ask that two fiducials be added onto the PCB at opposite corners of the board. These fiducials are important for optimal alignment of components and are especially required for products which have fine pitched IC's, BGA, QFN, DFN packages and/or small chip components such as 0402 and 0201. Correct alignment of these parts is critical. The fiducials are also crucial for Automated SMD inspection on our SAKI AOI . Having these fiducials in place will greatly reduce instances of misalignment, as well as reducing possible dry joints, tomb stoning and bridging of specific parts.

If you have any questions whilst setting up your PCB file for optimal efficiency in regards to loading, please give your TCM Sales Manager a call to discuss further today.

### **Excess Stock**

In December last year we advised about our new reporting system which highlights any significant components that are accruing on your 'excess stock register' so that early action can be taken to avoid, or minimize, the invoicing of these components to you.

As many of you have seen since the beginning of January, after shipping an order, we have sent notifications regarding the excess stock added to the register.

Our aim is for greater transparency with any MOQ's for your company and working together on the many tailored solutions to avoid excess inventory, e.g. long term scheduling; blanket orders or specific stocking arrangements.

Visit [www.tcmelectronics.com.au](http://www.tcmelectronics.com.au) to view

*Call TCM to experience the best in manufacturing quality, service, flexibility and reliability.....in essence, 'the best value for money' in the market place.*

