

# Application Notes

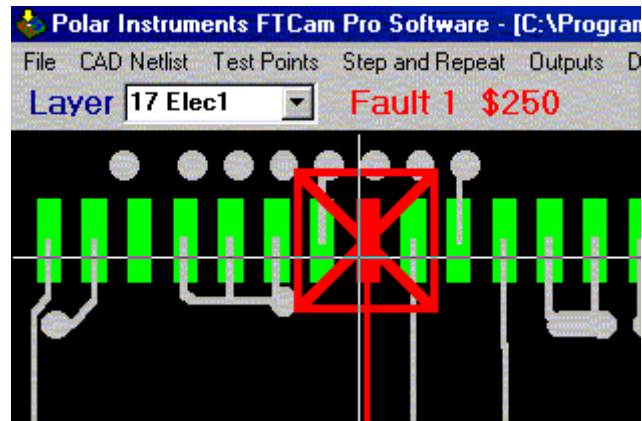
Application Note 114

**Polar FTCam Pro speeds program generation on FT100s Flying probe faultfinding systems and PCB fault locators**  
**FT100s is a faultfinding system for assembled PCBs**

Polar FTCam Pro allows program generation from most popular CAD systems the FTCam Pro is primarily aimed at the FT100s but is also of use in large PFL programs.

If you need to debug complex boards and short production runs the FT100s can simplify your faultfinding process.

Do you need to fault find PCBs that fail functional test? Please read on...



## How?

CAD data from most popular packages can be extracted and a faultfinding program generated for the FT100s. For large PCBs this process is considerably faster than inputting the parts list and manually teaching the locations.

## Can I access components on the solder side?

Yes, when importing you can choose to generate a program for top or bottom side components. Perhaps more importantly you can also choose to probe conventional dual in line components from the rear of the PCB. This is especially important in this case as the hole sizes on legacy PCBs are often relatively large and the ICs position cannot be guaranteed to be the same from one board to the next. Probing on the solder side eliminates this problem.

## Which CAD formats are supported?

The list is always growing, Cadstar, Visula, Mentor, Cades, Protel, Hyperlynx and many others are supported, if you are in the process of justifying purchase of a Polar flying probe faultfinding system we will consider adding support for your own Cad system.

Please contact [gwen.merchant@polarinstruments.com](mailto:gwen.merchant@polarinstruments.com) with your particular requirement.

## Do you support Gerber?

Gerber is the standard format used by PCB manufacturers. It is the physical information used to generate PCB artwork but absent from Gerber is the physical component location information and the bill of materials information necessary to build a full test program. Gerber is supported but if you can supply CAD data you will generate a much more usable test program

## What options do I require to import CAD data on a PFL or FT100?

FTCam pro takes your CAD data and allows you to select test points either one per pin or one per net. You can perform most of the test program generation off line as FTCam pro visually highlights test points and graphically allows you to jog probe positions on devices such as QFPs before you output the test data. Test data is output directly in a format accepted by FT100s and Polar PFL fault locating systems.

**Can I panelise my CAD data?**

Yes if you need to test identical boards in panels FTCam Pro can generate a panelised test program for you.

**Is it possible to view the CAD data to assist in repair?**

Simply highlight the faulty track or tracks and use the cursor to guide you to potential fault locations. You can also install multiple seats of FTCam pro a graphical repair stations. Once you have taken your cad data into FTCam you can distribute the CAD data in Polar's proprietary FTCam format to other repair centres.



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