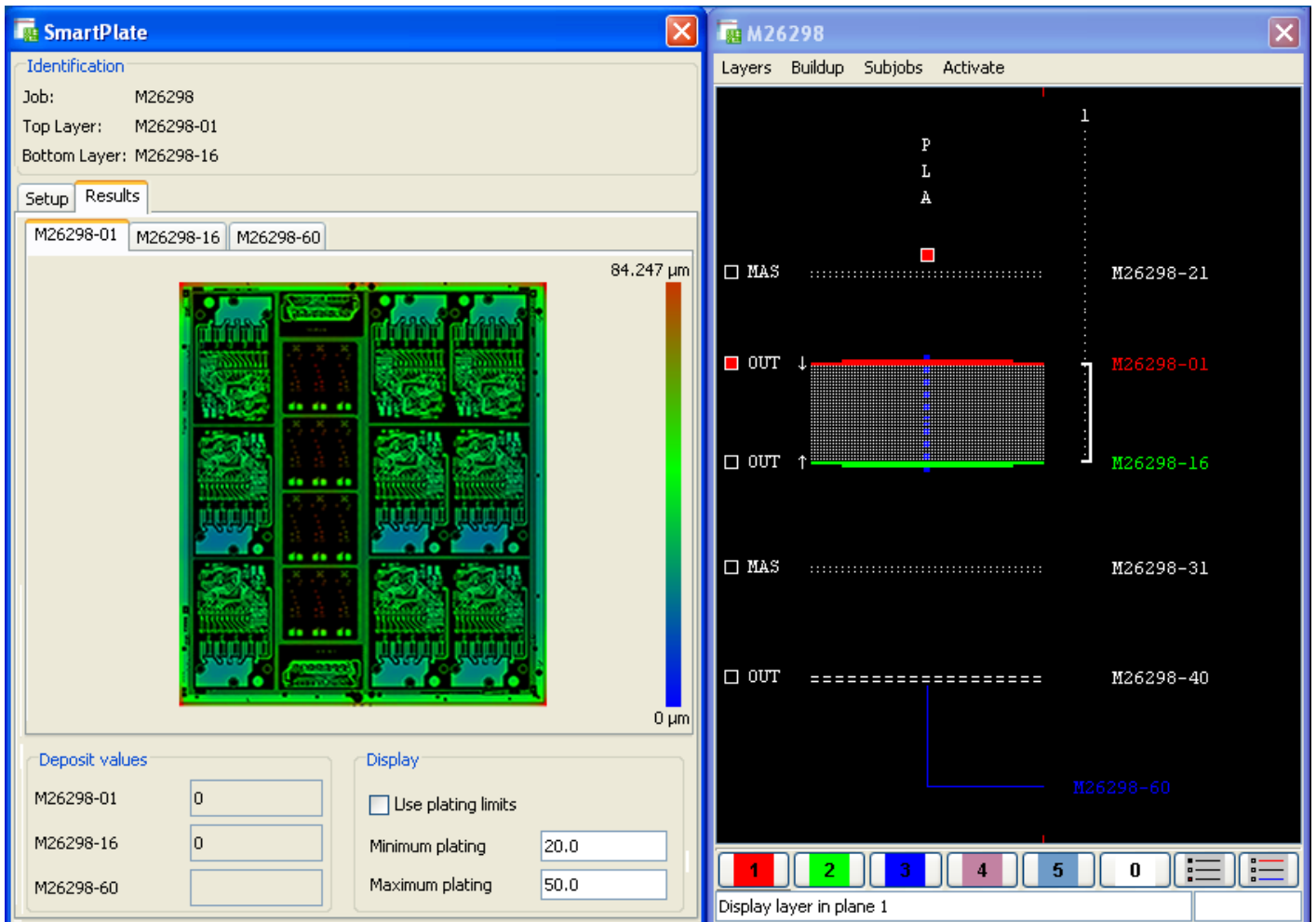


## SmartPlate

Innovative Software  
for Reliable Plating



PCBs today have to meet increasingly stringent end-user requirements for electrical performance and long-term reliability. These depend critically on accurate plated copper thickness. For the first time **SmartPlate** takes the trial and error out of plating. State of the art tools model the plating process and provide accurate job by job data predicting copper thicknesses across the board.

- Accurate calculation of copper thicknesses in CAM
- Improved board performance and process yields
- Reduced enterprise and environmental costs

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### What is SmartPlate?

**SmartPlate** embeds advanced electrochemical modelling software developed by plating industry specialists into the PCB CAM environment. The core modelling engine analyses the plating bath geometry and the individual panel layout to predict copper thicknesses across the board. On-screen output

- displays the range of predicted thicknesses across the panel
- highlights critical holes for further action
- shows clearly the relationship between test coupons and the finished circuits

Detailed measurement tests show that **SmartPlate's** predictive accuracy is better than 85%.

**SmartPlate** is CAM-independent working with both UCAM and Frontline Genesis.

The **SmartPlate** workflow is straightforward. Load your plating line chemistry, jig configuration and bath geometry once into the **SmartPlate** Modelling Engine. For each job specify the job parameters on the **SmartPlate** Main Station, then upload the panel data into the engine in DPF or ODB++ format. The Modelling Engine performs the analysis and delivers the data in tabular and graphic form either to the Main Station or to a SmartPlate viewer.

The standard configuration includes 3 **SmartPlate** viewers so that the data can be viewed in the Cam area, in production planning and in the plating shop or process control laboratory.

### Why use SmartPlate?

End-users need accurate plating to ensure board performance and long-term reliability especially for impedance-controlled designs. Denser design technologies demand increasingly strict tolerances, and these are closely checked by the end-users.

Plating accuracy depends on complex variables within the electrochemical process as well as the individual board geometries. Historically these have been controlled empirically by the plating engineer and by detailed measurements taken on test and production boards. **SmartPlate** eliminates the guesswork and reduces the number of destructive tests required by modelling the total process quickly and accurately.

### SmartPlate delivers

- consistent quality and customer confidence, generating more repeat business
- higher throughput as fewer set-up tests are required
- lower enterprise and environmental costs
  - plating scrap and reloads are reduced
  - fewer trial panels and destructive tests are needed
  - eliminating overplating cuts chemical and electricity costs

### Rent SmartPlate

Rent **SmartPlate** software and make the savings before you pay the rental. Ask your local Ucamco sales channel for details.

### Elsyca & Ucamco

Smartplate is a joined development of Elsyca & Ucamco

Elsyca is an innovative Belgian company specialising in advanced electrochemical modelling and the optimisation of electrochemical processes across a wide range of industrial applications. Their intelligent solutions deliver higher productivity, enhanced product quality, reduced costs and ecological gains to the whole electrochemical industry.

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Ucamco delivers pre-CAM and CAM software, the Smart range of machine front-end and job viewing software, as well as related services to the PCB industry.