

## PRESS RELEASE

### **SmartPlate software takes the guesswork out of PCB plating.**

PCB front-end engineering specialists Ucamco have teamed up with electroplating simulation & optimisation experts Elsyca to develop the CAM-independent SmartPlate program which predicts plating layer thicknesses across a PCB and in the plated drill holes to an accuracy better than 85%. Better controlled plating improves the electronic performance and long-term reliability of the PCB, as well as cutting production and environmental costs.

Board designers are demanding increasingly strict tolerances on plated copper thicknesses for HDI and impedance-controlled PCBs. For the fabricator plating accuracy depends on complex variables within the electrochemical process as well as the individual board geometries. Today these are controlled empirically by the plating engineer and confirmed by trial and error and repeated, mostly destructive, measurements on test and production boards.

SmartPlate eliminates the guesswork by modelling the total electroplating process quickly and accurately. The SmartPlate software takes the board data from Ucamco's UCAM or from Frontline's Genesis or other CAM software and loads it into Elsyca's modelling core. The modelling engine analyses the plating cell geometry and the individual board layout to predict the copper thicknesses across the board and the trough holes. The results are displayed on-screen using color-shaded graphics. Red highlights critical areas and critical holes where adjustments need to be made. Extensive field-trials have shown that SmartPlate achieves an accuracy in excess of 85%.

Karel Tavernier, Managing Director of Ucamco, highlights the benefits: "The end-user can be confident that the boards delivered will meet his tightest performance tolerances. For the fabricator SmartPlate delivers extra throughput and lower costs. The program reduces the need for trial runs and destructive testing. It eliminates board rejects due to over- or under-plating. Fewer re-makes and less over-plating cut chemical and electricity usage. As well as lowering enterprise costs this can significantly reduce the environmental impact of the plating process."

Karel Tavernier continues: "In the current economic climate investment budgets are very tight. This is a breakthrough product for PCB fabricators which will not be in their planning budgets. To give them the possibility to make savings before spending cash, we are offering SmartPlate on an open-ended rental basis."

Luc Wanten, CEO of Elsyca, adds: "In an industry of constant change and intense competition, we are always looking at developing next-generation solutions that set our customers ahead of the field; our unique numerical modelling and electrochemical simulation technology is fundamental in achieving this. The dedicated simulation tool SmartPlate brings PCB plating to such level of accuracy and process control that is a must for each PCB manufacturer to stay ahead of competition."

### **About Ucamco**

UCAMCO is a market leader in the design and manufacturing of PCB CAM and laser photoplotting systems with more than 25 years continuous experience developing, supplying and supporting leading-edge front-end tooling solutions for the global PCB industry.

### **About Elsyca**

Elsyca, a Belgian based company, develops and markets a unique portfolio of engineering services, software and hardware solutions analyzing and optimizing electrochemical process performance for the Electronics industry as well as the Surface Finishing and Corrosion Protection industries. Elsyca's core is a unique state-of-the-art electrochemical simulation platform, combined with expert electrochemical knowledge and experience.

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