### **Semiconductors Can't Rely on Semi-Accuracy!**

## **On-Line Chemical Monitoring System** for Copper Electrodeposition



The QUALI-LINE<sup>®</sup> QLC-7500 is the latest generation of ECI's On-Line, Chemical Monitoring Systems (CMS). QLC-7500 was designed to provide analysis capabilities for Front-End plating applications in R&D and high volume manufacturing fabs. The analytical techniques incorporated in QLC-7500 provide complete chemical metrology solutions to the tightest specifications necessary for 32nm nodes and beyond.

ECI's 20+ years of experience and leadership in plating bath analysis are captured in the new design.

QLC-7500 incorporates CVS *Express*<sup>™</sup>, other non-reagent electrochemical techniques, and spectroscopy to meet the stringent requirements of accuracy and reproducibility while minimizing Cost of Ownership. This combination allows for reduction of chemical reagents drastically decreases maintenance and waste generation while increasing overall system efficiency and reliability.

QLC-7500's software platform introduces new analytical techniques, improved algorithms, and extended reporting capabilities.

QLC-7500 features seamless integration with plating tool and an application library containing over 200 Copper Chemistries.

# QUALI-LINE<sup>®</sup> QLC-7500







We Keep The Chemistry Right.

# **QUALI-LINE QLC-7500**

# Unparalleled precision and low cost of ownership... that's the QLC-7500

### Features & Benefits

#### Organic: Accelerator, Suppressor and Leveler Analysis

- Accuracy +/-5% or better
- Repeatability +/-4% or better

#### Inorganic: Copper, Chloride and Acid Analysis

- Accuracy +/-3% or better
- Repeatability +/-2% or better
- · Results are validated with chemical standards so accuracy is assured
- Automatic calibration Non-Reagent analysis for Cu and Acid to reduce CoO, waste and maintenance costs
- · Express diagnostics of Bath abnormalities such as overdose, dilution, evaporation, contamination
- · Reduction of sample volume
- DCA<sup>™</sup> Dual Component Analysis patented technique for combined analysis of 2 organic components in 1 step.
- One system capable of analyzing up to 4 plating tools plus 1 manual sample
- · The largest variety of analytical procedures ever offered
- · Rapid development for new chemistries
- Full control of temperature, mixing procedures and more
- · Closed-loop communication with major tool manufacturers
- Small footprint

#### **Software Platform**

- · Graphical User Interface more data viewable on the screen; fast and easy
- · Preventive Maintenance Tracking module for increased uptime and reliability
- Online Statistics and control
- · Flexible determination of species and techniques
- Multi Database support
- · User friendly SPC and Trend analysis with Smart Alarms configurations
- Multi-language Help

#### **Options**

- NowPak® reagent delivery system
- FM-4910 compliant closure material
- · Automated chemical dosing system



### **Worldwide Distribution & Support Available**

For additional information, call or write: ECI TECHNOLOGY, INC. 60 Gordon Drive, Totowa, NJ 07512 U.S.A. Tel: 973•890•1114 Fax: 973•890•1118 Email: info@ecitechnology.com Web site: www.ecitechnology.com Copyright 2011, ECI Technology, ALL RIGHTS RESERVED





