



THE AMERICAN ASSOCIATION FOR  
LABORATORY ACCREDITATION

## ACCREDITED LABORATORY

A2LA has accredited

**BALAZS ANALYTICAL SERVICES**

**Fremont, CA**

for technical competence in the field of

**Chemical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated 18 June 2005*).



Presented this 10<sup>th</sup> day of July 2008.

A handwritten signature in cursive script, appearing to read "Peter Abney".

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President

For the Accreditation Council

Certificate Number 1439.01

Valid to June 30, 2010

For the tests or types of tests to which this accreditation applies,  
please refer to the laboratory's Chemical Scope of Accreditation.

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

BALAZS ANALYTICAL SERVICES  
AIR LIQUIDE ELECTRONICS US LP  
46409 Landing Parkway  
Fremont, CA 94538  
Steven Jones Phone: 510 624 4001

CHEMICAL

Valid To: June 30, 2010

Certificate Number: 1439.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following types of tests on chemicals and air analysis, ultra pure water, and wafer:

TEST DESCRIPTION

TEST METHOD

Bacterial Examination of Water

Cultured Bacteria in Water	BAL-82013-SOP
EPI Fluorescence Bacteria – Direct Count	BAL-82011-SOP

Determination of Boron and/or Phosphorous in SiO<sub>2</sub> (BPSG, BSG, PSG Films) by ICP-OES

Determination of Boron and/or Phosphorous in SiO <sub>2</sub> (BPSG, BSG, PSG Films) by ICP-OES	BAL-82700-SOP
Wafer Mapping for BPSG, PSG, BSG Films	BAL-82705-SOP

Determination of Particles

Determination of Optical Particle Counts in UPW	BAL-82017-SOP
Determination of Particles by SEM-DCM	BAL-82012-SOP

Determination of Phosphorous in SiO<sub>2</sub> (BPSG and PSG Films) by Colorimetry

Determination of Phosphorous in SiO <sub>2</sub> (BPSG and PSG Films) by Colorimetry	BAL-82704-SOP
Wafer Mapping for BPSG, PSG, BSG Films	BAL-82705-SOP

Determination of Trace Anions & Cations

Anions and Ammonium in Air and Inert Gases	BAL-82005-SOP
Determination of Residue in DIW	BAL-82018-SOP
Determination of Trace Anions & Cations in UPW by Ion Chromatography	BAL-82008-SOP
IC Analysis of Amines in Cleanroom Air	BAL-82007-SOP
IC Analysis of Water for Organic Acids and Fluoride	BAL-82006-SOP
UPW and Chemical Extractable Compounds	BAL-82001-SOP

Determination of Trace Elements on Wafers by VPD ICP-MS or GFAA

Quantitative Analysis of Trace Elements on Silicon Wafers by VPD	BAL-82714-SOP
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<u>TEST DESCRIPTION</u>	<u>TEST METHOD</u>
<u>Determination of Trace Metals in Chemicals</u> Determination of Trace Metals in Chemicals	BAL-82518-SOP
<u>Determination of Trace Metals in Ultra Pure Water (UPW)</u> Measurement of TM in UPW by ICP-MS Measurement of Trace Metals in UPW by High Resolution ICP-MS	BAL-82518-SOP BAL-82519-SOP
<u>Non-Routine Analysis</u> Guidance for Conducting R&D and Non-Routine Analysis Non-Routine Analysis of Solid Materials by SARIS	BAL-82400-SOP BAL-82522-SOP
<u>On-site Sampling</u> Elemental Analysis & Composition in Solids by LA-ICPMS Water Sampling Sampling of Liquid Processing Chemicals	BAL-82522-SOP BAL-82010-SOP BAL-82513-SOP
<u>Organic Analysis by Thermal Desorption (TD) GC-MS</u> GC-MS Identification of Organics on Wafers Off-Line Outgassing by GC-MS Organic Contaminants in Air and Inert Gases Outgassing by TD-GC-MS	BAL-82802-SOP BAL-82808-SOP BAL-82803-SOP BAL-82805-SOP
<u>Solvent Assays by GC or GC-MS</u> Area % Assay for Solvents or Mixtures by Gas Chromatography GC-MS Identification of Organics on Wafer, ASTM "F-1982-99, Method B - Non-Breaking method" Qualitative Analysis of Liquid Samples by GC-MS Quantitative Analysis of Solvent Mixtures by GC-TCD Weight % Semi-Volatile Organics in Water	BAL-82804-SOP BAL-82811-SOP BAL-82809-SOP BAL-82807-SOP BAL-82810-SOP
<u>Spectroscopy Analysis</u> Operation of the BioRad FTS 6000 FTIR Spectrophotometer Operation of the PE Lambda 5 UV-VISP Spectrophotometer Operation of the Renishaw Raman Spectrometer	BAL-82818-SOP BAL-82817-SOP BAL-82816-SOP
<u>Thermal Analysis</u> Differential Scanning Calorimetry (DSC-7) Thermogravimetric Analysis (TGA-7) Thermomechanical Analysis (TMA-7)	BAL-82815-SOP BAL-82816-SOP BAL-82814-SOP
<u>Wet Chemistry</u> City Water Analysis (pH) Determination of Dissolved Silica in UPW by Colorimetry Determination of Total Oxidizable Carbon (TOC) in UPW	BAL-82014-SOP BAL-82015-SOP BAL-82004-SOP