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NOTICE: Starting with the November 2001 (1101) publishing cycle, a distinction is being made between Standards that have subordinate document designation numbers and require a parent Standard (i.e., SEMI E1.1, which requires SEMI E1), and Standards that have subordinate document designation numbers but do not require a parent Standard (i.e., SEMI E1.9). Documents that require parent Standards are indented under their parent Standard. Documents that do not require parent Standards are not indented. The last two or four digits of the Document designation denote the year, or the month and year, when the latest revisions were made. (e.g., SEMI F6-92 was published in 1992, SEMI E1.9-1106 was published November 2006).

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Test Method for Evaluating the Electromagnetic Susceptibility of Thermal Mass Flow Controllers

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Provisional Specification for Polymer Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

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Test Method for Determination of Moisture Dry-Down Characteristics of Surface-Mounted and Conventional Gas Delivery Systems By Atmospheric Pressure Ionization Mass Spectrometry (APIMS)

SEMI F59-0302 (Reapproved 1108)

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Guide for Ultrapure Water System Used in Semiconductor Processing

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Test Method for Determining Mass Flow Controller Performance Characteristics for Ambient and Gas Temperature Effects

SEMI F63-0211

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SEMI F64-0701 (Reapproved 1111)

Test Method for Determining Pressure Effects on Indicated and Actual Flow for Mass Flow Controllers

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SEMI F67-1101 (Reapproved 1108)

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SEMI F73-0309

Test Method for Scanning Electron Microscopy (SEM) Evaluation of Wetted Surface Condition of Stainless Steel Components

SEMI F74-1103 (Reapproved 0710)

Test Method for the Performance and Evaluation of Metal Seal Designs for Use in Gas Delivery Systems

SEMI F75-1102 (Reapproved 0309)

Guide for Quality Monitoring of Ultrapure Water Used in Semiconductor Manufacturing

SEMI F76-0303 (Reapproved 1110)

Test Method for Evaluation of Particle Contribution from Gas System Components Exposed to Corrosive Gas

SEMI F77-0703 (Reapproved 0310)

Test Method for Electrochemical Critical Pitting Temperature Testing of Alloy Surfaces Used in Corrosive Gas Systems

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Practice for Gas Tungsten Arc (GTA) Welding of Fluid Distribution Systems in Semiconductor Manufacturing Applications

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Guide for Gas Compatibility with Silicon Used in Gas Distribution Components

SEMI F80-0309

Test Method for Determination of Gas Change/Purge Efficiency of Gas Delivery System

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Specification for Visual Inspection and Acceptance of Gas Tungsten Arc (GTA) Welds in Fluid Distribution Systems in Semiconductor Manufacturing Applications

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Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.125 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

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Specification for Dimension of One Port Components for 1.125 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

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Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.125 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

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Specification for Dimension of Three Port Components (Except MFC/MFM) for 1.125 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F88-0304^E

Specification for Dimension of Standard Size Mass Flow Controllers and Mass Flow Meters for 1.5 Inch Type Surface Mount Gas Distribution Systems

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Specification for Dimension of Compact Size Mass Flow Controllers and Mass Flow Meters for 1.5 Inch Type Surface Mount Gas Distribution Systems

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SEMI F98-0305 (Reapproved 1111)

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Guide for Selecting Specifications for Dimension of Components for Surface Mount Gas Distribution

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Particle Test Method Guidelines for Evaluation of Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

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Guide for Integration of Liquid Chemical Piping Components for Semiconductor, Flat Panel Display, and Solar Cell Manufacturing Applications

SEMI S2-0310d

Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment

SEMI S9-0307 (Withdrawn 0211)

Guide to Electrical Design Verification Tests for Semiconductor Manufacturing Equipment that Have Been Moved to SEMI S22

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Flat Panel Display

SEMI D3-91 (Reapproved 0709)

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SEMI D15-1296 (Reapproved 0703)

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Guide for Cost of Equipment Ownership (CEO) Calculation for FPD Equipment

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Specification for Glass Substrates Used to Manufacture Flat Panel Displays

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Test Method for Heat Resistance in Flat Panel Display (FPD) Color Filters

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Test Method for Light Resistance in Flat Panel Display (FPD) Color Filters

SEMI D31-1102

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SEMI D32-0303 (Reapproved 0709)

Specification for Improved Information Management for Glass FPD Substrates Through Orientation Corner Unification

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SEMI D34-0710

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Test Method for Measurement of Cold Cathode Fluorescent Lamp (CCFL) Characteristics

SEMI D36-0306

Terminology for LCD Backlight Unit

SEMI D38-0211

Guide for Quality Area of LCD Masks

SEMI D39-0704 (Reapproved 0710)

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SEMI D40-0704

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SEMI D41-0305

Measurement Method of SEMI Mura in FPD Image Quality Inspection

SEMI D42-0308

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SEMI D43-1105

Test Method for Mechanical Vibration in AMHS for FPD Manufacturing

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Specification for Reference Position of Single Substrate for Handling Off On Tool

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Specification of Single Substrate Orientation for Loading/Unloading into/from Equipment to Specify ID Reader Position

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Test Method for Surface Hardness of FPD Polarizing Film

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Specification for Handshake Method of Single Substrate for Handling Off/On Tool in FPD Production

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Specification for Liquid Crystal Display (LCD) Pellicles

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Specification for Substrate Management of FPD Production (SMS-FPD)

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Guide for Evaluation Method of Color Performance for Color Filter Assemblies (Evaluation Method of Color Purity)

SEMI D56-0310

Measurement Method for Ambient Contrast of Liquid Crystal Displays

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Measurement Method for Depolarization Effect of FPD Color Filter

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SEMI T8-1110

Specification for Marking of Glass Flat Panel Display Substrates with a Two-Dimensional Matrix Code Symbol

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SEMI C3-0699

Specifications for Gases

SEMI C3.2-0611

Specification for Arsine (AsH_3) in Cylinders, 99.94% Quality

SEMI C3.12-1109

Specification for Ammonia (NH_3) in Cylinders, 99.998% Quality

SEMI C3.20-0309

Specification for Helium (He), in Cylinders, 99.9995%

SEMI C3.24-0309

Specification for Sulfur Hexafluoride (SF_6) in Cylinders, 99.97% Quality

SEMI C3.26-0301

Specification for Tungsten Hexafluoride (WF_6) in Cylinders, 99.8% Quality

SEMI C3.27-1102 (Reapproved 1011)

Specification for Boron Trifluoride (BF_3) in Cylinders, 99.0% Quality

SEMI C3.32-1109

Specification for Chlorine (Cl_2), 99.996% Quality

SEMI C3.33-92 (Reapproved 0303)

Standard for Boron Trichloride (BCl_3) (Provisional)

SEMI C3.34-1109

Specification for Disilane (Si_2H_6) in Cylinders, 97% Quality

SEMI C3.35-1109^E

Specification for Hydrogen Chloride (HCl), 99.997% Quality

SEMI C3.37-1109

Specification for Hexafluoroethane (C_2F_6), 99.97% Quality

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Specification for Nitrogen Trifluoride (NF_3), 99.98% Quality

SEMI C3.40-1011

Specifications for Carbon Tetrafluoride (CF_4), 99.997% Quality

SEMI C3.47-1011

Specification for Hydrogen Bromide (HBr), 99.98% Quality

SEMI C3.51-1101

Specification for Boron Trichloride (BCl_3), 99.98% Quality

SEMI C3.52-0200

Standard for Tungsten Hexafluoride, 99.996% Quality

SEMI C3.54-0200^E (Withdrawn 1011)

Gas Purity Guideline for Silane (SiH_4)

SEMI C3.55-1011

Specification for Silane (SiH_4), Bulk, 99.994% Quality

SEMI C3.56-0600

Specification for Diborane Mixtures

SEMI C3.57-0600

Specification for Carbon Dioxide, CO_2 , Electronic Grade in Cylinders

SEMI C3.58-1011

Specification for Octafluorocyclobutane, C_4F_8 , Electronic Grade in Cylinders, 99.999% Quality

SEMI C3.6-0710

Specification for Phosphine (PH_3) in Cylinders, 99.98% Quality

SEMI C6.2-93 (Reapproved 1111)

Particle Specification for Grade 20/0.02 Oxygen Delivered as Pipeline Gas

SEMI C6.3-89 (Reapproved 1111)

Particle Specification for Grade 20/0.2 Hydrogen (H_2) Delivered as Pipeline Gas

SEMI C6.4-90 (Reapproved 1111)

Particle Specification for Grade 20/0.02 Nitrogen (N_2) and Argon (Ar) Delivered as Pipeline Gas

SEMI C6.5-90 (Reapproved 1111)

Particle Specification for Grade 10/0.2 Nitrogen (N_2) and Argon (Ar) Delivered as Pipeline Gas

SEMI C6.6-90 (Reapproved 1111)

Particle Specification for Grade 10/0.1 Nitrogen (N_2) and Argon (Ar) Delivered as Pipeline Gas

SEMI C6.7-93 (Reapproved 1111)

Particle Specification for Grade 10/0.2 Nitrogen in High Pressure Gas Cylinders

SEMI C9.1-93 (Reapproved 1102)

Guide for Analysis of Uncertainties in Gravimetrically Prepared Gas Mixtures

SEMI C10-1109

Guide for Determination of Method Detection Limits

SEMI C14-95 (Reapproved 0309)

Test Method for Particle Shedding Performance of 25 cm Gas Filter Cartridges

SEMI C15-95 (Reapproved 1102)

Test Method for ppm and ppb Humidity Standards

SEMI C52-0301

Specification for the Shelf Life of a Specialty Gas

SEMI C54-1103 (Reapproved 0211)

Specification and Guidelines for Oxygen

SEMI C55-1104 (Reapproved 0211)

Specification for Liquid Carbon Dioxide (CO₂) Used in Near Critical, Critical and Supercritical Applications, ≥99.99% Quality

SEMI C56-0305 (Reapproved 0211)

Specifications and Guidelines for Dichlorosilane (SiH₂Cl₂)

SEMI C57-0305 (Reapproved 0211)

Specifications and Guidelines for Argon

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SEMI C59-1104 (Reapproved 0211)

Specification and Guidelines for Nitrogen

SEMI C60-0305 (Reapproved 0211)

Specifications and Guidelines for Nitrous Oxide (N₂O)

SEMI C70-0611

Specifications for Tungsten Hexafluoride (WF₆)

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SEMI M1-1111

Specifications for Polished Single Crystal Silicon Wafers

SEMI M6-1108

Specification for Silicon Wafers for Use as Photovoltaic Solar Cells

SEMI M8-0307

Specification for Polished Monocrystalline Silicon Test Wafers

SEMI M9-0811

Specifications for Polished Monocrystalline Gallium Arsenide Wafers

SEMI M9.1-96^E (Reapproved 0308)

Standard for Round 50.8 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.2-96^E (Reapproved 0308)

Standard for Round 76.2 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.3-89

Standard for Round 2 Inch Diameter Polished Monocrystalline Gallium Arsenide Slices for Optoelectric Applications

SEMI M9.4-89

Standard for Round 3 Inch Diameter Polished Monocrystalline Gallium Arsenide Slices for Optoelectric Applications

SEMI M9.5-96^E (Reapproved 0308)

Standard for Round 100 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.6-95^E (Reapproved 0308)

Standard for Round 125 mm Diameter Polished Monocrystalline Gallium Arsenide Wafers

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Specification for Round 150 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

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Specification for Round 200 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

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Standard Nomenclature for Identification of Structures and Features Seen on Gallium Arsenide Wafers

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Specification for Serial Alphanumeric Marking of the Front Surface of Wafers

SEMI M13-0706 (Reapproved 1011)

Specification for Alphanumeric Marking of Silicon Wafers

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Specification for Ion Implantation and Activation Process for Semi-Insulating Gallium Arsenide Single Crystals

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Polished Wafer Defect Limits Table for Semi-Insulating Gallium Arsenide Wafers

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Specification for Polycrystalline Silicon

SEMI M17-1110

Guide for a Universal Wafer Grid

SEMI M18-1107

Guide for Developing Specification Forms for Order Entry of Silicon Wafers

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Specification for Electrical Properties of Bulk Gallium Arsenide Single Crystal Substrates

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Practice for Establishing a Wafer Coordinate System

SEMI M21-1110

Guide for Assigning Addresses to Rectangular Elements in a Cartesian Array

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Specification for Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.1-0211

Specification for Round 50 mm Diameter Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.2-0211

Specification for Round 76.2 mm (3 inch) Diameter Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.3-0600 (Withdrawn 0811)

Standard for Rectangular Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.4-0211

Specification for Round 100 mm Polished Monocrystalline Indium Phosphide Wafers for Electronic and Optoelectronic Device Applications (Dove-Tail Type)

SEMI M23.5-0211

Specification for Round 100 mm Polished Monocrystalline Indium Phosphide Wafers for Electronic and Optoelectronic Device Applications (V-Groove Option)

SEMI M23.6-0703 (Reapproved 0211)

Specification for Round 150 mm Polished Monocrystalline Indium Phosphide Wafers (Notched)

SEMI M24-0307

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SEMI M26-0304 (Reapproved 1110)

Guide for the Re-Use of 100, 125, 150, and 200 mm Wafer Shipping Boxes Used to Transport Wafers

SEMI M29-1296 (Reapproved 1110)

Specification for 300 mm Shipping Box

SEMI M31-0708

Mechanical Specification for Front-Opening Shipping Box Used to Transport and Ship 300 mm Wafers

SEMI M32-0307

Guide to Statistical Specifications

SEMI M34-0299 (Withdrawn 0211)

Guide for Specifying SIMOX Wafers

SEMI M35-1107

Guide for Developing Specifications for Silicon Wafer Surface Features Detected By Automated Inspection

SEMI M36-0699

Test Method for Measuring Etch Pit Density (EPD) in Low Dislocation Density Gallium Arsenide Wafers

SEMI M37-0699

Test Method for Measuring Etch Pit Density (EPD) in Low Dislocation Density Indium Phosphide Wafers

SEMI M38-0307

Specification for Polished Reclaimed Silicon Wafers

SEMI M39-0999

Test Method for Measuring Resistivity and Hall Coefficient and Determining Hall Mobility in Semi-Insulating GaAs Single Crystals

SEMI M40-1109

Guide for Measurement of Surface Roughness of Planar Surfaces on Silicon Wafer

SEMI M41-0707

Specification of Silicon-on-Insulator (SOI) for Power Device/ICS

SEMI M42-0211

Specification for Compound Semiconductor Epitaxial Wafers

SEMI M43-1109

Guide for Reporting Wafer Nanotopography

SEMI M44-0305 (Reapproved 0211)

Guide to Conversion Factors for Interstitial Oxygen in Silicon

SEMI M45-1110

Specification for 300 mm Wafer Shipping System

SEMI M46-1101^E (Reapproved 0309)

Test Method for Measuring Carrier Concentrations in Epitaxial Layer Structures by ECV Profiling

SEMI M49-1011

Guide for Specifying Geometry Measurement Systems for Silicon Wafers for the 130 nm to 22 nm Technology Generations

SEMI M50-0310

Test Methods for Determining Capture Rate and False Count Rate for Surface Scanning Inspection Systems by the Overlay Method

SEMI M51-0303

Test Method for Characterizing Silicon Wafer by Gate Oxide Integrity

SEMI M52-0307

Guide for Specifying Scanning Surface Inspection Systems for Silicon Wafers for the 130 nm, 90 nm, 65 nm, and 45 nm Technology Generations

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Practice for Calibrating Scanning Surface Inspection Systems Using Certified Depositions of Monodisperse Reference Spheres on Unpatterned Semiconductor Wafer Surfaces

SEMI M54-0304 (Reapproved 0611)

Guide for Semi-Insulating (SI) GaAs Material Parameters

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SEMI M55.1-0308

Specification for 50.8 mm Round Polished Monocrystalline 4H and 6H Silicon Carbide Wafers

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Specification for 76.2 mm Round Polished Monocrystalline 4H and 6H Silicon Carbide Wafers

SEMI M56-0307

Practice for Determining Cost Components for Equipment Due to Measurement Variability and Bias

SEMI M57-1011

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Test Method for Evaluating DMA Based Particle Deposition Systems and Processes

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Terminology for Silicon Technology

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Test Method for Time Dependent Dielectric Breakdown Characteristics of SiO₂ Films for Si Wafer Evaluation

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Specification for Silicon Epitaxial Wafers with Buried Layers

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Specifications for Silicon Epitaxial Wafers

SEMI M63-0306

Guideline: Test Method for Measuring the Al Fraction in AlGaAs on GaAs Substrates by High Resolution X-Ray Diffraction

SEMI M64-0306

Test Method for the EI2 Deep Donor Concentration in Semi-Insulating (SI) Gallium Arsenide Single Crystals by Infrared Absorption Spectroscopy

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Specifications for Sapphire Substrates to Use for Compound Semiconductor Epitaxial Wafers

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Test Method to Extract Effective Work Function in Oxide and High-K Gate Stacks Using the MIS Flat Band Voltage-Insulator Thickness Technique

SEMI M67-1109

Practice for Determining Wafer Near-Edge Geometry from a Measured Thickness Data Array Using the ESFQR, ESFQD and ESBIR Metrics

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Practice for Determining Wafer Near-Edge Geometry from a Measured Height Data Array Using a Curvature Metric, Zdd

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Practice for Determining Wafer Near-Edge Geometry Using Partial Wafer Site Flatness

SEMI M71-0310

Specification for Silicon-on-Insulator (SOI) Wafers for CMOS LSI

SEMI M73-0309

Test Method for Extracting Relevant Characteristics from Measured Wafer Edge Profiles

SEMI M74-1108

Specification for 450 mm Diameter Mechanical Handling Polished Wafers

SEMI M75-0309

Specifications for Polished Monocrystalline Gallium Antimonide Wafers

SEMI M76-0710

Specification for Developmental 450 mm Diameter Polished Single Crystal Silicon Wafers

SEMI M77-1110

Practice for Determining Wafer Near-edge Geometry Using Roll-Off Amount, ROA

SEMI M78-1110

Guide for Determining Nanotopography of Unpatterned Silicon Wafers for the 130 nm to 22 nm Generations in High Volume Manufacturing

SEMI M79-0211

Specification for Round 100 mm Polished Monocrystalline Germanium Wafers for Solar Cell Applications

SEMI M80-1111

Mechanical Specification for Front-Opening Shipping Box Used to Transport and Ship 450 mm Wafers

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Guide to Defects Found on Monocrystalline Silicon Carbide Substrates

MEMS

SEMI MS1-0307

Guide to Specifying Wafer-Wafer Bonding
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Test Method for Step-Height Measurements of
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Terminology for MEMS Technology

SEMI MS4-1109

Standard Test Method for Young's Modulus
Measurements of Thin, Reflecting Films Based on
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SEMI MS5-1211

Test Method for Wafer Bond Strength
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SEMI MS6-0308

Guide for Design and Materials for Interfacing
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SEMI MS7-0708

Specification for Microfluidic Interfaces to
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SEMI MS8-0309

Guide to Evaluating Hermeticity of MEMS
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SEMI MS9-0611

Specification for High Density Permanent
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Microlithography

SEMI E100-1104 (Reapproved 0710)

Specification for a Reticle SMIF Pod (RSP) Used to Transport and Store 6 Inch or 230 mm Reticles

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Mechanical Specification for a 150 mm Reticle SMIF Pod (RSP150) Used to Transport and Store a 6 Inch Reticle

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Mechanical Specification for a 150 mm Multiple Reticle SMIF Pod (MRSP150) Used to Transport and Store Multiple 6 Inch Reticles

SEMI P1-0708^E

Specification for Hard Surface Photomask Substrates

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Specification for Chrome Thin Films for Hard Surface Photomasks

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Test Method for Interstitial Oxygen Content of Silicon by Infrared Absorption with Short Baseline

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Test Method for Oxygen Precipitation Characteristics of Silicon Wafers by Measurement of Interstitial Oxygen Reduction

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Test Method for Measuring Boron Contamination in Heavily Doped N-Type Silicon Substrates by Secondary Ion Mass Spectrometry

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Practice for Evaluation of Granular Polysilicon by Melted-Zoner Spectroscopies

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Test Method for Evaluating Gate Oxide Integrity by Voltage Ramp Technique

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Test Method for Counting Preferentially Etched or Decorated Surface Defects in Silicon Wafers

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Test Methods for Analyzing Organic Contaminants on Silicon Wafer Surfaces by Thermal Desorption Gas Chromatography

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Test Method for Measuring Nitrogen Concentration in Silicon Substrates by Secondary Ion Mass Spectrometry

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