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Standards are numbered sequentially as they are developed and approved in accordance with the formal balloting requirements. the last two or four digits of the document designation denote the year or the month and year when the latest revisions were made. Revised sections of existing documents are noted by a side-bar in the column beside the text.

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 now indented under their parent Standards. Documents that do not require parent Standards are not indented, and are now available individually.

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SEMI F54-1000 (Reapproved 1110)
Test Method for Measuring the Counting Efficiency of Condensation Nucleus Counters

SEMI F55-0600 (Reapproved 0307)
Test Method for Determining the Corrosion Resistance of Mass Flow Controllers

SEMI F56-0600 (Reapproved 0307)
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SEMI F57-0301
Provisional Specification for Polymer Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

SEMI F58-0708
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SEMI F59-0302 (Reapproved 1108)
Test Method for Determination of Filter or Gas System Flow Pressure Drop Curves

SEMI F60-0306
Test Method for ESCA Evaluation of Surface Composition of Wetted Surfaces of Passivated 316L Stainless Steel Components

SEMI F61-0301 (Reapproved 0309)
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SEMI F62-0701 (Reapproved 0307)
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SEMI F63-0309
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SEMI F64-0701 (Reapproved 0307)
Test Method for Determining Pressure Effects on Indicated and Actual Flow for Mass Flow Controllers

SEMI F65-1101
Dimensional Specification for Mounting Bases of Diaphragm Valves Used with Metric PFA Tubes

SEMI F66-1101
Specification for Port Marking and Symbol of Stainless Steel Vessels for Liquid Chemicals

SEMI F67-1101 (Reapproved 1108)
Test Method for Determining Inert Gas Purifier Capacity

SEMI F68-1101 (Reapproved 1108)
Test Method for Determining Purifier Efficiency

SEMI F69-0708
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SEMI F70-0302
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SEMI F71-1102
Test Method for Temperature Cycle of Gas Delivery System

SEMI F72-0309
Test Method for auger Electron Spectroscopy (AES) Evaluation of Oxide Layer of Wetted Surfaces of Passivated 316L Stainless Steel Components

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)
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SEMI F78-0304
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SEMI F79-0710
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SEMI F80-0309
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SEMI F81-1103
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SEMI F82-0304
Specification for Dimension of Mass Flow Controller/Mass Flow Meter for 1.125 Inch Type Surface Mount Gas Distribution Systems

SEMI F83-0304
Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.125 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F84-0304
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SEMI F85-0304
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SEMI F87-0304
Specification for Dimension of Three 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 Standard Size Mass Flow Controllers and Mass Flow Meters for 1.5 Inch Type Surface Mount Gas Distribution Systems

SEMI F89-0304[E]
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Specification for Dimension of Standard Size Two Port Components (Except MFC/MFM) for 1.5 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F91-0304[E]
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SEMI F92-0304[E]
Specification for Dimension of Compact Size Three Port Components for 1.5 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F93-0304[E]
Specification for Dimension of One Port Components for 1.5 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

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SEMI F94-0304^E
Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.5 Inch Four Fastener Configuration Type Surface Mount Gas Distribution Systems

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SEMI F99-0705
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SEMI F100-0705
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SEMI F101-1105
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SEMI F102-0306
Guide for Selecting Specifications for Dimension of Components for Surface Mount Gas Distribution

SEMI F103-0307
Specification for Size Ranges of Stainless Steel Canisters to Contain Liquid Chemicals

SEMI F104-1107
Particle Test Method Guidelines for Evaluation of Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

SEMI F105-0708
Guide for Metallic Material Compatibility in Gas Distribution Systems

SEMI F106-0308
Test Method for Determination of Leak Integrity of Gas Delivery Systems by Helium Leak Detector

SEMI F107-0309
Guide for Processing Equipment Adapter Plates

SEMI F108-0310
Guide for Integration of Liquid Chemical Piping Components for Semiconductor, Flat Panel Display, and Solar Cell Manufacturing Applications

SEMI S2-0310a
Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment

SEMI S9-0307
Guide to Electrical Design Verification Tests for Semiconductor Manufacturing Equipment that Have Been Moved to SEMI S22

SEMI S22-1110
Safety Guideline for the Electrical Design of Semiconductor Manufacturing Equipment

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Flat Panel Display

SEMI D3-91 (Reapproved 0709)
Quality Area Specification for Flat Panel Display Substrates

SEMI D5-94 (Reapproved 0703)
Standard Size for Flat Panel Display Substrates

SEMI D6-0308
Specification for Liquid Crystal Display (LCD) Mask Substrates

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FPD Glass Substrate Surface Roughness Measurement Method

SEMI D9-0303 (Reapproved 0709)
Terminology for FPD Substrates

SEMI D10-95 (Reapproved 0703)
Test Method for Chemical Durability of Flat Panel Display Glass Substrates

SEMI D11-95 (Reapproved 0709)
Specification for Flat Panel Display Glass Substrate Cassettes

SEMI D12-95 (Reapproved 0703)
Specification for Edge Condition of Flat Panel Display (FPD) Substrates

SEMI D13-0708
Terminology for FPD Color Filter Assemblies

SEMI D15-1296 (Reapproved 0703)
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SEMI D16-0998
Specification for Mechanical Interface Between Flat Panel Display Material Handling System and Tool Port

SEMI D17-0200
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SEMI D18-0299^E
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SEMI D19-0305
Test Method for the Determination of Chemical Resistance of Flat Panel Display Color Filters

SEMI D20-0706
Terminology for FPD Mask Defect

SEMI D21-0706
Terminology for FPD Mask Pattern Accuracy

SEMI D22-1109
Test Method for Determination of Color, Transmittance of FPD Color Filter Assemblies

SEMI D23-0999
Guide for Cost of Equipment Ownership (CEO) Calculation for FPD Equipment

SEMI D24-0200 (Reapproved 0706)
Specification for Glass Substrates Used to Manufacture Flat Panel Displays

SEMI D25-0600^E (Reapproved 0706)
Specification for Flat Panel Display Glass Substrate Shipping Case

SEMI D26-1000
Provisional Specification for Large area Masks for Flat Panel Displays (North America)

SEMI D27-1000
Guide for Flat Panel Display Equipment Communication Interfaces

SEMI D28-1101 (Reapproved 0708)
Specification for Mechanical Interface Between Flat Panel Display Material Handling Equipment and Tool Port, Using Automated Guided Vehicle (AGV), Rail Guided Vehicle (RGV), and Manual Guided Vehicle (MGV)

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SEMI D30-0707
Test Method for Light Resistance in Flat Panel Display (FPD) Color Filters

SEMI D31-1102
Definition of Measurement Index (Semu) for Luminance Mura in FPD Image Quality Inspection

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SEMI D32-0303 (Reapproved 0709)
Specification for Improved Information Management for Glass FPD Substrates Through Orientation Corner Unification

SEMI D33-0703
Measuring Method of Optical Characteristics for Backlight Unit

SEMI D34-0710
Test Method for FPD Polarizing Films

SEMI D35-1103 (Reapproved 0709)
Test Method for Measurement of Cold Cathode Fluorescent Lamp (CCFL) Characteristics

SEMI D36-0306
Terminology for LCD Backlight Unit

SEMI D38-0304
Guide for Quality area of LCD Masks

SEMI D39-0704 (Reapproved 0710)
Specification for Markers on FPD Polarizing Films

SEMI D40-0704
Terminology for FPD Substrate Deflection

SEMI D41-0305
Measurement Method of SEMI Mura in FPD Image Quality Inspection

SEMI D42-0308
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SEMI D43-1105
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SEMI D45-0706
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SEMI D46-0706
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SEMI D49-0707
Specification of Single Substrate Orientation for Loading/Unloading into/from Equipment to Specify ID Reader Position

SEMI D50-0707
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SEMI D51-0709
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SEMI D52-0708^{E}
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SEMI D53-0708
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SEMI D54-0709^{E}
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SEMI D55-0310
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

SEMI D57-0310
Definition of Measurement Index (VCT) for Mura in FPD Image Quality Inspection

SEMI D58-0310
Terminology and Test Pattern for the Color Breakup of Field Sequential Color Display

SEMI D59-0710
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SEMI D60-0710
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SEMI D61-1110
Test Method of Perceptual Angle of OLED Displays

SEMI T8-1110
Specification for Marking of Glass Flat Panel Display Substrates with a Two-Dimensional Matrix Code Symbol

Gases

SEMI C3-0699
Specifications for Gases

SEMI C3.2-0301
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
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

SEMI C3.39-0304
Standard for Nitrogen Trifluoride (NF_3)

SEMI C3.40-1000
Standard for Carbon Tetrafluoride (CF_4), VLSI Grade

SEMI C3.47-1101
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
Gas Purity Guideline for Silane (SiH_4)

SEMI C3.55-0200
Standard for Silane (SiH_4), Bulk

SEMI C3.56-0600
Specification for Diborane Mixtures

SEMI C3.57-0600
Specification for Carbon Dioxide, CO_2, Electronic Grade in Cylinders

SEMI C3.58-0303
Specification for Octafluorocyclobutane, C_4F_8, Electronic Grade in Cylinders

SEMI C3.6-0710
Specification for Phosphine (PH_3) in Cylinders, 99.98% Quality

SEMI C6.2-93 (Reapproved 1102)
Particle Specification for Grade 20/0.02 Oxygen Delivered as Pipeline Gas

SEMI C6.3-89 (Reapproved 0303)
Particle Specification for Grade 20/0.2 Hydrogen (H_2) Delivered as Pipeline Gas

SEMI C6.4-90 (Reapproved 1102)
Particle Specification for Grade 20/0.02 Nitrogen (N_2) and Argon (Ar) Delivered as Pipeline Gas

SEMI C6.5-90 (Reapproved 1102)
Particle Specification for Grade 10/0.2 Nitrogen (N_2) and Argon (Ar) Delivered as Pipeline Gas

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SEMI C6.7-93 (Reapproved 1102)
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 C16-0299 (Withdrawn 1110)
Guide for Precision and Data Reporting Practices

SEMI C52-0301
Specification for the Shelf Life of a Specialty Gas

SEMI C54-1103
Specification and Guidelines for Oxygen

SEMI C55-1104
Specification for Liquid Carbon Dioxide (CO_2) Used in Near Critical, Critical and Supercritical Applications, ≥99.99% Quality

SEMI C56-0305
Specifications and Guidelines for Dichlorosilane (SiH_2Cl_2)

SEMI C57-0305
Specifications and Guidelines for Argon

SEMI C58-0305
Specifications and Guidelines for Hydrogen

SEMI C59-1104
Specification and Guidelines for Nitrogen

SEMI C60-0305
Specifications and Guidelines for Nitrous Oxide (N_2O)

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Materials

SEMI M1-1109
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 M9-0708
Specifications for Polished Monocrystalline Gallium Arsenide Slices

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

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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

SEMI M9.7-0708
Specification for Round 150 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

SEMI M9.8-0306
Specification for Round 200 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

SEMI M10-1296
Standard Nomenclature for Identification of Structures and Features Seen on Gallium Arsenide Wafers

SEMI M12-0706
Specification for Serial Alphanumeric Marking of the Front Surface of Wafers

SEMI M13-0706
Specification for Alphanumeric Marking of Silicon Wafers

SEMI M14-89
Specification for Ion Implantation and Activation Process for Semi-Insulating Gallium Arsenide Single Crystals

SEMI M15-0298
Polished Wafer Defect Limits Table for Semi-Insulating Gallium Arsenide Wafers

SEMI M16-1110
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

SEMI M19-91
Specification for Electrical Properties of Bulk Gallium Arsenide Single Crystal Substrates

SEMI M20-1110
Practice for Establishing a Wafer Coordinate System

SEMI M21-1110
Guide for Assigning Addresses to Rectangular Elements in a Cartesian Array

SEMI M23-0703
Specification for Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.1-0600
Standard for Round 50 mm Diameter Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.2-1000
Standard for Round 3 Inch (76.2 mm) Diameter Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.3-0600
Standard for Rectangular Polished Monocrystalline Indium Phosphide Wafers

SEMI M23.4-0999
Specification for Round 100 mm Polished Monocrystalline Indium Phosphide Wafers for Electronic and Optoelectronic Device Applications (Dove-Tail Type)

SEMI M23.5-1000
Specification for Round 100 mm Polished Monocrystalline Indium Phosphide Wafers for Electronic and Optoelectronic Device Applications (V-Groove Option)

SEMI M23.6-0703
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
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SEMI M34-0299
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 M42-1000
Specification for Compound Semiconductor Epitaxial Wafers

SEMI M43-1109
Guide for Reporting Wafer Nanotopography

SEMI M44-0305
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 M47-0707 (Withdrawn 1110)
Specification for Silicon-on-Insulator (SOI) Wafers for CMOS LSI Applications

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SEMI M48-1101 (Withdrawn 1110)
Guide for Evaluating Chemical-Mechanical Polishing Processes on Films on Unpatterned Silicon Substrates

SEMI M49-1108
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

SEMI M53-0310
Practice for Calibrating Scanning Surface Inspection Systems Using Certified Depositions of Monodisperse Reference Spheres on Unpatterned Semiconductor Wafer Surfaces

SEMI M54-0304
Guide for Semi-Insulating (SI) GaAs Material Parameters

SEMI M55-0308
Specification for Polished Monocrystalline Silicon Carbide Wafers

SEMI M55.1-0308
Specification for 50.8 mm Round Polished Monocrystalline 4h and 6h Silicon Carbide Wafers

SEMI M55.2-0308
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 M57-0706
Guide for Specifying Silicon Annealed Wafers

SEMI M58-1109
Test Method for Evaluating DMA Based Particle Deposition Systems and Processes

SEMI M59-1110
Terminology for Silicon Technology

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Test Method for Time Dependent Dielectric Breakdown Characteristics of Sio_2 Films for Si Wafer Evaluation

SEMI M61-0307
Specification for Silicon Epitaxial Wafers with Buried Layers

SEMI M62-0309
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 El2 Deep Donor Concentration in Semi-Insulting (SI) Gallium Arsenide Single Crystals by Infrared Absorption Spectroscopy

SEMI M65-0306^E2^
Specifications for Sapphire Substrates to Use for Compound Semiconductor Epitaxial Wafers

SEMI M66-0706^E^
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

SEMI M68-1109
Practice for Determining Wafer Near-Edge Geometry from a Measured Height Data Array Using a Curvature Metric, Zdd

SEMI M70-1109
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

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MEMS

SEMI MS1-0307
Guide to Specifying Wafer-Wafer Bonding Alignment Targets

SEMI MS2-1109
Test Method for Step-Height Measurements of Thin Films

SEMI MS3-0307
Terminology for MEMS Technology

SEMI MS4-1109
Standard Test Method for Young's Modulus Measurements of Thin, Reflecting Films Based on the Frequency of Beams in Resonance

SEMI MS5-0310
Test Method for Wafer Bond Strength Measurements Using Micro-Chevron Test Structures

SEMI MS6-0308
Guide for Design and Materials for interfacing Microfluidic Systems

SEMI MS7-0708
Specification for Microfluidic Interfaces to Electronic Device Packages

SEMI MS8-0309
Guide to Evaluating Hermeticity of MEMS Packages

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SEMI E100-1104 (Reapproved 0710)
Specification for a Reticle SMIF Pod (RSP) Used to Transport and Store 6 Inch or 230 mm Reticles

SEMI E111-1106
Mechanical Specification for a 150 mm Reticle SMIF Pod (RSP150) Used to Transport and Store a 6 Inch Reticle

SEMI E112-1106
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

SEMI P2-0308
Specification for Chrome Thin Films for Hard Surface Photomasks

SEMI P3-0308
Specification for Photoresist/E-Beam Resist for Hard Surface Photoplates

SEMI P5-0704
Specification for Pellicles

SEMI P6-88 (Reapproved 0707)
Specification for Registration Marks for Photomasks

SEMI P7-0997 (Reapproved 1103)
Method of Viscosity Determination, Method a – Kinematic Viscosity

SEMI P8-0997
Method for the Determination of Water in Photoresist

SEMI P9-0298
Guideline for Functional Testing of Microelectronic Resists

SEMI P10-0709
Specification of Data Structures for Photomask Orders

SEMI P11-0308
Test Method for Determination of Total Normality for Alkaline Developer Solutions

SEMI P12-0997
Determination of Iron, Zinc, Calcium, Magnesium, Copper, Boron, Aluminum, Chromium, Manganese, and Nickel in Positive Photoresists By Inductively Coupled Plasma Emission Spectroscopy (ICP)

SEMI P13-91 (Reapproved 1104)
Determination of Sodium and Potassium in Positive Photoresists by Atomic Absorption Spectroscopy

SEMI P14-0997
Determination of Tin in Positive Photoresists by Graphite Furnace Atomic Absorption Spectroscopy

SEMI P15-92 (Reapproved 1104)
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SEMI G75.8-0698 (Reapproved 0706)
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SEMI G75.9-0698 (Reapproved 0706)
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SEMI T9-1110
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SEMI PV1-0709
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SEMI PV3-0310
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SEMI PV4-0710
Specification for Range of 5th Generation Substrate Sizes for Thin Film Photovoltaic Applications

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SEMI C10-1109
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SEMI C16-0299 (Withdrawn 1110)
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Safety Guidelines

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Safety Guideline for Equipment Safety Labels

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Safety Guideline for the Electrical Design of Semiconductor Manufacturing Equipment

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SEMI ME1392-1109
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SEMI MF28-0707
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SEMI MF42-1105
Test Methods for Conductivity Type of Extrinsic Semiconducting Materials

SEMI MF43-0705
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SEMI MF81-1105
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SEMI MF84-0307
Test Method for Measuring Resistivity of Silicon Wafers with an In-Line Four-Point Probe

SEMI MF95-1107
Test Method for Thickness of Lightly Doped Silicon Epitaxial Layers on Heavily Doped Silicon Substrates Using an Infrared Dispersive Spectrophotometer

SEMI MF110-1107
Test Method for Thickness of Epitaxial or Diffused Layers in Silicon by the Angle Lapping and Staining Technique

SEMI MF154-1105
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SEMI MF374-0307
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SEMI MF391-0310
Test Methods for Minority Carrier Diffusion Length in Extrinsic Semiconductors by Measurement of Steady-State Surface Photovoltage

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Test Method for Resistivity of Silicon Bars Using a Two-Point Probe

SEMI MF523-1107
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SEMI MF525-0307
Test Method for Measuring Resistivity of Silicon Wafers Using a Spreading Resistance Probe

SEMI MF533-0310
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SEMI MF657-0707^{E}
Test Method for Measuring Warp and Total Thickness Variation on Silicon Wafers by Noncontrast Scanning

SEMI MF671-0707
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Test Method for Measuring Resistivity Profiles Perpendicular to the Surface of a Silicon Wafer Using a Spreading Resistance Probe

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Test Method for Measuring Resistivity of Semiconductor Wafers or Sheet Resistance of Semiconductor Films with a Noncontact Eddy-Current Gauge

SEMI MF674-0705
Practice for Preparing Silicon for Spreading Resistance Measurements

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SEMI MF723-0307E
Practice for Conversion Between Resistivity and Dopant or Carrier Density for Boron-Doped, Phosphorus-Doped, and Arsenic-Doped Silicon

SEMI MF728-1106
Practice for Preparing an Optical Microscope for Dimensional Measurements

SEMI MF847-0705
Test Method for Measuring Crystallographic Orientation of Flats on Single Crystal Silicon Wafers by X-Ray Techniques

SEMI MF928-0305
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SEMI MF950-1107
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SEMI MF951-0305
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SEMI MF978-1106
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Test Method for Measuring the Reflective Total Integrated Scatter

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SEMI MF1239-0305
Test Method for Oxygen Precipitation Characteristics of Silicon Wafers by Measurement of Interstitial Oxygen Reduction

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SEMI MF1392-0307
Test Method for Determining Net Carrier Density Profiles in Silicon Wafers by Capacitance-Coltage Measurements with a Mercury Probe

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SEMI MF1527-0307
Guide for Application of Certified Reference Materials and Reference Wafers for Calibration and Control of Instruments for Measuring Resistivity of Silicon

SEMI MF1528-0308
Test Method for Measuring Boron Contamination in Heavily Doped N-Type Silicon Substrates by Secondary Ion Mass Spectrometry

SEMI MF1529-1110
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SEMI MF1530-0707
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SEMI MF1535-0707
Test Method for Carrier Recombination Lifetime in Silicon Wafers by Noncontact Measurement of Photoconductivity Decay by Microwave Reflectance

SEMI MF1569-0307
Guide for Generation of Consensus Reference Materials for Semiconductor Technology

SEMI MF1617-0304 (Reapproved 0710)
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SEMI MF1618-1110
Practice for Determination of Uniformity of Thin Films on Silicon Wafers

SEMI MF1619-1107
Test Method for Measurement of Interstitial Oxygen Content of Silicon Wafers by Infrared Absorption Spectroscopy with P-Polarized Radiation Incident at the Brewster Angle

SEMI MF1630-1107
Test Method for Low Temperature FT-IR Analysis of Single Crystal Silicon for III-V Impurities

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Practice for Evaluation of Granular Polysilicon by Melter-Zoner Spectroscopies

SEMI MF1723-1104
Practice for Evaluation of Polycrystalline Silicon Rods by Float-Zone Crystal Growth and Spectroscopy

SEMI MF1724-1104
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SEMI MF1726-1110
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SEMI MF1727-1110
Practice for Detection of Oxidation Induced Defects in Polished Silicon Wafers

SEMI MF1763-0706
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SEMI MF1771-0304
Test Method for Evaluating Gate Oxide Integrity by Voltage Ramp Technique

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SEMI MF1810-1110
Test Method for Counting Preferentially Etched or Decorated Surface Defects in Silicon Wafers

SEMI MF1811-0310
Guide for Estimating the Power Spectral Density Function and Related Finish Parameters from Surface Profile Data

SEMI MF1982-1110
Test Methods for Analyzing Organic Contaminants on Silicon Wafer Surfaces by Thermal Desorption Gas Chromatography

SEMI MF2074-0707
Guide for Measuring Diameter of Silicon and Other Semiconductor Wafers

SEMI MF2139-1103 (Reapproved 1110)
Test Method for Measuring Nitrogen Concentration in Silicon Substrates by Secondary Ion Mass Spectrometry

SEMI MF2166-0304
Practices for Monitoring Non-Contact Dielectric Characterization Systems Through Use of Special Reference Wafers

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Traceability

SEMI G71-0996 (Reapproved 1104)
Specification for Barcode Marking of Intermediate Containers for Packaging Materials

SEMI G83-0301 (Reapproved 0308)
Specification for Bar Code Marking of Product Packages

SEMI M12-0706
Specification for Serial Alphanumeric Marking of the Front Surface of Wafers

SEMI M13-0706
Specification for Alphanumeric Marking of Silicon Wafers

SEMI T2-0298 (Withdrawn 1110)
Specification for Marking of Wafers with a Two-Dimensional Matrix Code Symbol

SEMI T3-0302 (Reapproved 1108)
Specification for Wafer Box Labels

SEMI T4-0301 (Reapproved 0307)
Specification for 150 mm and 200 mm Pod Identification Dimensions

SEMI T5-1106
Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers

SEMI T6-0697 (Withdrawn 1110)
Procedure and Format for Reporting of Test Results by Electronic Data Interchange (EDI)

SEMI T7-0303 (Reapproved 0709)
Specification for Back Surface Marking of Double-Side Polished Wafers with a Two-Dimensional Matrix Code Symbol

SEMI T8-1110
Specification for Marking of Glass Flat Panel Display Substrates with a Two-Dimensional Matrix Code Symbol

SEMI T9-1110
Specification for Marking of Metal Lead-Frame Strips with a Two-Dimensional Data Matrix Code Symbol

SEMI T10-0701 (Reapproved 0307)
Test Method for the Assessment of 2D Data Matrix Direct Mark Quality

SEMI T11-0703 (Reapproved 0709)
Specification for Marking of Hard Surface Reticle Substrates

SEMI T12-0710
Specification for Tracing Jigs and Implements

SEMI T12.1-0704 (Reapproved 0710)
Specification for SECS Protocol for Tracking Jigs and Implements

SEMI T12.2-1105
Specification for XML Protocol for Tracking Jigs and Implements

SEMI T13-1104 (Reapproved 0710)
Specification for Device Tracking: Concepts, Behavior and Services

SEMI T13.1-1104 (Reapproved 0710)
Specification for SECS Protocol for Device Tracking

SEMI T13.2-1104 (Reapproved 0710)
Specification for XML Protocol for Device Tracking

SEMI T14-0705
Specification for Micro ID on 300 mm Silicon Wafers

SEMI T14.1-0705
Specification for the Micro ID of Short Vertical Dimension on 300 mm Wafers

SEMI T15-0705
General Specification of Jig ID: Concept

SEMI T16-0310
Specification for Use of Data Matrix Symbology for Automated Identification of Extreme Ultraviolet Lithography Masks

SEMI T17-0706
Specification of Substrate Traceability

SEMI T18-1106
Specification of Parts and Components Traceability

SEMI T19-1109
Specification for Device Marking

SEMI T20-0710
Specification for Authentication of Semiconductors and Related Products

SEMI T20.1-1109
Specification for Object Labeling to Authenticate Semiconductors and Related Products in an Open Market

SEMI T20.2-1109
Guide for Qualifications of Authentication Service Bodies for Detecting and Preventing Counterfeiting of Semiconductors and Related Products

SEMI T20.3-0710
Specification for Service Communication for Authentication of Semiconductors and Related Products

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