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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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SEMI F12-0998
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SEMI F14-93 (Reapproved 0699)
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SEMI F15-0308 (Withdrawn 1011)
Test Method (SF_6 Tracer Gas) for Enclosures for Enclosures has Been Moved to SEMI S6

SEMI F18-95 (Reapproved 0413)
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SEMI F23-0697 (Reapproved 0712)
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SEMI F24-0697 (Reapproved 0712)
Particle Specification for Grade 10/0.2 Inert Specialty Gases

SEMI F25-0697 (Reapproved 0712)
Particle Specification for Grade 10/0.2 Oxidant Specialty Gases

SEMI F26-0697 (Reapproved 0712)
Particle Specification for Grade 10/0.2 Toxic Specialty Gases

SEMI F27-0997 (Reapproved 0611)
Test Method for Moisture Interaction and Content of Gas Distribution Systems and Components by Atmospheric Pressure Ionization Mass Spectrometry (APIMS)

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Test Method for Measuring Particle Generation from Process Panels

SEMI F29-0997 (Reapproved 0611)
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SEMI F30-0710
Start-Up and Verification of Purifier Performance Testing for Trace Gas Impurities and Particles at an Installation Site

SEMI F31-0313
Guide for Bulk Chemical Distribution Systems

SEMI F32-0211
Test Method for Determination of Flow Coefficient for High Purity Shutoff Valves

SEMI F33-0708
Test Method for Calibration of Atmospheric Pressure Ionization Mass Spectrometer (APIMS)

SEMI F34-0998
Guide for Liquid Chemical Pipe Labeling

SEMI F35-0304
Test Method for Ultra-High Purity Gas Distribution System Integration Verification Using Non-invasive Oxygen Measurement

SEMI F36-0299 (Reapproved 0913)
Guide for Dimensions and Connections of Gas Distribution Components

SEMI F37-0299 (Reapproved 0611)
Method for Determination of Surface Roughness Parameters for Gas Distribution System Components

SEMI F38-0699 (Reapproved 0611)
Test Method for Efficiency Qualification of Point-of-Use Gas Filters

SEMI F39-0315
Guide for Chemical Blending Systems

SEMI F40-0699^E
Practice for Preparing Liquid Chemical Distribution Components for Chemical Testing

SEMI F41-1116
Guide for Qualification of a Bulk Chemical Distribution System Used in Semiconductor Processing

SEMI F43-0308 (Reapproved 0613)
Test Method for Determination of Particle Contribution by Point-of-Use Gas Purifiers and Gas Filters

SEMI F44-0307 (Reapproved 0812)
Specification for Machined Stainless Steel Weld Fittings

SEMI F45-0307 (Reapproved 0812)
Specification for Machined Stainless Steel Reducing Weld Fittings

SEMI F46-0999
Guide for On-Site Chemical Generation (OSCG) Systems

SEMI F47-0706 (Reapproved 0812)
Specification for Semiconductor Processing Equipment Voltage Sag Immunity

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SEMI F48-0600 (Reapproved 1214)
Test Method for Determining Trace Metals in Polymer Materials

SEMI F49-0200 (Reapproved 1213)
Guide for Semiconductor Factory Systems Voltage Sag Immunity

SEMI F50-0200 (Reapproved 1213)
Guide for Electric Utility Voltage Sag Performance for Semiconductor Factories

SEMI F51-0917
Guide for Elastometric Sealing Technology

SEMI F52-1101
Dimensional Specification for Metric PFA Tubes for Liquid Chemical Distribution in Semiconductor and Liquid Crystal Display Manufacturing

SEMI F53-0600 (Reapproved 0412)
Test Method for Evaluating the Electromagnetic Susceptibility of Thermal Mass Flow Controllers

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

SEMI F55-0600 (Reapproved 0412)
Test Method for Determining the Corrosion Resistance of Mass Flow Controllers

SEMI F56-0600 (Reapproved 0412)
Test Method for Determining Steady-State Supply Voltage Effects for Mass Flow Controllers

SEMI F57-0314
Specification for Polymer Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

SEMI F58-0708
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 0613)
Test Method for Determination of Filter or Gas System Flow Pressure Drop Curves

SEMI F60-1214
Test Method for ESCA Evaluation of Surface Composition of Wetted Surfaces of Passivated 316L Stainless Steel Components

SEMI F61-0617
Guide for Ultrapure Water System Used in Semiconductor Processing

SEMI F62-1016
Test Method for Determining Mass Flow Controller Performance Characteristics for Ambient and Gas Temperature Effects

SEMI F63-1016
Guide for Ultrapure Water Used in Semiconductor Processing

SEMI F64-0701 (Reapproved 1111)
Test Method for Determining Pressure Effects on Indicated and Actual Flow for Mass Flow Controllers

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Dimensional Specification for Mounting Bases of Diaphragm Valves Used with Metric PFA Tubes

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Specification for Port Marking and Symbol of Stainless Steel Vessels for Liquid Chemicals

SEMI F67-1101 (Reapproved 0713)
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SEMI F68-1101 (Reapproved 0713)
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SEMI F69-1213[E]
Test Method for Transport and Shock Testing of Gas Delivery Systems

SEMI F70-0611
Test Method for Determination of Particle Contribution of Gas Delivery System

SEMI F71-1102
Test Method for Temperature Cycle of Gas Delivery System

SEMI F72-0214
Test Method for Auger Electron Spectroscopy (AES) Evaluation of Oxide Layer of Wetted Surfaces of Passivated 316L Stainless Steel Components

SEMI F73-1214
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

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

SEMI F78-0611 (Reapproved 0917)
Practice for Gas Tungsten Arc (GTA) Welding of Fluid Distribution Systems in Semiconductor Manufacturing Applications

SEMI F79-0914
Guide for Gas Compatibility with Silicon Used in Gas Distribution Components

SEMI F80-0309 (Reapproved 0914)
Test Method for Determination of Gas Change/Purge Efficiency of Gas Delivery System

SEMI F81-0611 (Reapproved 0917)
Specification for Visual Inspection and Acceptance of Gas Tungsten Arc (GTA) Welds in Fluid Distribution Systems in Semiconductor Manufacturing Applications

SEMI F82-1012
Specification for Dimension of Mass Flow Controller/Mass Flow Meter for 1.125 Inch Type Surface Mount Gas Distribution Systems

SEMI F83-1012
Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.125 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F84-1012
Specification for Dimension of Three Port Components (Except MFC/MFM) for 1.125 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F85-1012
Specification for Dimension of One Port Components for 1.125 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F86-1012
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 F88-1012
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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SEMI F91-1012
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SEMI F92-1012
Specification for Dimension of Compact Size Three Port Components for 1.5 Inch Type Two Fastener Configuration Surface Mount Gas Distribution Systems

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SEMI F93-1012
Specification for Dimension of One Port Components for 1.5 Inch Type Four Fastener Configuration Surface Mount Gas Distribution Systems

SEMI F94-1012
Specification for Dimension of Two Port Components (Except MFC/MFM) for 1.5 Inch Four Fastener Configuration Type Surface Mount Gas Distribution Systems

SEMI F95-1012
Specification for Dimension of Three Port Components for 1.5 Inch Four Fastener Configuration Type Surface Mount Gas Distribution Systems

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SEMI F97-0305
Specification of Facility Package Integration, Monitoring and Control

SEMI F98-0305 (Reapproved 1111)
Guide for Treatment of Reuse Water in Semiconductor Processing

SEMI F99-0705
Dimensional Specification of a Diaphragm Valve for a Metric PFA Tube

SEMI F100-0705
Compliance Test Method for Minimum Flow Coefficient of Diaphragm Valve for Metric PFA Tube

SEMI F101-1105 (Reapproved 1111)[E]
Test Method for Determining Pressure Regulator Performance in Gas Distribution Systems

SEMI F102-0306 (Reapproved 0513)
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 F104-0312
Particle Test Method Guide for Evaluation of Components Used in Ultrapure Water and Liquid Chemical Distribution Systems

SEMI F105-0914
Guide for Metallic Material Compatibility in Gas Distribution Systems

SEMI F106-0308 (Reapproved 1012)
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 F109-0212
Guide for Heater Systems Requirements

SEMI F110-0712
Test Method for Mono-Dispersed Polystyrene Latex (PSL) Challenge of Liquid Filters

SEMI F111-0413
Test Method for Equipment Fan Filter Unit (EFFU) Particle Removal

SEMI F112-0613
Test Method for Determination of Moisture Dry-Down Characteristics of Surface-Mounted and Conventional Gas Delivery Systems by Cavity Ring Down Spectroscopy (CRDS)

SEMI F113-1116
Test Method for Pressure Transducers Used in Gas Delivery Systems

SEMI S2-1016b
Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment

SEMI S22-0715b[E]
Safety Guideline for the Electrical Design of Semiconductor Manufacturing Equipment

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 D6-0211 (Reapproved 0117)
Specification for Liquid Crystal Display (LCD) Mask Substrates

SEMI D7-94 (Reapproved 0703)
FPD Glass Substrate Surface Roughness Measurement Method

SEMI D9-0303 (Reapproved 0515)
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 (Reapproved 1113)
Terminology for FPD Color Filter Assemblies

SEMI D15-1296 (Reapproved 0703)
FPD Glass Substrate Surface Waviness Measurement Method

SEMI D16-0998
Specification for Mechanical Interface Between Flat Panel Display Material Handling System and Tool Port

SEMI D17-0200
Mechanical Specification for Cassettes Used to Ship Flat Panel Display Glass Substrates

SEMI D18-0299^{E}
Specification for Cassettes Used for Horizontal Transport and Storage of Flat Panel Display Substrates

SEMI D19-0305 (Reapproved 0412)
Test Method for the Determination of Chemical Resistance of Flat Panel Display Color Filters

SEMI D20-0706 (Reapproved 0815)
Terminology for FPD Mask Defect

SEMI D21-0706 (Reapproved 0815)
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)

SEMI D29-1101 (Reapproved 1113)
Test Method for Heat Resistance in Flat Panel Display (FPD) Color Filters

SEMI D30-0707 (Reapproved 1113)
Test Method for Light Resistance in Flat Panel Display (FPD) Color Filters

SEMI D31-0914
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 (Reapproved 0117)
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 D38-0211 (Reapproved 0117)
Guide for Quality Area of LCD Masks

SEMI D39-0704 (Reapproved 0117)
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 (Reapproved 0815)
Specification for Ultra Large Size Mask Substrate Case

SEMI D43-1105
Test Method for Mechanical Vibration in AMHS for FPD Manufacturing

SEMI D44-0706^E
Specification for Reference Position of Single Substrate for Handing Off On Tool

SEMI D45-0706 (Reapproved 0412)
Measurement Methods for Resistance of Resin Black Matrix with High Resistance for FPD Color Filter

SEMI D46-0213
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SEMI D47-0307
Test Method for Measurement of Bent Cold Cathode Fluorescent Lamps

SEMI D48-1107
Specification for Reference Position of Substrate ID to Specify Datum Line for ID Reader for Handing Off/On Tool

SEMI D49-0707
Specification of Single Substrate Orientation for Loading/Unloading into/from Equipment to Specify ID Reader Position

SEMI D50-0316
Test Method for Surface Hardness of Flat Panel Display (FPD) Components

SEMI D51-0709
Specification for Handshake Method of Single Substrate for Handling Off/On Tool in FPD Production

SEMI D52-0708^E
Specification for Reference Position of Substrate ID

SEMI D53-0708 (Reapproved 0815)
Specification for Liquid Crystal Display (LCD) Pellicles

SEMI D54-0709^E
Specification for Substrate Management of FPD Production (SMS-FPD)

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
Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials

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Test Method of Perceptual Angle of OLED Displays

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Measurement Method for Depolarization Effect of FPD Color Filter

SEMI D64-0811
Test Method for Measuring the Spatial Contrast Ratio of Flat Panel Display

SEMI D65-1011
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SEMI D66-0212
Terminology for Plastic Substrates of Flexible Display

SEMI D67-0212
Test Methods for Antifouling Property and Chemical Resistance of FPD Polarizing Films and Its Materials

SEMI D68-0512
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SEMI D69-0314
Test Method of Flat Panel Display-Based Stereoscopic Display with Active Glasses

SEMI D70-0314
Test Method of Flat Panel Display-Based Stereoscopic Display with Passive Glasses

SEMI D71-0614
Test Method of PDP Tone and Color Reproduction

SEMI D72-1014
Test Methods for Color Properties of Electronic Paper Displays

SEMI D73-1014
Test Methods for Positional Accuracy of Capacitive Touchscreen Panel

SEMI D74-0116
Guide for Measuring Dimensions of Plastic Films/Substrates

SEMI T8-1110 (Reapproved 0216)
Specification for Marking of Glass Flat Panel Display Substrates with a Two-Dimensional Matrix Code Symbol

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Gases

SEMI C3-0317
Specification for Gases

SEMI C3.2-0611
Specification for Arsine (AsH_3) in Cylinders, 99.94% Quality

SEMI C3.12-0116
Specification for Ammonia (NH_3) in Cylinders, 99.998% Quality

SEMI C3.20-0414
Specification for Helium (He), in Cylinders, 99.9995%

SEMI C3.24-0414
Specification for Sulfur Hexafluoride (SF_6) in Cylinders, 99.97% Quality

SEMI C3.26-0301 (Withdrawn 0312)
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 C3.32-0614
Specification for Chlorine (Cl_2), 99.996% Quality

SEMI C3.33-92 (Withdrawn 0312)
Standard for Boron Trichloride (BCl_3) (Provisional)

SEMI C3.34-0116
Specification for Disilane (Si_2H_6) in Cylinders, 97% Quality

SEMI C3.35-1109^E (Reapproved 0815)
Specification for Hydrogen Chloride (HCl), 99.997% Quality

SEMI C3.37-0614
Specification for Hexafluoroethane (C_2F_6), 99.97% Quality

SEMI C3.39-1011
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 (Withdrawn 0312)
Specification for Boron Trichloride (BCl_3), 99.98% Quality

SEMI C3.52-0200 (Withdrawn 0312)
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 C3.56-0312
Specification for Diborane Mixtures

SEMI C3.57-0312
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 (Reapproved 0815)
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 C9.1-0212
Guide for Analysis of Uncertainties in Gravimetrically Prepared Gas Mixtures

SEMI C10-1109 (Reapproved 1114)
Guide for Determination of Method Detection Limits

SEMI C14-95 (Reapproved 0913)
Test Method for Particle Shedding Performance of 25 cm Gas Filter Cartridges

SEMI C15-0616
Test Method for ppm and ppb Humidity Standards

SEMI C52-0301 (Reapproved 0312)
Specification for the Shelf Life of a Specialty Gas

SEMI C54-1116
Specification for Oxygen

SEMI C55-1104 (Reapproved 0211)
Specification for Liquid Carbon Dioxide (CO_2) Used in Near Critical, Critical and Supercritical Applications, ≥99.99% Quality

SEMI C56-1116
Specification for Dichlorosilane

SEMI C57-0317
Specification for Argon

SEMI C58-1116
Specification for Hydrogen

SEMI C59-0317
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SEMI C60-0317
Specification for Nitrous Oxide

SEMI C70-1116
Specification for Tungsten Hexafluoride

SEMI C71-0611
Specifications and Guide for Boron Trichloride (BCl_3)

SEMI C91-1115
Test Method for Determination of Moisture Dry-Down Characteristics of Gas Delivery Components

SEMI C92-0216
Test Method for Determining the Critical Pitting Temperature of Stainless Steel Surfaces Used in Corrosive Gas Systems by use of a Ferric Chloride Solution

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HB-LED

SEMI HB1-0816
Specification for Sapphire Wafers Intended for Use for Manufacturing High Brightness-Light Emitting Diode Devices

SEMI HB2-0613
Specification for 150 mm Open Plastic and Metal Wafer Cassettes Intended for Use for Manufacturing HB-LED Devices

SEMI HB3-1016
Specification for the Mechanical Interface for 150 mm HB-LED Load Port

SEMI HB4-0913
Specification of Communication Interfaces for High Brightness LED Manufacturing Equipment (HB-LED ECI)

SEMI HB5-0615
Test Method for Measurement of Saw Marks on Crystalline Sapphire Wafers by Using Optical Probes

SEMI HB6-0316
Test Method for Measurement of Thickness and Shape of Crystalline Sapphire Wafers by Using Optical Probes

SEMI HB7-0615
Test Method for Measurement of Waviness of Crystalline Sapphire Wafers by Using Optical Probes

SEMI HB8-0217
Test Method for Determining Orientation of a Sapphire Single Crystal

Materials

SEMI M1-1016
Specification for Polished Single Crystal Silicon Wafers

SEMI M6-1108 (Withdrawn 0712)
Specification for Silicon Wafers for Use as Photovoltaic Solar Cells

SEMI M8-0312
Specification for Polished Monocrystalline Silicon Test Wafers

SEMI M9-0816
Specification for Polished Monocrystalline Gallium Arsenide Wafers

SEMI M9.1-0813
Standard for Round 50.8 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.2-0813
Standard for Round 76.2 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.3-0812
Specification for Round 2 Inch Diameter Polished Monocrystalline Gallium Arsenide Slices for Optoelectric Applications

SEMI M9.4-0812
Specification for Round 3 Inch Diameter Polished Monocrystalline Gallium Arsenide Slices for Optoelectric Applications

SEMI M9.5-0813
Standard for Round 100 mm Polished Monocrystalline Gallium Arsenide Wafers for Electronic Device Applications

SEMI M9.6-0813
Standard for Round 125 mm Diameter Polished Monocrystalline Gallium Arsenide Wafers

SEMI M9.7-0914
Specification for Round 150 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

SEMI M9.8-0306 (Reapproved 0812)
Specification for Round 200 mm Polished Monocrystalline Gallium Arsenide Wafers (Notched)

SEMI M10-0816
Terminology for Identification of Structures and Features Seen on Gallium Arsenide Wafers

SEMI M12-0706 (Reapproved 1011)
Specification for Serial Alphanumeric Marking of the Front Surface of Wafers

SEMI M13-0706 (Reapproved 1011)
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 (Reapproved 1015)
Specification for Polycrystalline Silicon

SEMI M17-1110 (Reapproved 1015)
Guide for a Universal Wafer Grid

SEMI M18-0912
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 M20-0215
Practice for Establishing a Wafer Coordinate System

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

SEMI M23-0811
Specification for Polished Monocrystalline Indium Phosphide Wafers

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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 M24-0612
Specification for Polished Monocrystalline Silicon Premium Wafers

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 (Reapproved 0512)
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SEMI PV44-0513
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SEMI PV56-1214
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SEMI PV66-0715
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SEMI PV69-1015
Test Method for Spectrum Response (SR) Measurement of Organic Photovoltaic (OPV) and Dye-Sensitized Solar Cell (DSSC)

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SEMI PV71-0116
Test Method for In-Line, Noncontact Measurement of Thickness and Thickness Variation of Silicon Wafers for Photovoltaic (PV) Applications Using Laser Triangulation Sensors

SEMI PV72-0316
Test Method to Evaluate an Accelerated Thermo Humidity Resistance of Photovoltaic (PV) Encapsulation

SEMI PV73-0216
Test Method for Thin-Film Silicon Photovoltaic (PV) Modules Light Soaking

SEMI PV74-0216
Test Method for the Measurement of Chlorine in Silicon by Ion Chromatography

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Test Method on Cell Level for Potential-Induced Degradation Susceptibility of Solar Cells and Module Encapsulation Materials

SEMI PV76-0117
Test Method for Durability of Low Light Intensity Organic Photovoltaic (OPV) and Dye-Sensitized Solar Cell (DSSC)

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SEMI PV78-0817
Test Method for Bending Property of Flexible Thin Film Photovoltaic (PV) Modules

SEMI PV79-0817
Test Method for Exposure Durability of Photovoltaic (PV) Cells to Acetic Acid Vapor

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SEMI C10-1109 (Reapproved 1114)
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SEMI C19-0514
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SEMI C20-0213
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SEMI C21-0708
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SEMI C22-0212
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SEMI C44-0514
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SEMI C45-0309[E]
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SEMI C46-0812
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SEMI C48-0812
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SEMI C67-0811 (Reapproved 0317)
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SEMI C68-0811 (Reapproved 0317)
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SEMI C72-0811 (Reapproved 0317)
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SEMI C73-0811 (Reapproved 0317)
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SEMI C75-0811 (Reapproved 0317)
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SEMI C76-0811 (Reapproved 0317)
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SEMI C78-0113
Test Method for Determining Roughness of Polymer Surfaces Used in Ultrapure Water and Liquid Chemical Distribution Systems by Atomic Force Microscopy

SEMI C79-0113
Guide to Evaluate the Efficacy of Sub-15 nm Filters Used in Ultrapure Water (UPW) Distribution Systems

SEMI C80-0214
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SEMI C81-0113
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Test Method for Determining Roughness of Polymer Surfaces Used in Ultrapure Water and Liquid Chemical Distribution Systems by Contact Profilometry

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SEMI C94-0516
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SEMI S1-1015
Safety Guideline for Equipment Safety Labels

SEMI S2-1016b
Environmental, Health, and Safety Guideline for Semiconductor Manufacturing Equipment

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SEMI S4-0304
Safety Guideline for the Separation of Chemical Cylinders Contained in Dispensing Cabinets

SEMI S5-0616
Safety Guideline for Sizing and Identifying Flow Limiting Devices for Gas Cylinder Valves

SEMI S6-0707^E
EHS Guideline for Exhaust Ventilation of Semiconductor Manufacturing Equipment

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SEMI S8-1116
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SEMI S13-0113
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Safety Guidelines for Fire Risk Assessment and Mitigation for Semiconductor Manufacturing Equipment

SEMI S16-0307 (Reapproved 0812)
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SEMI S18-0312
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SEMI S23-1216
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SEMI S24-0306 (Reapproved 0811)
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SEMI S27-0310
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SEMI S28-1011
Safety Guideline for Robots and Load Ports Intended for Use in Semiconductor Manufacturing Equipment

SEMI S29-0712
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SEMI ME1392-0116
Guide for Angle Resolved Optical Scatter Measurements on Specular or Diffuse Surfaces

SEMI MF26-0714
Test Methods for Determining the Orientation of a Semiconductive Single Crystal

SEMI MF28-0317
Test Methods for Minority Carrier Lifetime in Bulk Germanium and Silicon by Measurement of Photoconductivity Decay

SEMI MF42-0316
Test Method for Conductivity Type of Extrinsic Semiconducting Materials

SEMI MF43-0316
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SEMI MF81-1105 (Reapproved 0316)
Test Method for Measuring Radial Resistivity Variation on Silicon Wafers

SEMI MF84-0312
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SEMI MF95-1107 (Reapproved 1012)
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SEMI MF110-1107 (Reapproved 0912)
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SEMI MF154-1105 (Reapproved 0316)
Guide for Identification of Structures and Contaminants Seen on Specular Silicon Surfaces

SEMI MF374-0312
Test Method for Sheet Resistance of Silicon Epitaxial, Diffused, Polysilicon, and Ion-Implanted Layers Using an In-Line Four-Point Probe with the Single-Configuration Procedure

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

SEMI MF397-0812
Test Method for Resistivity of Silicon Bars Using a Two-Point Probe

SEMI MF523-1107 (Reapproved 1012)
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SEMI MF525-0312
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SEMI MF533-0310 (Reapproved 0416)
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SEMI MF534-0707 (Withdrawn 0115)
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SEMI MF576-0812
Test Method for Measurement of Insulator Thickness and Refractive Index on Silicon Substrates by Ellipsometry

SEMI MF657-0707^{E} (Withdrawn 0914)
Test Method for Measuring Warp and Total Thickness Variation on Silicon Wafers by Noncontrast Scanning

SEMI MF671-0312
Test Method for Measuring Flat Length on Wafers of Silicon and Other Electronic Materials

SEMI MF672-0412
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SEMI MF673-1014
Test Method for Measuring Resistivity of Semiconductor Wafers or Sheet Resistance of Semiconductor Films with a Noncontact Eddy-Current Gauge

SEMI MF674-0316
Practice for Preparing Silicon for Spreading Resistance Measurements

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SEMI MF723-0307[E] (Reapproved 0412)[E]
Practice for Conversion Between Resistivity and Dopant or Carrier Density for Boron-Doped, Phosphorus-Doped, and Arsenic-Doped Silicon

SEMI MF728-1106 (Reapproved 0317)
Practice for Preparing an Optical Microscope for Dimensional Measurements

SEMI MF847-0316
Test Method for Measuring Crystallographic Orientation of Flats on Single Crystal Silicon Wafers by X-Ray Techniques

SEMI MF928-0317
Test Method for Edge Contour of Circular Semiconductor Wafers and Rigid Disk Substrates

SEMI MF950-1107 (Reapproved 0912)
Test Method for Measuring the Depth of Crystal Damage of a Mechanically Worked Silicon Wafer Surface by Angle Polishing and Defect Etching

SEMI MF951-0305 (Reapproved 0316)
Test Method for Determination of Radial Interstitial Oxygen Variation in Silicon Wafers

SEMI MF978-1106 (Reapproved 0317)
Test Method for Characterizing Semiconductor Deep Levels by Transient Capacitance Techniques

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SEMI MF1049-0308 (Reapproved 0413)
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SEMI MF1152-0316
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SEMI MF1153-1110 (Reapproved 1015)
Test Method for Characterization of Metal-Oxide-Silicon (MOS) Structures by Capacitance-Voltage Measurements

SEMI MF1188-1107 (Reapproved 0912)
Test Method for Interstitial Oxygen Content of Silicon by Infrared Absorption with Short Baseline

SEMI MF1239-0305 (Reapproved 0416)
Test Method for Oxygen Precipitation Characteristics of Silicon Wafers by Measurement of Interstitial Oxygen Reduction

SEMI MF1366-0308 (Reapproved 0413)
Test Method for Measuring Oxygen Concentration in Heavily Doped Silicon Substrates by Secondary Ion Mass Spectrometry

SEMI MF1388-0707 (Reapproved 0412)
Test Method for Generation Lifetime and Generation Velocity of Silicon Material by Capacitance-Time Measurements of Metal-Oxide-Silicon (MOS) Capacitors

SEMI MF1389-1115
Test Method for Photoluminescence Analysis of Single Crystal Silicon for III-V Impurities

SEMI MF1390-1014
Test Method for Measuring Bow and Warp on Silicon Wafers by Automated Noncontact Scanning

SEMI MF1391-1107 (Reapproved 0912)
Test Method for Substitutional Atomic Carbon Content of Silicon by Infrared Absorption

SEMI MF1392-0307 (Reapproved 0512)
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SEMI MF1451-0707 (Reapproved 0512)
Test Method for Measuring Sori on Silicon Wafers by Automated Noncontact Scanning

SEMI MF1527-0412
Guide for Application of Certified Reference Materials and Reference Wafers for Calibration and Control of Instruments for Measuring Resistivity of Silicon

SEMI MF1528-0413
Test Method for Measuring Boron Contamination in Heavily Doped *n*-Type Silicon Substrates by Secondary Ion Mass Spectrometry

SEMI MF1529-1110 (Reapproved 1115)
Test Method for Sheet Resistance Uniformity Evaluation by In-Line Four-Point Probe with the Dual-Configuration Procedure

SEMI MF1530-0707 (Reapproved 0512)
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SEMI MF1535-1015
Test Method for Carrier Recombination Lifetime in Silicon Wafers by Noncontact Measurement of Photoconductivity Decay by Microwave Reflectance

SEMI MF1569-0307 (Reapproved 0512)
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SEMI MF1617-0304 (Reapproved 0416)
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SEMI MF1618-1110 (Reapproved 1115)
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SEMI MF1619-1107 (Reapproved 0912)
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SEMI MF1630-1107 (Reapproved 0912)
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SEMI MF1708-1104
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
Test Method for Measuring Surface Metal Contamination of Polycrystalline Silicon by Acid Extraction-Atomic Absorption Spectroscopy

SEMI MF1725-1110 (Reapproved 1115)
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SEMI MF1726-1110 (Reapproved 1115)
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SEMI MF1727-1110 (Reapproved 1115)
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SEMI MF1763-0706 (Reapproved 1111)
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SEMI MF1809-1110 (Reapproved 1115)
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SEMI MF1810-1110 (Reapproved 1115)
Test Method for Counting Preferentially Etched or Decorated Surface Defects in Silicon Wafers

SEMI MF1811-1116
Guide for Estimating the Power Spectral Density Function and Related Finish Parameters from Surface Profile Data

SEMI MF1982-0317
Test Method for Analyzing Organic Contaminants on Silicon Wafer Surfaces by Thermal Desorption Gas Chromatography

SEMI MF2074-0912
Guide for Measuring Diameter of Silicon and Other Semiconductor Wafers

SEMI MF2139-1103 (Reapproved 0416)
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SEMI MF2166-1110 (Withdrawn 1015)
Practices for Monitoring Noncontact Dielectric Characterization Systems Through Use of Special Reference Wafers

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Traceability

SEMI G71-0996 (Reapproved 0811)
Specification for Barcode Marking of Intermediate Containers for Packaging Materials

SEMI G83-0912
Specification for Bar Code Marking of Product Packages

SEMI G83.1-0912
Specification for XML Protocol for Device Tracking

SEMI M12-0706 (Reapproved 1011)
Specification for Serial Alphanumeric Marking of the Front Surface of Wafers

SEMI M13-0706 (Reapproved 1011)
Specification for Alphanumeric Marking of Silicon Wafers

SEMI T3-1213
Specification for Wafer Box Labels

SEMI T4-0301 (Reapproved 1213)
Specification for 150 mm and 200 mm Pod Identification Dimensions

SEMI T5-1214
Specification for Alphanumeric Marking of Round Compound Semiconductor Wafers

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SEMI T8-1110 (Reapproved 0216)
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SEMI T9-1110 (Reapproved 0216)
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SEMI T11-0703 (Reapproved 1014)
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SEMI T12-0710
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SEMI T12.1-0704 (Reapproved 0710)
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SEMI T12.2-1105
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SEMI T13-1104 (Reapproved 0710)
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SEMI T13.1-1104 (Reapproved 0710)
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SEMI T15-0812
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SEMI T16-0310 (Reapproved 0216)
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SEMI T17-0706 (Reapproved 0812)
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SEMI T18-1106 (Reapproved 0812)
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SEMI T19-0311 (Reapproved 0717)
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SEMI T20-0710 (Reapproved 0416)
Specification for Authentication of Semiconductors and Related Products

SEMI T20.1-1109 (Reapproved 0416)
Specification for Object Labeling to Authenticate Semiconductors and Related Products in an Open Market

SEMI T20.2-1109 (Reapproved 0416)
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SEMI T20.3-0710 (Reapproved 0416)
Specification for Service Communication for Authentication of Semiconductors and Related Products

SEMI T21-0314
Specification for Organization Identification by Digital Certificate Issued from Certificate Service Body (CSB) for Anti-Counterfeiting Traceability in Components Supply Chain

SEMI T22-0212
Specification for Traceability by Self Authentication Service Body and Authentication Service Body

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