<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEIA, SYSTEMS &amp; PROCESSES (PRODUCT CODE 7)</td>
<td>7-1</td>
</tr>
<tr>
<td>CONFIGURATION &amp; DATA MANAGEMENT</td>
<td>7-1</td>
</tr>
<tr>
<td>ELECTROMAGNETIC INTERFERENCE</td>
<td>7-2</td>
</tr>
<tr>
<td>MANAGEMENT SYSTEMS</td>
<td>7-2</td>
</tr>
<tr>
<td>RELIABILITY/MAINTAINABILITY</td>
<td>7-3</td>
</tr>
<tr>
<td>SOFTWARE DEVELOPMENT</td>
<td>7-3</td>
</tr>
<tr>
<td>SOLID STATE DEVICES</td>
<td>7-5</td>
</tr>
<tr>
<td>SYSTEM SAFETY</td>
<td>7-5</td>
</tr>
<tr>
<td>SYSTEMS ENGINEERING</td>
<td>7-5</td>
</tr>
<tr>
<td>GEIA/REQUIREMENTS COUNCIL REPORTS AND PROCEEDINGS</td>
<td>7-7</td>
</tr>
</tbody>
</table>
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

**CONFIGURATION & DATA MANAGEMENT**

**EIA-649**  
*National Consensus Standard for Configuration Management (ANSI/EIA-649-98)*, replaces EIA/IS-649

This Standard presents configuration management from the viewpoint that configuration management practices are employed because they make good business sense rather than because requirements are imposed by an external customer. This Standard discusses configuration management principles and practices from an enterprise view. It does not prescribe which CM activities individual organizations or teams with the enterprise should perform. Each enterprise assigns responsibilities in accordance with its own management policy. This Standard explains the major CM functions rather than mandates them. The explanation includes purpose, benefits, and best practices. Within each topic, the basic principles of configuration management are addressed.

*Product Code 7*  
*Aug, 1998 COMMITTEE:G-33*  
*$87.00*

**EIA-649 Electronic version**  
*National Consensus Standard for Configuration Management (ANSI/EIA-649-98)*, replaces EIA/IS-649

See EIA-649 for description. Electronic version available in searchable pdf format.

*Product Code 7*  
*Aug, 1998 COMMITTEE:G-33*  
*$155.00*

**CMB5-A**  
*Configuration Management Requirements for Subcontractors/Vendors*

This Bulletin is written as a guide for the contractors when imposing Configuration Management Requirements on their Subcontractors/Vendors in the following five major categories of procurement: development item, off-the-shelf item, modified off-the-shelf item, build-to-print item, and piece part. The Bulletin is divided into three parts: the first part establishes the outline of those CM requirements which should be addressed in reference to suppliers. The second part presents a matrix which may be used a guide to the buyer when considering applying CM requirements on the supplier, and the third part presents a questionnaire which may be used by the buyer to evaluate and determine the capability of a supplier.

*Product Code 7*  
*Sep, 1986 COMMITTEE:G-33*  
*$46.00*

**CMB6-3**  
*Configuration Identification*

This Bulletin has been prepared to provide a textbook for use at the undergraduate level to teach the configuration identification CM 201 course developed by the Education and Training Task Group. The purpose is to provide an in-depth understanding of the concepts and principles involved in the Configuration Identification process. It is written for the individual who has completed a basic introductory course in CM and who requires the more in-depth knowledge of a CM practitioner as opposed to a superficial overview.

*Product Code 7*  
*Jan, 1991 COMMITTEE:G-33*  
*$80.00*

**CMB6-4**  
*Configuration Control*

This Bulletin was prepared to provide a textbook for use at the undergraduate level to teach the configuration control portion of the Configuration Management (CM) curriculum being developed by the Education and Training Task Group. The objective of this course is to provide an in-depth understanding of the concepts and principles involved in the configuration control process. It is intended for an individual who has completed a basic introductory course in CM and who requires the deeper knowledge of a CM practitioner rather than a superficial overview.

*Product Code 7*  
*Jul, 1991 COMMITTEE:G-33*  
*$90.00*

**CMB6-5**  
*Configuration Status Accounting*

This Bulletin describes configuration status accounting within a configuration management system. The configuration of an item is defined in both functional and physical terms. Common sense management practices have been formalized into set practices to address the peculiarities of managing large inventories of units in multiple product lines. The configuration management is divided into four functional areas: identification, audit, control, and status accounting. Each of these areas are described.

*Product Code 7*  
*Mar, 1988 COMMITTEE:G-33*  
*$80.00*

**CMB6-1C**  
*Configuration and Data Management References*

Configuration Management (CM) and Data Acquisition Management (DM) have only recently begun to receive support by extensive literature reference. Although recently text material became available, the majority of references are Department of Defense (DoD) directives and specifications. The remainder are either short treatments under other disciplines (such as Quality Assurance) or papers and articles on these subjects. This Bulletin contains a compilation of literature references for the disciplines of CM and DM available from government and industry references. This listing is a guide in selecting appropriate reading material and text for college curricula, as well as material for anyone interested in researching these subjects.

*Product Code 7*  
*(Jul, 1994 COMMITTEE:G-33*  
*$46.00*

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

CMB6-6
Reviews and Configuration Audits
The objective of this text is to provide in-depth understanding of the concepts and principles involved in the Review and Configuration Audit process. It is intended for an individual who has completed a basic introductory course in Configuration Management (CM) and who requires the deeper knowledge of a CM practitioner rather than a superficial overview.

Product Code 7 May, 1996 COMMITTEE:G-33
$80.00

CMB6-10
Education in Configuration and Data Management
This document provides a list of guidelines to help interested EIA members make the correct initial moves toward establishing the EIA-developed Configuration Management and Date Management courses into a college curriculum, initially as one introductory course. From this logical beginning, later developments can materialize as certificate programs, a specialization in an Associate degree, or a major in an established Baccalaureate degree program. The guidelines provided the lessons learned in the process of instituting programs in academic institutions. They outline EIA experiences to date and define interface which will have to be developed with a variety of functions in the contracted institution.

Product Code 7 Jan, 1991 COMMITTEE:G-33
$80.00

CMB7-4
Glossary of Terms, Acronyms, and Definitions
This Engineering Bulletin provides a comprehensive cross-reference of Terms, Acronyms, and Definitions used in the CM & DM and related functional environments.

Product Code 7 Sep, 1995 COMMITTEE:G-33
$90.00

CMB7-4 Electronic Version
Glossary of Terms, Acronyms, and Definitions
See CMB7-4 for description. Electronic version available in searchable pdf format.

Product Code 7 Sep, 1995 COMMITTEE:G-33
$150.00

EIA/IS-648
Measurement of Electromagnetic Interference
Characteristics of Equipment Intended to Operate in Severe Electromagnetic Environments
This Standard establishes general techniques for use in the measurement and determination of the electromagnetic emission and susceptibility characteristics of electronic, electrical, and electromechanical equipment and subsystems.

Product Code 7 May, 1996 COMMITTEE:G-46
$146.00

EMCB1-1
Historical Rationale for Military EMI Limits
The purpose of this document is to foster an engineering issues oriented understanding of military EMI requirements.

Product Code 7 Jan, 1993 COMMITTEE:G-46
$80.00

EIA-748
Earned Value Management Systems (ANSI/EIA-748-98)
The earned value management system guidelines incorporate best business practices to provide strong benefits for program or enterprise planning and control. The processes include integration of program scope, schedule, and cost objectives, establishment of a baseline plan for accomplishment of program objectives, and use of earned value techniques for performance measurement during the execution of a program. The system provides a sound basis for problem identification, corrective actions, and management replanning as may be required.

Product Code 7 Jun, 1998 COMMITTEE:EOC
$51.00

EIA-748 Electronic version
Earned Value Management Systems (ANSI/EIA-748-98)
See EIA-748 for description. Electronic version available in searchable pdf format.

Product Code 7 Jun, 1998 COMMITTEE:EOC
$93.00

Explore the GEIA web site at http://www.eia.org
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

### RELIABILITY/MAINTAINABILITY

**RB4-A**
*Reliability Quantification*
This Bulletin provides a guide for the use by companies contracting for design of electronic products with the Department of Defense and other government agencies. The bulletin presents concepts and techniques for quantifying electronic equipment reliability and/or effectiveness. It covers the specification and apportionment of reliability, the essential elements or analytical activities of a quantification program, prediction, measurement and demonstration.

**Product Code 7** May, 1969 COMMITTEE:G-41
$34.00

**RB9**
*Failure Mode and Effect Analyses*
This Reliability Bulletin is provided as a guide for engineering and management personnel concerned with Failure Mode and Effect Analyses (FMEA). In addition, it provides information concerning technical and functional relationship of Failure Mode and Effect Analyses to associated disciplines, as for example, Maintainability, Safety, and System Effectiveness Analyses. This Bulletin covers requirements, concepts, interface, procedures and reports of FMEA. This Bulletin should contribute to greater utilization of FMEA results and to the understanding and appreciation of the purpose of FMEA on the part of engineering and management personnel.

**Product Code 7** Nov, 1971 COMMITTEE:G-41
$34.00

#### SOFTWARE DEVELOPMENT

**J-STD-016**
*Standard for Information Technology - Software Life Cycle Processes - Software Development - Acquirer-Supplier Agreement (Issued for Trial Use)*
This Standard defines a set of software development activities and resulting software products. It provides a framework for software development planning and engineering. It is written in contractual language. This choice is based on the fact that it is easier for non-contractual users to adapt contractual language to their use than for contractual users to apply non-contractual language. It is the first step in the implementation of ISO/IEC 12207, Software Life Cycle Processes. Future version are intended to implement additional software life cycle processes and supplier roles, such as the operator and maintainer. Those activities of the maintainer that are the same as those of a developer are covered in this version of the Standard. For purposes of this implementation, the “supplier” of ISO/IEC 12207 is always the “developer,” and the term “developer” is used throughout this Standard. It is meant to be tailored to ensure that only necessary and cost-effective requirements are applied. It is not intended to specify or discourage the use of any particular software development method. The developer is responsible for selecting software development methods that support the achievement of contract requirements. This Standard emphasizes that information resulting from the activities required by this Standard is intrinsic to the software development process, to be recorded regardless of whether a deliverable is required. When information is not required to be delivered, the software products cited in this Standard are to be used as checklists of items to be covered, as applicable, in the planning and engineering activities for the project. It is intended to allow information to be recorded in representations other than traditional documents (for example, computer-aided software engineering (CASE) tools and provides relaxed requirements for the format and structure of that information for such representations.

**Product Code 7** Feb, 1996 COMMITTEE:G-34
$186.00

**J-STD-016-A**
*Standard for Information Technology - Software Life Cycle Processes - Software Development - Acquirer-Supplier Agreement (Issued for Trial Use)*

**Product Code 7** Feb, 1996 COMMITTEE:G-34
$310.00

**IEEE/EIA-12207 Set**
**Product Code 7** COMMITTEE:G-34
$260.00

**IEEE/EIA-12207 Set** Electronic Version
Electronic version available in searchable pdf format.

**Product Code 7** COMMITTEE:G-34
$480.00

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2, EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

IEEE/EIA-12207.0-1996
This Standard is the adaptation of the international Standard, ISO/IEC 12207. It provides a framework of software life cycle processes suitable for use in the acquisition, supply, development, maintenance, and operation of software. This Standard also provides concepts and guidelines to foster a better understanding and application of the standard.
Product Code 7 Mar, 1998 COMMITTEE:G-34
$106.00

IEEE/EIA-12207.1-1997
This Guide provides information on life cycle data resulting from the processes of IEEE/EIA-12207.0. It describes the relationship among the following: the content of the life cycle data information items, references to documentation of life cycle data in IEEE/EIA-12207.0 and sources of detailed software product information.
Product Code 7 Apr, 1998 COMMITTEE:G-34
$57.00

IEEE/EIA-12207.2-1997
This Guide provides guidance in implementing the process requirements of IEEE/EIA-12207.0. The guidance is intended to summarize the best practices of the software industry in the context of the process structure provided by ISO/IEC 12207 and provides additions, alternatives, and clarifications to ISO/IEC 12207's life cycle processes as derived from U.S. practices.
Product Code 7 Apr, 1998 COMMITTEE:G-34
$124.00

CMB4-2
Configuration Identification for Digital Computer Programs
There are two aspects of configuration identification that must be understood. First, is the identification of the computer program, as described by technical data/documentation during its life cycle. Second, is the associated identification of the computer program by means of a tag, usually its name, and/or a unique number and other selective identification characteristics which correlate the specific code to its documentation and enable traceability back to the development requirements. Configuration management planning is based upon the establishment of reference points for specific milestones during a configuration item's life cycle. The data at certain points of time in the cycles are designated for configuration documentation.
Product Code 7 Jun, 1981 COMMITTEE:G-33
$34.00

CMB4-3
Computer Software Libraries
This Bulletin is one of a series to explain the role of Computer Software Libraries in a configuration management system. The purpose of this Bulletin is to relate the terms of the software world to the software configuration management system, i.e., the role of a library in the release of software. It describes the three types of libraries which are involved in the system, it discusses the principles and factors which affect their design and its presents a model, including samples of records and forms. Also included is a universal position description for a librarian.
Product Code 7 Feb, 1981 COMMITTEE:G-33
$34.00

CMB4-4
Configuration Change Control for Digital Computer Programs
Control of the configuration in configuration management is the systematic evaluation, coordination, approval or disapproval, and implementation of all approved changes in the configuration of a configuration item after formal establishment of its configuration identification. This Bulletin describes the software change control process in the context of a structured programming environment. Problems inherent in or to the control process are identified. The tools, forms, and procedures associated with each life cycle phase and the methodology instituted are described. Transition process from completion of the development phases to the Operational and Maintenance phases is also described.
Product Code 7 May, 1982 COMMITTEE:G-33
$34.00

Explore the GEIA web site at http://www.eia.org
SOLID STATE DEVICES (cont.)
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

SOLID STATE DEVICES
SSB-1-C
Guidelines for Using Plastic Encapsulated Microcircuits and Semiconductors in Military, Aerospace and Other Rugged Applications
This Engineering Bulletin and its annexes provide guidance to Original Equipment Manufacturers (OEMs) in evaluating device manufacturer flows and in selecting cost-effective, standard products that met the performance objective for potential use in many rugged, military, severe, or other environments.
Product Code 7 Aug, 2000 COMMITTEE:G-12
$Call for Pricing

SSB-1.001 Qualification and Reliability Monitors
This document is an annex to EIA Engineering Bulletin SSB-1, Guidelines for Using Plastic Encapsulated Microcircuits and Semiconductors in Military, Aerospace and Other Rugged Applications (the latest revision). The scope of this document is to establish the recommended minimum qualification and monitoring testing of plastic encapsulated microcircuits and discrete semiconductors suitable for potential use in many rugged, military, severe, or other environments.
Product Code 7 Nov, 1999 COMMITTEE:G-12
$40.00

SSB-1.002 Environmental Tests and Associated Failure Mechanisms
This document is an annex to EIA Engineering Bulletin SSB-1, Guidelines for Using Plastic Encapsulated Microcircuits and Semiconductors in Military, Aerospace and Other Rugged Applications (the latest revision). This document provides reference information concerning the environmental stresses associated with tests specifically designed to apply to (or have unique applications for) plastic encapsulated microcircuits and semiconductors, and the specific failures induced by these environmental stresses.
Product Code 7 Nov, 1999 COMMITTEE:G-12
$39.00

SSB-1.003 Acceleration Factors
This document is an annex to EIA Engineering Bulletin SSB-1, Guidelines for Using Plastic Encapsulated Microcircuits and Semiconductors in Military, Aerospace and Other Rugged Applications (the latest revision). This document provides reference information concerning acceleration factors commonly used by device manufacturers to model failure rates in conjunction with statistical reliability monitoring. These acceleration factors are frequently used by OEMs in conjunction with physics of failure reliability analysis to assess the suitability of plastic encapsulated microcircuits and semiconductors for specific end use applications.
Product Code 7 Nov, 1999 COMMITTEE:G-12
$42.00

SSB-1.004 Failure Rate Estimating
This document is an annex to EIA Engineering Bulletin SSB-1, Guidelines for Using Plastic Encapsulated Microcircuits and Semiconductors in Military, Aerospace and Other Rugged Application (the latest revision)
Product Code 7 Jan, 2000 COMMITTEE:G-12
$46.00

SYSTEM SAFETY
SEB6-A
System Safety Engineering in Software Development
This Bulletin describes guidelines on how a system safety analysis and evaluation program should be conducted for systems which include computer-controlled or -monitored functions. The safety significance of software in system safety programs conducted for Department of Defense (DoD) weapon systems in accordance with MIL-STD-882, “System Safety Program Requirements,” is described and how hazard identification and control functions of a system safety program relate to the process specified by DOD-STD-2167A, “Defense System Software Development,” for major software development programs is explained. It addresses the problems and concerns associated with such a program, the tasks which must be performed, and some methods which can be used to effectively perform these tasks.
$101.00

SYSTEMS ENGINEERING
EIA-632
Processes for Engineering a System (ANSI/EIA-632-98)
The purpose of this Standard is to provide an integrated set of fundamental processes to aid a developer in the engineering or reengineering of a system. Use of this Standard is intended to help developers establish and evolve a complete and consistent set of requirements that will enable delivery of feasible and cost-effective system solutions: satisfy requirements within cost, schedule, and risk constraints; provide a system, or any portion of a system, that satisfies stakeholders over the life of the products that make up the system; and provide for the safe and/or cost-effective disposal or retirement of a system.
Product Code 7 Jan, 1999 COMMITTEE:G-47
$146.00

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com
SYSTEMS ENGINEERING (cont.)

The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA-IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

EIA-632 Electronic version

Processes for Engineering a System (ANSI/EIA-632-98)
See EIA-632 for description. Electronic version available in searchable pdf format.

Product Code 7 COMMITTEE:G-47
$258.00

EIA/IS-731.1
Systems Engineering Capability Model

The purpose of this Standard is to support the development and improvement of systems engineering capabilities. This Standard includes all activities that associate with or enable systems engineering. Systems engineering is an inter-disciplinary approach and means to enable the realization of successful systems. In this context, systems engineering is not limited to what either Systems Engineering organizations or Systems Engineers do. Rather it is the interaction of many people, processes, and organizations resulting in the accomplishment of the required activities.

The EIA Systems Engineering Capability Model (SECM), EIA 731-1, is to be used in conjunction with the SECM Appraisal Method, EIA 731-2, to develop, improve, and assess systems engineering capability. This Standard applies to programs and organizations doing systems engineering: small or large; simple or complex; software intensive or not; preceded or unprecedented. It applies to systems that may contain hardware, software, personnel, facilities, data, materials, services, or techniques. This Standard is applicable to the engineering of a new system or the reengineering of a legacy system, or portions thereof.

This Standard is, to a large extent, a process-based systems engineering capability model. It is intended solely to be used for self-development, self-improvement, and self-appraisal. Process maturity indicators were developed first because they were deemed easiest to develop and had received the most attention in other efforts, e.g., ISO initiatives, and other disciplines, e.g., software. This Standard also includes non-process indicators of systems engineering capability. These non-process indicators represent high leverage characteristics of systems engineering capability.

This Standard contains a set of Focus Areas, Themes, Practices, and Attributes designed to be tailored. Tailoring (see Annex A and EIA 731-2 for guidance) is deletion of non-applicable Focus Areas, Themes, Practices, and Attributes, or addition of unique or special Focus Areas, Themes, Practices, and Attributes provided in organization policies and procedures, or in an acquirer-supplier agreement.

Product Code 7 Dec, 1998 COMMITTEE:G-47
$146.00

EIA/IS-731.2
Systems Engineering Capability Appraisal Method


Executives and process owners in organizations, enterprises, or programs performing any kind of Systems Engineering product life cycle activities may use this Appraisal Method.

Organizations already engaged in process improvement efforts may use this Appraisal Method and the SECM to baseline their efforts and success to date.

The scope of the Appraisal Method is designed specifically to support continuous process improvement. The Appraisal Method activities are the same basic set used by the SEI CMM-Based Appraisal for Internal Process Improvement (CBA-IPI) method for staged architecture CMMPs. Some differences exist due to the different model architectures.

This document is a process description for the Appraisal Method, not a training manual. Some materials are included that support appraisal training; however, it is not the intent of this document to be a substitute for appraisal training materials.

Product Code 7 Dec, 1998 COMMITTEE:G-47
$160.00

EIA/IS-731.2 Electronic version

Systems Engineering Capability Appraisal Method

See EIA/IS-731.2 for description. Electronic version available in searchable pdf format.

Product Code 7 COMMITTEE:G-47
$279.00

SYSB-1
System Engineering

System Engineering is recognized as the central process by which a system/equipment is designed to meet a given set of user operational requirements. This Bulletin provides a clearer, more definitive description of system engineering in order to promote greater recognition, more effective application, and the further development of system engineering that can be shared among systems contractors, subcontractors, engineering institutions, process tool developers and the Department of Defense.

Product Code 7 Dec, 1989 COMMITTEE:G-47
$99.00

EIA/IS-731.1 Electronic version

Systems Engineering Capability Model

See EIA/IS-731.1 for description. Electronic version available in searchable pdf format.

Product Code 7 COMMITTEE:G-47
$258.00

Explore the GEIA web site at http://www.eia.org

7-6
SOLID STATE DEVICES (cont.)
The following documents are available electronically for placement on an internal intranet per site basis, and includes updates on a yearly basis; EIA-632, EIA-649, EIA/IS-731.1, EIA/IS-731.2 EIA/IS-731 set, EIA-748, J-STD-016, IEEE/EIA-12207 series and CMB7-4. Please call for yearly subscription prices.

GEIA/REQUIREMENTS COUNCIL REPORTS AND PROCEEDINGS

The following publications should be ordered directly from:

GEIA/Requirements Council
Electronic Industries Alliance
2500 Wilson Boulevard
Arlington, VA 22201-3834
Phone: 703-907-7570
FAX: 703-907-7501

GEIA Ten-Year Forecast of Defense Markets and Electronic Opportunities

GEIA Five-Year Forecast of Federal Information Systems Opportunities
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEIA, INDUSTRIAL AUTOMATION (PRODUCT CODE 9)</td>
</tr>
<tr>
<td>COMPUTER AIDED SOFTWARE ENGINEERING (CASE)</td>
</tr>
<tr>
<td>CASE DATA INTERCHANGE FORMAT (CDIF)</td>
</tr>
<tr>
<td>NUMERICAL CONTROL</td>
</tr>
<tr>
<td>AXIS AND MOTION</td>
</tr>
<tr>
<td>CONTOURING</td>
</tr>
<tr>
<td>INTERFACE</td>
</tr>
<tr>
<td>MANUFACTURING MESSAGE SPECIFICATIONS</td>
</tr>
<tr>
<td>TERMS</td>
</tr>
<tr>
<td>TAPE, MAGNETIC</td>
</tr>
<tr>
<td>PERFORATED</td>
</tr>
</tbody>
</table>
**COMPUTER AIDED SOFTWARE ENGINEERING (CASE)**

**CASE DATA INTERCHANGE FORMAT (CDIF)**

**EIA/IS-106**
**CDIF - Case Data Interchange Format - Overview**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard describes the architecture of the CDIF Family of Standards and provides an overview to all the current standards that form the CDIF Family of Standards.

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-107**
**CDIF - Framework for Modeling and Extensibility**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard defines the CDIF Meta-meta-model and the modeling concepts used throughout CDIF and the extensibility mechanism.

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-108**
**CDIF Transfer Format - General Rules for Syntaxes and Encodings**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard defines how CDIF supports multiple exchange Syntaxes and Encodings, and describes how CDIF meta-models are concretely represented during a transfer.

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-109**
**CDIF - Transfer Format Syntax - SYNTAX.1**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard defines the CDIF Transfer Format Syntax, SYNTAX.1

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-110**
**CDIF - Transfer Format Encoding - ENCODING.1**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard defines an encoding of SYNTAX.1.

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-111**
**CDIF - Integrated CASE Meta-model-Foundation Subject Area**
This standard will assist the vendors and users of CASE tools in developing mechanisms for interchanging information between CASE tools. This standard specifies an element of a family of related standards. When used together, these standards specify a mechanism for transferring information between CASE tools.

This standard explains the Foundation subject area of the CDIF Integrated Meta-model, which is used to ensure that the information held by tools communicating using CDIF express the information they pass with an agreed meaning. This subject area contains the basic objects on which all others, including extensions, must be based.

**Product Code 9** Jan, 1994 **COMMITTEE:CDIF**
**$150.00**

**EIA/IS-118**
**Integrated Meta-Model-Presentation Location and Connectivity Subject Area**
This document provides a textual description of the major concepts of presentation location and connectivity subject area. Explains coverage of this subject area and outlines what it is capable of representing.

**Product Code 9** Dec, 1996 **COMMITTEE:CDIF**
**$160.00**

**EIA/IS-734**
**CDIF - Transfer Format - OMG/IDL Bindings**
This standard describes how the Object Management Group’s Common Object Request Broker Architecture (CORBA) is used as a CDIF transfer mechanism by mapping CDIF into OMG IDL, the Interface Definition Language defined by the Object Management Group.

**Product Code 9** Mar, 1998 **COMMITTEE:CDIF**
**$Call for Pricing**

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com

9-1
NUMERICAL CONTROL

EIA-358-C
This information and comments contained in the PREFACE should not be considered part of the Standard. They have been included for clarification and guidance purposes only. American National Standard Code for Information Interchange (ANSI X3.4) is designed to achieve coding uniformity for information interchange between data processing and communication systems. The increasing use of computers and related equipment for preparation of perforated tape for numerical machine control and for communication between various components of advanced numerically controlled systems has demonstrated the need for standardized usage for numerical control. As a result, the EIA IE-31 Committee, which is made up of representatives of control system builders, machine builders, and users, has prepared this Standard for use by people building and using numerical control equipment.
Product Code 9 Dec, 1992 COMMITTEE:IE-31 $30.00

AXIS AND MOTION

EIA-267-C
Axis and Motion Nomenclature for Numerically Controlled Machines (ANSI/EIA-267-C-90)
This Standard is intended to avoid misunderstandings between manufacturers, programmers, and users of machine tools, to simplify programming, to facilitate interchangeability of recorded data between machines of like configuration, and to simplify the training of programmers through standardization of machine coordinate system and motion nomenclature. EIA-267-C defines a machine coordinate system and machine movements so that a machine tool programmer can describe machining operations without having to know whether the tool approaches the workpiece or the workpiece approaches the tool.
Product Code 9 Dec, 1990 COMMITTEE:IE-31 $67.00

CONTOURING

EIA-274-D
Interchangeable Variable Block Data Contouring, Format for Positioning and Contouring/Positioning Numerically Controlled Machines (ANSI/EIA-274-D-80) (R88)
This Standard applies wherever a variable block format is used on perforated tape to control contouring or contouring/positioning numerically controlled machines. This format will usually be read row-by-row. This standard was adopted and approved for DoD use on March 9, 1979.
Product Code 9 Oct, 1988 COMMITTEE:IE-31 $70.00

INTERFACE

EIA-408
Interface between Numerical Control Equipment and Data Terminal Equipment Employing Parallel Binary Data Interchange (ANSI/EIA-408-73) (R92)
This Standard applies to the interconnection of data terminal equipment and numerical control equipment at the tape reader interface. The data terminal would typically be connected to a remote data source/link such as a computer.

EIA-431
Electrical Interface between Numerical Control and Machine Tools (ANSI/EIA-431-92)
This Standard is intended to serve as a guide in the design of an electrical interface between Numerical Control systems and electrical equipment associated with machine tools.
Product Code 9 Mar, 1992 COMMITTEE:IE-31 $30.00

EIA-441
Operator Interface Functions of Numerical Controls (ANSI/EIA-441-92)
This Standard is intended to serve as a guide in the coordination of system design to promote uniformity of the nomenclature and description of the operator devices. The definitions used in this standard are considered to be the minimum functional requirement for the device described.

EIA-484-A
This standard is intended to serve as a guide in the coordination of design and implementation of digital data communication links between Direct Numerical Control (DNC) Systems and Numerical Control Units in the machine shop and the automated factory. It is intended to meet the present and future needs of such links requiring: two way simultaneous message transfer, error protection, noise rejection, transparency to the data, independence from higher level protocols, point to point communications, switched or non-switched links, and transmission via modems. An additional facet of the purpose is to establish standards to permit DNC systems and Computer Numerical Control Units of the same or different vendor source and having a common messaging syntax and protocol. EIA-511 is such a standard.
Product Code 9 Jun, 1995 COMMITTEE:IE-31 $93.00

Explore the GEIA web site at http://www.eia.org
NUMERICAL CONTROL, INTERFACE (cont.)

EIA-491
Interface between a Numerical Control Unit and Peripheral Equipment Employing Asynchronous Binary Data Interchange over Circuits Having EIA-423-A Electrical Characteristics (ANSI/EIA-491-92)
The purpose of this Standard is to define a common interface that will enable user to connect numerical control equipment to a plurality of peripheral devices including full-duplex data communication equipment. A further purpose is to define a standard connector on the numerical control equipment and to assign contacts to the various circuit functions. EIA-491 applies to the interconnection of a numerical control unit and a variety of peripheral devices including reader/punches, automatic send-receive (ASR) terminals, intelligent terminals, part program preparation system, or another numerical control unit using serial binary asynchronous transfer to data.
COMMITTEE:IE-31
$59.00

EIA-494-B
32 Bit Binary CL (BCL) and 7 Bit ASCII CL (ACL) Exchange Input Format for Numerically Controlled Machines (ANSI/EIA-494-B-90)
The purpose of this Standard is to define a uniform, part oriented data format for the distribution of machine input data to numerically controlled machines, and the response of the machines thereto, in order to permit the exchange of such input data among a wider variety of machines than is possible with existing Standards.

The scope of this Standard is the definition of the response of a numerically controlled machine to a valid sequence of records made up of 32 bit binary words or ASCII text strings. The Standard defines the structure of these records and of the 32 bit binary words or ASCII text strings which make up the records.

This Standard addresses the control of machines capable of performing 2, 3, 4 and 5 axis motion of an active tool (mill, laser, pen, etc.) relative to part, and those capable of 2 and 4 axis tool motion relative to a rotating part (turning machines, including parallel tool slide sets capable of concurrent (merged) motion.
Product Code 9 Jul, 1992 COMMITTEE:IE-31
$184.00

MANUFACTURING MESSAGE SPECIFICATIONS

EIA-511
Standardizes services required to control and monitor plant floor devices, as well as the protocol necessary to achieve such services in a vendor-independent fashion. Manufacturing Message Specification (MMS) is primarily intended for application to computer numerical control (CNC) equipment, programmable controllers, robotics equipment, and process control systems. Other devices may be supported by using MMS as well. MMS is intended for use under the ISO open systems interconnection (OSI) architecture. It defines an application service element under OSI and is described through the use of a model device called a virtual manufacturing device (VMD), and through description of operations on the VMD.
Product Code 9 Apr, 1989 COMMITTEE:IE-31
$152.00

TERMS

AB3-D
Glossary of Terms for Numerically Controlled Machines
This document contains definitions prepared by EIA Committee IE-31 on Numerical Control Systems and Equipment. They are presented as a minimum nomenclature and are not intended to be either rigorous or exhaustive.
Product Code 9 Jul, 1992 COMMITTEE:IE-31
$53.00

TAPE, MAGNETIC

PERFORATED

EIA-227-A
One-Inch Perforated Tape (ANSI/EIA-227-A-78) (R78) (R88) (R93)
Covers the physical characteristics of one-inch perforated tape for use with numerical machine controls and applies to perforated tape with fully punched round holes. It covers perforated tape made from paper, plastic, metal, and combinations thereof. Physical properties and punch dimensions which must be maintained with the tolerance specified for the environmental conditions of 30 F to 150 F and 5% to 95% relative humidity are described.
$30.00
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEIA, DESIGN AUTOMATION (PRODUCT CODE 10) .............................................................................................................. 10-1</td>
</tr>
<tr>
<td>ELECTRONIC DATA INTERCHANGE .......................................................................................................................... 10-1</td>
</tr>
<tr>
<td>ELECTRONIC DESIGN INTERCHANGE FORMAT (EDIF) .................................................................................................. 10-1</td>
</tr>
<tr>
<td>I/O BUFFER INFORMATION SPECIFICATION (IBIS) ...................................................................................................... 10-2</td>
</tr>
<tr>
<td>VHDL ........................................................................................................................................................................ 10-2</td>
</tr>
</tbody>
</table>
## ELECTRONIC DATA INTERCHANGE

**EIA-548**  
*Electronic Design Interchange Format 2 0 0*  
Product Code 10 Mar, 1984 COMMITTEE:EDIF  
$122.00

**EIA-618**  
*Electronic Design Interchange Format (EDIF) Version 3 0 0*  
This document defines the syntax and semantics for EDIF Version 3 0 0, also known as IEC 61690-1. EDIF Version 3 0 0 is defined at two levels, Level 0 and Level 2. Level 0 is the normal mode of use; Level 2 supports a certain degree of parameterization. EDIF Version 3 0 0 completely addresses the areas of design connectivity as the ConnectivityView and logical schematics as the schematicView), including at Level 1 the ability to represent schematic and connectivity frames. It represents design hierarchy, library information and design configuration. It also includes capabilities formerly found in the Document and Graphics views of EDIF Version 2 0 0. A subsequent release of EDIF, EDIF Version 4 0 0 (EIA-682-1996), provides support for the domain of printed circuit design and multi-chip modules in addition to the coverage already in EDIF Version 3 0 0. EDIF 400 is upwardly compatible from EDIF Version 300. When one purchases EDIF Version 3 0 0, EDIF Version 400 is included.  
Product Code 10 Dec, 1993 COMMITTEE:EDIF  
$266.00

**EIA-682**  
*EDIF Version 4 0 0 (EIA-682-96) Electronic Design Interchange Format*  
EDIF Version 4 0 0 - This document provides the latest version of the standard added support for PCBs and multichip modules, manufacturing drawings and technology rules to the capabilities for schematics connectivity, design hierarchy, libraries, and design configuration already provided by EDIF Version 3 0 0. EDIF Version 4 0 0 is fully upwards compatible from EDIF Version 3 0 0. EDIF Version 4 0 0 is also known as IEC 61690-2. When one purchases EDIF Version 3 0 0, EDIF Version 400 is included.  
Product Code 10 Dec, 1996 COMMITTEE:EDIF  
$266.00

**EIA/IS-103-A**  
*Library of Parameterized Modules (LPM) Version 2.0*  
The objective of the LPM standard is to allow efficient access to unique architectures (such as those found in FPGA products) to a wider group of designers who lack a detailed knowledge of the vendor’s silicon architecture. This access is provided via synthesis tools and other design entry systems.  
Through the LPM standard, designs can remain technology-independent longer. The user is freed from the need to know or decide upon the implementation technology until later in the design flow. The designer’s entry tools can be completely independent of the target technology and rely on synthesis tools to map the design to the target technology. The objective of LPM is to provide a generic, technology independent set of logical primitives with which to construct a design and get efficient performance from a wide array of technologies.  
Product Code 10 Feb, 1999 COMMITTEE:EDIF  
$201.00

**EIA/EDIF/AG-1**  
*Application Guide Using EDIF 2 0 0 for Schematic Transfer*  
Introduction to EDIF.  
Product Code 10 Jul, 1989 COMMITTEE:EDIF  
$52.00

**EIA/EDIF-1**  
*Introduction to EDIF, Volume 1*  
This volume is the first in a series of monographs designed to make the standard easier to understand. It is intended to be used as a companion to the Electronic Design Interchange Format (EDIF) Reference Manual Version 2 0 0. This volume gives an overview of the format.  
Product Code 10 Jul, 1989 COMMITTEE:EDIF  
$55.00

**EIA/EDIF/AG-2**  
*EDIF Connectivity*  
This volume is the second in a series of monographs designed to make EDIF Version 2 0 0 easier to understand. It is intended to be used as a companion to the Electronic Design Interchange Format (EDIF) Reference Manual for Version 2 0 0. This volume gives an introduction to the concept of connectivity in the EDIF Version 2 0 0 format.  
Product Code 10 Jun, 1989 COMMITTEE:EDIF  
$55.00

**I/O BUFFER INFORMATION SPECIFICATION (IBIS)**

**EIA-656-A**  
IBIS is a consistent, software-parsable format to be used by semiconductor vendors for specifying the analog characteristics of input and output buffers of digital semiconductor devices. This essential information is readily transformed into accurate models by EDA vendors and semiconductor customers. Resulting behavioral models enable users to perform high-speed, accurate signal-integrity simulations of their digital system interconnects. Prior to IBIS, I/O buffer model development methodologies revealed proprietary device fabrication process information.  
Product Code 10 Sep, 1999 COMMITTEE:IBIS  
$106.00

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com

10-1
EIA-567-A
VHDL Hardware Component Modeling and Interface Standard (ANSI/EIA-567-A-95)
The purpose of this standard is to provide guidelines for the production of VHDL models for hardware descriptions that:

a) conform to a common signal interface convention;

b) possess common simulation capabilities;

c) are reusable as library elements of other designs;

d) support multiple source procurement; and

e) support technology independent reprocurement.

It is not the purpose of this standard to create models that promote a particular hardware design methodology.

Product Code 10 Jul, 1995 COMMITTEE:VHDL
$61.00
GEIA Standards and Engineering Publications
# Table of Contents

- GEIA, QUALITY & RELIABILITY (PRODUCT CODE 11) ................................................................. 11-1
- QUALITY ................................................................................................................................................ 11-1
- CERTIFICATION .................................................................................................................................... 11-1
- ELECTRONIC, TESTING, QUALITY ................................................................................................. 11-1
- PREFERRED QUALITY STANDARDS ................................................................................................. 11-1
- PROCESS IMPROVEMENT ................................................................................................................. 11-1
- PROCUREMENT PROCESS ............................................................................................................... 11-1
- QUALITY LEVELS ............................................................................................................................. 11-1
- SAMPLING ......................................................................................................................................... 11-2
- VARIABLES TEST DATA .................................................................................................................... 11-2
- STATISTICAL PROCESS CONTROL ................................................................................................. 11-2
QUALITY CERTIFICATION

EIA-599-A
This Standard is applicable to suppliers of electronic components, assemblies, equipment, and related materials. This standard establishes the general requirements to achieve a certified process. The use of this standard is intended for any manufacturing or service company whose goal is to achieve customer satisfaction through continuous improvement. 
Product Code 11 Jun, 1996 COMMITTEE:QRE, JC-14.4 $36.00

EIA-601-A
This Standard specifies requirements for the approval and maintenance of a manufacturer’s capability and the procedures for the test and release of passive electronic components manufactured under capability approval. It also includes requirements for generic specifications that invoke this Standard.  
Product Code 11 May, 2000 COMMITTEE:QRE $40.00

ELECTRONIC, TESTING, QUALITY

EIA-554-1
Assessment of Average Outgoing Levels in Parts per Million (PPM) (ANSI/EIA-554-1-96)
This Standard was developed to provide a uniform method of measurement and calculation of average outgoing quality levels. Minimum sample sizes and a method for aggregating data are provided.  
Product Code 11 Aug, 1996 COMMITTEE:QRE $Call for Pricing

EIA-554-2
Assessment of Nonconforming Levels in Parts per Million (PPM) (ANSI/EIA-554-2-96)
This Standard was developed to provide a uniform method of assessing quality levels in situations with audit sampling rather than acceptance sampling is performed.  
Product Code 11 Aug, 1996 COMMITTEE:QRE $Call for Pricing

PREFERRED QUALITY STANDARDS

EIA-765-A
International and National Quality Standards Index
This index is presented to provide a quick reference of international and national quality standards and publications that support general quality system elements. This reference is a list of quality standards a company may wish to consider when implementing or improving their quality system.  
Product Code 11 May, 1998 COMMITTEE:QRE $39.00

PROCESS IMPROVEMENT

EIA-832
Process Improvement Guidelines
The purpose is to guide a manufacturer through a methodology for analyzing, modeling, controlling, validating and improving products and services through the use of effective and measurable engineering practices.  
Product Code 11 May, 2000 COMMITTEE: QRE $42.00

PROCUREMENT PROCESS

EIA-830
Model for Integrating Metrics Into the Procurement Process
The purpose is to describe a model that is applicable during the acquisition process to gain insight into suppliers’ approaches to using metrics in monitoring, managing, and improving their processes and products. This model also facilitates a common fra  
Product Code 11 Feb, 2000 COMMITTEE: QRE $55.00

QUALITY LEVELS

EIA-555
Lot Acceptance Procedure for Verifying Compliance with the Specified Quality Levels (SQL) in PPM (ANSI/EIA-555-88) (R97)
EIA-555 is a means by which ppm nonconformance level requirements can be verified on a lot by lot basis until such time that quality approaches the ultimate objective of near zero nonconformances. It allows a customer to set his quality requirements (Specified Quality Level) and provides a method for verifying that an individual lot meets those quality requirements (SQL). A key feature of this standard is that it provides incentives for suppliers to improve their quality. The lot acceptance portion of this standard requires larger sample sizes when quality declines and smaller sample sizes when quality improves. 
Product Code 11 Jun, 1997 COMMITTEE:QRE $41.00

To order call: 800-854-7179, 303-397-7956 or e-mail global@ihs.com
**QUALITY, QUALITY LEVELS (cont.)**

**EIA-738**  
**Guideline on the Use and Application of Cpk**  
This document provides the guidelines for the utilization of Cpk as a monitor of process performance, and application of the guidelines in this document should allow businesses to use Cpk or similar techniques to effectively monitor one aspect of quality improvement and to promote strong customer/supplier relationships.

**Product Code 11 Sep, 1997 COMMITTEE:QRE**  
**$44.00**

**SAMPLING**

**EIA-584**  
**Zero Acceptance Number Sampling Procedures and Tables for Inspection by Attributes of a Continuous Manufacturing Process (ANSI/EIA-584-91) (R97)**  
Conventional attribute sampling plans based upon nonzero acceptance numbers are no longer desirable. In addition, emphasis is now placed on the quality level that is received by the customer. This relates directly to the Lot Tolerance Percent Defective (LTPD) value or the Limiting Quality Protection of MIL-STD-105. Measuring quality levels in percent nonconforming, although not incorrect, has been replaced with quality levels measured in parts per million (PPM). As a result, this standard addresses the need for sampling plans that can argument MIL-STD-105, are based upon zero acceptance number, and address quality (nonconformance) levels in the parts per million range. This document does not address minor nonconformances, which are defined as nonconformances that are not likely to reduce materially the usability of the product for its intended purpose.

**Product Code 11 Jun, 1997 COMMITTEE:QRE**  
**$57.00**

**EIA-585**  
**Zero Acceptance Number Sampling Procedures and Tables for Inspection by Attributes of Isolated Lots (ANSI/EIA-585-91) (R97)**  
Conventional attribute sampling plans based upon acceptance numbers that permit acceptance of a lot when some allowable number of nonconformances are encountered during inspection are no longer desirable. In addition, emphasis is now placed on the quality level that is received by the customer. This relates directly to the Lot Tolerance Percent Defective (LTPD) value or the Limiting Quality Protection of MIL-STD-105. Measuring quality levels in percent nonconforming, although not incorrect, has been replaced with quality levels measured in parts per million (PPM). As a result, this standard addresses the need for sampling plans that can augment MIL-STD-105, are based upon zero acceptance number, and address quality (nonconformance) levels in the parts per million range. This document does not address minor nonconformances, which are defined as nonconformances that are not likely to reduce materially the usability of the unit of product for its intended purpose.

**Product Code 11 Jun, 1997 COMMITTEE:QRE**  
**$55.00**

**VARIABLES TEST DATA**

**EIA-591**  
**Assessment of Quality Levels in PPM Using Variables Test Data (ANSI/EIA-591-92)**  
The traditional approach to measuring levels of nonconformance using attribute data, whether the results are stated in percent or Parts Per Million (PPM), becomes more burdensome as the nonconformance levels approach zero. The quantities required to establish a data base for an acceptable confidence level may be in the hundreds of thousands, which also makes it impractical for a user to verify these quality levels at an Incoming Inspection Facility.

The use of variables test data offers a solution to these problems. Oftentimes, sample sizes of 100 or fewer can be used to generate acceptable confidence levels for selected parameters, either by the manufacturer or the user. Such characterizations can be statistically meaningful only if the product represented can be considered to have come from a statistically stable (uniform) manufacturing process. The procedure described here further requires that the measured characteristic (or some transformation of it) follow a normal distribution. The procedure described in this document is a useful approach to estimating PPM nonconforming using variables data if, but only if, the data are consistent with the assumption of an underlying population distribution that is normal (Gaussian). If this requirement is not satisfied, then the procedure described here should not be used, because it may yield greatly erroneous estimates of PPM nonconforming.

**Product Code 11 Dec, 1992 COMMITTEE:QRE**  
**$55.00**

**STATISTICAL PROCESS CONTROL**

**EIA-557-A**  
Continuous quality improvement and the achievement of operational and manufacturing excellence are the essence of the total quality philosophy. One of the major vehicles used for achieving the excellence objective is the application of Statistical Process Control (SPC) techniques.

SPC embraces a management philosophy of continuous process improvement that has a primary focus on prevention of defects. After a process has been characterized using statistical techniques (i.e., design of experiments (DOE), capability studies, etc.), SPC is a tool that can be applied to control and optimize the process and reduce variability. An acceptable approach toward an SPC system involves the use of “end-of-process” data to control the process through the application of SPC techniques. However, the intent of this standard is to emphasize the use of in-process data in order to better control and forecast system quality. This proactive use of SPC in conjunction with other techniques and the appropriate responsiveness to out-of-control situations serves to make SPC techniques critical in continuous process improvement and achieving excellence.

**$54.00**

Explore the GEIA web site at [http://www.eia.org](http://www.eia.org)
EIA-681
Assessment Guide for Process Certification
It is the purpose of this document to provide guidance for companies and registrars to achieve a consistent assessment of a producer's compliance to the requirements for Process Certification (EIA-599). In addition, a technique is provided as an option for the assessment of a producer's level of quality system maturity.
Product Code 11 Jul, 1996 COMMITTEE:QRE/JEDEC
$67.00