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Library Format Description for Printed Boards in Digital Form

1.0 SCOPE
The information contained in this standard is intended to supplement the IPC-D-350 through IPC-D-353 standard series. This document describes the usage of libraries within the processing and generation of information files. The data contained within covers both the definition and usage of internal (exist within the information file) and external libraries. The libraries can be used to make the data generated more compact and thus facilitate data exchange and archival. The subroutines within a library can be used one or more times within any Data Information Module (see 5.2), and also in one or more Data Information Modules. As a supplement, this document will not cover the specifics of the other standards in the series.

1.1 Format Compatibility The concepts detailed in this standard are supplemented by the descriptions defined in other companion IPC standards. It is the intent that the family of IPC-D-35X standards detail the various record formats.

Data redundancy is kept to a minimum by using various standards for appropriate data descriptions dependent upon the use of the data.

The following shows the correlation between the IPC standard and the record formats that are defined in each particular standard.

IPC-D-35X
Standards Record Description
IPC-D-350 Artwork Records
IPC-D-350 Board Description Records
IPC-D-351 Schematic Drawing Records
IPC-D-351 Master Drawing Records
IPC-D-351 Assembly Drawing Records
IPC-D-351 Miscellaneous Part Drawing Records
IPC-D-352 Electrical Description Records
IPC-D-352 Bill of Material Records
IPC-D-353 Testing Format Records
IPC-D-354 Library Description Records

Users are encouraged to maintain data in a form that is self-sufficient, and is not impacted by changes in supplementary data used in the design process. Thus, library description records may be repeated on archived data. All records shall be in the appropriate format defined in the IPC standard related to the particular record type.

2.0 APPLICABLE DOCUMENTS
The following documents, of the issue currently in effect, form a part of this standard to the extent specified herein.

2.1 IPC

- IPC-T-50 Terms and Definitions
- IPC-D-300 Printed Board Dimensions and Tolerances
- IPC-D-310 Suggested Guidelines for Artwork Generation and Measurement Techniques for Printed Circuits
- IPC-D-325 Printed Board Documentation
- IPC-D-350 Printed Board Description in Digital Form
- IPC-D-351 Printed Board Drawings in Digital Form
- IPC-D-352 Electronic Design Data Description for Printed Boards in Digital Form

2.2 American National Standards Institute

- ANSI X3.12 Subroutine Record Format Standardization
- ANSI X3.22 Recorded Magnetic Tape for Information Interchange
- ANSI X3.26 Hollerith Punched Card Code
- ANSI X3.39 Recorded Magnetic Tape
- ANSI X3.54 Recorded Magnetic Tape
- ANSI Y14.5 Dimensioning and Tolerancing for Engineering Drawing
- ANSI Y32.1 Logic Diagram Standards
- ANSI Y32.16 Electrical and Electronic Reference Designations
- ANSI Z210.1 Metric Practice Guide (ASTM E380-72)