



*THE INSTITUTE FOR
INTERCONNECTING
AND PACKAGING
ELECTRONIC CIRCUITS*

IPC-D-354

Library Format Description for Printed Boards in Digital Form

ANSI/IPC-D-354

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Table of Contents

1.0 SCOPE	1	6.0 COMMENT RECORDS	8
1.1 Format Compatibility.....	1	7.0 FEATURE/LOCATION AREA FORMAT	8
2.0 APPLICABLE DOCUMENTS	1	7.1 General Information.....	8
2.1 IPC.....	1	7.2 Operations Code Description Area.....	8
2.2 American National Standards Institute	1	7.3 Features Description Area (FDA)	9
2.3 Department of Defense.....	2	7.4 Location Description Area (LDA)	12
3.0 TERMS AND DEFINITIONS	2	7.5 Unassigned Columns	14
3.1 Annotation.....	2	8.0 LINE RECORD DEFINITION	14
3.2 Comment Records.....	2	8.1 Special Requirements for Line Records	14
3.3 Complex or Composite Records	2	8.2 Operations Code Definitions	14
3.4 Data Information Module (DIM)	2	8.3 "D" Field Definition	14
3.5 Data Layer.....	2	8.4 "L" Field Definition	14
3.6 Feature Location Record	2	8.5 "S" Field Definition	14
3.7 Job Set.....	2	8.6 "H" Field Definition	14
3.8 Modal Form	2	8.7 "P" Field Definition	14
3.9 Parameter Record.....	2	8.8 "G" Field Definition	14
3.10 Physical Layer.....	2	8.9 LDA Field Definition	15
3.11 Subroutine	2	9.0 POINT RECORD DEFINITION	15
3.12 Subroutine Call	2	9.1 Operations Code Definition	15
4.0 GENERAL REQUIREMENTS	2	9.2 "D" Field Definition	15
4.1 External Libraries	2	9.3 "L" Field Definition	16
4.2 Internal Libraries.....	2	9.4 "S" Field Definition	16
4.3 Other Requirements	2	9.5 "H" Field Definition	16
4.4 Job Set Definition	3	9.6 "P" Field Definition	16
4.5 Data Information Module Definition	4	9.7 "G" Field Definition	16
4.6 Data Orientation	4	9.8 LDA Field Definition	16
4.7 Transfer Media and Data Formats	4	10.0 ANNOTATION/DIMENSION RECORD DEFINITION	16
5.0 PARAMETER RECORDS	4	10.1 Annotation Record.....	16
5.1 Parameter—JOB	4	10.2 Special Requirements for Annotation Records	18
5.2 Parameter—DIM	5	11.0 SUBROUTINES	19
5.3 Parameter—UNITS	6	11.1 General	19
5.4 Parameter—TITLE	6	11.2 Subroutine Definition—Operation Code 2.....	19
5.5 Parameter—NUM	6	11.3 Subroutine CALL Records	20
5.6 Parameter—REV	7		
5.7 Parameter—SHEET	7		
5.8 Parameter—SCALE	7		
5.9 Parameter—LAYER	7		
5.10 Parameter—IMAGE	7		

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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 IPC¹

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 Institute²

ANSI X3/TR-1-77 American National Dictionary for Information Processing

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)

1. Publications are available from the IPC, 2215 Sanders Road, Northbrook, IL 60062-6135.2

2. To obtain documents, write: American National Standards Institute, 1430 Broadway, New York, NY 10018.