

ENGINEERING PRACTICE STUDY  
PROJECT NUMBER: 5998-2008-016

TITLE:

Review of Non-Government Standard (NGS) IPC-4204  
To Determine The Status Of Its DoD Adoption.

11 March 2008

FINAL REPORT

Prepared by:

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ATTCH 2

I. **OBJECTIVES:** The objective of this study was to evaluate the status of IPC-4204 in regards to its worth as a viable document for use by the Defense Standardization Program (DSP) using the following criteria:

- a. Evaluate the activities by the non-Government standard body (NGSB) regarding the document.
- b. Reviewing the actual notice of adoption on the ASSIST web site that is administered by the Document Automation and Production Service (DAPS) for accuracy and errors.
- c. Determine the value and use of IPC-4204 as a DoD adopted document within the DSP.

II. **BACKGROUND:** IPC-4204, "Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Circuitry", was adopted on 26 February 2003 and the DoD notice of adoption has not been revised since that date. IPC-4204 was developed and published its non-Government standard body (NGSB), the IPC – Association Connecting Electronics Industries. The NGSB committee responsible for IPC-4204 meets regularly to maintain and keep current its contents. DSCC attends many of these meetings and makes comments to drafts in order to represent the DoDs position regarding IPC-4204. This study is part of a 5-year review of the DoD adoption notice for validity and accuracy, since the NGS document has already been adopted for use by the DoD.

III. **RESULTS:** After a thorough review of IPC-4204, ASSIST, and the printed board industry, the answers to the questions posed in section I of this study are as follows:

- a. **NGSB activity:** Currently, the NGSB is developing revision A of IPC-4204 to address new metal clad flexible base materials. DSCC-VAC has been monitoring the activities of the IPC's D-13 committee, which is responsible for content and maintenance of IPC-4204.
- b. **Status of the DoD Notice:** A review of the actual notice of adoption that is on the ASSIST web site (attachment 1) uncovered mistakes in the title of the NGS and out of date contact information for both the NGSB and the DSCC point of contact. A proposed updated notice highlighting these errors is included as attachment 2.
- c. **Use of the NGS in DoD documents:** ASSIST revealed that there is no usage of IPC-4204 within DoD standardization documents. This fact is acceptable given the fact that IPC-4204 is primarily used by design activities and acquiring activities as a reference on printed board detail drawings. These printed board detail drawings reference the DoD specifications MIL-PRF-31032 and MIL-P-50884 for inspection and testing.

IV. **CONCLUSION:** Based on its usage by design and acquiring activities, IPC-4204 is a valued acquisition document that benefits the DoD standardization program.

V. **RECOMMENDATION:** IPC-4204, "Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Circuitry", should continue to be available for citing by DoD standardization documents and use by design and acquiring activities. Therefore, an updated notice of adoption for IPC-4204 should be coordinated with the military custodians for review and comment.

**ADOPTION NOTICE**

IPC-4204, "Metal-Clad, Flexible, Dielectrics for Use in Fabrication of Flexible Printed Circuitry", was adopted on 26-FEB-03 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Defense Supply Center Columbus, P.O. Box 3990, Attn: DSCC-VAI, Columbus, OH 43216-5000. Copies of this document may be purchased from the Institute for Interconnecting and Packaging Electronic Circuits, 2215 Sanders Road, Northbrook, IL 60062-6135. <http://www.ipc.org/>

**Custodians:**

Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

**Adopting Activity:**

DLA - CC

**Reviewer Activities:**

Army - MI

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Custodians:  
Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

Project: 5998-0136-06

Review activities:  
Air Force - MI

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil/>.