

MICROSECTION COUPON**1.0 Definition of terms:**

1.0.1 The term “shall”, “will” and “may” are used with specific intent thought-out these documents and will observe the following rules:

- 1.1** Requirements defined using “**shall**” in the text are mandatory requirements and are considered to be binding and require formal verification. Departure from such a requirement is not permissible without formal agreement between Subcontractor and CSPI.
- 1.2** Requirements defined using “**will**” in the text expresses a provision or service by CSPI or an intention by CSPI in connection with a requirement of this document. The subcontractor is implicitly authorized to rely on such service or intention.
- 1.3** The word “**may**” in the text expresses a permissible practice or action. It does not express a requirement of this document.

2.0 Microsection Coupon

With each delivery of boards, the supplier shall include the microsections used for product acceptance and coupon strips representing each panel for which product is delivered. Supplier will conform to the latest rev of IPC-A-600 Class-3 standard. The following standard IPC microsections for each panel will consist of (as a minimum):

2.1 OPTION 1

2.1.1 "A and B" microsections that have not been solder floated (As Received).

2.1.2. The following microsections are required in the "X" and "Y" direction:

- "A" microsections that have been solder floated. (Note: This is only required if the hole size is larger than the hole on the "B" microsection. The larger hole will be used to detect post separation.)
- "B" microsections that have been solder floated.

2.2 OPTION 2 (As stated in IPC 2221, latest rev.)

2.2.1. "AIB" microsections that have not been solder floated (As received).

2.2.2 "AIB" microsections that have been solder floated, this is required in both the "X" and "Y" direction.

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- 2.3 REQUIRED** - Coupon strips representing the microsections in Option 1 or Option 2 above.
- 2.4 REQUIRED** - If the board contains blind or buried vias, one set of microsections representing these features must be submitted.
- 2.5 REQUIRED** - Any special coupon strips (impedance, peel strength, wire bond, etc..) that are specified on the master drawing.
- 3.0** The coupon strips and microsections listed above will not be returned to the supplier. The supplier shall retain other acceptance microsections and additional coupon strips that are a part of the fabrication panel. The following documentation is required with each shipment:
- 3.1** C of C stating conformance to the specifications.
- 3.2** A list of the panel numbers and corresponding boards shipped. Also, indicate which panels were scrapped at your facility.
- 3.3** A list of the panel numbers for which micro sections were submitted. Micro sections must be marked to indicate panel number.
- 3.4** Electrical test results to include impedance data if applicable.
- 3.5** Statement of results of "R" coupon testing by panel number if used to verify acceptable internal layer registration.
- 3.6** Use of a "modified F" coupon is acceptable in some cases if it is used for the same purpose as the "R" coupon.
- 3.7** If the printed circuit board microsection fails external annular ring, state that the boards themselves were checked for registration and pass, if the boards are to be delivered.
- 3.8** Retention of micro-sections and coupon strips representing the delivered product.
- 3.8.1** The supplier is responsible for maintaining a set of microsections and coupon strips which represent the product delivered. However, if only one set remains and, in order to satisfy the requirements of this note, that set is delivered to CSPI then CSPI accepts the responsibility for the micro-sections and coupon strips and their retention as required.

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