Tape Splicing

An ECIA Knowledge Document

Volume 1, Number 3

October 2009

NOTICE

ECIA Knowledge Documents are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such documents shall not in any respect preclude any member or nonmember of ECIA from manufacturing or selling products not conforming to the documents, nor shall the existence of such documents preclude their voluntary use by those other than ECIA members, whether the document is to be used either domestically or internationally.

ECIA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the Document.

This Document does not purport to address all safety problems associated with its use or all applicable regulatory requirements. It is the responsibility of the user of this Document to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before its use.

This ECIA Knowledge Document was formulated under the cognizance of the Automated Component Handling Standards Committee.

Published by

Tape Splicing

Splicing is widely used by end users during Pick & Place operations, but not by people who tape components for use elsewhere. In fact, there are end users who explicitly ban spliced components in their procurement documentation. ACH committee members have tested spliced components in the taping process and due to machine jams, this process was considered unsuccessful.

Several companies market splicing systems:

- Acupaq (www.acupaq.com) offers hand tools and adhesive tapes.

- Ateksystems (www.atekllc.com) also offers splicing materials and tools.

- Shenzhen Kanghongjin Electronic Co. system (www.kanghongjin.com) uses adhesive tapes without tools. It is used with 8mm through 24mm wide tapes, both punched paper and embossed plastic.

- Sierra Electronics (www.tapesplice.com) uses brass shims, each 5 sprocket holes long, which are crimped to the tape edge. An adhesive tape goes over the cover tape.

- Topline's system (www.topline.tv) uses adhesive strips with punched holes, plus adhesive tape over the cover tape. Topline continues to supply the adhesive strips, but the tool used in the process has been discontinued.

At the time of publication, no splicing methods have been confirmed to pass ISTA-3A package testing and therefore are only recommended for in-house use.