APPLICATION SPECIFICATION FOR
Molex IMPACT RIGHT ANGLE CONNECTORS
SIGNAL MODULE INSTALLATION

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1.0 SCOPE

This document describes the methods and tooling for application of various Molex connectors with press-fit signal modules onto a printed circuit board (PCB). The recommendations contained within are for installation of Impact Right Angle connectors, including standard and orthogonal pitch, daughtercards and RAM products. This document may be more applicable to connectors with larger pair sizes (5-Pr and 6-Pr) since an increase in pin count can increase the amount of variation seen in the connector’s compliant tail true position.

2.0 PROCEDURE

2.1 INCOMING INSPECTION

2.1.1 CONNECTOR

Inspect the position of the compliant pin tips in order to verify that there is no damage to the connector that might have occurred during shipment.

2.1.2 PCB

Inspect the PCB hole pattern to verify initial drill size and finished hole size.

2.2 PCB SUPPORT

The IMPACT right angle signal modules require up to 4 lbs per pin of force to press into the PCB. Therefore, a PCB support pallet is recommended directly under the signal module hole pattern in order to prevent bowing and damage to the PCB. The support fixture should have clearance for the signal modules terminals when they protrude through the underside of the PCB.
2.3 SIGNAL MODULE PRESS TOOLING

For IMPACT right angle standard pitch and right angle orthogonal connectors, there is a custom-profiled application tool (See figure 2.3). To order, contact your local Molex representative.

![Guide Surface Diagram]

Figure 2.3

2.4 SIGNAL MODULE PLACEMENT

When placing the connector module onto the PCB, locate one corner pin of the module into the proper plated hole. Then, roll the remaining module pins into the PCB (see the attached figures). Visually inspect the module to verify that all of the compliant pin tips have entered the appropriate PCB vias.
Example 1: Right Angle Daughtercard

Figure 2.4.1: Back corner pin into PCB

Figure 2.4.2: Roll the module across the back row

Figure 2.4.3: Roll the module forward toward the front edge of the circuit board

Figure 2.4.4 Press down and check for bent pins

The connector shown in Figures 2.4 is reflective of 6-Pr 100-Ohm Daughtercard. The same process can be applied to all Impact daughtercard and RAM products of various pair sizes.