The Technobox PMC Socket-Saver permits cost effective volume testing of PMC modules when used with Technobox P/N 3390 “PMC to PCI adapter for Test.” It may also be used to reduce wear and tear on Technobox P/N 1518/1523 (“Extender/Preprocessor”).

The Technobox P/N 3390 is nominally an engineering test tool for debugging PMC designs. However, this tool can be readily converted into a production-worthy test fixture using the PMC Socket Saver.

The PMC connector is specified by EIA standard 700 AAAB, “1.0 Millimeter, Two-Part Connectors for Use with Parallel Printed Circuit Boards.” This standard specifies a “Durability” of only 100 mating cycles (see section 10.2.2 of the specification).

Although the specification is probably conservative, Technobox has found instances where the connector fails after numerous mating cycles during production testing of PMC cards.

The Socket Saver protects the user’s investment in expensive PMC-related test tools by providing a disposable device which can be easily replaced when a failure occurs. It also may be used in situations where a 10 mm elevation of a PMC is desired.

The Socket Saver is a simple two-layer PCB board. Four “Receptacle” connectors (JN1, JN2, JN3, JN4) are soldered to one side, while four “Plug” connectors (PN1, PN2, PN3, and PN4) are soldered to the opposite side of the board. One-to-one connection is provided by the printed circuit board, between the PN and JN connectors.

The unit supports 32-bit PCI bus (JN1/JN2/PN1/PN2), 64-bit PCI bus (JN3/PN3), and rear user I/O (JN4/PN4) continuity between a PMC test tool and the PMC under test.

The Socket Saver is secured to the board at the center using a 10mm standoff (provided). Also, the socket saver has an alignment feature at this point, such that the PMC under test is aligned with respect to the Socket Saver connectors prior to mating.