



## **Packaging a durable integrated student laboratory fixture for Micro-processor development**

In November 1998

I was commissioned by the Electrical Engineering Department of St. Louis University to develop and produce a fleet of durable integrated and portable laboratory fixtures for the instructional support of a commercial Micro-processor development system.

I designed and produced ten such units as pictured which included student development modules purchased by St. Louis University.

This package included a linear bipolar dc power supply for all components and this design reduced power supply noise and radiation normally affiliated with switching regulators.

The unit was assembled in a surplus carrying case that provided both power cord and RS233 programmers connections to the core processor with the case completely closed. This configuration allowed the unit to be placed on the floor next to computer workstations for student code development.

