



Vx Aviation

PROTON-225A

General Purpose Prototyping Board
with PIC Microcontroller

Installation Guide

Ver. A1

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PROTON-225A

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Description

The PROTON-225A is a general purpose electronics prototyping board. It is prewired to support a 20-pin PIC16 or PIC18 type microcontroller with programming port, a regulated power supply, uncommitted transistor and potentiometer circuits and two DB-25 connectors.

All of the pins on the two DB-25 connectors are uncommitted, with the exception of pins 13 and 25 which are wired together on both connectors and are reserved for unregulated power and ground, respectively.

The PROTON-225A, when provisioned with the bottom DB-25 male connector, will plug directly into the Vx Aviation AXIS-25A wiring hub. This allows the possibility of connecting together multiple PROTON based circuits and other instruments in an organized, centralized fashion.

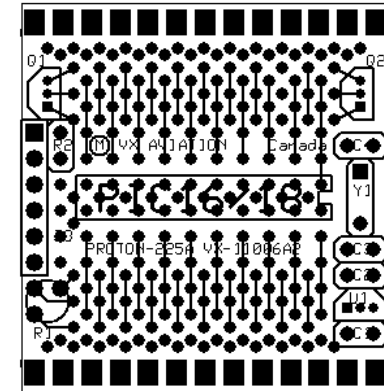
Although originally designed to support avionics interconnect, the PROTON/AXIS products are completely general purpose and application independent.

The entire PROTON-225A device will fit into the optional 25-pin D-subminiature connector shell. This provides convenient mechanical packaging for many applications, depending on component size.

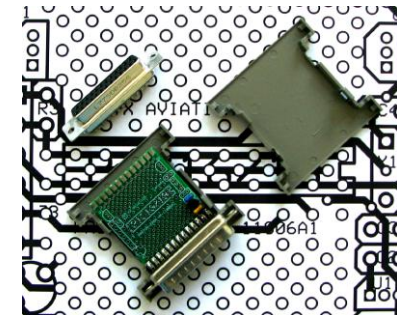
The device is provided either as a stand-alone blank PCB or optionally with two DB-25 connectors (one male for the bottom, one female for the top) and the connector shell.

Technical Summary

- ❑ General purpose prototyping board, with approximately 200 circuit pads.
- ❑ Provisions for:
 - ❑ Discrete components (LEDs, resistors, capacitors, etc.)
 - ❑ Regulated power supply for 78L05 type regulators
 - ❑ PIC16/PIC18 microcontroller with ICSP programming port
 - ❑ PIC oscillator circuit
 - ❑ Two DB-25 connectors (one male, one female)
 - ❑ Two transistor positions
 - ❑ One potentiometer position
- ❑ Mechanical packaging provided by included snap-together backshell
- ❑ Backplane support provided by companion AXIS-25A wiring hub.



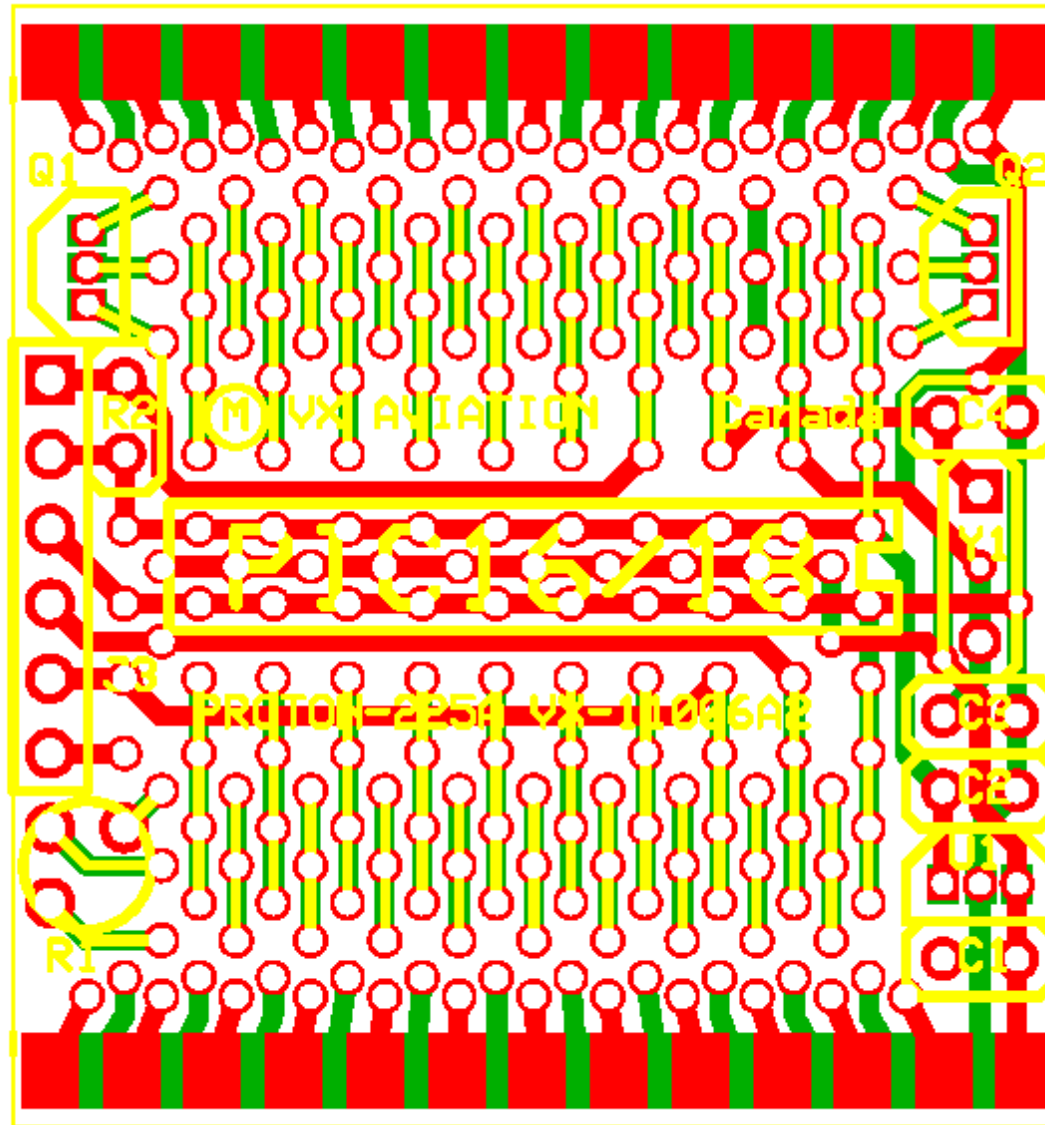
PROTON-225A Board Layout



**PROTON-225A Image,
with optional components**

NOT FOR USE IN CERTIFIED AIRCRAFT





PROTON-225A PCB Layout

