

# UxV/35 Test Set Usage

The UxV/35 bus has a defined set of signals for usage on various Uncrewed Vehicles in different domains – Land, Surface and Air.

Access to these signals for diagnostics can be achieved manually through connection to the bus pins or you can use these boards to perform common tests or signal acquisition.







The boards are powered by the stack, USB powered port the usage of an external battery or power supply.

Since these signals are active when the UxV/35 is active, these test boards can also be used for live systems testing and validation.

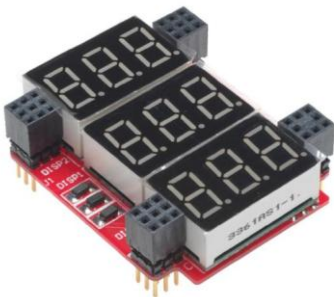
System or board level issues can more rapidly be isolate using the KA1051-01 UxV/35 Test Board Set.

**Kairos82nd**

**KA1051-01**  
**1 Set**  
**UxV/35 Test Boards**

 KA1031-01 Serial Test	 KA1033-01 Serial Loopback
 KA1035-01 LED Status	 KA1036-01 Digital Input
 KA1034-01 Stack Voltage	 KA1039-01 Multi-Source Test Power

UxV/35



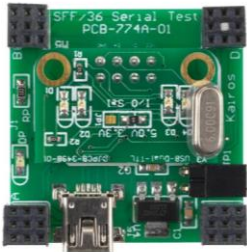
The Voltage Display measures and displays the primary bus voltage found on the UxV/35 bus. It shows the Battery VIN voltage, 8-32vdc, the 5vdc and the 3.3vdc. It is powered by any available voltage.

It is an easy, low risk way to assure that the expected voltages are on the UxV/35 Stack.



The Signal Test board shows the status of all the signals on the UxV/35 bus. There is a red and green LED on each line. If the line is driven low, the RED led is fully illuminated, if the line is driven high the GREEN led is fully illuminated. A changing signal shows an intensity for the strongest signal. An undriven signal is a dim red and green LED. It is easy to see an expected visual signature of a properly operating bus. Quick diagnostics!

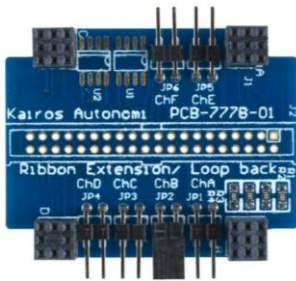
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The Serial Test board provides two USB serial ports that can be routed to any of the serial signals that are used on the UxV/35 bus. Solder Jumpers on the back of the board help select the Tx/Rx polarity and what port is mapped to either of the USB serial channels. This board can also be used to power the UxV/35 stack from a USB port on a PC for testing and development.

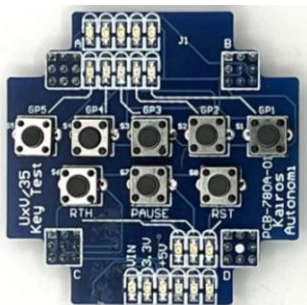


The Power Supply board is used to provide power to the UxV/35 Stack on the bench for development or testing. It provides all three voltages and can be used for UxV/35 simulation as well. The external power input for the board becomes the Vin voltage.



The Serial Loopback board provides a convenient way to loopback any of the serial ports upon themselves for testing and assurance of proper serial port operation.

The board also has a break of all UxV/35 signals on a 2mm ribbon cable connection for remote UxV/35 usage or alternate stack configurations.



The KeyTest boards allows user testing of each of the inputs on the UxV/35 bus such as Reset, Pause, RTH and all of the General Purpose lines. Led status is also provided for those signals the same way as the Signal Test board with LEDs.

This board is great for determining proper reactions from discrete signal on the UxV/35 bus.