



## **PRODUCT DESCRIPTION**

### **CASCADE MICROTECH REL-6100 and REL-5500 LABVIEW DRIVER**

For use with ECX-56 Expansion box and AUCS prober command set.

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FemtoTek's LabVIEW Driver for the Cascade Microtech REL-6100 Prober is a software package that enables automated control of the Cascade Microtech semi-automatic wafer prober. The driver software communicates with the prober through the computer's GPIB interface and the ECX-56 Expansion box.

FemtoTek's driver package includes:

- REL-6100 AUCS command VIs
- Checkout panel
- Sample programs

The driver library offers a choice of more than forty commands (see table below). All commands to and responses from the wafer prober are text based. The LabVIEW driver sends the required command to the prober then waits for a text response from the prober. The prober response contains status and error information that is interpreted by the driver. The prober status information can be used to create LabVIEW programs that process cassettes and wafers, and react to error conditions.

The checkout panel allows you to send a selection of commands to the prober one at a time to verify the prober and GPIB interface.

The sample programs demonstrate how to combine the prober driver with DUT test routines. For a typical application, shown in the sample programs, the operator intervenes only to load the cassette and initial wafer. The rest of the cassette can be measured automatically using computer control.

## Commands implemented in the REL-6100 driver library

### Move:

- Move XY forever
- Move axis machine
- Move axis position
- Move axis relative
- Move XY machine
- Move XY position
- Move XY relative
- Move axis increment
- Move XY increment
- Move Z separate
- Move XY home
- Move axis align
- Move axis init
- Move Z contact
- Move axis home
- Move kill all
- Move kill axis
- Move chuck to load position

### Action:

- Ink die
- Chuck vacuum
- Ejector pins
- Microscope lamp

### Setting & Configuration:

- Set units
- Set wafer size units
- Set wafer size mm
- Set wafer size inches
- Set axis home
- Set XY home
- Set XY increment
- Set XY position
- Set vacuum control
- Set DUT default Z axis
- Set Z contact
- Set Z separate
- Set Z separation distance
- Set Z auto
- Set broadcast messages
- Set chuck load position
- Set chuck load position
- Set ejector pin control

### Status Query:

- Query XYZT position
- Query XY home
- Query XY load
- Query axis home
- Query axis load
- Query XY step size
- Query chuck vacuum
- Query vacuum system
- Query microscope lamp

### General:

- Initialize
- Close