

LabMaster™

Control & Monitoring

ENHANCED PROBER SOFTWARE

LabMaster™ control software for the Pegasus™ Series 200mm & 300mm probers features interactive graphics to centralize real-time monitoring and test setup of the prober and accessories. LabMaster™ is designed with an intuitive graphical user interface to enable part time users to operate the prober with ease, as well as advanced utilities to permit the experienced user to design sophisticated test routines. These test routines may then be re-used for automated testing, a significant productivity advantage.

LabMaster™ offers wafer test setup with the software wizards for creating wafer maps, sub-sites on die, and programming environment for remote control of the prober via Wentworth remote command library. Remote programming allows users to customize their test routines.

Other features include Pattern Recognition (PR) interface for die stepping alignment, thermal control of the thermal chuck temperature and automatic compensation for thermal expansion, and test result monitoring displayed in real time on the wafer map.

LabMaster™ control software for the Pegasus™ Series seamlessly integrates with leading testers using standard communication protocols, while simultaneously communicating with all prober accessories

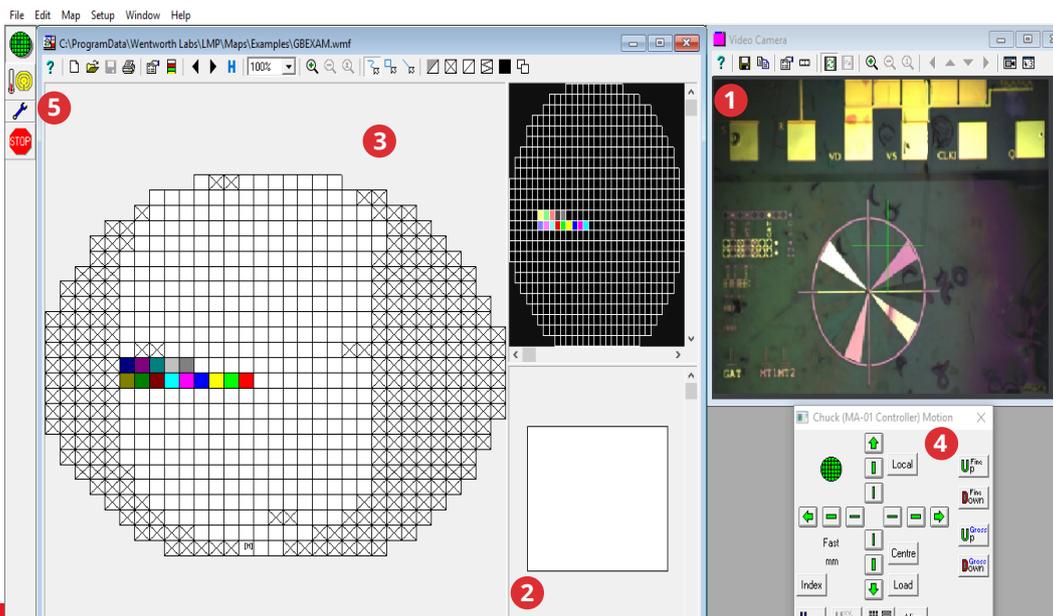
The LabMaster™ **Video Window** **1** displays real-time video from the camera attached to the microscope by using an overlay video board. Any image shown in the LabMaster™ Video window can be saved to disk in a variety of image formats, or copied to the Windows clipboard for pasting into other Windows applications.

The LabMaster™ **Text Editor Window** **2** can be used to create, edit and run REXX programs. Multiple Edit windows can be open at any one time, allowing you to cut and paste text from one window to another. The Edit window toolbar contains buttons for frequently used functions such as Open, Save, Run, Stop and Syntax Check.

The graphical **WaferMap Window** **3** is a powerful failure analysis tool that can be used for device navigation and positioning, and for displaying and storing die-binning information. By using the Wafer Map window for device navigation and movement, the user can quickly position the chuck to any die on the wafer. Wafer maps can be stored locally at the prober and saved as a simple text file (SINF - comma separated value), for easy transfer import/export.

Pegasus™ Motion Control Window **4** can be used to control the motion of the prober's chuck. The arrow buttons are used to index the prober the distance specified by the index step values entered using the probers setup dialogue box. Slow, Medium & Fast velocity function buttons allow easy navigation between different areas on the wafer.

LabMaster™ **Device Toolbar** **5** contains the device buttons for controlling external devices such as the Probe Platform, PMM, SAM's, Thermal Chucks, Lasers and Microscope Auto Zoom functions. The Hardware Setup dialogue box is used to add or remove devices from the Toolbar. It can also be used to modify a device's hardware setup parameters.



The Wentworth Labs Wafer Map editor is an off line editor / viewer for LabMaster™ compatible wafer map files and wafer map file templates. It allows for wafer map templates to be created and modified prior to being used for wafer testing. Wafer results files can also be viewed in this application and used to generate further template files.

Simple click and press on a die to move the prober/optical view to the selected die and view.