

# EPROM Version 7.000 Specification

**Current EPROM Version:** 7.000  
**EPROM Release Date:** 9/30/99  
**Previous EPROM Version:** 6.001

**256XL EPROM Part Number:** 5280901  
**1024XL EPROM Part Number:** 5280902  
**1536XL EPROM Part Number:** 5280903  
**2048XL EPROM Part Number:** 5280904

## New EPROM Format

EPROM version 7.000 is the first release using a new, larger EPROM. The increased capacity of this EPROM will allow Dynalab to continue to add enhancements to the XL Series Analyzers for years to come.

To access this new EPROM format, the Analyzer CPU requires a one-time PLD upgrade. At startup, this new EPROM performs a check for the proper PLD and provides an error message if not found. To upgrade the PLD, Part number 5280184 (located in socket U204), must be replaced with part number 5280185.

## Autolearn Enhancements

### Autolearn Templates (Options Menu→ Autolearn → Autolearn)

Dynalab has long allowed Autolearned programs to adopt test settings and symbolic names (Wire Colors, Block and Pin names) from a "DEFAULT" program. EPROM v7.000 enhances this capability significantly by allowing Autolearned programs to copy program data from a "Template" program.

At the time of learning, the Analyzer now prompts the operator to "Use Another Program as a Template?" If the user selects "YES," the Analyzer displays a list of programs in memory from which to choose. The learned program copies the following data from the Template program:

- **Test Parameters** – The drive voltage, sink current, and voltage thresholds of all 16 parameters.
- **Symbolic Names** – The names and locations of all Blocks, Pins, and associated Circuit names and Colors.
- **Alarm Netlist** – If the template program uses the ALARM Sequence Command, the Alarm Netlist is copied to the Autolearned Program. (This means that the Autolearned program will contain 2 Netlists: the Alarm Netlist and the Autolearned Netlist)
- **Program Sequence and Messages** – The test sequence and all messages are copied. Sequence Commands that test Netlists (TEST, ASSEMBLE, SHORT, NET, WPB, UWPB, and AUTO) will point to the new, Autolearned Netlist.

*Note: If the Template program contains commands that point to the Alarm Netlist, these commands will remain pointed to the Alarm Netlist in the Autolearned program. This insures that the Autolearned program will perform like the original, Template program.*

The Alarm Netlist is the only Netlist that may be copied from the Template. Therefore, the Template program can only contain 1 Netlist unless the ALARM command is used in the sequence, in which case, the Template program is limited to 2 Netlists. If the user selects a Template program with too many Netlists, the Analyzer warns that the chosen file is unacceptable and prompts the user to select another Template file.

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## Rename Menu Function (Options Menus → Autolearn → Rename)

The Autolearn Menu now includes a new RENAME item. This item renames Autolearned programs. Autolearned programs created using EPROM v7.000 and above can now be given any name using this function.

*Note: When a program is Autolearned, the Analyzer assigns a unique Learn ID based on the learned Netlist and incorporates it into the name. Renaming the program allows the user to delete the Learn ID. If the Learn ID will be needed later, Dynalab recommends that it be recorded in a safe location*

## Serial Port Infrared Menu (Setup Menus → Ports → Serial → IR Accessories)

To support the new IR products offered by Dynalab, EPROM v7.000 offers a special IR Accessories Menu. The items on this menu activate and control the settings for the IR protocol used by Dynalab Analyzers. This protocol enhances IR communication and corrects any errors caused by disruptions to the Infrared signal. To determine the correct IR settings, consult the specification literature provided with the Dynalab Infrared Accessories.

## Auto Restart Flag (Setup Menus → Configurations → Restart)

When Dynalab Analyzers are subjected to environments with high static or irregular power sources, the CPU may respond with an Analyzer reset or an "Address Exception" error. EPROM v6.000 offered the Auto Restart function, providing some relief for customers using their Analyzers in this type of harsh environment.

The Auto Restart function monitors the state of the Analyzer and, if an error occurs during program execution, the Analyzer simply restarts itself and automatically re-runs the selected program again. Since this function restarts the program at the beginning, the program sequence may need to be written with the potential restart in mind. Because most customers do not experience these types of issues, EPROM v7.000 now allows the new Auto Restart mode to be disabled.

## Quick Reload Capability

From time to time Analyzer programs may become corrupted. (This is especially true in environments with high static and inconsistent power sources). Current versions of PASS add a checksum value to the program. If the program becomes corrupt, this Analyzer will detect it when the program is run. The new Quick Reload Capability makes it easier to replace a corrupted program.

If the Analyzer detects a corrupt program, it will immediately check for the presence of a DynaCard. If detected, the Analyzer will search the DynaCard for a copy of the corrupted program. If the DynaCard contains a copy of the program, the Analyzer will automatically prompt the user to replace the corrupted program in memory with the program found on the DynaCard.