# VALID

SCALD
Graphics Editor

FEATURES

- Easy to learn and use
  - Menu
  - Tablet
  - On-line help
  - Undo/redo any number of commands
  - Real-time movement
  - Same editor for defining objects and using them
  - Components stay connected when moved
- Powerful
  - Scripts
  - User assignable function keys
  - Multiple libraries
- General
  - Lines, arcs, and circles of any size or orientation
  - Arbitrary size text
  - Properties may be attached to any object
- Special features for schematics
  - Push and pop to change levels in the hierarchy
  - Auto generation of names
  - Simple checking on-line
  - Net list output to SCALD compiler
 - Stripping/scaling of drawing

DESCRIPTION

The SCALD Graphics Editor is an easy to use *and* powerful tool for the entry of graphic data. It is your primary interface to the SCALD-system™ software.
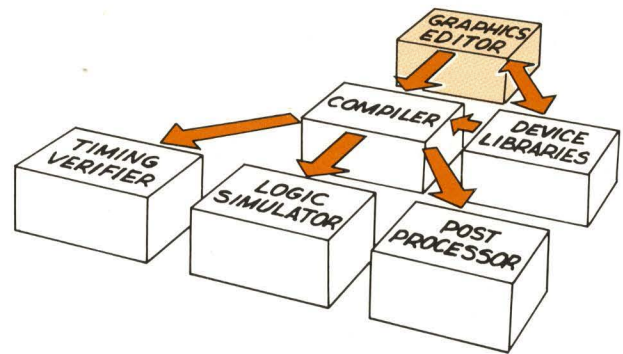
Easy To Learn And Use

The SCALD Graphics Editor is ergonomically designed for ease of use. You don't have to be familiar with computer terminology or need to use a reference manual. Choose commands from the on screen menu, or enter them from the keyboard. A built-in graphics tablet lets you move the cursor anywhere on the screen. On-line help is available for all commands, and an UNDO facility lets you reverse previous commands in case of error. All objects are selected
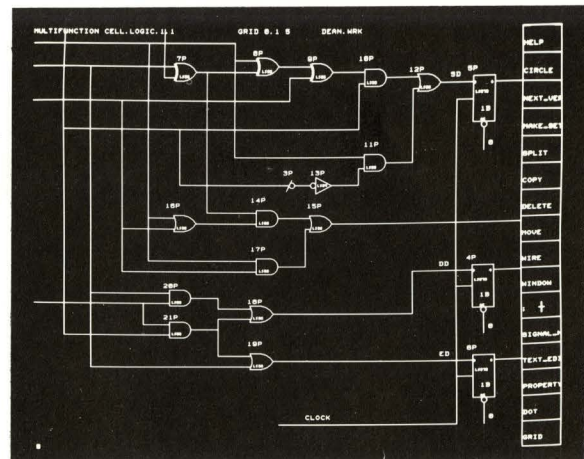
Figure 1. This Graphics Editor display shows a typical schematic. At the right of the display is the Graphics Editor menu.

and moved with the cursor in real time. The same editor is used for defining objects and creating schematics, minimizing training time and making hierarchical design very simple.

Powerful

In addition to being easy to use, the SCALD Graphics Editor has many features which make it ideal for both experienced and inexperienced users to operate. Groups of objects are easily defined, and then moved, deleted or copied as a whole. The Graphics Editor can get its input from scripts as well as from the terminal. Soft function keys are user assignable and may be set appropriately for each application. Multiple libraries can be handled at the same time. Text on diagrams can be edited with one of the UNIX text editors as well as with a string editor provided within the Graphics Editor.

General

The SCALD Graphics Editor imposes very few restrictions on the diagrams it creates. Create diagrams for almost any standards you choose. Lines, arcs and circles may be created in any size or orientation. You define the size of the grid on which diagrams are drawn. Text size may be set independently for each string. Hardcopy may be scaled to any size required.

Special Features For Schematics

The SCALD Graphics Editor has many features explicitly designed into it to make dealing with hierarchical schematics easier. As an example: PUSH and POP commands enable you to traverse the hierarchy easily. Unnamed signals are named automatically, and there is even a command to number all the components. Simple checking is performed on-line, with the results instantly available. The Graphics Editor also generates the net lists used by the SCALD Compiler.

Primitives

There are 5 basic objects that can be manipulated by the Graphics Editor. These are wires or lines, circles, components, properties and notes. All drawings and components are made up of these basic object types.

Components are symbols that stand for either collections of components or for primitive parts. Each component is arbitrary in shape and size. You define components using the same editor as you do for logic diagrams—top down design is simple. There is no difference between a component you define and a library component except for where they're stored on the system.

Wires drawn on the screen connect components symbols together. Each wire, depending on its name, may represent anything from a simple signal to a structured bus of many different signals. Explicit names on each wire are not required; the SCALDsystem™ will supply a name, and if the width of the signal can be computed from context it is not necessary to specify it.

Circles and arcs are used by the SCALD Graphics Editor to generate professional quality artwork.

Properties are used by the Graphics Editor to attach information to the objects in a diagram. For example, the signal name of a wire is a property of that wire. Each property consists of a name-value pair, where the value is an arbitrary string. Properties can be attached to any object in a diagram. If a property is attached to a component when it is defined, that property will be automatically associated with all instances of that component. When an object is moved, all properties automatically move with it.

Notes are comments. For professional appearance, each note and property may be individually scaled in size.

These are only some of the unique features the SCALD Graphics Editor contains. To get a better understanding of its sophistication, call us and arrange for a demonstration of the SCALDsystem™.

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