

ENGINEERING
DataXpress

DXL800 Mentor Graphics V8 Schematic Translator

The DXL800™ Mentor Graphics schematic translator is one of a series of optimized data links that is part of the DataXpress Integrator™ product line. The DataXpress Integrator was developed as a solution to the problem of moving design data from one EDA vendor's tools to another's.

The DXL800 schematic translator allows Mentor Graphics Design Architect users to translate their schematic design data to and from the Engineering DataXpress database called EDI. Data from the EDI database can be output as an EDIF data file. EDIF schematic files can also be read into the EDI database and translated into the Mentor Graphics database.

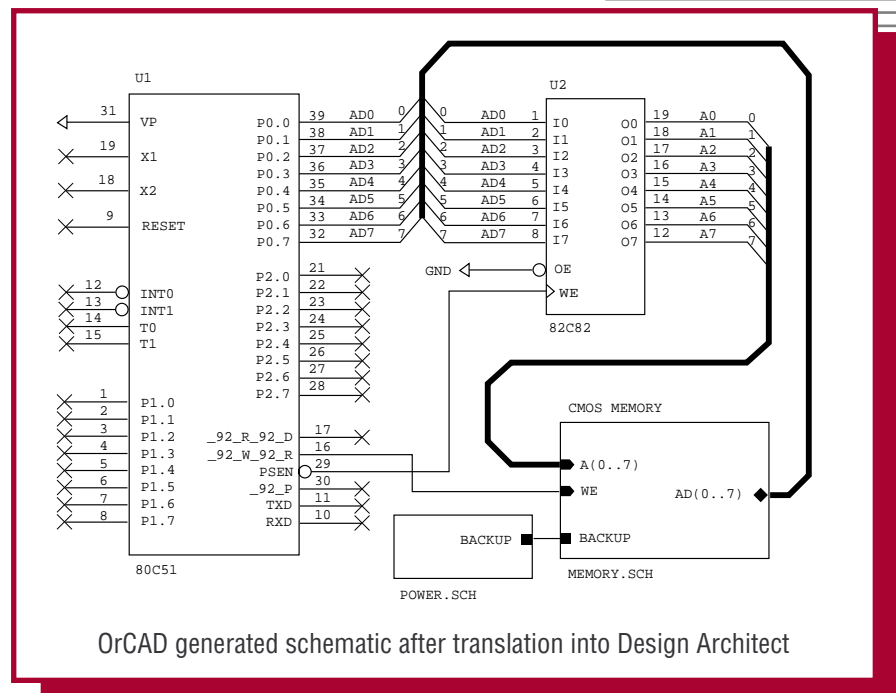
The DXL800 can also be combined with other Engineering DataXpress translators to facilitate direct database translation between Design Architect and the EDA vendors that we currently support. The list of translators that we offer includes many of the schematic systems such as OrCAD, Synario, PADS Software, Viewlogic and others.

Schematics and cell libraries can be transferred independently, or a schematic and its library of subcomponents can be transferred at the same time. The full design hierarchy can be transferred or it can be limited in various ways. Also, when reading an EDIF file, schematics are allowed to reference symbols which are defined externally. Options and commands for the translator are specified on the command line or in a configuration file.

The DXL800 Schematic Translator is fully supported by Engineering DataXpress, a world-wide leader in data translation technology. This support ensures that the translator will continue to be enhanced with new features and options and will remain current with each new release of Mentor Graphics software.

Features

- Bidirectional translation of Mentor Graphics Design Architect sheets and symbols.
- Can translate frames, connectivity by name, busses, and comment graphics.
- Can convert IDEA Series V7.0 schematic designs to Design Architect V8.X.
- User control over name mapping, grids, library transfer, etc.
- Handles hierarchy in Mentor Graphics sheets, symbols, and EDIF cells.



OrCAD generated schematic after translation into Design Architect

Product Description

The DXL800 schematic translator transfers schematic and symbol information both into and out of Mentor Graphics Design Architect through the EDI database. Data can then be transferred either directly to other EDA vendors who are also linked to the EDI database or to any EDA vendor that has an EDIF schematic interface.

The DXL800 translator is comprised of two modules. The mda2edi module takes as its input schematics and symbols created with Design Architect and creates as its output either an EDI database or an EDIF file describing the schematics and/or symbols. The edi2mda module takes an EDIF input file or EDI database, and creates Mentor Graphics schematics and/or symbols which can then be edited with Design Architect. The reader can read and translate any correct EDIF level 0 schematic representation into Design Architect constructs.

Mentor Graphics specific elements such as connectivity by name, both between sheets and to members of busses, rippers, off-page connectors, net connectors, and graphics are all translated to the equivalent EDIF representations. Mentor Graphics "frames" are written into the EDIF file such that they can be extracted as frames by another system which is capable of handling frames. For systems that do not support frames, the frame is read as comment graphics.

The translator uses commands from the command line and/or configuration files to determine user options and to locate files in a design hierarchy. Using a configuration file, the user can specify globally for the entire translation or within a specific library or cell how various properties and attributes are to be mapped to and from EDIF files.

By default, a complete design hierarchy is translated. Simple commands limit the traversal of the hierarchy to only those schematics and symbols which are to be translated.

Using configuration files and/or command line options, the user can specify the following to control the translation process:

- Which schematics, symbols and cell libraries to translate.
- Scaling of sheets and symbols.
- Name mapping by character, substring, prefix and suffix for nets, symbols, instances and properties.
- How properties map to EDIF properties.
- How properties map to EDIF attributes.
- Translation of cell libraries.
- Translation of design hierarchy.
- Overwriting of schematics and symbols.

Supported Platforms

- Sun4/SunOS 4.1.4+.
- Sun4/SunOS 5.x (Solaris 2.x).
- HP 9000/7xx HP-UX 9.07 or greater.
- HP/Apollo 4xxx and HP9000/400 with Domain OS version SR10.3.5 or later.

Software Requirements

- Design Architect software release 8.4 or later.
- EDIF version 2 0 0.

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