

PROTEUS V8.2 OUT IN BETA!

We are pleased to announce that development on Proteus 8.2 has now been released in beta, and is available to those with a valid contract. Existing customers can install from the 'Check for Updates' link on the Proteus 8 home page. Version 8.2 is a significant point release, building on the new Version 8 application framework and adding several important features to the Schematic/PCB design modules. These are described in more detail below. We do not recommend that you use the beta version for production purposes.

New Features in Proteus 8.2

New! BSDL Import

- Import schematic library parts from any manufacturer who uses BSDL.
- Automatically creates pin names and sets pin types for you.
- Automatically creates a standard ISIS component from the BSDL file.
- Contains the binding between each pin name on the schematic and the pad name of the footprint for easy packaging

New! PADS ASCII Import

- Support for PADS ASCII 2007 and PADS ASCII Version 9.5 Layout format.
- Automatically creates ARES footprints from the PADS ASCII file.
- Import Log shows any warnings or errors.
- Fully interoperable with the PCB Library Expert footprint creation tool.

New! Project Notes

- New application module for generic entry of notes and reports.
- Templates for ECO's, Manufacturing Notes and others.
- Integrates with the rest of Proteus through links, field codes and live clipboard.
- Can be appended to BOM report (PDF) or CAD/CAM Output fileset.

New! Bill of Materials

- Switch to physical layout format for better printing and PDF output.
- New style configuration via standard dialogue UI.

Overview

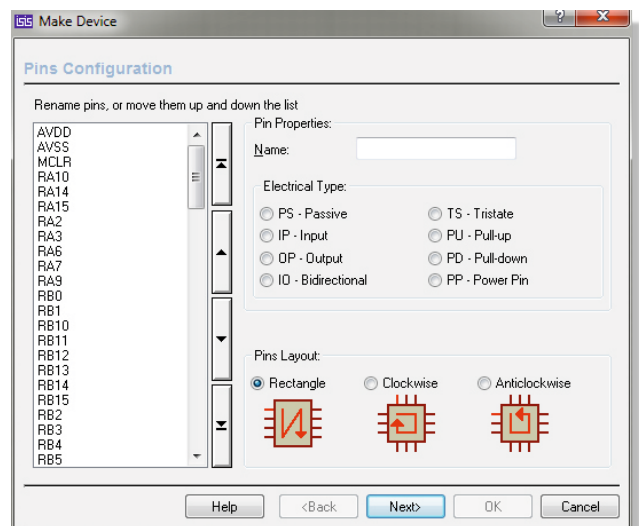
The Proteus 8.2 release was focussed on simplifying some of the common jobs that are often required but can be time-consuming and distracting from the main development goals of the project. BSDL Import enables semi-automatic creation and packaging of large schematic parts while PADS ASCII import enables semi-automatic creation of almost any PCB footprint. Project Notes simplifies and streamlines the documentation requirements for a project and the changes to the BOM enable rapid styling and consistent output of the report.

BSDL file format and import

The boundary scan description language (BSDL) is a description language for electronics testing using JTAG. It has been added to the IEEE Std. 1149.1, and BSDL files are increasingly well supported by JTAG tools for boundary scan applications, and by test case generators.

BSDL is a VHDL subset. Each BSDL file describes one version of an IC and has many package pin maps as are available for a particular die. This is necessary because, for example, two different BGA packages will have different balls; even if the ball has the same name it may be bonded to a different signal on the other package.

From a schematic and PCB perspective there are two main benefits in providing support for this file format:



1) The part name, number of pins, electrical type and pin names are all part of the file. This means we can automatically create a basic schematic component for the part.

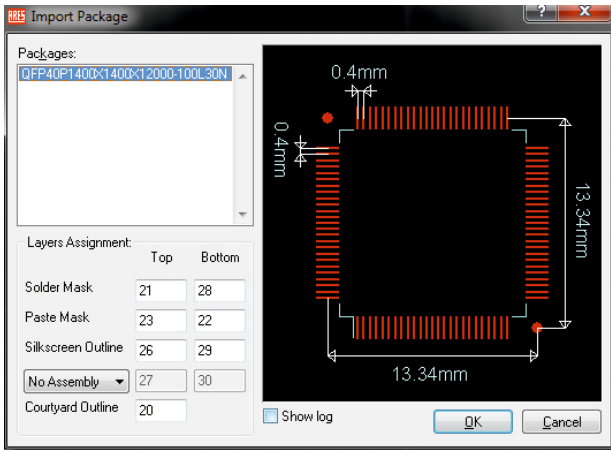
2) The binding between each pin name on the schematic and the pad name of the footprint is included. This means that we can provide an assisted/automatic packaging for the schematic component.

More information can be found at <http://www.bsdl.info>

PADS ASCII Import

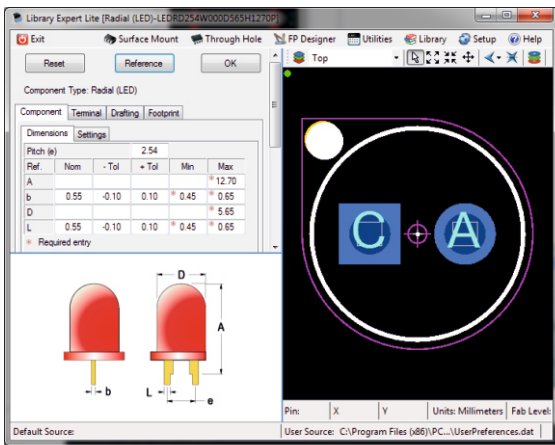
Proteus provides a lot of flexibility and functionality for creating different types of footprints and putting them into libraries for re-use. However, for complex parts or where a lot of parts are needed, the use of third party tools can get the job done faster. Also, if libraries of parts exist from a different product, it is helpful to translate and import them into Proteus.

The PADS ASCII Library Part importer is the mechanism by which we support this. PADS ASCII (Mentor Graphics) is a widely recognised file format for describing a PCB footprint and offers a semi-automatic way to translate a footprint into a Proteus library part.



Support for this format also enables interoperability with the popular PCB Library Expert footprint creation tool (www.pcblibraries.com). The free version of this tool will allow the creation of footprints based on template types and entering dimensions; the result can then be exported as PADS ASCII for import into Proteus.

The paid version includes access to Parts on Demand as well as additional configuration options.



Project Notes

Project notes is a completely new application module in the Proteus Design Suite. It will be instantly usable by most customers as document entry is very similar to that of a typical word processing system. It can be used for anything from Engineering Change Orders to Revision History to Design Decision Documentation to Manufacturing Notes. Educators may use it to document Lab Notes or to capture the key concepts being taught and it provides a blank canvas for those who simply want to jot down ideas or reminders on their work.

Project Notes also integrates with the rest of the Proteus system. Field codes allow users to access project information such as Author, Filename or Modified Date while links allow users to click and navigate to parts on the schematic or layout.

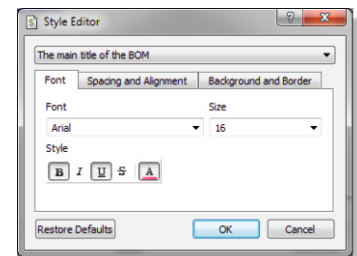
Templates exist for some common uses and the templating scheme allows additional templates to be created by users for specific purposes.

Project Notes are saved with the project (PDSRJR) file and can be exported as PDF or printed to paper. They can also be appended to the PDF output for the BOM report or included in the CAD/CAM fileset sent to manufacturers.

Bill of Materials

The Bill of Materials module has undergone a significant overhaul to make it paper based rather than screen based. This provides implicit pagination and therefore improves the PDF output of the report.

Styling of the BOM content is also now far easier and works entirely from a dialogue user interface similar to that found in word processing applications.



Atmel ARM Cortex M3

Proteus 8.2 now includes a wide selection of Atmel's Cortex M3 variants:

LM3S300, LM3S301, LM3S308, LM3S310.
LM3S315, LM3S316, LM3S317, LM3S328.
LPC1311FHN33, LPC1313FHN33, LPC1313FBD48,
LPC1342FHN33, LPC1342FBD48,
LPC1343FHN33, LPC1343FBD48

Please note that a VSM licence for ARM Cortex M3 or ARM Bundle is required for simulation of these devices.



Renewing your Contract:

Click on the 'Renew USC' on the Home page of the Proteus software and follow the instructions. You will need your customer number (xx-xxxx-xxx). If you choose not to renew and you exceed the 3 months renewal period, there will be additional charges added to your renewal costs.

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