

ICU 2004 Allegro Design Entry HDL Issues

1. Title: 'ConceptHDL Viewer'

Description: 'ConceptHDL needs a free viewer. Something similar to PTC s eDrawings. A standalone executable containing the schematic you want to look at and the viewer app itself and include some markup functionality. If this isn't possible at least generate Searchable PDF s from Concept without the need of PDFwriter or Distiller.'

2. Title: 'Cut Copy and Paste between windows or to file'

Description: 'To perform any copy cut paste operations the user must have the two designs open within the same Concept window. Concept should support these functions between windows or to file to improve the efficiency of these commands and add flexibility to create copy or cut objects to paste into other designs. This would allow users to share data by using copy to file and sending file to other users. '

3. Title: 'scripting function embedded to capture commands'

Description: 'Presently Concept records commands in log file after the command has been executed successfully. If the command causes Concept to abort or core dump the command sequence that caused the problem is lost. Concept should capture commands and mouse clicks in the log files as they occur before execution so the log file can be played back to re-create the failure. This would greatly simplify creation of test cases to submit to Cadence. It would also allow the Cadence AEs to playback the problem rather than having to try to recreate the problem. A side bonus is supporting regression testing after fixes are received to verify fix works in local user environment. '

4. Title: 'create template for reports to allow user-defined properties'

Description: 'Crefer reports are fixed at present. If user wants to include user-defined properties in these reports they are forced to use SKILL which is very temperamental in Concept. The tool should support templates to control content and formatting much like the BOM template including supporting user-defined properties.'

5. Title: 'Add check for presence of symbols with power pins'

Description: 'If a component has several symbols the front end tools have no way of telling the user that symbols with power pins have not been placed in the schematic and connected to an power or ground signal.'

6. Title: 'Add drawing tools to Concept'

Description: 'Add tools to allow users to create tables draw block diagrams and annotate schematics. This should include rectangles lines without and with arrows and tables where user specifies rows and columns. The rectangle and table objects should support text entry with word wrapping within cell.'

7. Title: 'Provide a monospace font(i.e. Courier) to match screen font'

Description: 'The fonts supplied with ConceptHDL(Arial Helvetica Verdana Trebuchet) are all proportional fonts and don t accurately reflect the screen font(valid_font) which is a monospaced font. When printing using one of the supplied "proportional" fonts the printed outputs for text lines tends to have varying width spaces between words so you end up having a very uneven line.'

Something like this: This is a long line that has varying The "Default" font is monospace and accurately represents the text graphics WYSIWYG but is a vector-based font that is very "stick-figure" in nature and doesn't render well when blown up to larger size plots as the vectoring nature is visible. A "real" font just looks so much better in appearance and readability. A common monospace font that would accurately represent the screen text spacing and metrics is needed. I'm not necessarily proposing that you change the displayed screen font but instead allow for the substitution of a suitable font at plot output. Courier would be fine as it is widely available or any others that fall into the availability category and are monospace. Unix ConceptHDL still has the capability to generate Courier font plots. Hpf as well as Windows plot mode is implemented on the Unix side. Why not do the same by porting hpf to Windows such that we can have this functionality? Irregardless of the method this shortcoming needs to be addressed. '

8. Title: 'Searching a part '

Description: 'When we place a component by using the Physical Part filter all the columns aren't sorted. By adding a sort function we will save time and avoid errors. Very useful for resistors values per example.'

9. Title: 'Replace command lost the Ref Des'

Description: 'When we do a Component --> Replace the Ref Des is lost. We have to change it to the previous value. Time saving and errors avoiding.'

10. Title: 'Cadence Help/Hot line and Source link interface to customers'

Description: 'Cadence should put more effort into providing technical support through personell that can speak english well enough to direct solutions and understand questions. I used to be able to call the hotline and speak to someone and get answers very quickly by explaining the problem I was having and the end result of what I was trying to do. Now I have to submit my problem on Source link wait for someone to respond and then if my problem has anything to do with Concept HDL I get an email from someone in India that attaches a tutorial. Most of the time my problem could be resolved in a much quicker manner by speaking on the phone. When I do finally get to speak with someone on the phone I end up having to constantly repeat my question or statement and have to have the technician repeat him or herself several times before I can understand them.'

11. Title: 'Support of replicated hierarchy for Global Component Change'

Description: 'Global Component Change needs to support replicated hierarchy so that a substitution does not cause you to lose your existing reference designations. It supports retaining reference designators in other designs (flat hierarchy without replication) and should support replicated hierarchy too as the rest of the tool does. Losing the reference designators causes the placement to be lost or else you have to manually reset them all which time consuming error prone and by default sets the location hard which is not desirable.'

12. Title: 'Cap Placement Property'

Description: 'Propagation delay does not work for cap placement on large nets. We need a special property to handle placement of caps near specific pins.'

13. Title: 'Cross Reference file format GUI'

Description: 'The number of sheets created by the crossreferencer has increased by 3 to 4 times. Instead of 7 pages you get 30 pages. I want a wysiwyg GUI that will allow me to more easily modify the the "crefout" format and control the cross referencer setup options.'

14. Title: 'Page Copy to copy all page info to another design'

Description: 'Design information is no longer contained in schematic sheets. Copying a sheet to another design does not copy occurrence or constraint information. I want a page copy all command that will copy all of the information from one design to another.'

15. Title: 'Variables for Property Passing in Complex Hierarchy'

Description: 'I just want to be able to define variables in the body of the subdesign. The variables might be indicated using a special character like a % sign. So in the body I might define a parameter as "%lval = 12V_1D2". Then anywhere in the subdesign schematic where "%lval" appears it is replaced by "12V_1D2" at compile/package time. This should work for any attribute anywhere in the subdesign including component values node names power group names etc... '

16. Title: 'Constraint Manager reads incomplete netlist'

Description: 'Constraint Manager in Allegro displays a complete netlist including all power pins. Constraint Manager in Concept HDL does not display power pins defined in the chips.prt. Pin Pairs can be created in layout that can not be read by the schematic version of Constraint Manager.'

17. Title: 'Add alpha property for symbol section'

Description: 'Additional sec property but alpha so we can place it like a suffix on the ref des u24a make it update automatically like the sec property just use alpha a b c etc'

18. Title: 'Complex Schematic Part Creation'

Description: 'In the "bad old days" you could create a complex part (e.g. high pin count microcontroller) in several "sections" with disjoint pin sets. (i.e. the DRAM interface as one "section" parallel I/O as another power/ground pins as another) The old manual creation of pinout drawings allowed you to create multiple chips.dat files and merge these manually. The new part librarian makes this impossible. (At least through 14.2)'

19. Title: 'Rationalize Mouse Action between Concept and Allegro'

Description: 'Make the "pan" functions work the SAME in both Concept and Allegro. (This was wrong in 12.x and before fine in 13.x broken (again) in 14.x). Ditto for the sense of mouse buttons when panning..."shift/hold" in Allegro just "hold" in Concept. Grrr... In Allegro shift/hold pans the view. In Concept hold pans the window moving the view in the OPPOSITE direction as the same action in Allegro.'

20. Title: 'Hilite placed comps in Concept'

Description: 'Make it so when you have allegro and concept up through the project manager (like placing from concept) the components that are already placed show up in a different color (or marked somehow) to show that they have already been placed. This would greatly enhance placing from the schematic I believe. And I am always right. Really.'