



MakeCAP FEATURES

MakeCAP

A complete Property solution to drive the Allegro constraint-driven flow from the Capture frontend desktop. Produces error-free Parts and Nets properties.

Unique Spreadsheet Grid linked Database View produces Perfect Property Definitions.

MakeCAP is the fast, easy, error-free way to select your Net or Part Objects, apply Properties and write out perfect Property syntax to your Capture DSN Property database to netlist into Allegro. The Capture Property Editor has no error checking. With MakeCAP, there's no need to type Net or Part Names or create typos. There are no wrong Pins associated with Nets and Parts and no incorrect syntax in your Property definitions that cause properties to crash or disappear when you Netlist into Allegro. It's the perfect way to populate Allegro Constraints from your Capture frontend.

Apply Property Value to many Nets and Parts.

Easily select many Nets and Parts and apply a Property to all of them in a single operation. Use wildcards, highlight multiple Nets or Parts in the spreadsheet grid or do a Boolean combination (choose all the Nets in a Bus plus other Nets minus some other Nets).

Select once and apply different Properties.

It's a fast way to pick your Bus or Memory Nets and apply ALL Properties to them without constantly reselecting them over and over again. Select once and for any Property you'll find those Nets or Parts still selected and ready to receive a Property value.

EZRead Views make Allegro Property syntax easily understood.

MakeCAP displays all properties in both Allegro property syntax and in MakeCAP EZRead views. Allegro property syntax can be complex and daunting to learn and execute correctly and consistently. It can also be difficult to understand and interpret. How do you know that what you're looking at expresses your Design Intent? EZRead views organize and display properties in a more natural, easy-to-understand format. EZRead views are organized similarly to Constraint Manager to help familiarize you with the CM environment in Allegro for using a constraint-driven flow.

Crossprobe between MakeCAP and Capture.

If Capture is open, then you can cross-probe between MakeCAP and Capture. Select in either environment to automatically goto and select in the other. The MakeCAP PagePilot Capture navigational aid lets you select by Net and Part Object or Page from within MakeCAP and goto all instances within the open Capture schematic.

Update Properties in Capture. MakeCAP can update your Capture DSN file directly without the need to write out an ASCII Update file. MakeCAP includes an automatic mode for handling Instance and Occurrence synchronization with Capture and an Expert Mode to let you control exactly which Nets or Part properties you update and whether Instance or Occurrence is preferred.



MakeCAP also writes out a syntax perfect Update file if you want to control the flow of properties into Capture using Import Update files or if you have an Engineering design process that uses intermediate Capture property Update files.

ECO Property Compare. Easily find what out changed between the board lots that work and the ones that don't. MakeCAP compares and reports additions, deletions and changed values for properties, Nets and Parts between two different Capture DSN files. This can be between the Capture database you're working with in MakeCAP and another DSN, or between any two DSNs even if not actively loaded in MakeCAP. ECO Compare overlays the property views of both DSN databases so you can see a composite color-coded grid highlighting all changed cells. A table of all changes is shown with a linked goto for each changed cell. ECO Compare produces a date-stamped report that can be archived as well as shared on your Network.

Differential Pairs. Define Differential Pairs with intelligent wildcard matching and associate Nets into Pairs with smart wildcard matching or pick pairs from the displayed Netlists. Differential Pair Objects are defined for netlisting into Allegro and for constraining. All DiffPair properties are displayed in a single database form for easy entry and viewing. Specify all diffpair property values, select diffpairs from the display of pairs you've created or inherited from Allegro and apply all properties to all selected pairs in a single operation. A dynamic graphical WYSIWYG display shows the diffpair construction to give you visual confirmation of your Design Intent as you enter constraints.

Define PinPairs. PinPairs are the building blocks of Allegro Timing. MakeCAP displays all Net Pins so you can pick and create individual explicitly defined PinPairs as well as the default D:R, AD:AR and L:S descriptors. The proprietary bestfit mapping lets you pick a component path flow and MakeCAP then automatically creates PinPairs that most closely fit your Net flow. Select these PinPairs and apply Min/Max Prop Delay constraints.

Define Buses. Use wildcard searches, Boolean selections and grid highlighting to easily create and populate Buses.

Relative Propagation Delay Timing. Create Matched Groups and select PinPairs. MakeCAP will automatically organize the correct syntax model for each type of Timing relationship – Match no Target, Match with centered Target, and complex Timing amongst different collections of PinPairs. The built-in graphical WYSIWYG Timing Display shows you the Timing as you create it to validate that your constraints are indeed producing the Timing Design Intent and relationships you want. The MakeCAP Graphical Display shows both the Tolerance as well as the match Range because often they are not equivalent. Constrain complex DDR and Interface Timing in MakeCAP and confirm with the Graphical Timing Display.

Create Physical and Spacing Classes. MakeCAP easily creates new Physical and Spacing Classes that then Netlist from within Capture into Allegro. These can be quickly populated with Nets using the same wildcard, Boolean and grid selection options used to populate Buses in MakeCAP.

Property Filters. MakeCAP includes a variety of built-in Filters to display commonly associated collections of properties. You can also create your own librated custom filters for recurring use. You can filter by Nets or Parts to display every combination of Nets, Parts and specific properties.

Reports. Produce useful reports on property values for Nets and Parts that can be archived and shared with others.