

Using Altium Documentation

Modified by Phil Loughhead on Jun 19, 2017

The image shows the 'Polar Grid Editor [mm]' dialog box. It is divided into several sections: 'Settings' with 'Name' (New Polar Grid) and 'Unit' (Metric); 'Display' with 'Fine' (Lines), 'Coarse' (Lines), and 'Multiplier' (5x Grid Step); 'Steps' with 'Angular Step' (5.000) and 'Radial Step' (0.935mm); 'Angular Range' with 'Start Angle' (60.000) and 'End Angle' (55.000); 'Origin' with 'Origin X' (15mm) and 'Origin Y' (15mm); and 'Radial Range' with 'Min' (2.54mm) and 'Max' (10.953mm). Buttons for 'OK', 'Cancel', and 'Apply' are at the bottom.

Example local polar grid definition, using the *Polar Grid Editor* dialog.

Summary

This dialog allows the designer to view and modify properties for the selected polar grid. Polar grids enable you to more easily design non-rectangular features and boards. Tailor the polar grid to suit both your personal placement preferences and design requirements.

Access

The dialog can be accessed from both the PCB Editor and the PCB Library Editor. In either editor, the *Polar Grid Editor* dialog is opened from the *Grid Manager* dialog. In the *Grid Manager*, select a Polar Grid (or create one by selecting the **Menu** button and choosing **Add Polar Grid**). Double-click on the polar grid or right-click on the Polar Grid and select **Properties** from the context menu to open the dialog.

Options/Controls

Settings

- **Name** - use this field to give the grid a more meaningful name. For example, you might name

the grid using a format that reflects its purpose (e.g., Grid for Component-Side Memory).

- **Unit** - use this field to specify the measurement units used for the grid - Imperial or Metric.

Steps

- **Angular Step** - use this field to define the distance, in degrees, between the angular grid lines. This value is used to equally space the angular grid lines over the defined angular range.
- **Radial Step** - use this field to field define the distance between the radial grid lines. Type the required step size directly, or select from a range of common sizes available in the associated drop-down list.
- **Set Radial Step in PCB View** - click this control to define the radial step directly from within the PCB workspace. You will be taken to the workspace to specify two 'calculating' locations - the resulting step size is taken as the hypotenuse of the triangle formed by the chosen points in the workspace.

Origin

- **Origin X** - use this field to specify the X coordinate for the center point of the grid in the workspace.
- **Origin Y** - use this field to specify the Y coordinate for the center point of the grid in the workspace.
- **Set Origin in PCB View** - click this control to be taken to the PCB workspace, from where you can click to define the centerpoint for the grid's origin. The resulting coordinate values will be loaded into the **Origin X** and **Origin Y** fields respectively.

Display

- **Fine** - use the associated drop-down to define the markers used for the fine-level display of the grid in the workspace, either Lines or Dots. The step size used for the markers is that defined in the **Steps** region. Click on the associated color swatch to access the standard *Choose Color* dialog, from where you can specify the color to be used for the fine-level display grid in the workspace. You can always reset the color back to its default using the **Reset to Default** link.
- **Coarse** - use the associated drop-down to define the markers used for the coarse-level display of the grid in the workspace. Again, choose from either Lines or Dots. The coarse-level display grid is simply the fine-level display grid with an increased step size, in accordance with the entry selected in the **Multiplier** field. If you don't want to use the coarse-level display grid, simply choose the option Do Not Draw.

Click on the associated color swatch to access the standard *Choose Color* dialog, from where you can specify the color to be used for the coarse-level display grid in the workspace. You are free to choose a completely different color to that used for the fine-level display grid.

Alternatively, you can quickly employ a lighter or darker shade of the color currently used for the fine-level display grid, using the available **Lighter** or **Darker** links respectively. Again, you can reset the color back to its default using the **Reset to Default** link.

- **Multiplier** - use this field to specify the required multiple of the grid's step size, either 2x Grid Step, 5x Grid Step, or 10x Grid Step.

The default display colors - assigned to **Fine** and **Coarse** display grids when the **Reset to Default** link is clicked - are defined in the **System Colors** region, on the **Board Layers And Colors** tab of the [View Configurations](#) dialog. Specifically, the default fine-level display grid color is specified using the **Default Grid Color - Small** option, and the default coarse-

level display grid color is specified using the **Default Grid Color - Large** option.

Angular Range

- **Start Angle** - use this field to configure at which angle the polar grid begins.
- **End Angle** - use this field to configure at which angle the polar grid ends.

If the start angle and end angle are set to the same number, the dialog will automatically update to **Start Angle** 00.000 and **End Angle** 360.000. The polar grid will display as a full 360°.

Radial Range

- **Min** - use this field to set the minimum diameter of the polar grid.
- **Max** - use this field to set the maximum diameter of the polar grid.

The diameters of the **Radial Range** are measured from the origin point out and set the radial extents of the grid.

Source URL:

[https://www.altium.com/documentation/display/ADES/PCB_Dlg-GridEditorForm_Panel_Main_Panel_Grid_PolarGridFrame\(\(Polar+Grid+Editor\)\)_AD](https://www.altium.com/documentation/display/ADES/PCB_Dlg-GridEditorForm_Panel_Main_Panel_Grid_PolarGridFrame((Polar+Grid+Editor))_AD)