Title: Design for Fabrication Checks (DFF)

Product: Allegro / OrCAD PCB Editor 17.2
        QIR4 (Hotfix 25) or newer

Summary: Step by step description, how to setup DFF Checks

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1 Available Checks and required License

A basic set of around 250 checks is available within all OrCAD / Allegro PCB Editor licenses. The full blown set of around 2500 checks is available within the Allegro Venture PCB Designer Suite or Allegro Enterprise PCB Designer Suite license.

2 Rules Setup

Basic use model of the DFF check is the same as for other Constraints. First the DFF checks are defined in the DFF Constraint Set section of the Manufacturing domain. Then the rules are applied to the design features.

In the Manufacturing rules domain new rules can be entered by using “New CSET”:

Depending on the “CSet Usage”, the right design features are enabled / disabled. And values can be entered for the enabled features.
In this example, e.g. 0.5 mm has been defined for spacing between Board Outline and Trace, Shape and Pads. For Board Outline to Non Plated Holes 5mm has been set, and so on:

3 Applying Rules

To use the rules, the DFF Constraint sets have to be applied to the design features in the Design Domain section of the Manufacturing domain:

In case of flex designs also the different zone of the design are available to applied different Constraint Sets.
4 Analysis Modes

The checks need to be enabled under “Setup / Constraints / Modes” in the “Design for Fabrication” Section:

**Remark:** On the right side of the Analysis Modes UI, there are also hints available for the different checks.
5 DRC Reporting

5.1 DRC Display on Canvas

In the design canvas the DRC are highlighted by error markers like other design rule violations:

5.2 DRC Summary in Constraint Manager

In the DRC Domain of the Constraint Manager the violations are reported under “Design for Fabrication”:
6 Further Documentation

Further Documentation can be found in the Online Documentation under “Design for Fabrication”.
