

# Better DFM Report

Guest Better DFM # : afvbd-12345

Report Date : 5th May 2010, 11:50 PM

[What is Better DFM?](#)

Sierra Proto Express Part Number : Testing

Revision : 3

Feedback or Questions about this report or any particular issue in report? [Feedback](#)

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This report shows coordinates based on Datum (Origin) as specified in the gerber files you uploaded.  
See location of Datum [here](#).

Category of Issues	Number of Issues Found
<a href="#">Sierra Circuits recommends that customer should fix these issues</a>	3 issues
Customer must review and fix (if needed) these issues	No such issues
Sierra Circuits will need customer approval to fix these issues	No such issues
<a href="#">Sierra Circuits will automatically fix these issues</a>	11 issues

What [if I can't or don't want to fix any of these issues](#) that Sierra recommends?

## Section 1 of 2:

### Sierra Circuits recommends that customer should fix the issue(s) noted in this section

Layername: l1g

**Title:** Conductor width [Signal Checks]  
**(Sierra Circuits recommends that customer should fix this issue)**

FileName: shankar.top

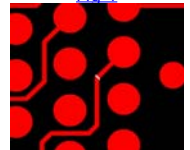
X: 4.6366 Y: 4.2894

Value Found: 6.000 mils

Rule: 6.000 mils

```
The minimum conductor width being checked for is 6.000 mils. This location measures 6.000 mils.
```

Fig 1



This issue has **4** more locations. Click image above to see locations.

Layername: l1g

**Title:** Line Neckdown [Signal Checks]  
**(Sierra Circuits recommends that customer should fix this issue)**

FileName: shankar.top

X: 0.7885 Y: 2.8151

Value Found: 3.842 mils

Rule: 6.000 mils

```
Lines defined as traces must be wider than the minimum trace width. The trace width minimum requirement being checked for is 6.000 mils. This location measures 3.842 mils.
```

Fig 2



Layername: l1g

**Title:** Stubs [Signal Checks]  
**(Sierra Circuits recommends that customer should fix this issue)**

FileName: shankar.top

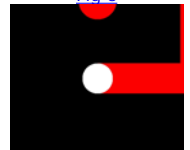
X: 0.6467 Y: 1.3455

Value Found: 40.000 mils

Rule: 1000.000 mils

```
Stubs indicate an error in the design. Normally lines end in pads. There is a stub located at X0.6467 Y1.3455.
```

Fig 3



## Section 2 of 2:

### Sierra Circuits will automatically fix the issue(s) noted in this section

Layername: sm1

FileName: shankar.topstop

X: 0.7737 Y: 4.5316

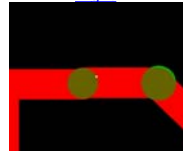
Value Found: 0.000 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 4



This issue has 1 more location. Click image above to see locations.

Layername: sm1

FileName: shankar.topstop

X: 0.6575 Y: 1.5653

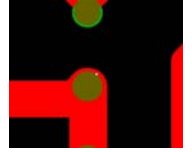
Value Found: 0.000 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 5



Layername: sm1

FileName: shankar.topstop

X: 7.0298 Y: 7.1736

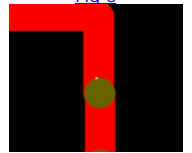
Value Found: 0.000 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 6



This issue has 1 more location. Click image above to see locations.

Layername: sm1

FileName: shankar.topstop

X: 3.6222 Y: 7.6044

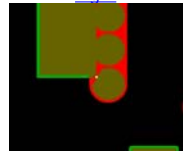
Value Found: 0.135 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 7



Layername: sm1

FileName: shankar.topstop

X: 1.7387 Y: 2.8245

Value Found: 0.325 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 8



Layername: sm1

FileName: shankar.topstop

X: 1.8908 Y: 1.3575

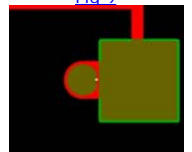
Value Found: 0.500 mils

Rule: 2.000 mils

Title: Pad annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The soldermask clearance around a plated hole pad should be larger than the pad to allow for registration tolerances. The minimum soldermask clearance being checked for is 2.000 mils.

Fig 9



This issue has 1 more location. Click image above to see locations.

Layername: sm1

FileName: shankar.topstop

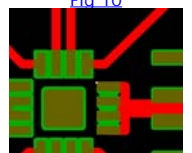
X: 3.8261 Y: 6.2627

Value Found: 0.000 mils

Rule: 2.000 mils

Title: SMD annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

Fig 10



This issue has 3 more locations. Click image above to see locations.

The area around a surface mount pad should be clear of soldermask. The minimum soldermask to a surface mount pad clearance being checked for is 2.000 mils.

Layername: sm1

FileName: shankar.topstop

X: 5.8265 Y: 3.8391

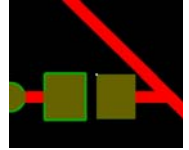
Value Found: 0.138 mils

Rule: 2.000 mils

Title: SMD annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The area around a surface mount pad should be clear of soldermask. The minimum soldermask to a surface mount pad clearance being checked for is 2.000 mils.

Fig 11



Layername: sm1

FileName: shankar.topstop

X: 3.4731 Y: 7.9976

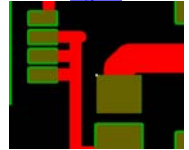
Value Found: 0.138 mils

Rule: 2.000 mils

Title: SMD annular Ring [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

The area around a surface mount pad should be clear of soldermask. The minimum soldermask to a surface mount pad clearance being checked for is 2.000 mils.

Fig 12



Layername: sm1

FileName: shankar.topstop

X: 3.8576 Y: 6.2056

Value Found: 0.200 mils

Rule: 2.800 mils

Title: Coverage [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

Circuit features that are close to a soldermask clearance must be covered with soldermask to prevent solder bridging. The minimum coverage being checked for is 2.800 mils.

Fig 13



This issue has 1 more location. Click image above to see locations.

Layername: sm1

FileName: shankar.topstop

X: 5.8788 Y: 3.8401

Value Found: 2.710 mils

Rule: 2.800 mils

Title: Coverage [Solder Mask Checks]  
(Sierra Circuits will fix automatically)

Circuit features that are close to a soldermask clearance must be covered with soldermask to prevent solder bridging. The minimum coverage being checked for is 2.800 mils.

Fig 14



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### Want to let someone else know about these issues?

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Message

[Yes, send an email with a link to this DFM report](#)