

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

Or you may send an email to BetterDFM@protoexpress.com

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
Sierra Circuits recommends that customer should fix these issues	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
Sierra Circuits will automatically fix these issues	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

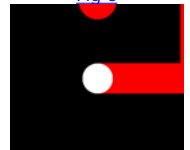
X: 0.6467 Y: 1.3455

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

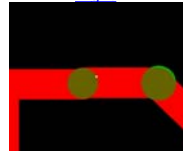
Value Found: 0.000 mils

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

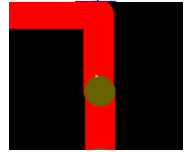
Value Found: 0.000 mils

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

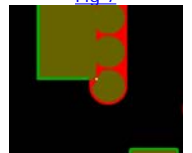
Value Found: 0.135 mils

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

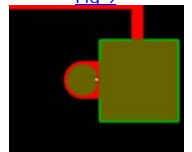
Value Found: 0.500 mils

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

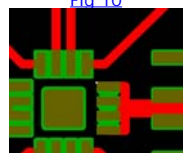
X: 3.8261 Y: 6.2627

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.

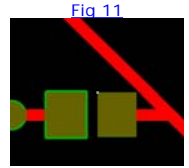


Fig 11

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.

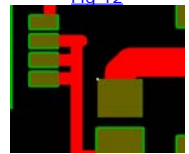


Fig 12

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.

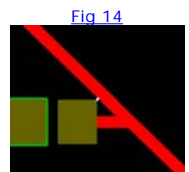


Fig 14

Feedback or Questions about this report or any particular issue in report? [Feedback](#)
Or you may send an email to BetterDFM@protoexpress.com

Want to let someone else know about these issues?

Your Name
Your Email
Email this report to
Message

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