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## **Certificate of Compliance**

Customer Fork Sand-Jeff Moe

Address 626 W 66th St Loveland CO 80538

 Part Number
 TRELLIS
 Revision:
 rev1.0

 Purchase Order #
 No PO on File
 Date Code
 1936

 Base Material
 Ventec VT-47

| Sierra Tool Number | 160832 | Work Order | 404357 - 1.00

Number of Layers 8
Surface Finish ENIG

Quantity of PCB Shipped: 1 Date Shipped 9/13/2019

(Plus solder sample if required.)

Compliance to:

Master Drawing None

 Specification / Rev / Amd
 IPC-6012 Rev D Amd 1, Class 2
 and IPC-1601, IPC-A-600 (latest revision)

 Lead Free
 Yes
 NASA Outgassing
 No

 RoHS / REACH \*
 Yes
 Positive Etch Back
 No

 UL
 -- Halogen Free
 No

UL --Special ID, marking, comments None

## Specific paragraphs and inspection items:

IPC-6012

3.2 Material

3.3.1 Edges of Printed Board 3.5.4

3.3.2 Laminate Imperfections

3.3.3 Plating and Coating Voids in the Hole

3.3.4 Lifted Lands

Visual

3.3.5 Marking and Traceability

3.3.9 Workmanship

Solderablity

3.3.6 Surface3.3.6 Plated Through Holes

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Dimensional

3.4 Printed Board Dimensional

3.4.1 Hole Size

3.4.1 Hole Pattern Accuracy

3.4.1 Pattern feature accuracy

3.4.2 Annular ring (external)

3.4.3 Bow and twist

3.7 Solder Mask Coverage

3.6.2.11 Plating / coating thickness

Conductor Width & Spacing

3.5.1 Internal and External Width

2.5.2 Internal and External Spacing

Conductor Surfaces

3.3.8 junction of gold plate to solder finsih

3.5.4.1 Nick, dents, pinholes

3.44.4.5 - 7 Dewetting / nonwetting / final finiish coverage

3.5.4.4 Edge printed board connector

3.5.4.2 Surface mount

Physical

3.3.7 Plating adhesion

3.7.2 Solder mask cure and adhesion

Structural Integrity After Thermal Stress

3.6.2.1 Plating integrity

3.6.2.3 Laminate voids

3.6.2.6 & 8 Etchback / negative etchback

3.6.2.9 Annular ring and Breakout (internal)

3.6.2.10 Lifted Lands

3.6.2.11 Hole plating thickness

3.6.2.15 Surface plating and conductor thickness

3.6.2.14 Copper foil thickness (internal)

3.6.2.16 Metal core spacing

3.6.2.17 Dielectric thickness

3.6.2.18 Material fill of Blind and Buried Vias

Cleanliness

3.9.1 Cleanliness prior to solder mask application Foreign Object Debris (FOD)

The above order has been both visually inspected, microsection, tested, and conformed to the customer specification, customer's master drawings, and purchase order.

All material used in the manufacture of the above order meet the material and manufacturing specifications as specified on the customer's drawings and purchase order subject to subsequent communication / agreement. Sierra Circuits hereby certifies that the item was last substantially transformed ("Substantially Transformed") in the United States of America. Sierra hereby certifies that the information is accurate and TAA Compliant, which is defined to mean that the article is wholly the growth, product or manufacture of the U.S.A. or Substantially Transformed in the U.S.A.

\* If indicated above compliant to "RoHS / REACH" Compliant: Manufactured to the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) as regulated by the European Union dated 18 December 2006. Furthermore, they do not contain any of the 174 materials that are considered substance of very high concern (SVHC), updated on July 7, 2017. (refer to URL: http://ec.europa.eu/environment/).



Bhupinder Kaur

September 13, 2019

Date

Inspector