



DEFENSE LOGISTICS AGENCY
 LAND AND MARITIME
 POST OFFICE BOX 3990
 COLUMBUS, OH 43218-3990

February 16, 2016

Mr. Jim Spaulding
 FTG Circuits, Inc.
 20750 Marilla Street
 Chatsworth, CA 91311

Dear Mr. Spaulding:

RE: Notification of Qualification, MIL-PRF-31032B, FSC 5998; CN049711, VQ (VQE-16-030068)

Qualification of your products is granted under the current issue of the specification as a result of successful qualification testing to Department of Defense Performance Specification MIL-PRF-31032, Printed Circuit Board/Printed Wiring Board, and associated specifications MIL-PRF-31032/3 and MIL-PRF-31032/4 (Adhesiveless Construction). The capabilities indicated below shall be listed on Qualified Manufacturers List QML-31032. The effective date of this qualification is February 16, 2016.

MANUFACTURER NAME & ADDRESS FTG Circuits, Inc. 20750 Marilla Street Chatsworth, CA 91311	PLANT LOCATION Same	CAGE Code: 30803 Phone: 818-407-4024 Fax: 818-407-4034 Email: info@ftgcorp.com
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CAPABILITIES BY TECHNOLOGY / ASSOCIATED SPECIFICATION:

Specification: MIL-PRF-31032/3, MIL-PRF-31032/4
 Qualification Letters: VQE-16-030068
 Rigid Base Material: GF: Woven E-Glass, Epoxy Resin, Flame Resistant; GI: Glass Base, Woven, Polyimide Resin, Heat Resistant
 Flex Base Material: Copper Clad Adhesiveless Polyimide
 Max. Panel Size: 18" x 24"
 Max. Number of Layers: 28
 Max. Board Thickness: .200"
 Min. Hole Size: .006" Laser Ablated Plated Hole Size Before Plating, 0.013" Drilled Plated-Through Hole Before Plating
 Aspect Ratio: 1.1:1 Microvia, 10:1 Through-Hole
 Min. Conductor Width/Space: .0035"/.004"
 Hole Preparation: Plasma Desmear, Plasma Etchback
 Hole Wall Conductive Coating: Electroless Copper
 Copper Plating: Direct Current Plate
 Hole Fill/Via Plug: Non-Conductive
 Solder Resist: Liquid Photoimageable
 Finish System: HASL, Hot Oil Reflow of Plated Sn/Pb, ENIG, Electrolytic Ni / Soft Au, Ni/Pd/Au
 Additional Fab Capabilities: Foil Lamination, Blind Vias, Buried Vias, Sequential Lamination
 Controlled Impedance: Differential, Single-Ended
 Flex Usage: Use A (Flex During Installation)

Test report number 31032-4448-15 has been assigned to your test data for the adhesiveless construction qualification. These qualifications are based on your MIL-PRF-31032 certification and are subject to the conditions stated below:

1. A listing on the Qualified Manufacturers List (QML) does not guarantee acceptance of the product(s) in any future purchase.
2. QML listing does not constitute a waiver of any requirements of the specification or of the provisions of any contract.
3. Advertising of qualification information is permitted. Permission to use such information for advertising or publicity purposes is granted provided that such publicity or advertising does not state or imply that the product(s) is the only product of that type qualified or that the Department of Defense in any way recommends or endorses the manufacturer's product.
4. The listing applies only to products produced in the plant(s) specified in this letter of notification of qualification and applies to future amendments or revisions of the specification, unless otherwise notified.
5. The listing applies only to materials and manufacturing construction techniques identical to or covered by that (those) qualified. The qualifying activity must be advised in advance of any change to the materials and manufacturing construction techniques. Failure to notify the qualifying activity of any change to the materials and manufacturing construction techniques is cause for removal from the QML.

Because we are held responsible for the accuracy and currency of this QML, please let us know if your company discontinues production utilizing these materials or processes. If you have any questions, please contact Mr. Lowell Sherman, (614) 692-0627 or vqe.ls@dla.mil.

Sincerely,

ALAN J. WILL
Acting Chief
Sourcing and Qualifications Division