



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

August 31, 2016

Ms. Kathy Phelan  
 Midwest Printed Circuit Services  
 1741 Circuit Drive  
 Round Lake Beach, IL 60073

Dear Ms. Phelan:

RE: Notification of Qualification, MIL-PRF-31032B, FSC 5998; CAGE Code 0YYS4, CN052460, VQ (VQE-16-030690)

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 August 31, 2016.

<b>MANUFACTURER NAME &amp; ADDRESS</b>  Midwest Printed Circuit Services 1741 Circuit Drive Round Lake Beach, IL 60073	<b>PLANT LOCATION</b>  Same	<b>CAGE Code: 0YYS4</b>  Phone: 847-740-4120 Fax: 847-740-4187 Email: mpcs@midwestpcb.com
<b>CAPABILITIES BY TECHNOLOGY / ASSOCIATED SPECIFICATION:</b>		
Specification: MIL-PRF-31032/3, MIL-PRF-31032/4 Qualification Letters: VQE-16-030690 Rigid Base Material: GF: Woven E-Glass, Epoxy Resin, Flame Resistant Flex Base Material: Copper Clad Adhesiveless Polyimide Max Panel Size: 12" X 18" Max number of layers: 10 Max Board Thickness: 0.094" Min Hole Size: 0.016" Drilled Plated-Through Before Plating Aspect Ratio: 5.8:1 Through Hole Min Conductor Width/Space: 0.010" / 0.010" Hole Preparation: Plasma Desmear Hole Wall Conductive Coating: Electroless Copper Copper Plating: Direct Current Plate Solder Resist: Dry Film, Liquid Photoimageable, Silk Screen Finish System: HASL, ENIG Flex Usage: Use A (Flex during Installation), Use B (Dynamic Flex)		

Test report number 31032-4650-16 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. Tom Dwyer, (614) 692-9447 or [thomas.dwyer@dla.mil](mailto:thomas.dwyer@dla.mil).

Sincerely,

for ALAN J. WILL  
Chief  
Sourcing and Qualifications Division