



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

IN REPLY  
REFER TO

April 17, 2012

Mr. Joe Lefebure  
Advanced Circuits – Tempe Division  
229 S. Clark Drive  
Tempe, AZ 85281-3073

Dear Mr. Lefebure:

RE: Notice of Qualification; MIL-PRF-31032/1, /2; FSC 5998; CAGE Code 0SX42; VQE-12-024291 / CN036054

Qualification of products is granted as a result of successful qualification testing to Military Performance Specification MIL-PRF-31032, Printed Circuit Board/Printed Wiring Board, and associated specification MIL-PRF-31032/1 and /2. The capabilities qualified for each base material and slash sheet indicated below shall be listed on Qualified Manufacturers List QML-31032. The effective date of this qualification is April 17, 2012.

MANUFACTURER	PLANT LOCATIONS	CAGE CODE: 0SX42
Advanced Circuits – Tempe Division 229 S. Clark Drive Tempe, AZ 85281-3073	Same Address as Manufacturer	PHONE #: 480-966-5894 FAX #: 480-966-5896 EMAIL: jlefebure@4pcb.com
Specification: MIL-PRF-31032/1, MIL-PRF-31032/2 Qualification Letters: VQE-12-024291 Rigid Base Material: GF: Woven E-Glass, Epoxy Resin, Flame Resistant Max. Panel Size: 18" x 24" Max. Number of Layers: 10 Max. Board Thickness: 0.100" Min. Hole Size: 0.020" Drilled Plated-Through Hole Before Plating Aspect Ratio: 5:1 Through-Hole Min. Conductor Width/Space: 0.010 "/0.010" Hole Preparation: Permanganate Desmear, Plasma Desmear/Etchback Hole Wall Conductive Coating: Electroless and Electroplated Copper		

Copper Plating: Direct Current Plate  
Solder Resist: Dry Film, Liquid Photoimageable  
Finish System: HASL  
Additional Fab Capabilities: Foil Lamination

Specification: MIL-PRF-31032/1, MIL-PRF-31032/2  
Qualification Letters: VQE-12-024291  
Rigid Base Material: GI: Glass Base, Woven, Polyimide Resin, Heat Resistant  
Max. Panel Size: 18" x 24"  
Max. Number of Layers: 10  
Max. Board Thickness: 0.100"  
Min. Hole Size: 0.020" Drilled Plated-Through Hole Before Plating  
Aspect Ratio: 5:1 Through-Hole  
Min. Conductor Width/Space: 0.010 "/0.010"  
Hole Preparation: Permanganate Desmear, Plasma Etchback/Desmear  
Hole Wall Conductive Coating: Electroless and Electroplated Copper  
Copper Plating: Direct Current Plate  
Solder Resist: Dry Film, Liquid Photoimageable  
Finish System: HASL  
Additional Fab Capabilities: Foil Lamination

Test report number 31032-3523-12 has been assigned to your test data. This qualification is based on your MIL-PRF-31032 certification and is 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.

Manufacturers are required to inform this Office immediately if a failure occurs during PCI testing, if production of this qualification is discontinued, or prior to issuance of a GIDEP Alert and/or Problem Advisory on their QML products. If you have any questions, please contact Mr. Robert Puckett, (614) 692-0625 or vqe.rp@dla.mil.

Sincerely,

/SIGNED/

JOSEPH GEMPERLINE  
Chief  
Sourcing and Qualification Division