



This certificate is granted and awarded by the authority of the Nadcap Management Council to:

Benchmark Electronics, Inc.

**3535 Technology Dr NW
Rochester, MN 55901
United States**

This certificate demonstrates conformance and recognition of accreditation for specific services, as listed in www.eAuditNet.com on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:

Electronics

Certificate Number: 8778163871
Expiration Date: 31 October 2018

Joseph G. Pinto
Executive Vice President and Chief Operating Officer



SCOPE OF ACCREDITATION

Electronics

Benchmark Electronics, Inc.
3535 Technology Dr NW
Rochester, MN 55901

This certificate expiration is updated based on periodic audits. The current expiration date and scope of accreditation are listed at: www.eAuditNet.com - Online QML (Qualified Manufacturer Listing).

In recognition of the successful completion of the PRI evaluation process, accreditation is granted to this facility to perform the following:

AC7120 Rev D - Nadcap Audit Criteria for Circuit Card Assemblies (to be used on audits before 9 April 2017)

- 07– CAD/CAM Data
- 08– Electrostatic Discharge (ESD)
- 09– Material Handling
- 10– Moisture Sensitive Components and Materials
- 11– Re–Packaging
- 12.1– Programming: Component Programming (Prior Assembly)
- 12.2– Programming: Circuit Card Assembly Programming
- 13– Electronic Component Preparation For Preassembly Process
- 14– Stencil Printing
- 15.1– Part Placement: General
- 15.2– Part Placement: Manual
- 15.4– Part Placement: Automated Part Placement
- 15.5– Part Placement: Build through / Build Short
- 16.1– In–Process Verification / Inspection: General
- 16.2– In–Process Verification / Inspection: Visual
- 16.3– In–Process Verification / Inspection: AOI
- 16.4– In–Process Verification / Inspection: X–Ray
- 17– Bonding
- 18.1– Assembly Soldering Processes: General
- 18.2– Assembly Soldering Processes: Reflow Soldering
- 18.3– Assembly Soldering Processes: Wave Soldering
- 18.4– Assembly Soldering Processes: Selective Soldering
- 18.5– Assembly Soldering Processes: Hand Soldering

- 18.7– Lead–Free Soldering
- 19.1– Secondary Assembly: Mechanical Part Installation
- 19.2– Secondary Assembly: Wire Cutting & Stripping
- 19.3– Secondary Assembly: Jumper Wire Installation
- 19.5– Secondary Assembly: Compliant Pin (Press Fit) Connector Installation
- 20– Cleanliness
- 21– Coating and Encapsulation
- 22.1– Final Tests: Environmental Stress Screening
- 22.2– Final Tests: Bed of Nails Testing
- 22.3– Final Tests: Flying Probe Testing
- 22.6– Final Tests: Functional Testing
- 23– Final Inspection
- 24– Rework