

Merit

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*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](http://www.eAuditNet.com) on the Qualified Manufacturers List (QML), to the revision in effect at the time of the audit for:*

## **Electronics**

Certificate Number: 8778193337  
Expiration Date: 30 November 2022  
Accreditation Length: 24 Months

**David L. Schutt, PhD**  
President

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## 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](http://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 E - Nadcap Audit Criteria for Printed Board Assemblies (to be used on audits on/after 9 April 2017) (CANNOT BE COMBINED WITH AC7119 or AC7121)**

- 03–Company Information (mandatory)
- 04– General (mandatory)
- 05– Outsourced Processes (mandatory)
- 06– Process Control (mandatory)
- 07– Visual Acuity (mandatory)
- 08– Customer Data (mandatory)
- 09– Electrostatic Discharge (ESD) (mandatory)
- 10– Material Management (mandatory)
- 11– Moisture Sensitive Components and Materials
- 12– Kitting
- 13.1– In–Process Verification / Inspection: General (mandatory)
- 13.2– In–Process Verification / Inspection: Visual (mandatory)
- 13.3– In–Process Verification / Inspection: AOI
- 13.4– In–Process Verification / Inspection: X–Ray
- 14.1– Secondary Assembly: Mechanical Part Installation
- 14.2– Secondary Assembly: Wire Cutting & Stripping
- 14.3– Secondary Assembly: Jumper Wire Installation
- 14.5– Secondary Assembly: Compliant Pin (Press Fit) Connector Installation
- 14.6– Secondary Assembly: Bonding
- 15– Cleanliness
- 16– Final Inspection (mandatory)
- 17– Rework (mandatory)

#### **AC7120/2 - General Soldering of Printed Board Assemblies (to be used on audits on/after 9 April 2017)**

- 03– General (mandatory)
- 04– Electronic Component Preparation for Preassembly Process

- 05.1– Part Placement: General (mandatory)
- 05.2– Part Placement: Manual
- 06– Gold Removal
- 07– Build Through / Build Short
- 08– Hand Soldering

**AC7120/3 - Plated Through Hole Technology (to be used on audits on/after 9 April 2017)**

- 03.2– Part Placement: Automated Part Placement of PTH Components
- 04– Wave Soldering
- 05– Selective Soldering

**AC7120/4 Rev A - Surface Mount Technology (to be used on audits on/after 3 March 2019)**

- 03– Preparation
- 04– Stencil Printing (mandatory)
- 05– Automated Part Placement (mandatory)
- 06– Reflow Soldering (mandatory)

**AC7120/6 - Lead Free Soldering (to be used on audits on/after 9 April 2017)**

- 03– Lead-Free Control Plan (LFCP) (mandatory)
- 04– Process Control (mandatory)
- 05– Training (mandatory)

**AC7120/7 - Conformal Coating of Printed Board Assemblies (to be used on audits on/after 9 April 2017)**

- 04– Material (mandatory)
- 05– Material and Equipment Compatibility (mandatory)
- 06– Preparation / Cleaning (mandatory)
- 07– Application / Drying / Curing (mandatory)
- 08– Thickness (mandatory)
- 09– Inspection (mandatory)
- 10– Rework (mandatory)
- 11– Training (mandatory)

**AC7120/9 - Programming (to be used on audits on/after 9 April 2017)**

- 04– General (mandatory)
- 06– Circuit Card Assembly Programming

**AC7120/10 - Final Testing (to be used on audits on/after 9 April 2017)**

- 04– General

**AC7120/12 - Nadcap Audit Criteria for Depaneling (to be used on audits on/after 30 June 2019)**

- 02– Inspection (mandatory)
- 03– Mechanical Router Process
- 07– Hand Cutters
- 08– Pizza Cutter ('V' Groove Depanelizer)
- 10– Finishing of cut edges (Rotary, Guillotine, hand cut methods must answer this section)
- 11– Preservation and Packing of Depaneled Images (mandatory)