



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: 8778177661
Expiration Date: 31 October 2020

*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 E - Nadcap Audit Criteria for Circuit Card 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
- 05.3– Part Placement: Clinched Component Leads
- 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 - Surface Mount Technology (to be used on audits on/after 9 April 2017)

- 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