



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

Benchmark Electronics, Inc.

*4065 Theurer Blvd
Winona, MN 55987
United States*

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

Printed Board Assemblies

Certificate Number: 156012004962
Expiration Date: 29 February 2024
Accreditation Length: 12 Months

Jay Solomond
Executive Vice President & Chief Operating Officer

SCOPE OF ACCREDITATION

Printed Board Assemblies

Benchmark Electronics, Inc.
4065 Theurer Blvd
Winona, MN 55987

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:

AC8120 Rev A - MedAccred Audit Criteria for Printed Circuit Board Assemblies (to be used on audits BEFORE 05-Mar-2023)

- 04.0 General
- 05.0 Process Validation
- 06.0 Medical Record Keeping
 - 06.1 Device Master Record (DMR)
 - 06.2 Device History Record (DHR)
 - 06.3 Product Traceability
- 07.0 Foreign Object Damage and Foreign Object Debris (FOD) Prevention
- 08.0 Electrostatic Discharge (ESD) Management
- 09.0 Calibration
- 10.0 Preventive Maintenance
- 12.0 Purchasing and Authentic Component Assurance
- 13.0 Process Control
- 14.0 CAD/CAM Data
- 15.0 Receipt, Inspection & Control of Incoming Material
- 16.0 Storage and Handling of Received Materials
- 17.0 Component Programming
 - 17.2 PCBA–Level Component Programming
- 18.0 Electronic Component Preparation
- 19.0 Stencil Printing
- 20.0 Component Placement
 - 20.1 Manual
 - 20.3 Automated Part Placement
 - 20.4 Build Through / Build Short
- 21.0 In–Process Placement Verification / Inspection
 - 21.1 General
 - 21.2 Visual
 - 21.3 Automated Optical Inspection (AOI)

- 21.4 X-Ray
- 22.0 Assembly Soldering Processes
 - 22.1 Reflow Soldering
 - 22.2 Wave Soldering
 - 22.3 Selective Soldering
 - 22.4 Hand Soldering
- 23.0 Secondary Assembly
 - 23.1 Mechanical Part Installation
 - 23.3 Jumper Wire Installation
 - 23.5 Compliant Pin (Press Fit) Connector Installation
- 24.0 PCBA Cleaning Process and Control
- 26.0 Adhesive Bonding
- 27.0 Assembly Testing
 - 27.3 Environmental Stress Screening or Highly Accelerated Stress Screening (ESS / HASS)
 - 27.4 In-Circuit Testing
 - 27.5 Flying Probe Testing
 - 27.8 Functional Testing
- 28.0 Final Acceptance Inspection
- 29.0 Rework
- 30.0 Storage, Handling & Packaging of Finished Goods