MedAccred℠

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

Printed Circuit Board Assemblies

Certificate Number: 87782001942
Expiration Date: 31 July 2020
Accreditation Length: 12 Months

Michael J. Hayward
Vice President and Chief Operating Officer

SCOPE OF ACCREDITATION

Printed Circuit Board Assemblies

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:

AC8120 Rev A - MedAccred Audit Criteria for Printed Circuit Board Assemblies (to be used on audits on/after 6 November 2016)

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
  20.5 Through Hole Component Lead Trimming

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
- 23.5 Compliant Pin (Press Fit) Connector Installation

24.0 PCBA Cleaning Process and Control

25.0 Coating and Encapsulation
- 25.1 Coating and Encapsulation Process
- 25.2 Coating and Encapsulation Inspection (Mandatory if 25.0 Coating and Encapsulation is checked)

27.0 Assembly Testing
- 27.4 In–Circuit Testing
- 27.5 Flying Probe Testing
- 27.7 Manual Bench Testing
- 27.8 Functional Testing

28.0 Final Acceptance Inspection

29.0 Rework

30.0 Storage, Handling & Packaging of Finished Goods