



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

Benchmark Electronics (Thailand) PCL

*94 Moo 1, Hi-Tech Industrial Estate
Banlane, Bang Pa-in, Ayudhaya, 13160
Thailand*

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: 189372002763
Expiration Date: 31 May 2021
Accreditation Length: 12 Months

A handwritten signature in black ink, appearing to read "D. Schutt", written over a horizontal line.

David L. Schutt, PhD
President

Audit Summary Report - 2004764

Auditee	Benchmark Electronics (Thailand) PCL (18937) 94 Moo 1, Hi-Tech Industrial Estate, Banlane, Bang Pa-in, Ayudhaya, 13160, Thailand	Program	MedAccred
Audit Number	2004764	Auditor(s)	Herbert Robbins Jr
Commodity	Printed Circuit Board Assemblies	Audit Type	Add Scope
Scopes	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 09.0 Calibration 13.0 Process Control 15.0 Receipt, Inspection & Control of Incoming Material 16.0 Storage and Handling of Received Materials 20.0 Component Placement 20.4 Build Through / Build Short 22.0 Assembly Soldering Processes 22.1 Reflow Soldering 22.2 Wave Soldering 22.3 Selective Soldering 22.4 Hand Soldering 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		
Start Date	05-Apr-2021	Close Date	01-Jun-2021
End Date	06-Apr-2021	Status	Main Audit Certified
Duration	2 day(s)	Cert Expiry	31-Oct-2021

SCOPE OF ACCREDITATION

Printed Circuit Board Assemblies

Benchmark Electronics (Thailand) PCL
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Banlane, Bang Pa-in, Ayudhaya, 13160
Thailand

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
 - 17.1 Component Programming (Prior to Assembly)
- 18.0 Electronic Component Preparation
- 19.0 Stencil Printing
- 20.0 Component Placement
 - 20.1 Manual
 - 20.3 Automated Part Placement
- 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
 - 23.2 Wire Cutting & Stripping
 - 23.3 Jumper Wire 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)
- 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