

**TENNESSEE TECHNOLOGICAL UNIVERSITY  
REQUEST FOR QUOTATION**

Department: Electrical & Computer Engineering  
Requisition No.: PCB Equipment

Tennessee Technological University  
Purchasing Office  
Box 5144, 1 William L. Jones Drive  
Cookeville, TN 38505-0001  
[www.tntech.edu/purchasing/](http://www.tntech.edu/purchasing/)  
Fax: (931) 372-3727

Date: 2/23/2026  
Contact: Janice Scarlett  
Phone: (931) 372-3464  
Email: jscarlett@tntech.edu

**Bids must be received in the Purchasing Office by 3:00 p.m. Central Time on 3/6/2026.**

**Bid is subject to the attached RFQ – Standard Terms and Conditions. By submittal of a bid, bidder certifies its agreement to these terms and conditions.**

*Special Bid Instructions:*

1. Bidders not already registered as a vendor with Tennessee Tech should complete the online supplier registration: <https://www.tntech.edu/purchasing/howto.php#>
2. To view a bid tabulation after intent to award, please visit this link: <https://www.tntech.edu/purchasing/bidawards.php>  
Results are listed according to fiscal year then by date of bid opening.
3. Bid may be electronically signed and submitted.

**THIS IS NOT AN ORDER**

**DESCRIPTION**

Please bid to provide the following to Tennessee Technological University in Cookeville, TN.

The use of the name of a manufacturer and/or brand is meant to establish performance standards and does not restrict Bidder to that manufacturer. Equivalent products from other manufacturers will be considered.

**ITEM #1 – TROUBLESHOOTING SYSTEM**

(Equivalent to ABI BoardMaster – quantity needed - 1)

**SPECIFICATIONS:**

Please mark an "X" to the left of the specification if your product meets that specification. If it does not meet the specification, please leave line blank and note to the right what specifications your product does meet.

- \_\_\_\_\_ The troubleshooting system must be capable of performing PCB and component troubleshooting on both analog and digital boards
- \_\_\_\_\_ The system must have the capability of performing multiple tests on PCBs and components on both powered and unpowered boards
- \_\_\_\_\_ It must include built-in functional testing of both digital and analog ICs, with a library of functional tests for at least 10,000 components
- \_\_\_\_\_ The system must be able to perform tests of components in-circuit or out-of-circuit
  
- \_\_\_\_\_ It should include checks for logic operation, pin connections, and ability to see the state and voltage level on every pin of a component
- \_\_\_\_\_ It must have the capability of developing functional tests for components that are not included in the library of component functional tests
- \_\_\_\_\_ The system must be able to perform 2-D and 3-D V-I signature analysis of components and PCBs, allowing comparison of known-good signatures with the signatures of suspect components or PCBs
- \_\_\_\_\_ It must include Matrix V-I tests which enable in-circuit testing of components in isolation from their network connections on the PCB
- \_\_\_\_\_ The system must enable in-circuit design tests with at least 64 test channels (expandable) that can help in live comparison between known-good and faulty boards, and voltage acquisition at test nodes

**TENNESSEE TECHNOLOGICAL UNIVERSITY  
REQUEST FOR QUOTATION**

Department: Electrical & Computer Engineering  
Requisition No.: PCB Equipment

**DESCRIPTION**

- \_\_\_\_\_ Available tests must include digital V-I testing, loop testing, logic trace, tri-state and open-collector checks, guarding, and short-locator functions with audible/visual proximity indication
- \_\_\_\_\_ A graphical test generator must be included to drive inputs/outputs, auto-learn responses from a good board, and store/compare vector sets
- \_\_\_\_\_ The system must include a multiple instrument station with a digital storage oscilloscope, function generator, frequency counter, digital multimeter, auxiliary PSU, and universal I/O in a single module
- \_\_\_\_\_ The system must include a built-in power supply with at least three independent isolated channels with at least 40W of power per channel
- \_\_\_\_\_ The system must enable maintenance, repair, and overhaul (MRO) of legacy PCBs and newer, more complex PCBs with surface mount components
- \_\_\_\_\_ The software package must be included with the hardware

**ITEM #2 – REVERSE ENGINEERING SYSTEM**  
(Equivalent to Rev/Eng – quantity needed - 1)

**SPECIFICATIONS:**

Please mark an "X" to the left of the specification if your product meets that specification. If it does not meet the specification, please leave line blank and note to the right what specifications your product does meet.

- \_\_\_\_\_ Do schematic learning and PCB reverse-engineering system; help in recreating accurate schematics from a known-good circuit board without needing original design data
- \_\_\_\_\_ Generate netlist of all components and interconnections on an existing PCB by performing guided continuity tests through a channel interface (ideally up to 2048 channels in typical systems)
- \_\_\_\_\_ Convert learned netlist into a schematic using CAD tools, restoring missing or never supplied documentation for maintenance and redesign
- \_\_\_\_\_ The schematic generation system must have the capability of mapping unpowered circuit boards
  
- \_\_\_\_\_ The software package must be included with the hardware

**OVERALL REQUIREMENTS**  
(Included for both Item #1 & Item #2)

- \_\_\_\_\_ The same software package must operate both systems (item #1 and item #2)
- \_\_\_\_\_ The troubleshooting system (item #1) and the reverse engineering (item #2) solutions must be able to function independently and perform their respective functions at the same time
- \_\_\_\_\_ The systems must not include any ongoing costs such as consumables or licensing or support fees
  
- \_\_\_\_\_ Software updates must be provided for the life of the system
  
- \_\_\_\_\_ Technical support after training must be provided for both systems for the life of the system
  
- \_\_\_\_\_ At least two years of parts and labor warranty coverage must be provided
  
- \_\_\_\_\_ At least 4 days of onsite training must be included with the troubleshooting and reverse engineering systems (together for items 1 and 2)

**Bid Price:** \$ \_\_\_\_\_

**Unit bid prices are to include all shipping and handling costs necessary to make delivery FOB Cookeville, TN, 38505.**

\*\*\*\*\*

**TENNESSEE TECHNOLOGICAL UNIVERSITY  
REQUEST FOR QUOTATION**

Department: Electrical & Computer Engineering  
Requisition No.: PCB Equipment

**DESCRIPTION**

Note: Tennessee Tech’s RFQ Standard Terms and Conditions shall be considered an integral part of this Request for Quotation and any Purchase Order resulting from this process.

**OTHER CONSIDERATIONS:**

- **Debarment Certification.** The Bidder certifies, by signature below and submission of this/bid, that neither I nor my principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency.
- **Sales and Use Tax.** Before the contract resulting from this RFQ is signed, the apparent successful Bidder must be registered or exempted from registration with the Department of Revenue for the collection of Tennessee sales and use tax. The State shall not approve a contract unless the Bidder provides proof of such registration or exemption. The foregoing is a mandatory requirement of an award of a contract pursuant to this solicitation.

**Bid Award:** To view the bid tabulation after bids have been opened and evaluated, please visit this link: <https://www.tntech.edu/purchasing/bidawards.php> Results are listed according to fiscal year and then by date of bid opening.

**BIDDER IS TO COMPLETE INFORMATION AND SIGN BID BELOW. UNSIGNED BIDS WILL NOT BE ACCEPTED.**

\_\_\_\_\_  
Bidding Entity’s Name

\_\_\_\_\_  
Name of Contact Person (printed)

\_\_\_\_\_  
Address

\_\_\_\_\_  
Phone

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Email

\_\_\_\_\_  
**Authorized Signature of Bidder**

\_\_\_\_\_  
**Date**

**Name & Title of Signatory (printed):** \_\_\_\_\_

Tennessee Technological University is an EEO/AA/Title IX/Section 504/ADA employer

## RFQ – STANDARD TERMS AND CONDITIONS

1. Bidder must carefully review the RFQ and any attachments, exhibits, addenda or amendments. Bidder's failure to examine any drawings, specifications, or instructions will be at bidder's risk.
2. Bidder shall take into consideration any and all amendments and/or addenda, and bid shall reflect any changes made to the RFQ by the University. In the event of extensive changes to an RFQ, the University may cancel the RFQ and reissue it using a revised RFQ.
3. The University considers any oral communication unofficial and non-binding with regard to the RFQ.
4. Bidder must submit bid according to specific instructions, if any, contained in the RFQ, which supersede those contained in the RFQ - Standard Terms and Conditions, if different.
5. Bidder's submittal of a bid constitutes an offer to the University.
6. Bid must contain the bidder's most favorable terms and pricing.
7. Upon the University's request, the individual signing a bid must furnish satisfactory proof authority to bind the bidder in a contract.
8. Bidder is responsible for costs to prepare, submit and/or present its bid, including samples if requested. Bidder may request samples be returned at bidder's expense. The University is not responsible for and may dispose of any samples not claimed within 10 calendar days following contract award. The University may retain any sample.
9. Unless otherwise instructed, bidder may deliver a bid electronically via facsimile or email.
10. The University will not consider a late bid for an award. A "late bid" is any bid that is not actually delivered to and received by the Purchasing and Contracts Office on or before the date and hour specified in the RFQ.
11. At the University's option, bidder may be bound by bid errors or omissions. Bidder may withdraw or amend a bid before submission deadline. After bid submission deadline, the University will permit a bidder to withdraw a bid only where the enforcement of the bid would impose unconscionable hardship on the bidder. In case of error in a price extension, the unit price will govern.
12. The University reserves the right, at its sole discretion, to reject any and all bids, to cancel the RFQ in its entirety, or to waive any bid informality, in accordance with applicable laws and regulations.
13. The University may reject a bid as a non-responsive counteroffer if it restricts the University's rights or does not comply with the University's terms and conditions
14. The University may request bid clarification from bidders as needed.
15. The University shall reject a bid if it was not arrived at independently without collusion, consultation, communication or agreement with any other bidder as to any matter related to prices. Regardless of time of detection, the University shall consider any of the foregoing prohibited actions to be grounds for rejection of bid and/or purchase order cancellation.
16. The Purchasing and Contracts Office may conduct public bid openings, as appropriate. Public bid openings are for informational purposes only. No award will be made at the bid opening.
17. All materials submitted by a bidder are subject to public inspection according to Tennessee law. The University will not honor a bidder's request to prevent disclosure beyond that allowed by law.
18. If an RFQ is re-advertised, the original bids shall remain closed to public inspection until evaluation of the responses to the re-advertisement is completed.
19. The University may not consider prompt pay discounts of less than 20 days in bid evaluation.
20. Prior to award, the University may require the successful bidder to provide information to demonstrate financial stability.
21. Bid prices shall include delivery of all items F.O.B. destination to the location specified in the bid. The University is not responsible for items until accepted at its location.
22. Unless otherwise specified in the RFQ, bidder must bid only new and unused goods.
23. Unless specified in the RFQ, the University will not consider alternate bids.
24. Bidder shall post any bond(s) required by the RFQ and shall itemize the cost of bond(s) separately in the bid.
25. Bidder agrees to abide by all applicable state and federal statutes, including but not limited to non-discrimination, and regulations and University policies. The laws of the State of Tennessee, without regard to its choice of law principles, shall govern this RFQ.
26. Unless otherwise limited by the bidder, the University shall have sixty (60) days to accept a bid.
27. If the RFQ requests and bidder so indicates on the bid, the contract terms and pricing may be extended to other state entities.
28. An RFQ reference to a particular manufacturer, brand or make in does not restrict the bidder to that item, unless specifically stated in the RFQ. The University will consider comparable products of other manufacturers if bidder provides proof of compatibility.
29. Bidder must notify the Purchasing and Contracts Office in writing at least three business days prior to the bid submittal deadline whenever bidder perceives that specifications are not fair and open.
30. Bidder must furnish with the bid such specifications, catalog pages, brochures or other data as will provide an adequate basis for determining the quality and functional capabilities of the product offered. The University may reject a bid if bidder fails to provide this data.
31. The University is exempt from federal excise and state sales taxes on purchases of tangible personal property. Vendors making improvements or additions to, or performing repair work on real property for the University are responsible for payment of sales or use tax on tangible personal property used in connection with the contract or furnished to vendors by the University for use under the contract. Bidders are responsible for determining the applicability of taxes.
32. Prior to contract award, if required by law, successful bidder must register with or be exempted by the Tennessee Dept. of Revenue for the collection of Tennessee sales/use tax.
33. By submitting a bid, bidder attests that no conflict of interest exists that prevents bidder from doing business with the State of Tennessee.
34. Bidder may not require any other written terms or conditions, nor impose any other terms and conditions in subsequent documents, such as invoices, warranty agreements, license agreements, etc. Should a bidder propose terms which conflict with Tennessee law and policies, the University may render the bid non-responsive and reject it.
35. Bid protest procedures are available upon request.
36. By submitting a bid, bidder attests in writing that it will not knowingly utilize the services of illegal immigrants and/or the services of any subcontractor that does so in delivery of the goods/services to the University. If the bidder is discovered to have breached this attestation, the bidder shall be prohibited from supplying goods/services to any state entity for a period of one year from the date of discovery of the breach.
37. The requirements of TCA §12-12-101 et seq. addressing contracting with persons with investment activities in Iran shall be a material provision of this RFQ and any contract resulting from it. Bidder agrees, under penalty of perjury, that to the best of its knowledge that it is not on the list created pursuant to TCA § 12-12-106.
38. The University shall not:
  - i. reimburse a vendor for travel expenses in amounts exceeding the maximums contained in University travel policies;
  - ii. indemnify or hold harmless another entity;
  - iii. pay vendor's attorney fees in the event of legal action;
  - iv. consent to jurisdiction in courts outside Tennessee.
39. A vendor shall not:
  - i. disclaim or limit its liability for damages or warranty;
  - ii. limit the amount of damages recoverable by the University;
  - iii. limit the time permitted for the University to bring legal action;
  - iv. assess penalties or liquidated damages against the University.
40. Upon receipt of goods, the University shall have a reasonable period in which to inspect and accept or reject goods without liability. The University will reject items that are not equivalent and return them to the vendor, at vendor's expense
41. In case of vendor default, the University may procure the articles or services from other source(s) and hold the defaulting vendor responsible for any excess cost.
42. Should the original awarded vendor default, the University may award to the second lowest responsive, responsible bidder.
43. The University's PO – Standard Terms and Conditions shall apply to any purchase order or contract awarded as a result of this RFQ.
44. If applicable to this RFQ, Tennessee Tech's [Data Privacy and Security Terms and Conditions](#) and/or [GDPR Data Protection Addendum](#) shall by reference be included as a condition of the RFQ.