

Tender Document

**For Supply and Installation of Multilayer
PCB Machine**

MaDeIT Innovation Foundation

(A Section 8 Company under Companies Act floated by IIITDM Kancheepuram)

Regd. Office: 3rd Floor, New Academic Block,
IIITDM Kancheepuram campus, Melakottaiyur,
Off Vandalur-Kelambakkam Road, Chennai-600127

Item	:	Supply and Installation of Multilayer PCB Machine – 1 No (Specification and quantity enclosed as Annexure)
Tender Enquiry No	:	MaDeIT/19-20/T&E/PCB Machine/001 Dt.22.08.2019
EMD	:	Earnest Money Deposit (EMD) for Rs.20,000/- (Rupees Twenty Thousand only) in the form of Demand Draft/Bankers Cheque/ Bank Guarantee drawn in favour of “MaDeIT Innovation Foundation” payable at Chennai.
Submission of Offer	:	<u>Two Bid System:</u> Two bid system will be followed in this tender. In this system the bidder must submit his offer in two separate sealed envelopes . Both the technical bid and commercial bid envelopes should be securely sealed and stamped separately and clearly marked as “Envelope No: 1 - Technical Bid” and “Envelope No: 2 - Commercial Bid” respectively. EMD should be placed in the Technical Bid. This two separate sealed envelopes should be placed in single envelope superscribing the tender No and description of the item.
Due Date (For submission of bids)	:	03: 00 PM, 6th September 2019 (any bid received after the due date and time by any means will be summarily rejected)
Opening of Technical Bid	:	04: 00 PM, 6th September 2019
Place of Submission of Bid	:	The Director, MaDeIT Innovation Foundation Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, 3 rd Floor, Laboratory Complex, Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127.

Important :

All communications are to be addressed to in the name of Director, MaDeIT Innovation Foundation only and not in the name of any officer and mails has to be sent to official purchase email id **manager_madeit@iiitdm.ac.in**

Terms and Conditions

1. The Bidders are requested to give detailed tender in two bid format.

Envelope-I	:	Technical Bid
Envelope-II	:	Commercial Bid
2. The bidder has to accept all terms and conditions of the Institute and conditional offers will not be accepted.
3. The tender document can be downloaded from the MaDeIT Innovation Foundation website www.madeit.iiitdm.ac.in at free of cost. The duly filled tenders should be submitted to Director, MaDeIT Innovation Foundation, Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, 3rd Floor, Laboratory Complex, Off Vandalur – Kelambakkam Road, Melakkottaiyur, Chennai – 600 127 **on or before due date 03: 00 PM, 6th September 2019**. Extension of due date will not be entertained.
4. Tenders which are submitted without following the two bid offer system will summarily be rejected.
5. **Envelope No-1 : Technical Bid**
The technical offer should comprise of the following:
 - i) EMD for Rs.20,000/- (Rupees Twenty Thousand only) in the form of Demand Draft/Bankers Cheque / Bank Guarantee drawn in favor of **“MaDeIT Innovation Foundation” payable at Chennai**. (The EMD without interest shall be returned to the unsuccessful bidders after finalization of the tender).
 - ii) The firms registered and having valid MSME Certificate are exempt from submission of EMD.
 - iii) Bids should have a validity of **60 days**.
 - iv) The technical offer **should not contain any price information**.
6. **Envelope No-2 : Commercial Bid**
This should contain only the price information along with commercial terms and conditions.
7. **Opening of Technical Bids**
The technical bids will be opened on the scheduled date in the presence of the bidders or their authorized representatives who choose to attend the technical bid opening.
8. **Technical Evaluation**
 - i) All the technical aspects of the bids received and will be evaluated for suitability and specification. If required, the Institute may seek additional clarification from the bidders.
 - ii) The technical recommendation shall be final and binding on all the parties.
 - iii) The technically qualified firms will be intimated about Price Bid opening by email.

9. Opening of Commercial Bids

MaDeIT Innovation Foundation will open commercial bids of only the shortlisted bidders in technical evaluation in the presence of the bidders or their authorized representatives who choose to attend the commercial bid opening. The representatives of shortlisted firms only will be allowed for commercial bid opening.

10. Price

- i) The price can be quoted either in INR or in Foreign Currency. The price quoted should be for FOR Destination at MaDeIT Innovation Foundation, IIITD&M Kancheepuram, 3rd Floor, Laboratory Complex, Melakkottaiyur, Off Vandalur-Kelambakkam Road, Chennai – 600 127. The packing, forwarding, freight, insurance and clearance charges may be quoted separately in price bid.
- ii) The Institute is exempted from custom duty & GST (as applicable to Research Institutes/University) vide Custom notification no. 51/96 dt 23.07.1996 and GST notification no.45/2017 – Central Tax (Rate) dt 14.11.2017 & Notification no.47/2017 – Integrated Tax (Rate) dt 14.11.2017 respectively.
- iii) The Institute will arrive at the INR Rate by converting the foreign currency rate quoted with equivalent of INR as on the date of closing of tender (RBI Conversion rate will be applicable) for comparison of rates.

11. Delivery Period / Timelines

The time is the essence of the contract. It is mandatory for the bidders to deliver the item within 10 weeks from the date of purchase order.

The delivery period of 06 weeks or less should be specified in the bid and the bidder may note that no relaxation in this condition will be entertained and bids not adhering to the delivery schedule will be rejected in the technical evaluation.

12. Locations for the supply / services

The items covered by this document is required to be supplied and installed at
MaDeIT Innovation Foundation
Indian Institute of Information Technology,
3rd Floor, Laboratory Complex,
Design and Manufacturing, Kancheepuram,
Off Vandalur-Kelambakkam Road,
Melakkottaiyur, Chennai – 600 127. Tamil Nadu.

MaDeIT Innovation Foundation will not provide any accommodation / transportation for the engineers / representatives for attending installation, commissioning and demonstration work. It is the absolute responsibility of the principal supplier / agent to make their own arrangements.

13. Installation

- i) Bidder shall be responsible for installation as applicable and for after sales service during the warranty and thereafter.
- ii) Installation to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the item at site.

14. Warranty / Support

- i) The items supplied shall carry the warranty as per the requirement mentioned in the technical specification.
- ii) The defects, if any, during the guarantee / warranty period are to be rectified free of charge by arranging free replacement wherever necessary.

15. Indemnity

The vendor shall indemnify, protect and save MaDeIT Innovation Foundation against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc., or such other statutory infringements in respect of all the items supplied by them.

16. Freight and Insurance

The items to be supplied will be insured by the vendor against all risks of loss or damage from the date of shipment till such time it is delivered at MaDeIT Innovation Foundation site.

17. Payment

- i) **INR Terms:** 100% payment after delivery, installation and acceptance by MaDeIT Innovation Foundation on submission of Bank Guarantee for an equivalent value of 5% of PO value valid till warranty period plus 2 months
- ii) **Foreign currency terms:** 100% LC with 95% payment against submission of documents and balance 5% after delivery, installation and acceptance by MaDeIT Innovation Foundation against submission of Bank Guarantee for an equivalent value of 5% of PO value valid till warranty period plus 2 months.

18. Penalty for delayed services / LD

- i) As time is the essence of the contract, delivery period mentioned in the purchase order should be strictly adhered to. Otherwise the LD clause will be applied / enforced.
- ii) If the supplier fails to supply, and fix the item as per specifications mentioned in the order within the due date, the supplier is liable to pay liquidated damages of 1% of order value for delay of every week or or part thereof subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.
- iii) MaDeIT Innovation Foundation reserves the right to cancel the order in case the delay is more than 04 weeks and the contractor is not eligible for any damage from the Institute and contractor will forfeit his claim for EMD.

19. Purchasers right to vary quantities at the time of award

MaDeIT Innovation Foundation reserves the right at the time of award of contract to increase or decrease the quantity of items specified in the schedule of requirements without any change in price or other terms and conditions.

20. Jurisdiction

The disputes, legal matters, court matters, if any, shall be subject to Courts in the district of Kancheepuram Jurisdiction only.

21. Force Majeure

- a) MaDeIT Innovation Foundation may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the contract, is the result of a force majeure.
- b) If the due date of submission of tender / Tender opening is declared a holiday for the Institute, the due date for submission of tender / Tender will be extended to same time on next working day.

22. Arbitration

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc., shall be referred by either party (MaDeIT Innovation Foundation or the bidder) after issuance of 30 days' notice in writing to the other party clearly mentioning the nature of dispute and will be referred to the arbitrator to be nominated by Director, MaDeIT Innovation Foundation, India. The Venue for arbitration shall be Chennai, India.

23. Acceptance of the terms and conditions of tender document

The bidders has to accept all the terms and conditions of this tender document and it is made known that the bidders quoting for this tender had impliedly accepted the terms and conditions of this tender.

24. Interpretation of the clauses in the Tender Document

In case of any ambiguity / dispute in the interpretation of any of the clause in this tender document, interpretation of Director, MaDeIT Innovation Foundation shall be final and binding on all parties. The MaDeIT Innovation Foundation reserves the right to accept the offer in full or in parts or reject the offer summarily or partly without assigning any reasons.

Sd/-

Director

MaDeIT Innovation Foundation

Specification for Multilayer PCB Machine

Item Name & Description	Qty
<p>Detailed specifications for PCB PROTOTYPING MACHINE</p> <p>Fully automatic milling/drilling double sided PCB prototyping machine consists of</p> <p>A. Essential features such as</p> <ol style="list-style-type: none"> 1. Solder paste printer 2. Through-Hole Plating 3. Lead free soldering reflow oven <p>B. Optional features</p> <ol style="list-style-type: none"> 1. Component pick and place 2. Circuit Board Plotters 3. Multi-Layer Press <p>Essential Features</p> <p>Detailed specification is given below</p> <ol style="list-style-type: none"> 1. Capable of printing track on Multilayer with x-y marker (Monitor) 2. Screen frame dimension Minimum 450 X 450 mm 3. Printing area: 220 X 220 mm (Porous Metal Plate / Pin Location System) 4. PCB thickness – 0.2 ~ 6mm 5. Squeeze <ul style="list-style-type: none"> - Type: Diamond type (or Bar type) - Stroke: 10 ~ 280 mm (programmable) - Driving: Stepping motor - Speed: 2 ~ 150 mm/sec (programmable) - Pressure: 2 ~ 6 Kg (adjustable) 6. Accuracy = 0.5 micrometer or better 7. Repeatability = +/- 0.001 mm or better 8. Transport Direction - Left-Right; Right-Left; Left-Left; Right-Right 9. Transport speed in X/Y Direction-Minimum 100mm/s 10. Transport speed in Z Direction-Minimum 25mm/s. 11. Screen Frame Lock System <ul style="list-style-type: none"> - One-Touch (4point Clipping by Air Cylinder) 12. Stencil Separation Speed - 0.1~20mm/sec Programmable 13. Cleaning system – Dry. Wet, Vacuum (Programmable) 14. Acoustic cabinet for quite operation. 15. Power supply 1 phase, 240V, 50 Hz, nominal 16. Tool set with premium carbide tools of various sizes for milling, cutting purposes. 17. Supplied with all necessary cables, accessories, adhesive tapes, software for proper functioning of the equipment etc. 18. Software Features 	1 No

<p>a) Data Import – Gerber, STEP, IGES</p> <p>b) Design Rule Check</p> <p>c) Counter generation</p> <p>d) Direct entry of text</p> <p>e) Automatic milling depth adjustment</p> <p>f) Display of current milling status</p> <p>g) Compatible with hardware system having Windows 2000 or above version having 2 GB RAM.</p> <p>Optional:</p> <ol style="list-style-type: none"> 1. Automatic tool changing with minimum 10 tools 2. Automatic milling with tool depth adjustment 3. Automatic recognition of PCB position and reference setting. 4. Drilling Speed of 120 strokes/min or better 5. Spindle Speed higher than 50,000 rpm 6. 1 set Cleaning Pads for removing oxidation from copper clads. <p>Training & Warranty:</p> <ol style="list-style-type: none"> 1. 20 days of onsite training 2. 3 years comprehensive warranty 3. All other accessories for the satisfactory operation of the PCB Machine shall be included 	
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Sd/-
Director
MaDeIT Innovation Foundation