भारतीय प्रौद्योगिकी संस्थान गोवा

गोवा अभियांत्रिकी महाविद्यालय परिसर, फार्मागुडी, फ़ोंडा – 403401, गोवा

Indian Institute of Technology Goa

Goa College of Engineering Campus, Farmagudi, Ponda - 403401, Goa



Ref: IITGOA/2024-25/016 Date: 04/12/2024

To, M/s. dSPACE India Solutions Private Ltd., #214, 1st Floor, Bellary Road, Sadashivnagar, Bangalore – 560 080

Sir/Madam,

<u>Sub: Enquiry for "MicroLabBox: Advance Control Kit for Education with FPGA, Electric motor control blockset and necessary software."</u>

IIT Goa invites online bid(s) from the manufacturers/ suppliers for supply of item(s) / goods as per specification mentioned in Appendix-1: -

"MicroLabBox: Advance Control Kit for Education with FPGA, Electric motor control blockset and necessary software." - Qty 1 (As per the technical specifications mentioned in the tender enquiry)

Online bids should be submitted through www.eprocure.gov.in latest by 17:00 Hrs. on or before 13th December, 2024.

Please do the needful.

Regards,

Sd/-Assistant Registrar (S&P) IIT Goa

भारतीय प्रौद्योगिकी संस्थान गोवा

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Indian Institute of Technology Goa

Goa College of Engineering Campus, Farmagudi, Ponda - 403401, Goa



GSTIN: 30AABAI1653D1ZF PAN: AABAI1653D TAN: BLRI08261B

Tender Enquiry

Enquiry No: IITGOA/2024-25/016 Date: 04/12/2024

IIT Goa invites online bid(s) from the manufacturers/ suppliers for supply of item(s) / goods as per specification mentioned in Appendix-1 of tender document available at our website www.iitgoa.ac.in and central public procurement portal i.e. www.eprocure.gov.in.

SI. No.	Description of Item	Qty. (Nos.)
1	MicroLabBox: Advance Control Kit for Education with	01
	FPGA, Electric motor control blockset and necessary	
	software	

Terms & Conditions: -

- 1. The technical bid and the financial bid should be submitted through www.eprocure.gov.in before the last date & time of submission specified in tender document.
- 2. Technical bid should contain all the technical details and specification of the product. It should also contain techno-commercial terms and conditions, compliance certificates, proprietary certificates (if applicable), undertaking/self-declaration for bid security, declaration of local content, any other certificates/details etc. along with Annexure-A.
- 3. Financial bid should contain duly filled BOQ in excel format and a scanned copy of the same signed and stamped on the company letterhead in pdf format.
- 4. All taxes and duties will be paid extra and such amounts of mandatory/statutory taxes & duties shall be explicitly mentioned in BOQ while submitting bid. If GST amount not quoted in the BOQ (financial bid), the total cost will be treated as inclusive of GST. The prices filled in the e-procurement site will be treated final and shall be binding on the bidder.
- 5. At any time prior to the due date for submission of bids, the Institute may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing a corrigendum.

- 6. Corrigendum related to the tenders issued by this Institute shall be placed in its website. As such, all prospective bidders are expected to visit IIT Goa website before formulating and submitting their bids to take cognizance of the corrigendum, if any.
- 7. The estimated cost of the tendered items is Rs. 11.21 Lakhs (Inclusive of taxes).
- 8. Bid(s) must be valid for at least 90 days from the date of opening of technical bid.
- 9. The GSTIN should invariably be mentioned in your offer. The bidder has to submit a copy of GSTIN, last filled ITR and last filed GST return.
- 10. Bid Security or EMD: 2% of the estimated cost of the tender or bidders should submit "Bid Securing Declaration Form" on company letter head as per Annexure-B of this tender document.
- 11. EMD amount can be deposited in IIT Goa Main Account by RTGS/NEFT/SWIFT.

Account No. : 520101252594859

Bank Name and address: Union Bank of India, Farmagudi Branch

IFSC Code : UBIN0913286

A copy of the transaction details of EMD must be submitted along with the technical bid.

- 12. Kindly attach a compliance certificate along with the technical quote.
- 13. Model no. of the product and HSN or SAC code should be given with catalogue (if any).
- 14. Price: Price should be quoted in INR, with free delivery at IIT Goa campus at the site.
- 15. Custom Duty Exemption Certificate (CDEC) will be provided in case of GTE only.
- 16. Payment terms: 100% within 30 days after the delivery and successful installation of items against submission of performance security.
 - Note: All payments due under the contract shall be paid after deduction of statutory levies at source (Like ESIC, IT(TDS), GST etc.), wherever applicable.
- 17. Delivery should be made within 45 days from the date issue of Purchase Order.
- 18. Installation should be made within 15 days after the successful delivery (if applicable).
- 19. The items after inspection, if found defective or damaged or not according to the specifications of the supply order will be returned at the bidder's cost and risk.
- 20. Part supply and billing is not acceptable unless permitted by the Competent Authority.
- 21. Liquidated Damages: If the items are not delivered and installed within 60 days from the date of issue of Purchase Order, 0.5% as pre-estimated damages per week of the total amount subject to maximum of 10%.
- 22. Successful bidder has to submit a Performance Bank Guarantee for 3% of the purchase order value and valid till one year or up to warranty period, plus 60 days whichever is later from the date of successful installation of the item.
- 23. On site comprehensive warranty:

The successful bidder shall provide a comprehensive warranty for minimum period of 1 year (not applicable for consumable item(s)) after the installation and commissioning of the instrument/software/items. If within a warranty period after installation any such product or component is proven to be defective such product shall be repaired or replaced by the supplier. Such repair and replacement shall be sole obligation of supplier. Supplier shall be responsible for payment for all charges (to-and-fro) for repair/ replacement. Any design defects or installations deficiencies or any outer defects, if noticed during the warranty/ maintenance period, shall be rectified promptly by the successful bidder with no cost at all the places, which also includes the field installations.

- (i) Down-time call attendance should be within 72 hrs.
- (ii) In case the equipment/system remains non-operational for more than 5 days then warranty period will be extended for the equal period for which equipment/system remained non-operational. Warranty extension in such case shall be done without prejudice to any other term & condition of the contract.
- 24. The bidder shall provide the banking details along with their quote on their letterhead duly signed and stamped.
- 25. The Institute is following and shall abide with the revised Public Procurement (Preference to Make in India), Order 2017 P- 45021/2/2017 B. E. -II dated 16.09.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India & subsequent amendments/instructions of Ministry. Accordingly, preference will be given to the make in India products while evaluating the bids. However, it is sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India along with respective documentary evidence in the technical bid itself. A self-declaration as per Annexure- C related to local content should be submitted with technical bid.
- 26. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules or a startup, the bidder shall be exempted from the requirement of "EMD/Bid security", "Bidder Turnover" criteria and "Experience Criteria". If the bidder is OEM of the offered products, it would also be exempted from the "OEM Average Turnover" criteria. In case any bidder is seeking exemption from Turnover/Experience Criteria or EMD/Bid security, the supporting documents to prove his eligibility for exemption must be submitted with technical bid.
- 27. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT). This is also applicable for bidders bidding for finished goods

- procured directly/indirectly from the vendors from the countries sharing land border with India. A self-declaration as per Annexure- D should be submitted with technical bid.
- 28. IIT Goa reserves the right to accept and/or reject any/all bids or to cancel the entire tendering process at any stage of the procurement process without assigning any reason in public interest. All disputes are subject to Goa Jurisdiction only.
- 29. A self-declaration is to be submitted as per Annexure- E that the organization has not been blacklisted during last 3 years by any Central/State Government Department/Organization.
- 30. Bidder who does not manufacture the goods it offers to supply shall submit Manufacturers' Authorization Form as per Annexure- F specified in the bidding document to demonstrate that it has been duly authorized by the manufacturer of the goods to quote and / or supply the goods/services.
- 31. Evaluation of bids: In the first stage, technical bids shall be opened and evaluated by the competent committee. The bidders who do not fulfill the technical and financial qualification criteria shall be rejected during the evaluation of technical bid. At the second stage, financial bids of only the technically qualified bidders shall be opened and evaluated. Among all responsive financial bids, the lowest bid will be termed as L1 and recommended for awarding the purchase order/contract by the competent committee.
- 32. For any technical clarification, you may kindly contact Dr. Keval Ramani (E-mail: keval@iitgoa.ac.in). For any other clarification, you may contact the Assistant Registrar, Stores & Purchase section (email: purchase@iitgoa.ac.in / ar_sp@iitgoa.ac.in).
- 33. The bidders are expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in rejection of its bid.
- 34. Online bids should be submitted through www.eprocure.gov.in latest by 17:00 Hrs. on or before 13th December, 2024.

Sd/-Registrar, IIT Goa

dSPACE ACE KIT-MicroLabBox- SPECIFICATION

Parameter		MicroLabBox Specification		
		MicroLabBox, top panel variant with BNC Connectors (MLBX_1302T)		
D	Real-time Processor	NXP (Freescale) QorlQ P5020, dual-core, 2 GHz, 32 KB L1 data cache per core, 32 KB L1 instruction cache per		
Processor	Host communication Processor-	ore, 512 KB L2 cache per core, 2 MB L3 cache total NXP (Freescale) QorlQ P1011 800 MHz for communication with host PC		
Memory		1 GB DRAM, 128 MB flash memory.		
	Host Interface	Integrated Gigabit Ethernet I/O interface		
Interfaces	USB Interface	2 x USB 2.0 interface for data logging and booting applications via USB mass storage (max. 32 GB supported)		
Titter races	Serial Interface	2 x UART (RS232/422/485) interface		
FPGA	Scriai interface	Xilinx® Kintex® 7 XC7K325T FPGA		
Analog input	Resolution and type	8 14-bit channels, 10 Msps, differential 24 16-bit channels, 1 Msps, differential; functionality:		
три		single conversion and burst conversion mode with different trigger and interrupt options		
	Input voltage range	-10 10 V		
Analog	Resolution and type	16 16-bit channels, 1 Msps, settling time: 1 μs		
output	Output voltage range	-10 10 V		
	Output current	± 8 mA		
Digital I/O		48 bidirectional channels, 2.5/3.3/5 V (single-ended); functionality: bit I/O, PWM generation and measurement (10 ns resolution), pulse generation and measurement (10 ns resolution), 4 x SPI Master 12 bidirectional channels (RS422/485 type) to connect sensors with differential interfaces		
Electric motor	Separate interfaces	2 x Resolver interface		
control I/O functional ity	Functionality on digital I/O channels	6 x Encoder sensor input 2 x Hall sensor input 2 x EnDat interface 2 x SSI interface Synchronous multi-channel PWM Block computational PWM		
Sensor supply		1 x 12 V, max. 3 W/250 mA (fixed) 1 x 2 20 V, max. 1 W/200 mA (variable)		
Feedback e	elements	Programmable buzzer Programmable status LEDs		
Cooling		Active cooling (temperature-controlled fan)		

Herfamani

Physical connections		2 x Sub-D 50 I/O connectors
		48 x BNC I/O connectors
		4 x Sub-D 9 I/O connectors
		3 x RJ45 for Ethernet (host and I/O)
		USB Type A (for data logging)
		2 x 2 banana connectors for sensor supply
		Power supply
Physical	Enclosure size	Approx. 310 x 250 x 115 mm
characteri		(12.2 x 9.8 x 4.5 in)
stics	Temperature	0 50 °C (ambient temperature)
	Power supply	100 240 V AC, 50 60 Hz
	Power consumption	125 W
Software	s:	
Experime	ControlDesk	CDP Control Development Software Package
ntation		Platform API Package
Software		MLBX GNU Compiler with USB Dongle
	RTI	Implementation software for running models on
		dSPACE hardware. Comprehensive block library for
		specifying the hardware setup
Implemen	RTI_MP	For graphical setup of multiprocessor and multicore
tation		structures
Software	RTI_EMC_BS	E-Motor Control Blockset. Configuring electric motor
		control, I/O functions of MicroLabBox



Annexure - A

Check List Documents for comprising the bid

Sr. No.	Enquiry/tender requirement	Compliance	Document Submitted
1	"Bid Security Declaration form" on Company Letter Head as per Annexure-B	Yes / No	Yes / NA
2	Declaration of local content as per Annexure-C.	Yes / No	Yes / NA
3	Certification as per memorandum No. F.18/37/2020-PPD dated 8th February 2021, Dept. of Expenditure, Ministry of Finance, Govt. of India as per Annexure-D.	Yes / No	Yes / NA
4	Certification of non-black listing (Self Certification) as per Annexure-E.	Yes / No	Yes / NA
5	Manufacturers Authorization Form (MAF) (If applicable) as per Annexure – F	Yes / No	Yes / NA
6	Name of the Firm / Agency / Dealer / Supplier with full address including contact number and email id etc as per Annexure- G	Yes / No	Yes / NA
7	GSTIN of the Supplier/Firm/Bidder.	Yes / No	Yes / NA
8	PAN of the Supplier/Firm/Bidder	Yes / No	Yes / NA
9	Up to date GST return / any other tax clearance certificate. (last filed GST return)	Yes / No	Yes / NA
10	Up to date Income Tax Return (Last filled ITR)	Yes / No	Yes / NA
11	Proprietary Certificate from OEM to be uploaded along with the Technical Bid in case of Proprietary items	Yes / No	Yes / NA
12	Certificate under MSME, NSIC, Make-in-India & Startup as per Govt. of India Norms (if applicable).	Yes / No	Yes / NA
13	Experience, if any, with govt. sector /Public Undertaking /Private sector (if applicable) (May be relaxed for MSME, NSIC & Startup as per Govt. of India Norm)	Yes / No	Yes / NA
14	Supplier/Firm/Bidder should accept all Terms & Conditions and specification of the items given in the Tender Document.	Yes / No	

Undertaking/Self-Declaration for Bid Security

(To be issued by the bidder on company's letterhead in lieu of EMD) $\,$

To, The Registrar, Indian Institute of Technology Goa, At GEC Campus, Farmagudi, Ponda – Goa
We, M/s (name of the firm), with ref. to enquiry no dtd hereby undertake that:
1) We accept all the terms and conditions of the tender document. 2) We accept that, we will not modify our bid during the bid validity period, submit performance guarantee within the stipulated period and honor the contract after award of contract. 3) In the event of any modification to our bid by us or failure on our part to honor the contract after final award or failure to submit performance guarantee, our firm may be debarred from participation in any tender/contract notified by Indian Institute of Technology, Goa for a period of one year.
Yours faithfully,
(Signature of the bidder with date and seal)

DECLARATION OF LOCAL CONTENT

(To be given on company letter head - For tender value below Rs.10 crores) (To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 crores)

					Date:	
To, The Registrar Indian Institu At GEC Camp	ite of Techn	ology Goa, udi, Ponda - Go	a			
Sub: Declarat	ion of Local	content				
Tender Refer	ence No:					
Name of Tend	der:					
Country	of	Origin	of	Goods	being	offered:
We hereby de	clare that a	n item offered h	as % loca	content		
the item being customs duties. We understant	ng offered n es) as a prop nd that, as	he amount of value ninus the value portion of the to per Office Men	of the im tal value, in norandum	ported content n percent. dated 04/03/2	in the item (i	ncluding all Ministry of
	ng, training	try, services s and after sales				
General Fina	ncial Rules Rule 151 (iii)	be in breach of for which a bid of the General I	der or its	successors can	be debarred fo	or up to two
Yours faithful	lly,					
(Signature of	the Bidder,	with date and s	eal)			

(To be submitted on the bidder's letterhead) (As applicable)

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 and OM No. F.18/37/2020-PPD dated 8th February, 2021 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017.

Item Name:	
Enquiry No.:	
pertaining to th (Public procure	
	(*Tick wherever applicable)
We hereby contains tender. OR	ertify that we are not from such a country and eligible to be considered for
OK	
with the Con	such a country which shares a land border with India & have been registered appetent Authority as specified in the above-said order. We hereby certify that tirements in this regard and are eligible to be considered.
Evidence of valid	l registration by the Competent Authority is attached.
any bidder(s) sh	pliance of above said GoI Order and its subsequent amendment, (if any), by all lead to commercial rejection of their bids by IIT Goa) f(Name of the bidder)
(Signature of the	e Bidder, with date and seal)

NON-BLACKLISTING SELF CERTIFICATE

[To be submitted on the bidder's letterhead]

I/We hereby certify that the [Name of the company / firm] has not been ever blacklisted/debarred by any Central / State Government / Public Undertaking / University / Institute on any account.
I/We also certify that firm will provide material as per the specification given by IIT Goa and also abide all the terms and conditions stipulated in the bid document.
I/We also certify that the information given in bid is true and correct in all aspects and in any case at a later date it is found that any details provided are false and incorrect, contract given to the concerned firm or participation may be summarily terminated at any stage, the firm will be blacklisted and IIT Goa may impose any action as per the rules.
(Signature of the Bidder, with date and seal)

Annexure - F

MANUFACTURERS' AUTHORIZATION FORM (MAF)

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]

Date : [insert date (as day, month, and year) of bid submission]

Tender No. : [insert number from invitation for bids]

To : [insert complete name and address of purchaser]

WHEREAS

signing]

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with clause 14 of the terms and conditions, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _______ day of _______, _____ [insert date of

(To be printed on letterhead of the bidder)

Bidder's Information

1.	Name of the Bidder
2.	Address of the Bidder
3.	PAN No.
4.	GSTIN
5.	E-mail
6.	Contact Person's Name & Designation
7.	Mobile No.

Place:	
_	(a)
Date:	(Signature of the Bidder, with date and seal

FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To, The Registrar, Indian Institute of Technology Goa Farmagudi, Ponda, Goa – 403401

LETTER OF GUARANTEE
WHEREAS Indian Institute of Technology Goa (Buyer) have invited Tenders vide Tender No
AND
WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of "Registrar, Indian Institute of Technology, Goa" in the form of Bank Guarantee for Rs
NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology, Goa on demand and without protest or demur Rs
This Bank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.
We,
Notwithstanding anything contained herein:
Our liability under this Bank Guarantee shall not exceed Rs
2. This Bank Guarantee shall be valid up to(date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Goa serve upon us a written claim or demand on or before
4. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at situated at
Date: Yours truly,
Signature and seal of the Guarantor:
Name of Bank:
Instruction to Bank: Bank should note that on expiry of PBG Period, the Original PBG will not be returned to the Bank. Bank is

requested to take appropriate necessary action on or after expiry of PBG period.