NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
N.I.T Campus (P.O), Kerala-673601, India
Tel: 0495-228-6153
EMAIL: purchases8@nitc.ac.in

ADDENDUM NOTICE II

Ref No. **RC0881/S8/ECED/ANRF-ARG/RFC/CON/2026-27** Date:**26.10.2026**

This is in continuation to our **Quotation Notice No: RC0881/S8/ECED/ANRF-ARG/RFC/CON/2026-27/QT1 dt 24.09.2026 (QTRC0881_1)** for the RF Components for cognitive Radar (Phase 1) which was published in the NITC website.

The last date for submission of Quotation is hereby extended till **30.10.2026, 05.30 PM**. Other terms and conditions specified in Tender documents will remain unchanged. The required documents should reach the following address no later than the above prescribed date and time.

The Director
Kind attention Section-in Charge (Research & Consultancy)
NIT Calicut
NIT Calicut (P.O)
673601

26/10/26

AR(R&C)
सहायक कुलसचिव
Assistant Registrar
अनुसंधान और परामर्श
Research and Consultancy
राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट
National Institute of Technology Calicut
केरल - 673601 / Kerala - 673601

Quotation Notice No: QTRC0881_1

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

N.I.T. Campus (P.O.), Kerala - 673601, India
Tel. : 04952286101, 109, 115, 116
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QUOTATION NOTICE

MAIN STORE

Date : 24-September -2026

SEALED QUOTATIONS are invited for the supply of the stores given in Schedule C. **The tenderers are requested to send their quotations (as per the format given in schedule D) in sealed covers with the quotation number and last date for receipt of quotation superscribed.** Wherever indicated, samples may be furnished at the tenderer's expense unless otherwise specified. The tenderers are requested to follow the instruction given in Schedule A. This Institute cannot accept terms and conditions of payment other than the alternative given in Schedule B.

1. Quotation Ref No.	**RC0881/S8/ECED/ANRF-ARG/RFC/CON/2026-27/QT1**
2. Last Date for receipt of Quotation	**15-10-2026** Up to (IST) Time **5:30 PM**
3. The quoted rates should be valid up to	**3 Month**
4. Address to which quotation are to be sent	**The Director** **Kind attention Section-in charge (Research & Consultancy)** **NIT Calicut** **NIT Calicut (P.O.)** **673 601**

AR (R&C)

24/9/26

To

1 .....

SCHEDULED A - INSTRUCTIONS TO TENDERERS

(a) Quotations should contain the complete specification and brand names.
(b) All taxes, packing and forwarding charges (if any) and any other charges should be clearly shown
(c) Prices quoted should be F.O.R. NIT CAMPUS, CALICUT.
(d) Period within which the items can be supplied of firm order should be clearly mentioned.
(e) Quotations containing conditions like "subject to prior sale" may not be considered.
(f) Quotations received after the due date is liable to be rejected.
(g) The Quoted amount should be in INR Only.

SCHEDULED B - CONDITIONS OF PAYMENT

One of the following conditions of payment should be accepted if the quotation is to be considered.
(a) 100% payment after the receipt of the items in good condition.

Normally, complete payment will be made within 45 from the date of receipt of the items.
(b) The supplier shall furnish Performance Security Deposit and Form Contract as follows:

(i) Execute a Form of contract as per Institute standard format on stamped paper of Govt. of Kerala or Govt. India stamped paper worth RS.200/-.

(ii) In case of value of purchase order above one lakh with warranty of the item, furnish a performance security deposit@3% of the Supply Order value for the due fulfillment of the contract. This security shall be in the form of a Bank Guarantee/ FDR in favor of the Director, NIT, Calicut from any scheduled bank valid for a period of sixty days beyond the contractual obligations including warranty.

(c) In case the supplier fails to deposit the required security and execute the contract bond on stamped paper of GOI or Govt. of Kerala (Specimen enclosed) by the due date, contract is liable to be cancelled without prejudice to taking any further action to recover damages for any loss sustained by THE DIRECTOR as result of supplier's refusal to abide by the terms of contract

(a) Invoice number and date
(b) Customer name
(c) Customer and taxpayer's GSTIN (if registered)
(d) Place of supply
(e) Item details i.e. description, quantity (number), unit (meter, kg etc.), total value
(f) Taxable value and discounts
(g) Rate and amount of GST tax rates.
(h) Signature of the supplier.
(i) PAN number should be indicated.

SCHEDULED C - Technical Specification and Delivery Terms

(See Annexure - I)

SCHEDULED D - Format of Quotations

(For use of the bidder. See note below)

Format of Quotations

Quotation Ref. No.: Last Date :

Sl.No.	Description of Goods (Attach necessary brochures)	Specification	Qty.	Unit	GST	Other Charges (if any)	Total Cost
GRAND TOTAL							

1. We agree to supply the above goods in accordance with the technical specification for a total contract price of Rs._____(amount in figures) (Rupees_____only) (amount in words) within the period specified in the Invitation for Quotations.

2. We also confirm that commercial warranty/guarantee of _____months shall apply to the offered goods from the date of installation/commissioning.

3. We undertake that in competing for (and if the award is made to us in executing) the above contract of supply of goods. We will strictly observe the laws against fraud and corruption in force in the Republic of India as required by National Institute of Technology Calicut.

Signature of the Bidder

Place:
Date:

Note:

1. Above tabular form is applicable while bids are being invited for more than one item and will be evaluated for all the items together. Modify the format accordingly where evaluation would be made for each item separately

2. Quotations should be submitted on the official stationery of the bidder)

List of Enclosures: (1) Annexure 1

(2) _____ **(3)** _____

SCHEDULE C :

Sr. No.	Detailed Description	Approx. Quantity	Whether Samples are to be sent
1.	RF Components for Cognitive Radar(Phase 1) (Detailed specification attached)	1.00 NO	

Supply of **RF Components for Cognitive Radar** (Phase 1)

The Department of Electronics and Communication Engineering at NIT Calicut invites bids as per Table 1.

- Bidders much submit offer for all items in Table 1 with technical compliance as per specifications in Sec. 1. Partial bids are invalid.
- Bids for all components in Table 1 should be for connectorized modules i.e. self-contained functional blocks enclosed in metal housings with integrated SMA connectors, even if the specifications do not explicitly mention them.
- The vendor should submit appropriate OEM authorization certificate.
- The price quoted should be inclusive of local taxes (e.g. GST), and delivery to the "Department of Electronics and Communication Engineering, NIT Calicut"

Component	**Qty.**	**Specifications**
RF Filter	1	Section 1.1
Driver Amplifier	2	Section 1.2
RF Switch	2	Section 1.3
High Power Amplifier (with heat sink)	1	Section 1.4
Low-Noise Amplifier	1	Section 1.5

Table 1: Components, Quantity and Specifications

1 Component Specifications

1.1 RF Filter

Parameter	Freq. Range (MHz)	Min	Typ	Max	Unit
Centre Frequency	–		3250		MHz
Impedance	–		50		Ω
Passband	–	3000		3500	MHz
Insertion Loss @ 3 to 3.5 GHz	–		0.3	0.7	dB
Return Loss @ 3 to 3.5 GHz	–	14	19		dB
Stopband Rejection Lower	DC–2200	55	61	–	dB
	2200–2600	35	40	–	dB
	2600–2850	10	16	–	dB
Stopband Rejection Upper	3650–3800	10	16	–	dB
	3800–4100	25	32	–	dB
	4100–7800	45	51	–	dB
RF Power Input	–		–	25 W at 25°C	
Bandwidth	–		500		MHz

Table 2: Filter Specification Parameters with Stopband Frequency Breakdown

Port 1	SMA-Female
Port 2	SMA-Female

Table 3: Coaxial connection

1.2 Driver Amplifier

Parameter	Condition (GHz)	Min.	Typ.	Max.
Gain (dB)	2.0	–	15.4	–
	4.0	13.5	15.6	17.0
Gain flatness	0.05–4	–	±0.7dB	–
Input Return Loss (dB)	2.0	–	20.1	–
	4.0	–	20.7	–
Output Return Loss (dB)	2.0	–	11.0	–
	4.0	–	12.0	–
Output IP3 (dBm)	2.0	+31.5	+33.4	–
	4.0	–	+27.6	–
Output Power at 1 dB Compression (dBm)	2.0	+17.2	+19.0	–
	4.0	–	+15.8	–
Noise Figure (dB)	2.0	–	5.1	–
	4.0	–	5.1	–
Active Directivity (Isolation – Gain)	0.05–6	–	6 dB	–
DC Supply Voltage (V_d)	2.0	+4.8	+5.0	+5.2
	4.0	+4.8	+5.0	+5.2
Supply current	–	–		92 mA
Input RF Power, No Damage	–		+24 dBm at $V_d = 5$ V	–
Power Consumption	–	–	0.725 W	–
Connectors	–		SMA Female	

Table 4: Driver Amplifier Specifications

1.3 RF Switch

Parameter	Condition	Min	Typ	Max
Frequency Range		0.5 GHz		6 GHz
Insertion Loss	2 GHz		1.4 dB	1.7 dB
	4 GHz		1.7 dB	2.1 dB
Isolation at 2–4 GHz	common and two RF ports	48dB	57 dB	
Isolation at 2–4 GHz	RF port1 and port2	43dB	50 dB	
Return Loss (ON State)	2–4GHz		17 dB	
Return Loss (OFF State)	2–4GHz		19 dB	
Input IP3 @ 5V	2–6GHz		44 dBm	
Input P1dB @ 5V	2–6GHz		27 dBm	
Supply Voltage (Vdd)		3 V		5 V
Supply current @ 5V			50μA	
Control Voltage Low		0		0.5V
Control Voltage High		2.7		Vdd
Control current			5μA	
RF Input Power				1W
Dissipated Power at 25°C				370mW
RF Impedance			50 Ω	

Table 5: RF Switch Specifications

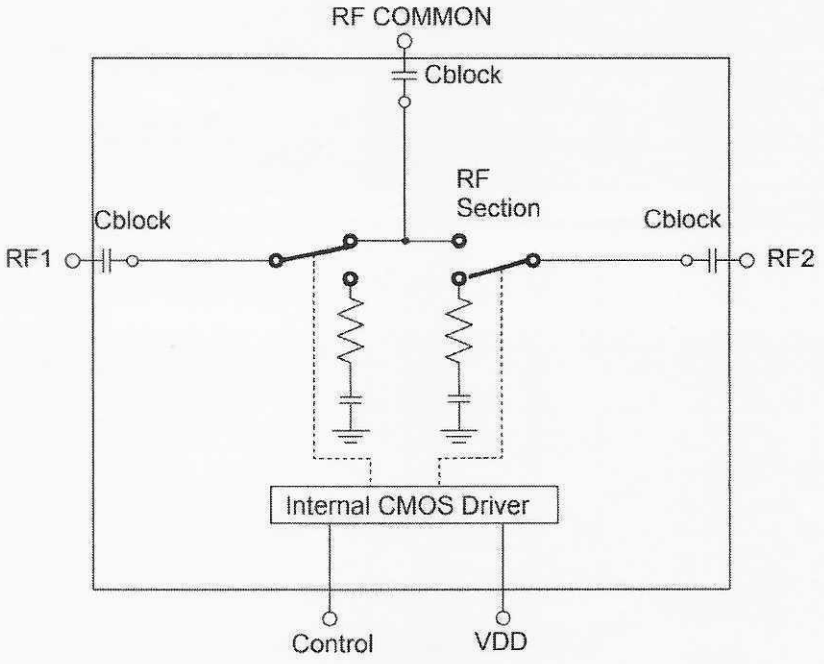


Figure 1: Schematic and Application Circuit

Port	Connector Type
RF COM	SMA Female
RF1	SMA Female
RF2	SMA Female
Control	SMA Female

Table 6: Coaxial connections

Parameters	Condition	Min.	Typ.	Max.
Rise/Fall Time (10 to 90% or 90 to 10% RF)	Vdd = 5V	–	25ns	–
Switching Time (50% CTRL to 90/10% RF)	Vdd = 5V	–	35ns	–
Video Feed through(Control 0-5V, Frequency 1 MHz)	Vdd= 5V	–	30 mVp-p	–

Table 7: Switch specifications

State of Control Voltage	Switch State - RF Common to	
	RF1	RF2
Low	ON	OFF
High	OFF	ON

Table 8: Switching operations

1.4 High Power Amplifier with Heat Sink

- Heat sink should be included with the high power amplifier.

Parameter	Min	Typ	Max
Frequency Range	2 GHz		8 GHz
Gain	30 dB		
Gain Flatness			2 dB
Input VSWR			2
Output VSWR			2
Output Power at 1dB Compression	30 dBm		
Output IP3		40 dBm	
Noise Figure		4 dB	
Device Operating Voltage		12V	
Device Operating Current			1.2A
Input RF Power(No Damage)			20dBm
Impedence		50 Ω	
Connector		SMA Female	

Table 9: Specifications of High Power Amplifier with Heat Sink

1.5 Low-Noise Amplifier

Parameter	Condition	Min	Typ	Max
Frequency Range	–	1.8 GHz		6 GHz
Noise Figure at 3.5 GHz	–		0.8 dB	
Gain	2.5 GHz 3.5 GHz 5 GHz	24.5dB	29.6 dB 27.8 dB 26.3dB	
Input Return Loss	2.5 GHz 3.5 GHz 5 GHz		8.5 dB 11 dB 11.5 dB	
Output Return Loss	2.5 GHz 3.5 GHz 5 GHz		10 dB 10.5 dB 16 dB	
Output Power at 1dB Compression	2.5 GHz 3.5 GHz 5 GHz	12 dB	14.6 dBm 13.6 dBm 11.1 dBm	
Output IP3	2.5 GHz 3.5 GHz 5 GHz		27.7 dBm 26 dBm 22.8dBm	
Device Operating Voltage(V_{DD})	–	4.9 V	5 V	7 V
Device Operating Current(I_D)	–			80 mA
Input Power(CW) at 5V				+29 dBm(5 minutes max) +10 dBm (continues)
Total Power Dissipation				0.56 W
Impedance	–		50 Ω	
Connectors	–		SMA Female	

Table 10: LNA Specifications