

Opole, 14.07.2024 r.

## REQUEST FOR QUOTATION

regarding the selection of a supplier of consumable materials for electronics for the design, development, and testing of electronic boards.

The order is planned for implementation in connection with the project titled "HomeCyte: A Portable Solution for Monitoring Infection/Inflammation Levels and Sepsis Risk," under the European Funds for Opolskie 2021-2027 program, Action 1.1 R&D work and infrastructure in SMEs, project number FEOP.01.01-IP.01-0025/23.

### I. NAME AND ADDRESS OF THE ORDERING PARTY

MICROX SPÓŁKA Z OGRANICZONĄ  
ODPOWIEDZIALNOŚCIĄ  
ul. Szelałowska 49 61-626 Poznań  
NIP: 9721303623

### II. DESCRIPTION OF THE ORDER

1. Type of order: supplies
2. Subject of the order:

The subject of the order is the supply of consumable materials for electronics for the design, development, and testing of electronic boards for medical diagnostic applications, specifically to develop a portable reader for determining blood morphology parameters (CBC+3DIFF) and inflammatory markers (CRP, IL-6, LDH, PCT) in blood.

The contractor will work closely with the ordering party to provide advice and develop the boards, ensuring timely delivery of components for research and development work.

The subject of the order includes:

#### 1. Passive components: capacitors, resistors, inductors

##### CPV 31711100-4 Electronic components

Estimated quantities of passive components needed to create two design iterations, each with 3 main boards:

- Ceramic, film, and electrolytic capacitors (500 pcs)
- Resistors based on the E48 series, precision resistors, power resistors (500 pcs)
- Inductors with air, powdered, and ferrite cores (50 pcs)
- Ferrite beads (50 pcs)

#### 2. Microcontrollers, FPGA circuits, operational amplifiers, voltage regulators, transistors, diodes, and other integrated circuits

#### **CPV 31711100-4 Electronic components**

The parameters provided are for information purposes; exact values will be determined through research and optimization of component availability on the market:

- ADC: minimum speed of 100 MSPS, 16-bit
- DAC: minimum 400 MSPS, 16-bit, high SFDR
- Main board OpAmp: programmable gain, low noise
- FPGA: DSP communication compatibility
- DSP processors: specific number of cores and OS capabilities, FPGA communication
- Clock generator, jitter filtering circuits: clock frequency
- Programmable signal amplifier with termination circuit
- Control microcontroller from the STM32xxxx family
- Rectifier, Zener, and Transil diodes

Set includes:

- ADC model AD9460 (6 pcs)
- DAC model DAC3282 (6 pcs)
- Main board OpAmp (10 pcs)
- FPGA processor from Xilinx family (6 pcs)
- DSP processors TMS320C6678 (6 pcs)
- Clock generator, jitter filtering circuits (3 pcs)
- Signal relay for gain adjustment (3 pcs)
- Semiconductor devices (transistors, diodes, triacs, etc.) (600 pcs)
- Integrated circuits (amplifiers, regulators, SoCs) (100 pcs)
- Microcontrollers from the STM32xxxxx family (20 pcs)
- Clock generators, quartz crystals (20 pcs)
- NOR Flash, NAND DDR RAM memory elements (20 pcs)

#### **2. Assembly materials: solder flux, wires, strippers, soldering tin**

##### **CPV 31731000-9 Electrotechnical articles**

Assembly materials will be used for:

- Creating mechanical elements (part of experimental models)
- Creating electronic elements (part of experimental models)

Set includes:

- Drill bits (10 pcs), screws (1000 pcs), hand drill (1 pc), rubber mats (5 mx 3 m), gloves (20 pcs), seals (2 pcs), pliers (2 pcs), grips (2 pcs), Scotch tapes (40 pcs), 1 storage box, wires (AWG 20,22,24,26,28,30 1m), flux (3L), spray (3 pcs), insulation tapes (40 pcs), 1 storage carton, tweezers (3 pcs), solder flux (3 pcs), soldering tin (500g)

#### **4. Pneumatic parts for building experimental models: pressure regulators, vacuum sensors, pumps**

##### **CPV 31711000-3 Electronical articles**

Components will be used during model work:

- Pressure regulators with test modules (measuring pressure drop, positive range from 0.5 to 1 bar, voltage level 0-5Vpp)
- Vacuum sensors with test modules (measuring vacuum level inside the cartridge)
- Pumps (for controlling fluid and air flow inside the cartridge)
- Valves (for regulating fluid and air flow)
- DC motors with encoders and gearboxes (for activating blisters to dispense reagents)
- Test circuits for laser photodiodes, including cooling drives
- Photodetector test circuit

Set includes components from SMC Japan, Hargraves, and LEE USA:

- Pressure reducers with test modules (9 pcs)
- Vacuum sensors with test modules (6 pcs)
- Vacuum regulators (10 pcs)
- Valves (30 pcs)
- DC motors with encoders and gearboxes (15 pcs)
- Stepper motor control boards (15 pcs)
- DC motor control boards (10 pcs)
- Laser photodiode test circuits, including cooling drives (30 pcs)
- Pumps (3 pcs)

## **5. Various electrical components: batteries, chargers, power supplies**

### **CPV 31711000-3 Electronical articles**

The research project will test two types of Li-ion batteries (99Wh and 199Wh) from 3 manufacturers: RRC (Germany), Wuhan Volatic (China), and MPO-MAG. The set will include:

- Batteries (99 Wh, 199 Wh)
- Charging modules and adapters
- Power supplies

Set includes:

- Batteries (99 Wh, 199 Wh) (6 pcs)
- Charging modules and adapters (8 pcs)
- DC power supplies (6 pcs)

## **6. Various plastic and components**

- Silicone transfer glue x 250nos
- Clear acrylic sheet 3mm thick x 3feet x 3 feet x 1 set
- BDMR210-40 hose connector (hydraulic connector) x 100nos
- Transparent polyester sheet 3mm thick x 1feet x 1 feet x 200 nos
- Loctite 3525 light-curing glue – 5 bottles 50mL
- Comco abrasive cleaner - 5 bottles 50mL
- Isopropyl alcohol 70% - 20 bottles 50mL
- Application tape (paper, low tack) TransferRite, Ultra Paper 560UL – 25 sheets

The components listed in 1, 2, 3, 4, 5 and 6 must be new.

### **III. ORDER IMPLEMENTATION SCHEDULE**

Implementation schedule: August 1, 2024 – January 31, 2025

### **IV. DELIVERY LOCATION OF THE ORDERED ITEM**

Prakhar Jain, MicroX Labs, SID IISc Bangalore, India 560012

### **V. CONDITIONS FOR PARTICIPATION IN THE PROCEDURE**

Entities related personally and financially to the ordering party are excluded from participating in the procedure. Personal or financial relationships are understood as mutual connections between the ordering party or persons authorized to incur obligations on behalf of the ordering party or persons performing activities related to the preparation and conduct of the selection procedure for the contractor on behalf of the ordering party, and the contractor, involving in particular:

- a) Participation in the company as a partner in a civil partnership or partnership,
- b) Owning at least 10% of shares or stock,
- c) Serving as a member of a supervisory or management body, proxy, or attorney,
- d) Being married, in a direct line of kinship, second-degree affinity or second-degree kinship in the collateral line, or in an adoptive, guardianship, or custodial relationship.

Failure to meet any of the conditions described in this point will result in the rejection of the offer.

### **VI. CRITERIA FOR EVALUATION AND SELECTION OF OFFERS**

The selection of the most advantageous offer will be based on the following criterion:

100% - Net Price

For the evaluation of the criterion, the total value of the order (the total price to be paid by the ordering party), i.e., the net price expressed in PLN (Polish zloty), will be taken into account. If the amount is quoted in a currency other than Polish zloty, the ordering party, for the purposes of selecting the offer, will convert it into Polish zloty at the average NBP exchange rate from the day preceding the opening of the offers. The price quoted in the offer must be given as net and gross, rounded to two decimal places. The values indicated in the offer will be binding for the entire period of validity of the offer and will be binding for the concluded contract.

The price must include all the requirements of this request for proposal and cover all costs related to the timely and correct execution of the entire subject of the order as well as the conditions and guidelines set by the ordering party, related to the subject of the order, including delivery costs.

Method of calculating points:

$$C = (C_{min} / C_{of}) \times 100$$

Where:

$C_{min}$  - the lowest price among the submitted offers

$C_{of}$  - the price of the given offer

$C$  - the number of points awarded for the price criterion of the given offer

## VII. PLACE, DEADLINE, AND METHOD OF SUBMITTING OFFERS

Offers completed on the offer form constituting Appendix No. 1 together with Appendix 2 must be submitted by **July 22, 2024, midnight** by:

Sending scans of the signed offer along with the required appendices/documents mandatorily via the Competitive Base portal: (<https://bazakonkurencyjnosci.funduszeuropejskie.gov.pl/>)

The actual date and time of receipt of the offer in the Competitive Base will determine the submission deadline. Offers submitted after the deadline will not be considered.

A detailed price list of the items covered by this inquiry is a mandatory attachment to the offer.

Only complete offers will be taken into account, i.e., offers with the required appendices, with the offer and the contractor's statement on compliance with the participation conditions in the procedure obligatorily filled out on the templates constituting Appendix No. 1 and 2 to this inquiry.

Additional attachments not required by the Ordering Party in this inquiry will not be grounds for rejection of the offer, but they will not be considered.

Offers must be prepared in Polish or English.

The offer and attachments to the offer must be signed by the authorized representative(s) of the Contractor in accordance with the form of representation of the Contractor specified in the Contractor's registration (evidential) document. If the offer is signed on behalf of the Contractor by an attorney (a person not authorized to perform these activities in the Contractor's registration documents), an appropriate power of attorney must be attached to the offer.

The Ordering Party does not allow partial offers.

The Ordering Party does not allow variant offers.

## VIII. ADDITIONAL ORDERS

The Ordering Party allows additional orders not exceeding 50% of the net value of the offer.

## IX. CONDITIONS FOR CHANGING THE CONTRACT

The Ordering Party specifies the following circumstances that may necessitate changes to the content of the concluded contract in relation to the content of the submitted offer:

1. The deadline or scope of the contract may change in the following situations:

- In the event of a change in the planned start date of the project due to an extended procedure related to the signing of the financing agreement by the Ordering Party with the institution organizing the competition or due to unforeseen circumstances at the time of signing the contract.
- In the event of circumstances beyond the Contractor's control, at its justified request, provided that the change results from circumstances that the Contractor could not foresee at the stage of submitting the offer and is not caused by the Contractor.
- The occurrence of circumstances that could not have been objectively foreseen at the time of signing the contract.

- In the event of the Ordering Party's failure to provide the Contractor with documents necessary to perform the contract, provided that the Ordering Party was obliged to provide such documents.

- If other unforeseen legal, economic, or technical circumstances arise, or in the event of force majeure, for which neither party is responsible, resulting in the inability to properly perform the contract in accordance with the order.

2. The Contractor's remuneration specified in the contract may change in the following cases:

- Change in the applicable VAT rate – if the change in the VAT rate affects the cost of executing the contract for the Contractor, the Ordering Party allows for the possibility of increasing/decreasing the remuneration by an amount equal to the difference in the tax amount paid by the Contractor.

- Resignation from part of the deliveries that are unnecessary or purposeless due to circumstances that could not have been foreseen at the time of signing the contract – by the value of undelivered supplies.

3. Other changes:

- In the event of a change in the legal regulations in force on the day of signing the contract with the Contractor, which will impose new requirements on how to execute any of the topics included in the order, provided that it is not related to changing the scope and value of the order.

- In the event of receiving a decision from the Financing Institution containing changes to the scope of tasks, deadlines, or additional provisions to which the Ordering Party will be obliged.

- Change of persons responsible for contacts and supervision over the execution of the contract.

- The occurrence of obvious clerical and accounting errors in the content of the contract.

The changes mentioned above will be allowed only on condition of a request submitted by the Contractor and after acceptance by the Ordering Party, and their introduction will require a written form under the pain of nullity.

## **X. ADDITIONAL INFORMATION**

1. The Ordering Party reserves the right to cancel the procedure without giving reasons during its duration in the event of unforeseen legal, economic, or technical circumstances or the occurrence of force majeure, for which neither party is responsible, especially if:

- The procedure is burdened with an irremovable defect,

- There is a significant change in circumstances causing that the conduct of the procedure or execution of the order is not in the interest of the Ordering Party.

Participants in the procedure are not entitled to any claims against the Ordering Party for this reason.

2. The Ordering Party will select the most advantageous offer that will obtain the highest number of points based on the criteria established in point VI and will sign a contract with the selected contractor.

3. The results of the selection of the offer will be published in the Competitive Base.

## **XI. METHOD OF PROVIDING INFORMATION AND CLARIFICATIONS**

Detailed information on the subject of the order is provided by:

Mr. Prakhar Jain



Fundusze Europejskie  
dla Opolskiego



Rzeczpospolita  
Polska

Dofinansowane przez  
Unię Europejską



**OPOLSKIE**

- Phone: +91 9717712111
- Email: prakhar@microxlabs.com

**XII. ATTACHMENTS:**

- Attachment No. 1 – Offer form
- Attachment No. 2 – Declaration of no personal or capital ties between the Bidder and the Ordering Party