



**DOST-ASTI Bids and Awards Committee
REQUEST FOR QUOTATION**

Kind of Procurement Activity:	Negotiated Procurement: Small-value Procurement		
Deadline of Submission of Bids:	Jun-07-2021, 2:00 PM		
RFQ No.:	21-06-3429	Date:	June-02-2021
PR No.:	GAA-21-05-11344	Date:	May-12-2021

The Department of Science and Technology (DOST) - Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), intends to procure the item/s listed below. As such, suppliers, contractors, or distributors are invited to submit their quotation/s duly signed by authorized representative. Prospective bidder/s who will submit a proposal with the single/lowest calculated and responsive quotation shall be selected. Guidelines on the format and eligibility documents are listed at the box below the item/s to be procured.

Quotations may be sent via **a)** electronic mail at bac-sec@asti.dost.gov.ph, **b)** fax message, or **c)** delivering documents to the BAC Secretariat. For further inquiries, you may contact +63 2 249-8500 local 1206/1212 or +63 2 426-7423.

Thank you.

Respectfully,

REYNALDO JOSEPH A. CALLAO JR.
BAC Chairman

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	EMBEDDED DEVELOPMENT MODULE A. Specifications: 1. Measurements: 51mm x 23mm x 8mm without headers soldered in 2. Weight: 5.8 grams 3. ATSAM21G18 @ 48MHz with 3.3V logic/power 4. No EEPROM 5. 3.3V regulator with 500mA peak current output 6. USB native support, comes with USB bootloader and serial port debugging 7. 20 GPIO pins 8. Hardware Serial, hardware I2C, hardware SPI support 9. 8 x PWM pins 10. 10 x analog inputs 11. 1 x analog output 12. Built in 100mA lipoly charger with charging status indicator LED 13. Pin #13 red LED for general purpose blinking 14. Power/enable pin 15. 4 mounting holes 16. Reset button 17. includes RFM9x LoRa 868/915 MHz radio module 18. SX127x LoRa® based module with SPI interface 19. Packet radio with ready-to-go Arduino libraries 20. Uses the license-free ISM bands (ITU "Europe" @	4	unit	3100.00	12,400.00

	<p>433MHz and ITU "Americas" @ 900MHz)</p> <p>21. +5 to +20 dBm up to 100 mW Power Output Capability (power output selectable in software)</p> <p>22. ~300uA during full sleep, ~120mA peak during +20dBm transmit, ~40mA during active radio listening.</p> <p>23. Simple wire antenna or spot for uFL connector</p> <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 				
2	<p>EMBEDDED DEVELOPMENT MODULE</p> <p>A. Specifications:</p> <ol style="list-style-type: none"> 1. Measurements: 51mm x 23mm x 8mm without headers soldered in 2. Weight: 5.3 grams 3. ATSAM21G18 @ 48MHz with 3.3V logic/power 4. 256KB of FLASH + 32KB of RAM 5. No EEPROM 6. 3.3V regulator with 500mA peak current output 7. USB native support, comes with USB bootloader and serial port debugging 8. 20 GPIO pins 9. Hardware Serial, hardware I2C, hardware SPI support 10. 8 x PWM pins 11. 10 x analog inputs 12. 1 x 10-bit analog output (DAC) 13. Built in 100mA lipoly charger with charging status indicator LED 14. Pin #13 red LED for general purpose blinking 15. Power/enable pin 16. with 4 mounting holes 17. Reset button 18. Pin #8 green LED 19. includes MicroSD card holder for adding storage for reading or writing <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 	4	unit	1800.00	7,200.00
3	<p>LORA CONCENTRATOR</p> <p>A. Features:</p> <ol style="list-style-type: none"> 1. Frequency: 433MHz 2. Fully functioning LoRaWAN® multichannel concentrator module (SX1301) 3. Tx Power up to 27dBm 4. RX sensitivity down to -139dBm 	2	unit	10800.00	21,600.00

	<p>5. Improved noise resistance due to improved RF chain filtering (Additional SAW)</p> <p>6. Full LoRaWAN® 1.0.2 stack support Supported bands: (EU433, CN470, IN865, EU868, AU915, US915, KR920, AS920, and AS923)</p> <p>7. Integrated Ublox MAX-7Q GPs Module 40pin female header (fully compatible with Raspberry Pi)</p> <p>8. Redesigned heat sink for better thermal dissipation and reduced thermal noise</p> <p>9 Packaging: <ul style="list-style-type: none"> - Board Dimensions: 56.0 x 65.0 x 22.0mm - Board Weight: Approximately 1.15 oz - Package Weight: 0.3kg - Package Inclusions: Pi HAT Board, SubG Antenna and GPS Antenna </p> <p>B. Notes: <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. </p>				
4	<p>ENCLOSURE</p> <p>A. Features: <ol style="list-style-type: none"> 1. Body color: Black 2. Material: Aluminum 3. Outer Dimensions: 92mm x 68.3mm x 53.5mm 4. IP rating: 30 </p> <p>B. Notes: <ol style="list-style-type: none"> 1. For prototyping activities. 2. For LoRa gateway. 3. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 4. At least one (1) year of limited warranty for parts and services. 5. Price is inclusive of government duties and taxes and other fees. 6. Payment upon full delivery. </p>	2	unit	3200.00	6,400.00
5	<p>POWER ADAPTER</p> <p>A. Specifications: <ol style="list-style-type: none"> 1. Voltage Rating: 5V 2. Current Rating: 2.5A 3. Connector Type: microUSB 4. Plug Type: UK Standard </p> <p>B. Notes: <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. </p>	2	unit	500.00	1,000.00

6	<p>ANTENNA</p> <p>A. Specifications:</p> <ol style="list-style-type: none"> 1. Type: LoRa antenna 2. RF Family/Standard: 802.15.4, General ISM 3. Frequency Group: UHF (300MHz ~ 1GHz) 4. Frequency (Center/Band): 433MHz 5. Antenna Type: Whip, Tilt 6. Number of Bands: 1 7. VSWR: 2 8. Gain: 2dBi 9. Power-Max: 10W 10. Termination: SMA Male 11. Height (Max) 2.102" (53.40mm) <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 	2	unit	1300.00	2,600.00
7	<p>16GB TF CARD</p> <p>A. Specifications:</p> <ol style="list-style-type: none"> 1. Memory Capacity: 16 GB 2. Type: MicroSDHC Card 3. Class: Class 10 UHS-1 4. Transfer rate: Up to 80MB/s 5. Waterproof 6. Shockproof <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 	5	unit	300.00	1,500.00
8	<p>EMBEDDED MODULE</p> <p>A. Specifications:</p> <ol style="list-style-type: none"> 1. Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz 2. 1GB LPDDR2 SDRAM 3. 2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2, BLE 4. Gigabit Ethernet over USB 2.0 (maximum throughput 300 Mbps) 5. Extended 40-pin GPIO header 6. Full-size HDMI 7. 4 USB 2.0 ports 8. CSI camera port for connecting a Raspberry Pi camera 9. DSI display port for connecting a Raspberry Pi touchscreen display 10. 4-pole stereo output and composite video port 11. Micro SD port for loading your operating system 	2	unit	3700.00	7,400.00

	<p>and storing data</p> <p>12. 5V/2.5A DC power input</p> <p>13. Power-over-Ethernet (PoE) support (requires separate PoE HAT)</p> <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 				
9	<p>CABLE ASSEMBLY</p> <p>A. Specification:</p> <ol style="list-style-type: none"> 1. Connector A Series: SMA 2. Connector A Gender: Jack (Female) 3. Connector A Body Style: Bulkhead 4. Connector B Series: U.FL 5. Connector B Gender: Plug (Female) 6. Connector B Body Style: Right Angle 7. Cable Length: 100 mm 8. Impedance: 50 Ohms 9. Cable Type: 1.32 mm Coax 10. Jacket Color: Black 11. Contact Plating: Gold 12. Contact Material: Brass 13. Connector A Polarity: Normal 14. Connector B Polarity: Reverse 15. Polarity: Normal 16. Product Type: RF Cable Assemblies <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 	4	set	505.00	2,020.00
10	<p>ANTENNA</p> <p>A. Specification:</p> <ol style="list-style-type: none"> 1. Type: GPS Antenna 2. Center Frequency: 1575.42 MHz +/- 3MHz 3. Active Gain: >4dB 4. Active LNA/Filter: +28dBi 5. Noise: 1.5dB 6. VSWR: <2 7. DC Voltage: 3.3V +/-0.3V 8. Polarisation: RHCP 9. Cable Length, Type: 5m,RG174 10. Termination: SMA Male 11. Dimensions: 38x34x12mm 12. Mounting: Magnetic mount and screw fix 13. IP: IP67 waterproof 14. Built-in LNA 	1	unit	1150.00	1,150.00

	<p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 				
11	<p>ANTENNA</p> <p>A. Specification:</p> <ol style="list-style-type: none"> 1. Frequency Range (MHz): 433+/-15 2. Bandwidth (MHz): 30 3. VSWR: ≤ 1.5 4. Gain (dBi): 2.5dbi 5. Max Input power (W): 60 6. Input Impedance (Ω): 50 7. Polarization Type: Vertical 8. Antenna Length (mm): 115 x 22 x 4 9. Cable Length (mm): 5000mm 10. Cable Type: RG174 11. Connector Type SMA Male straight 12. Mounting: Adhesive <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 2. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 3. At least one (1) year of limited warranty for parts and services. 4. Price is inclusive of government duties and taxes and other fees. 5. Payment upon full delivery. 	1	unit	500.00	500.00
12	<p>ENCLOSURE</p> <p>A. Specification:</p> <ol style="list-style-type: none"> 1. Body Color: Gray 2. Overall Dimension: 3. Height: 14.13" 4. Width: 12.26" 5. Depth: 6.13" 6. Standards: Complies with NEMA Type 1, 2, 3, 4, 4X, 12 and 13, 7. IEC 529, IP66 8. Construction: <ul style="list-style-type: none"> - Molded fiberglass polyester enclosure with matching cover - Stainless steel draw type "snap latch" door fastener - Door fasteners include a provision for padlocking - Door is supported with a continuous stainless steel hinge - Captive oil resistant gasket - Threaded brass inserts for mounting feet to the rear of the enclosure - Stainless steel mounting brackets and hardware for mounting to the rear of enclosure - Operating temperatures between 130C and -40C <p>B. Notes:</p> <ol style="list-style-type: none"> 1. For prototyping activities. 	3	unit	11100.00	33,300.00

	2. For remote stations. 3. Items must be delivered to ASTI within 30 calendar days upon issuance of NTP. 4. At least one (1) year of limited warranty for parts and services. 5. Price is inclusive of government duties and taxes and other fees. 6. Payment upon full delivery.				
13	4 PORT GSM MODEM A. Features: 1. Frequency: Quad-band 850/900/1800/1900 2. Network: IPv4/TCP/UDP/PPPoE/DHCP 3. Interface type: USB / RJ45 4. API: HTTP / SMPP B. Notes: 1. Item must be delivered to ASTI within 30 calendar days upon issuance of NTP. 2. At least one (1) year of limited warranty for parts and services. 3. Price is inclusive of government duties and taxes and other fees. 4. Payment upon full delivery.	1	lot	23400.00	23,400.00

TOTAL APPROVED BUDGET FOR THE CONTRACT:

Php 120,470.00

GUIDELINES

A. Submission of Quotations

1. Quotation/s shall include the Request for Quotation and/or the Purchase Request Number as state above;
2. Pictures or brand/model names or numbers, if applicable, should be specified in the quotation/s; and
3. Quotation/s must be signed by the company's duly authorized representative.

B. Eligibility Requirements

Pursuant to Annex "H" or Consolidated Guidelines for the Alternative Methods of Procurement of the 2016 Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, as amended by Government Procurement Policy Board Resolution No. 21-2017 dated 30 May 2017, the following documents shall be submitted except for Repeat Order, Shopping under Section 52.1(a), and Negotiated Procurement under Sections 53.1 (Two-Failed Biddings), and 53.5 (Agency-to-Agency):

For Procurement of Goods

1. Upon submission of quotation

- ✓ PhilGEPS Platinum Membership Certificate including Annex "A". If not available, the following alternate documents may be submitted:
 - PhilGEPS Registration Number
 - Mayor's Permit
 - For individuals/professionals engaged under Section 53.6, 53.7 and 53.9 of the 2016 IRR of RA No. 9184, only the Bureau of Internal Revenue (BIR) Certificate of Registration shall be submitted in lieu of the Mayor's Permit.

2. Upon issuance of Notice of Award (NOA)

- ✓ Omnibus Sworn Statement
 - Applicable only for bidders who have submitted their quotation on item/s with a total Approved Budget for the Contract (ABC) of above Php50,000.00.
- ✓ Income/Business Tax Return

- Applicable only for: **a)** bidders who have submitted their quotation on item/s with a total ABC of above Php500,000.00; and **b)** bidders for Lease of Real Property and Venue (except for government agencies as lessors).

For Procurement of Infrastructure

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Philippine Contractors Accreditation Board License.

For Procurement of Consulting Services

1. The requirements for Goods with the same submission indicated therein; and
2. Valid Professional Regulation Commission License or Curriculum Vitae.

NOTE: For new suppliers, submit a BIR Certificate of Registration for accounting purposes.

C. Terms and Conditions

1. Additional requirements, if necessary, may be requested by the BAC depending on the item to be bid;
2. For all kinds of procurement, the bidder who passed the bid evaluation, shall submit a duly notarized Omnibus Sworn Statement upon issuance of NOA, unless otherwise provided;
3. All transactions are subject to creditable withholding tax and final Value Added Tax or percentage tax per revenue regulation/s of the BIR;
4. A penalty of one-tenth of one percent (0.001) of the total value of the undelivered goods/services shall be charged as liquidated damages for every day of delay of the delivery; and
5. The DOST-ASTI reserves the right to accept or reject any proposal, to annul the bidding process, and to reject all proposals at any time prior to contract award, without thereby incurring any liability to the affected proponent or proponents.