



ASTI-FM 03-10
REV 2 / 13 MAR 2019

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

| | |
|--|---------------------------|
| Kind of Procurement Activity: Negotiated Procurement: Small-value Procurement | |
| Deadline of Submission of Bids: Jul-23-2019, 2:00 PM | |
| RFQ No.: 19-07-2584 | Date: July-18-2019 |
| PR No.: OPTIMIZATN-19-06-8012 | Date: June-14-2019 |

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,


FEDRITO B. MANGAHAS
Chairperson, BAC-1

| NO. | TECHNICAL SPECIFICATIONS | QTY | UNIT | UNIT PRICE(Php) | TOTAL PRICE(Php) |
|-----|--|-----|------|-----------------|------------------|
| 1 | <p>LCD MONITOR</p> <p>A. Specifications:</p> <p>Diagonal Viewing Size 59.9 cm 23.6 Inches (23.6-inch wide viewable image size)</p> <p>Panel Type, Surface TN , Anti-Glare with 3H hardness</p> <p>Optimal Resolution 1920 x 1080 at 60 Hz</p> <p>Preset Display Area (H x V) 521.28 mm x 293.22 mm 20.52 inches x 11.54 inches</p> <p>Contrast Ratio 1000: 1 (typical), 8 million : 1 (DCR)</p> <p>Backlight Technology LED</p> <p>Brightness 300 cd/m² (typical)</p> <p>Response Time 1 ms typical (G to G)</p> | 10 | unit | 10700.00 | 107,000.00 |

Viewing Angle
160° vertical / 170° horizontal

Adjustability
Tilt

Display Type
Widescreen Flat Panel Display

Connectivity
2 HDMI 1.4 connector
1 VGA connector

Voltage Required
100 VAC to 240 VAC / 50 Hz or 60 Hz \pm 3 Hz /1.6A
(typical)

Power Consumption (Operational)
17W (typical) / 16.5W Energy Star / 25W (maximum)

Power Consumption Stand by / Sleep
Less than 0.3W

Temperature Range Operating
0°C to 40°C (32°F to 104°F)

Temperature Range Non-operating
Storage : -20° to 60° (-4° to 140° F)
Shipping : -20° to 60° (-4° to 140° F)

Humidity Range Operating
10% to 80% (non-condensing)

Humidity Range Non-operating
Storage : 10% to 90% (non-condensing)
Shipping : 10% to 90% (non-condensing)

Altitude Operating
5,000 m (16,404 ft) max

Altitude Non-operating
12,192 m (40,000 ft) max

Compliant Standards

ENERGY STAR 6
EPEAT Silver
TCO Certified Displays
RoHS Compliant

B. Notes:

1. Bidder declared as SCRQ/LCRQ is required to submit two (2) samples of actual unit before full delivery.
2. At least two (1) year of limited warranty for parts and services.
3. Must be delivered to AST!

C. Others:

1. Delivery: Thirty (30) days upon issuance of NTP

| | | | | | |
|---|--|---|------|---------|-----------|
| | <p>2. Price is inclusive of government duties and taxes and other fees.</p> <p>3. Payment upon full delivery</p> | | | | |
| 2 | <p>SINGLE-BOARD MICROCONTROLLER</p> <p>A. Specifications: Dimensions: 85.6mm x 56.5mm x 17mm Weight: 45g Power Rating: 1.13A @ 5V Wired Connectivity: 4xUSB 2.0 Gigabit - Over USB 2.0 1xHDMI Port Shared Analog Video Out with Audio Jack 3.5 mm Audio Out Jack SPI I2c 40 pin GPIO DSI (Display Serial Interface) CSI (Camera Serial Interface) RX/TX UART On-Board Wireless Connectivity Wi-Fi: 2.4GHz and 5GHz 802.11 b/g/n/ac Bluetooth: 4.2, BLE Power Sources: GPIO or microUSB SOC Type: Broadcom BCM2837B0 Core Type: Cortex-A53 64-bit Number of Cores: 4 GPU: VideoCore IV CPU Clock: 1.4 GHz RAM: 1GB DDR2</p> <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery</p> | 4 | unit | 5500.00 | 22,000.00 |
| 3 | <p>ARM BASED MICROCONTROLLER PROTOTYPING BOARD</p> <p>A. Specifications: Dimensions: 101.52mm x 53.3mm Weight: 36g Power Rating: 800mA @ 3.3V Connectivity: 54 Digital I/O Pins 12 PWM Output 12 Analog Output Digital-to-Analog Converter SPI Communication I2C Communication Arduino Shield Compatibility (3.3V operating shields) 2 USB Ports - Programming USB and Native USB Power Jack JTAG Header Microcontroller: 32 bit Atmel SAM3X8E ARM Cortex-M3</p> | 4 | unit | 1100.00 | 4,400.00 |

| | | | | | |
|---|---|---|------|---------|-----------|
| | <p>Flash Memory: 512KB SRAM: 96KB Oscillator: up to 84MHz</p> <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery</p> | | | | |
| 4 | <p>RPI COMPATIBLE TOUCH DISPLAY</p> <p>A. Specifications: Screen Dimensions: 194mm x 110mm x 20mm (including standoffs) Viewable screen size: 155mm x 86mm Screen Resolution 800 x 480 pixels at 60 frames per second 70° viewing angle 10 finger capacitive touch. Display Serial Interface Compatible (w/ included DSI Ribbon Cable) Mounting Hardware Full Raspbian OS functionality without a keyboard and mouse</p> <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery</p> | 4 | unit | 5500.00 | 22,000.00 |
| 5 | <p>USB 3.0 HUB</p> <p>A. Specifications: 4 port USB 3 Hub Material: plastic Product Dimensions: 137 (L) x 31 (W) x 22 (H) mm Color: black, white output interface: USB3.0 x 4 hot swap: yes Product weight: 80g support system: Windows XP/Vista/7/8 & has USB support MAC safety certification: CE and FCC approval LED indicator: LED Power power status light - blue light</p> <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees.</p> | 5 | unit | 600.00 | 3,000.00 |

| | | | | | |
|---|--|---|------|---------|----------|
| | 3. Payment upon full delivery | | | | |
| 6 | <p>SENSOR KIT FOR ARDUINO AND RPI</p> <p>A. 37 Sensors Compatible with Arduino and RPI Part List:</p> <p>KY-001 Temperature sensor module KY-002 Vibration switch module</p> <p>KY-003 Hall magnetic sensor module KY-004 Key switch module KY-005 Infrared emission sensor module KY-006 Small passive buzzer module KY-008 Laser sensor module KY-009 3-color full-color LED SMD modules KY-010 Optical broken module KY-011 2-color LED module KY-012 Active buzzer module KY-013 Temperature sensor module KY-015 Temperature and humidity sensor module KY-016 3-color LED module KY-017 Mercury open optical module KY-018 Photo resistor module KY-019 5V relay module KY-020 Tilt switch module KY-021 Mini magnetic reed modules KY-022 Infrared sensor receiver module KY-023 XY-axis joystick module KY-024 Linear magnetic Hall sensors KY-025 Reed module KY-026 Flame sensor module KY-027 Magic light cup module KY-028 Temperature sensor module KY-029 Yin Yi 2-color LED module 3MM KY-031 Knock Sensor module KY-032 Obstacle avoidance sensor module KY-033 Hunt sensor module KY-034 Automatic flashing colorful LED module KY-035 Class Bihor magnetic sensor KY-036 Metal touch sensor module KY-037 Sensitive microphone sensor module KY-038 Microphone sound sensor module KY-039 Detect the heartbeat module KY-040 Rotary encoder module</p> <p>B. Note: Must be delivered to ASTI</p> <p>C. Others:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery | 1 | kit | 1140.00 | 1,140.00 |
| 7 | <p>CAMERA MODULE FOR RPI</p> <p>A. Specifications:</p> <p>Dimensions: 25mm x 23mm x 9mm Weight: 3g Still Resolution: 8 Megapixels Video Modes: 1080p30, 720p60, 640x480p60/90 Linux Integration: V4L2 Driver Available C Programming API: OpenMAX IL and others available Sensor: Sony IMX219</p> | 1 | unit | 2500.00 | 2,500.00 |

| | | | | | |
|---|---|----|-----|---------|-----------|
| | <p>Sensor Resolution: 3280 x 2464 pixels Sensor Image Area: 3.68 x 2.76mm Pixel Size: 1.12 µm x 1.12 µm Optical Size: 1/4" Focal Length: 3.04 mm Horizontal Field of View: 62.2 degrees Vertical Field of View: 48.8 degrees Focal Ratio (F-Stop): 2.0</p> <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery</p> | | | | |
| 8 | <p>ETHERNET TO USB ADAPTER WITH USB 3.0 PORTS</p> <p>A. Specifications:</p> <p>Ethernet Specification</p> <ol style="list-style-type: none"> 1. Support 10/100Mbps fast network access; 2. Support IEEE 802.3, 802.3u(10Base-T, 100Base-T) compatible. 3. Compliant with Windows 10/8/7/Vista/XP, Mac OS X 10.4 and above, Linux kernel 3.x/2.6.x; 4. LED indicators for Link and Activity; 5. Support both Full-duplex with flow control and Half-duplex with backpressure operation; 6. Support Full and Half duplex operating modes; 7. ASIX AX88772 chipset. <p>USB 3.0 Hub</p> <ol style="list-style-type: none"> 1. Extend 3 ports USB 3.0, convenient for your flash drive, keyboard, mouse, Camera, printer, HDD etc; 2. Support the speed up to 5Gbps; 3. Backward compatible with USB 2.0 and 1.1; 4. Additional DC-jack is optional for some power hungry devices. Please kindly note: this product ONLY works with DC 5V (Center Positive Polarity) adapter(not included) for power supply. <p>B. Notes: 1. At least one (1) year of limited warranty 2. Must be delivered to ASTI</p> <p>C. Others: 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery</p> | 10 | set | 1000.00 | 10,000.00 |
| 9 | <p>PIC32MZ EMBEDDED CONNECTIVITY DEV KIT</p> <p>A. Specifications: - PIC32 STARTER KIT W/ FPU PIC32MZ - Categories : Development Boards,Kits</p> | 3 | kit | 9500.00 | 28,500.00 |

| | | | | | |
|----|--|---|------|---------|-----------|
| | <ul style="list-style-type: none"> - Board Type : Evaluation Platform - Type : MCU 32-Bit - Core Processor : MIPS32® M4K™ - Platform PIC32 Starter Kit with FPU - Utilized IC : PIC32MZ - Mounting Type : Fixed <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 4. Supplier must provide brochures 5. Must be delivered to ASTI | | | | |
| 10 | <p>AVR-IOT WG EVALUATION BOARD</p> <p>A. Specifications:</p> <ul style="list-style-type: none"> - small and easily expandable demonstration and development platform for IoT solutions, based on the AVR® microcontroller architecture using Wi-Fi® technology - features USB interface chip Nano Embedded Debugger (nEDBG) - mass storage interface for easy 'drag and drop' programming - Includes two sensors: light sensor and high-accuracy temperature sensor - MCP9808 - mikroBUSTM connector is provided to expand the board capabilities with 450+ sensors and actuators - Onboard chips <ul style="list-style-type: none"> - Secure ATECC608A cryptographic coprocessor chip - Smart ATMEGA4808 MCU - ATWINC1510 Wi-Fi® Network Controller - MCP9808 Digital Temperature Sensor - MIC33050 Voltage Regulator - MCP73871 Battery Charger - Seamless migration to the various PIC and AVR modules <ul style="list-style-type: none"> - Connects millions of smart devices without compromising on security - Interfaces: SPI, I2C - Partitioning of tasks to win over complexity - IDE: Atmel Studio 7 or MPLAB X compatible - Rapid Prototyping: Atmel START or MPLAB Code Configurator <ul style="list-style-type: none"> - Dedicated web page to view sensor data from Google Cloud <p>Key Applications:</p> <ul style="list-style-type: none"> - Smart Home IoT Sensors and Actuators (lighting, access control, climate control) - Smart City Industrial Sensors (air quality, traffic forecast) - Health (blood pressure, heart rate) <ul style="list-style-type: none"> - Industry 4.0 Process Control Sensors (level, pressure, temperature, flow) <p>Services and Third Party</p> <ul style="list-style-type: none"> - Microchip IoT Design Partners - Microchip Training - Google Cloud | 4 | unit | 3000.00 | 12,000.00 |

| | | | | | |
|----|--|---|------|---------|-----------|
| | <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 4. Supplier must provide brochures 5. Must be delivered to ASTI | | | | |
| 11 | <p>BREAK AWAY HEADERS - STRAIGHT</p> <p>A. Specifications:</p> <ul style="list-style-type: none"> - Pin Style: Square - Number of Pins: 40 - Pin Spacing: 0.1" (2.54 mm) - Pin Length: 11.5 mm" <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 5. Must be delivered to ASTI | 5 | unit | 150.00 | 750.00 |
| 12 | <p>PIC24FJ256GA7 XLP CURIOSITY BRD,DM240016</p> <p>A. Specifications:</p> <ul style="list-style-type: none"> - board has a built-in programmer/debugger - provides all of the hardware necessary to get started developing a complete embedded applications - USB micro-B socket for PKOB and power supply - powered from PKOB microUSB connector - fully compatible with MPLAB Xpress, MPLAB X IDE, XC16 compiler and MPLAB Code Configurator - board includes: <ul style="list-style-type: none"> - 32MHz PIC24FJ256GA705 16-bit XLP microcontroller with 256KB ECC Flash memory, 16KB RAM - On-board MIC5528 +3.3V LDO regulator - PICKIT™ On-Board (PKOB) circuit implements basic programming/debugging ability - MCLR Reset button - Two general purpose push buttons - Red/Green/Blue (RGB) LED - Two general purpose indicator LEDs - 10kΩ potentiometer for analogue input - 32.768 kHz crystal - 2 x 28-pin socket headers for access to GPIO pins - Circuit prototyping area <ul style="list-style-type: none"> - Two mikroBUS™ interfaces for hardware expansion <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 4. Supplier must provide brochures 5. Must be delivered to ASTI | 4 | unit | 1600.00 | 6,400.00 |
| 13 | <p>AIR QUALITY 2 CLICK GAS SENSOR MIKROBUS CLICK BOARD FOR IAQ-CORE</p> | 3 | unit | 5500.00 | 16,500.00 |

| | | | | | |
|----|---|---|------|---------|-----------|
| | <p>A. Specifications:</p> <ul style="list-style-type: none"> - click accessory module - click sensor board utilizes the iAQ-Core Indoor Air Quality sensors that measures VOC (volatile organic compound) levels and provides equivalent predictions for CO2 and TVOC (total volatile organic compounds). - click board comes with the header strips soldered - CO2 equivalents sensing range: 450 to 2000 ppm - TVOC equivalents sensing range: 125 to 600 ppb - automatic Baseline Correction (ABC) - low power consumption - applications: Smart Home applications, Internet of Things devices, HVAC, thermostats, etc. - benefits: Reliable evaluation of indoor air quality, high sensitivity and fast response - interface: i2c - size: M (42.9 x 25.4 mm) - input voltage: 3.3V or 5V - mikroBus compatibility <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 4. Supplier must provide brochures 5. Must be delivered to ASTI | | | | |
| 14 | <p>EARTHQUAKE CLICK VIBRATION SENSOR MIKROBUS CLICK BOARD FOR D7S</p> <p>A. Specifications:</p> <ul style="list-style-type: none"> - click accessory module <ul style="list-style-type: none"> - compatible with MikroElektronika mikroBUS microcontroller development boards - includes D7S high-precision seismic sensor from Omron to provide a spectral intensity (SI) acceleration value - I2C interface and GPIO - input voltage: 3.3V or 5V - acceleration detection range $\pm 2,000$ gal - shutoff output for seismic intensity level 5 or higher - click board comes with the header strips soldered - click board size: S (28.6 x 25.4 mm) <p>B. Notes:</p> <ol style="list-style-type: none"> 1. Delivery: Thirty (30) days upon issuance of NTP 2. Price is inclusive of government duties and taxes and other fees. 3. Payment upon full delivery 4. Supplier must provide brochures 5. Must be delivered to ASTI | 3 | unit | 5000.00 | 15,000.00 |
| 15 | <p>AIR QUALITY CLICK GAS SENSOR MIKROBUS CLICK BOARD FOR MQ-135</p> <p>A. Specifications:</p> <ul style="list-style-type: none"> - click accessory module - for detection of dangerous gases within the office and home such as ammonia , nitrogen oxides, benzene, smoke and CO2 - mikroBUS pinout standard - MQ-135 sensor | 4 | unit | 1500.00 | 6,000.00 |

- Adjustable potentiometer
- 2 jumpers
- click board comes with the header strips soldered
- interface: analog
- input voltage: 3.3V or 5V
- click board size: M (42.9 x 25.4 mm)
- sensing layer on the sensor unit is made of tin dioxide (SnO2)

B. Notes:

1. Delivery: Thirty (30) days upon issuance of NTP
2. Price is inclusive of government duties and taxes and other fees.
3. Payment upon full delivery
4. Supplier must provide brochures
5. Must be delivered to ASTI

TOTAL APPROVED BUDGET FOR THE CONTRACT:

Php 257,190.00

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.