



Republic of the Philippines  
**DEPARTMENT OF SCIENCE AND TECHNOLOGY**  
**ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE**



**PURCHASE ORDER**

ASTI - FM 03-17  
 REV 3 / 10 October 2023

<b>Supplier:</b>	<b>JASSEN HARRIS INDUSTRIES CORP.</b>	<b>PO No.:</b>	<b>24-11-257</b>
<b>Address:</b>	<b>1063 Tomas Mapua St., Brgy. 329 Zone 33, Sta. Cruz, Manila</b>	<b>PO Date:</b>	<b>November 04, 2024</b>
<b>TIN:</b>	<b>009-248-102-000</b>	<b>Mode of Procurement:</b>	<b>NP-53.9 Small Value Procurement</b>

Gentleman:

Please furnish this Office the following articles subject to the terms and conditions contained herein:

**Place of Delivery:** DOST-ASTI Extension Office, NEC-UP, Junio Hall, corner Osmena Ave., Diliman, Quezon City  
**Delivery Term:** Sixty (60) calendar days upon issuance of NTP

**Date of Delivery:** \_\_\_\_\_  
**Payment Term:** Government Terms

**Warranty Term:** \_\_\_\_\_

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Lot	<p><b>Various Items for Prototype Development</b></p> <p>1. Objective                      1.1. DOST-ASTI is looking for qualified and competent bidders for the supply and delivery of various items, for prototype development.                      1.2. The Approved Budget for the Contract (ABC) is inclusive of government taxes and other applicable charges.                      1.3. Prospective bidders must submit a breakdown of price quotations per item specified in 2. Technical Specifications.</p> <p>2. Technical Specifications</p> <p>2.1. MCU Module - ESP32 (PhP3,700.00)                      2.1.1. Quantity: At least ten (10) pieces                      2.1.2. Genuine product and latest version                      2.1.3. Number of Cores: Two (2) (Dual Core)                      2.1.4. Wi-Fi: 2.4 GHz up to 150 Mbits/s                      2.1.5. Bluetooth: Bluetooth Low Energy (BLE) and Legacy Bluetooth                      2.1.6. Architecture: Thirty-two (32) bits                      2.1.7. Clock Frequency: Up to 240 MHz                      2.1.8. RAM: 512 KB                      2.1.9. Pins: Thirty-eight (38)                      2.1.10. Peripherals: Capacitive touch, Analog to Digital Converter (ADC), Digital to Analog Converter (DAC), 12C (Inter-Integrated Circuit), Universal Asynchronous Receiver/Transmitter (UART), Controller Area Network (CAN 2.0), Serial Peripheral Interface (SPI), 12S (Integrated Inter-IC Sound),</p>	1	₱44,600.00	₱44,600.00

**Postal Address :** ASTI Bldg., U.P. Technology Park Complex, CP Garcia Ave., Diliman, Quezon City 1101  
**Website :** www.asti.dost.gov.ph  
**Email :** info@asti.dost.gov.ph

**Tel No. :** +632 8249-8500  
 +632 8426-9755



Reduced Media-Independent Interface (RMII), Pulse Width Modulation (RMII), and more

2.1.11. Built-in Buttons: RESET and BOOT buttons

2.1.12. Built-in LEDs: Built-in blue LED connected to GPIO2; built-in red LED that shows the board is being powered

2.1.13. USB to UART bridge: CP2102

2.2. MCU Module - ESP32-CAM (Php 4,900.00)

2.2.1. Quantity: At least ten (10) pieces

2.2.2. ESP32 Cam WiFi Bluetooth Development Board with OV2640 Camera Module

2.2.3. Working Voltage: 4.75-5.25V, recommended 5V

2.2.4. SPI Flash: Default 32mbit

2.2.5. RAM: Internal 520KB+External 8MB PSRAM

2.2.6. Wi Fi: 802.11b/G/n/e/i

2.2.7. Bluetooth: Bluetooth 4.2BR/EDR and BLE standards

2.2.8. Supports Interfaces (2Mbps): UART, SPI, I2C, PWM

2.2.9. TF Card Support: Up to 4G

2.2.10. IO Ports: Nine (9)

2.2.11. Serial Port Speed: Default 115200bps

2.2.12. Spectrum Range: 2400~2483.5 MHz

2.2.13. Antenna Shape: Integrated PCB, 2dBi gain

2.2.14. Image Output Formats: JPEG (OV2640 only), BMP, GRAYSCALE

2.2.15. Transmission power

2.2.15.1. 802.11b:  $17 \pm 2$  dBm (@ 11mbps)

2.2.15.2. 802.11g:  $14 \pm 2$  dBm (@ 54mbps)

2.2.15.3. 802.11n:  $13 \pm 2$  dBm (@ MCS7)

2.2.16. Receiving Sensitivity

2.2.16.1. CCK, 1mbps: -90dBm

2.2.16.2. CCK, 11mbps: -85dBm

2.2.16.3. 6Mbps (1/2BPSK): -88dBm

2.2.16.4. 54Mbps (3/464 QAM): -70dBm

2.2.16.5. MCS7 (65Mbps, 72.2 Mbps): -67dBm

2.2.17. Power Consumption

2.2.17.1. Turn Off Flash: 180mA @ 5V

2.2.17.2. Turn on the flash and set the brightness to a maximum of 310mA @ 5V

2.2.17.3. Deep Sleep: The minimum power consumption can reach 6mA@5V

2.2.17.4. Modern Sleep: minimum achievable 20mA@5V

2.2.17.5. Light Sleep: minimum achievable 6.7mA@5V

2.2.18. Security: VPA/VPA2/VPA2 Enterprise/VPS

2.2.19. Working Temperature: -20 °C~70 °C

- \*2.3. MCU Module - ESP32 with OLED (PhP 5,750.00)
  - 2.3.1. Quantity: At least five (5) pieces
  - 2.3.2. Unsoldered TTGO T-Display ESP32 Module
  - 2.3.3. Chipset: ESPRESSIF-ESP32 240MHz Xtensa dual-core 32-bit LX6 microprocessor
  - 2.3.4. Memory: 4MB Flash, 520 kB SRAM
  - 2.3.5. USB to TTL Converter CP2104
  - 2.3.6. Interface: UART, SPI, SDIO, I2C, LED PWM, TV PWM, I2S, IRGPIO, ADC, capacitor touch sensor, DACLNA pre-amplifier
  - 2.3.7. Display: IPS ST7789V 1.14 Inch 135\*240 resolution
  - 2.3.8. Operating Voltage (VDC) 2.7 ~ 4.2
  - 2.3.9. Max. Operating Current (mA) 60
  - 2.3.10. Working Temperature Range (°C) -40 to 85
  - 2.3.11. Package includes:
    - 2.3.11.1. 1 x TTGO Wi-Fi and Bluetooth Development Board with 1.14" LCD Display
    - 2.3.11.2. 1 x Battery Connector
    - 2.3.11.3. 2 x 12 Pin Male Header
  
- \*2.4. Display Module - OLED (PhP 1,600.00)
  - 2.4.1. Quantity: At least ten (10) pieces
  - 2.4.2. OLED Display Module
  - 2.4.3. Size: ~0.96"
  - 2.4.4. Resolution: 128X64
  - 2.4.5. Chipset: SSD1315
  - 2.4.6. Communication Interface: SPI, IIC/I2C, Serial
  
- \*2.5. RFID Module (PhP 3,200.00)
  - 2.5.1. Quantity: At least ten (10) pieces
  - 2.5.2. Support I2C.SPI and HSU (High Speed UART), change between those modes
  - 2.5.3. Support RFID reading and writing, support P2P communication with peers, NFC with android phone
  - 2.5.4. RFID reader/writer support
    - 2.5.4.1. Mifare 1k, 4k, Ultralight, and DesFire cards, ISO/IEC 14443-4 cards such as CD97BX, CD light, DesFire, P5CN072 (SMX)
    - 2.5.4.2. Innovision jewel cards such as IRT5001 card
    - 2.5.4.3. FeliCa cards such as RCS\_860 and RCS\_854
  - 2.5.5. Built-in PCB antenna, with 4cm~6cm communication distance
  - 2.5.6. On-board level shifter, Standard 5V TTL for I2C and UART, 3.3V TTL SPI
  - 2.5.7. Package includes:
    - 2.5.7.1. 1x PN352 NFC/RFID Module
    - 2.5.7.2. 1x 2.54 spacing 4-pin Female Cable
    - 2.5.7.3. 1x NFC / RFID Card
    - 2.5.7.4. 1x Key tag



- ✓ 2.6. Fingerprint Module (PhP 7,000.00)
  - 2.6.1. Quantity: At least five (5) pieces
  - 2.6.2. Simple UART & USB communication protocol
  - 2.6.3. Complies with USB 2.0 full-speed specification
  - 2.6.4. Ultra-thin optical sensor
  - 2.6.5. Resolution 450 dpi
  - 2.6.6. Capable of 360° recognition
  - 2.6.7. Storage for 3,000 unique fingerprints
  - 2.6.8. Wake up on Finger Function
  - 2.6.9. Works well with dry, moist or rough fingerprints
  - 2.6.10. Anti-scratch with surface high hardness 5H
  - 2.6.11. 1:1 verification, 1:N identification
  - 2.6.12. High-accuracy and high-speed fingerprint identification technology
  - 2.6.13. 4x mounting holes
  - 2.6.14 Includes 2x JST SH connectors
  
- ✓ 2.7. microSD Card Module (PhP 450.00)
  - 2.7.1. Quantity: At least six (6) pieces
  - 2.7.2. Power Supply: 4.5V ~ 5.5V
  - 2.7.3. SPI interface
  - 2.7.4. Module Size: ~4.1 x 2.4cm
  
- ✓ 2.8. RTC Module (PhP 900.00)
  - 2.8.1. Quantity: At least six (6) pieces
  - 2.8.2. DS3231-based RTC High Precision Real-Time Clock Module with AT24C32 EEPROM
  - 2.8.3. Size: ~38mm x 22mm x 14mm
  - 2.8.4. Weight: ~8 grams
  - 2.8.5. Operating voltage: 3.3 - 5 .5V
  
- ✓ 2.9. Solenoid Lock - Latch (PhP 2,500.00)
  - 2.9.1. Quantity: At least four (4) pieces
  - 2.9.2. Operation Voltage: 12V DC
  - 2.9.3. Operating Current: 1.5A
  - 2.9.4. Dimension: ~73\*58\*13.3mm
  - 2.9.5. Do not electrify the lock for a long time(<5s)
  - 2.9.6. Parts list:
    - 2.9.6.1. Electric Solenoid Lock x1
    - 2.9.6.2. Gravity Connector x1
    - 2.9.6.3. Latch x1
  
- ✓ 2.10. Solenoid Lock - Slug (PhP 1,200.00)
  - 2.10.1. Quantity: At least four (4) pieces
  - 2.10.2. Voltage: 12VDC
  - 2.10.3. Current: 0.6A
  - 2.10.4. Size: ~53 x 26 x 23mm
  - 2.10.5. Weight: ~142g
  - 2.10.6. Latch Telescopic Length: ~10mm
  - 2.10.7. Energized Forms: intermittent



	<p>2.10.8. Unlocking Time: 1S  2.10.9. Continuously energized &lt;10S;  2.10.10. Temperature: -40 ~ +50</p> <p>2.11. UPS Backup Kit (Php 13,400.00)  2.11.1. Quantity: At least four (4) set  2.11.2. Suitable for Electric Door Locks with Time Delay  2.11.3. Can be connected to an external remote control module  2.11.4. Over-voltage protection, over-current protection, and fault protection  2.11.5. Size: Aprox. 212x173x70mm (L x W x H)  2.11.6. Input Voltage: AC 110 ~ 260 V / 50 ~ 60Hz  2.11.7. Output Voltage: DC 12 V / 5A  2.11.8. Time Delay: 0 to 15 seconds  2.11.9. Power: 50W  2.11.10. Operating Temperature: -20C~65C  2.11.11. Weight: ~1.1KG</p> <p>3. Warranty  3.1. Supplier warrants the item against defects in manufacturing and shipping and delivery issues.  3.2. Defective and incorrect items shall be replaced within seven (7) calendar days upon receipt of notice from the end-user or DOST-ASTI Property and Supply Section.  3.3. Warranty Period: At least six (6) months</p> <p>4. Payment and Delivery Terms  4.1. Price is inclusive of government taxes, delivery charges, etc.  4.2. Items must be delivered within sixty (60) days upon issuance of Notice To Proceed (NTP) to DOST-ASTI Extension Office, NEC-UP, Junio Hall, corner Osmena Ave., Diliman, Quezon City.</p> <p>(Please see attached quotation.)</p>			
			<b>TOTAL:</b>	<b>₱44,600.00</b>
<b>(Total Amount in Words)</b>			<b>Forty Four Thousand Six Hundred Pesos Only</b>	

The contract price is inclusive of taxes and other fees or charges. In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, DOST-ASTI may rescind or terminate the contract, without prejudice to other courses of action and remedies available under the circumstances and in accordance with the provisions of the latest implementing rules and regulations of RA 9184.

Conforme:

Very Truly Yours,

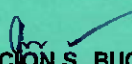
FRANZ A. DE LEON, Ph.D.

Director, DOST-ASTI

Digitally signed  
by Franz A. De Leon  
Benjamin R. Lara

\_\_\_\_\_  
(Signature over Printed Name of Supplier)

\_\_\_\_\_  
(Date)

<b>Fund Cluster:</b>	01	<b>ORS / BURS No.:</b>	02101012024-11-000952
		<b>ORS / BURS Date:</b>	NOVEMBER 05, 2024
<b>Funds Available:</b>	Php 49,600.00	<b>Amount:</b>	₱ 49,600.00
 <b>GAY CONCEPCION S. BUGAGAO</b> Accountant III			





04 November 2024

**NOTICE TO PROCEED**  
 ALTERNATIVE MODE OF PROCUREMENT

**Mr. MIKE JASSEN T. SY**  
 President  
**JASSEN HARRIS INDUSTRIES CORP.**  
 1063 Tomas Mapua St.  
 Brgy. 329 Zone 33 Sta. Cruz  
 Manila

Dear Mr. Sy,

This Notice to Proceed is hereby issued for the following contract details:

Contract Name	: <u>Supply and Delivery of One (1) Lot Various Items for Prototype Development</u>
Purchase Request No.	: <u>GAA-24-10-20067</u>
Purchase / Work Order No.	: <u>24-11-257</u>
Total Contract Price	: <u>Php 44,600.00</u>
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words	: <u>Forty Four Thousand Six Hundred Pesos</u>

Upon issuance of this Notice, your company, **JASSEN HARRIS INDUSTRIES CORP.** is hereby directed to commence the delivery of items and/or performance of services stipulated in the said Purchase Order which shall become due and demandable in accordance with the delivery schedule stipulated therein.

Please acknowledge receipt and acceptance of this Notice by signing in the space provided below. There are two (2) copies of this document; you may keep one copy and return the other to the Bids and Awards Committee (BAC) Secretariat of the Advanced Science and Technology Institute. Should you have any questions or clarifications, you may reach us at bac-sec@asti.dost.gov.ph.

Respectfully,

  
**FRANZ A. DE LEON, Ph.D.** Digitally signed by Franz A. De Leon on 2024.11.04 10:00:00 +0800 (PST) using PKCS#7 S/MIME  
 Director

DATE OF ISSUANCE:

**11 NOV 2024**

RECEIVED BY:

\_\_\_\_\_  
 Signature over Printed Name

\_\_\_\_\_  
 Date and Time

Postal Address : ASTI Bldg. UP Technology Park Complex  
 CP Garcia Ave., Diliman, Quezon City 1101  
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