



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

Supplier:	JASSEN HARRIS INDUSTRIES CORP.	PO No.:	ROAMER-25-05-002
Address:	1063 Tomas Mapua St., Brgy. 329 Zone 33, Sta. Cruz, Manila, 1014	PO Date:	May 9, 2025
TIN:	009-248-102-00000	Mode of Procurement:	NP-53.9 Small Value Procurement

Gentleman:

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

Place of Delivery:	ASIMOV-HAWKS Project Office, Suite 097, Pryce Tower Condominium Corporation, Pryce Business Park, J.P. Laurel Ave., Brgy. 19-B (Pob.), Davao City	Delivery Term:	Thirty (30) 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>VARIOUS PROTOTYPING SUPPLIES AND MATERIALS</p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI is seeking qualified and competent bidders for the One (1) Lot of Various Prototyping Supplies and Materials to be used by the HAWKS Component.</p> <p>1.2. The Approved Budget for the Contract (ABC) is inclusive of all applicable government taxes and service charges.</p> <p>1.3. Prospective bidders must send quotations within ABC of each item listed in Technical Specifications.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. 3D Printer PLA Filament (ABC- ₱6,000.00) <i>other supplies</i></p> <p>2.1.1. Quantity: Five (5) Rolls</p> <p>2.1.2. Filament Diameter: 1.75mm</p> <p>2.1.3. Weight: 1 kilogram of PLA filament per spool</p> <p>2.1.4. Color: Black</p> <p>Note: For consumables</p> <p>2.2. 3D Printer PLA Filament (ABC- ₱6,000.00) <i>other supplies</i></p> <p>2.2.1. Quantity: Five (5) Rolls</p> <p>2.2.2. Filament Diameter: 1.75mm</p> <p>2.2.3. Weight: 1 kilogram of PLA filament per spool</p> <p>2.2.4. Color: Pearl Red or Fire Engine</p>	1	P168,300.00	P168,300.00

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

Red

Note: For consumables

2.3. 3D Printer PLA Filament (ABC-
₱6,000.00) *other supplies*

2.3.1. Quantity: Five (5) Rolls

2.3.2. Filament Diameter: 1.75mm

2.3.3. Weight: 1 kilogram of PLA
filament per spool

2.3.4. Color: Pine Green

Note: For consumables

2.4. 3D Printer PLA Filament (ABC-
₱6,000.00) *other supplies*

2.4.1. Quantity: Five (5) Rolls

2.4.2. Filament Diameter: 1.75mm

2.4.3. Weight: 1 kilogram of PLA
filament per spool

2.4.4. Color: Silver

Note: For consumables

2.5. NP-F750 Battery (ABC- ₱8,400.00) *RED*

2.5.1. Quantity: Six (6) Pieces

2.5.2. Capacity: at least 5,200 mAh

2.5.3. Voltage: at least 7.2 Volts

2.5.4. Battery type: Lithium-ion
Rechargeable

Note: Part of the prototype

2.6. NP-F Battery Charger (ABC-
₱7,950.00) *T&S Semi*

2.6.1. Quantity: Three (3) Pieces

2.6.2. Power Output: 7.2 Volts & 12
Volts

2.6.3. Charging Port: Type-C

2.6.4. Charger with metal battery
adapter plate

Note: For tools

2.7. 3D Printer PETG Filament (ABC-
₱18,000.00) *other supplies*

2.7.1. Quantity: Four (4) Rolls

2.7.2. Manufacturing Precision: ±
0.02 mm Guaranteed Precision

2.7.3. Printing Setup Compatibility

2.7.3.1. Nozzle: 250±10 °C

2.7.3.2. Heatbed: 80±10 °C

2.7.4. High Color Consistency

2.7.5. Filament Diameter: 1.75mm

2.7.6. Weight: 1 kilogram of PETG
filament per spool

2.7.7. Color: Jet Black

2.7.8. Equivalent or Comparable Type
Required

Note: For consumables

2.8. 3D Printer ASA Filament (ABC-
₱18,000.00) *other supplies*

- 2.8.1. Quantity: Four (4) Rolls
- 2.8.2. Manufacturing Precision: ± 0.04 mm Guaranteed Precision
- 2.8.3. Printing Setup Compatibility
 - 2.8.3.1. Nozzle: 260±5 °C
 - 2.8.3.2. Heatbed: 110±5 °C
- 2.8.4. High Color Consistency
- 2.8.5. Filament Diameter: 1.75mm
- 2.8.6. Weight: 850g of ASA filament per spool
- 2.8.7. Color: Jet Black
- 2.8.8. Equivalent or Comparable Type Required
- Note: For consumables

2.9. Single-Board Computer (ABC-
₱24,000.00) T&S Semi

- 2.9.1. Quantity: Two (2) Units
- 2.9.2. Processor: Quad-core 64-bit ARM Cortex-A76 CPU, 2.4GHz, with cryptography extensions, 512KB per-core L2 cache, and 2MB shared L3 cache
- 2.9.3. Graphics: Integrated GPU supporting OpenGL ES 3.1 and Vulkan 1.2
- 2.9.4. Memory: 16GB LPDDR4X-4267 SDRAM
- 2.9.5. Display Output: Dual HDMI, supporting up to 4Kp60 with HDR
- 2.9.6. Video Decoding: Hardware-accelerated 4Kp60 HEVC decoder
- 2.9.7. Wireless Connectivity: Dual-band 802.11ac Wi-Fi and Bluetooth 5.0 / BLE
- 2.9.8. Storage: MicroSD card slot with high-speed SDR104 mode support
- 2.9.9. USB Ports: 2 × USB 3.0 (5Gbps), 2 × USB 2.0
- 2.9.10. Networking: Gigabit Ethernet with PoE+ support (requires separate PoE+ HAT)
- 2.9.11. Camera & Display Interfaces: 2 × 4-lane MIPI transceivers
- 2.9.12. Expansion: PCIe 2.0 x1 interface for high-speed peripherals (supports M.2 HAT or adapters)
- 2.9.13. Power Supply: 5V/5A DC via USB-C with Power Delivery support
- 2.9.14. GPIO: Standard 40-pin header
- 2.9.15. Additional Features: Real-time clock (RTC) with external battery support, power button
- 2.9.16. Equivalent or Comparable Model Required
- Note: For tools

2.10. M.2 PCIe Expansion Board with SSD (ABC- ₱10,000.00) T&S

- 2.10.1. Quantity: Two (2) Units

	<div>2.10.2. PCIe Expansion Board compatible with Single-Board Computers (SBCs)</div> <div>2.10.3. Interface: Supports single-lane PCIe 2.0 (500 MB/s peak transfer rate)</div> <div>2.10.4. Form Factor: Supports M.2 M key edge connector</div> <div>2.10.5. Compatible Sizes: Supports M.2 2230 and 2242 form factors</div> <div>2.10.6. Storage Capacity: 512GB NVMe SSD</div> <div>2.10.7. Power Delivery: Capable of supplying up to 3A to connected M.2 devices</div> <div>2.10.8. Indicators: Includes power and activity LEDs</div> <div>2.10.9. Board Standard: Conforms to HAT+ specification for SBCs</div> <div>2.10.10. Included Accessories: Ribbon cable, 16mm stacking header, threaded spacers and screws, and knurled double-flanged screw for securing the M.2 peripheral</div> <div>2.10.11. Equivalent or Comparable Model Required</div> <div>Note: Part of the prototype</div> <div>2.11. DC-DC BUCK CONVERTER (ABC- ₱2,400.00) T4S Semi</div> <div>2.11.1. Quantity: Four (4) Units</div> <div>2.11.2. Input Voltage Range: 3.6V – 25V DC</div> <div>2.11.3. Output Voltage: 5V DC (regulated)</div> <div>2.11.4. Maximum Output Current: 5A</div> <div>Note: For tools</div> <div>2.12. Microcontroller Development Board (ABC- ₱9,000.00) T4S Semi</div> <div>2.12.1. Quantity: Three (3) Units</div> <div>2.12.2. Processor: Dual-core ARM Cortex-M0+ microcontroller</div> <div>2.12.3. Interfaces: USB, SPI, I2C, I2S, UART, PWM</div> <div>2.12.4. I/O Pins: 20 PWM, 8 Analog, 22 Digital</div> <div>2.12.5. Connectivity: Wi-Fi and Bluetooth</div> <div>2.12.6. Built-in Sensors: 6-axis IMU with an embedded temperature sensor</div> <div>2.12.7. Memory & Storage: Onboard RAM and Flash storage suitable for embedded applications</div> <div>2.12.8. Form Factor: Compact board with castellated holes, compatible with standard headers and breadboards</div> <div>2.12.9. Additional Features: Secure cryptographic module for enhanced</div>			
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	security (if available)			
	2.12.10. Functional Requirement: Must be functionally and dimensionally equivalent to an industry-standard microcontroller development board with wireless connectivity and sensor integration			
	2.12.11. Equivalent or Comparable Model Required			
	Note: For tools			
	2.13. 3D Printer Nozzle (ABC- ₱4,950.00)			
	2.13.1. Quantity: Three (3) Pieces <i>other supplies</i>			
	2.13.2. Nozzle Type: Compatible with E3D V6-style hotends			
	2.13.3. Nozzle Diameter: 0.4 mm			
	2.13.4. Material: Brass			
	2.13.5. Functional Requirement: Must be dimensionally and functionally equivalent to industry-standard V6 nozzles for high-precision 3D printing			
	2.13.6. Equivalent or Comparable Model Required			
	Note: For tools			
	2.14. 3D Printer Nozzle (ABC- ₱4,950.00)			
	2.14.1. Quantity: Three (3) Pieces <i>other supplies</i>			
	2.14.2. Nozzle Type: Compatible with V6-style hotends			
	2.14.3. Nozzle Diameter: 0.6 mm			
	2.14.4. Material: Brass			
	2.14.5. Functional Requirement: Must be dimensionally and functionally equivalent to an industry-standard V6 nozzle for high-precision 3D printing			
	2.14.6. Equivalent or Comparable Model Required			
	Note: For tools			
	2.15. SMOOTH PEI STEEL SHEET (ABC- ₱11,200.00) <i>T&S Eni</i>			
	2.15.1. Quantity: Two (2) Pieces			
	2.15.2. Surface Type: Smooth PEI- coated flexible steel sheet			
	2.15.3. Compatibility: Must be compatible with 3D printers using magnetic heated beds with size 250mm by 210mm			
	2.15.4. Functional Requirement: Must be dimensionally and functionally equivalent to a smooth PEI steel sheet designed for reliable adhesion and easy print removal			
	2.15.5. Equivalent or Comparable Model Required			
	Note: For tools			
	2.16. TEXTURED POWDER-COATED			

STEEL SHEET (ABC- ₱12,600.00) T&S Semi

- 2.16.1. Quantity: Two (2) Pieces
- 2.16.2. Surface Type: Textured, powder-coated PEI flexible steel sheet
- 2.16.3. Compatibility: Must be compatible with 3D printers using magnetic heated beds with size 250mm by 210mm
- 2.16.4. Functional Requirement: Must be dimensionally and functionally equivalent to a textured powder-coated steel sheet designed for strong adhesion and easy print removal
- 2.16.5. Equivalent or Comparable Model Required
- Note: For tools

2.17. NOZZLE CLEANING NEEDLE (ABC- ₱2,400.00) other supplies

- 2.17.1. Quantity: Two (2) Set (at 5 pieces/set)
- 2.17.2. Diameter: 0.3 mm
- 2.17.3. Functional Requirement: Must be dimensionally and functionally equivalent to industry-standard cleaning needles used for 3D printer nozzle maintenance
- 2.17.4. Equivalent or Comparable Model Required
- Note: For tools

2.18. 3D PRINTING ADHESIVE (ABC- ₱5,500.00) other supplies

- 2.18.1. Quantity: Two (2) Pieces
- 2.18.2. Volume: 50ml
- 2.18.3. Application: Designed for improving first-layer adhesion on heated print beds
- 2.18.4. Compatible Materials: ABS, PLA, PETG, HIPS, ASA, TPU
- 2.18.5. Features:
 - 2.18.5.1. Easy application
 - 2.18.5.2. Easy release
 - 2.18.5.3. Easy clean
 - 2.18.5.4. No smell
 - 2.18.5.5. Non-toxic
 - 2.18.5.6. No additional tools needed
 - 2.18.5.7. Nicer print finish
- 2.18.6. Functional Requirement: Must be dimensionally and functionally equivalent to industry-standard 3D printing adhesives for various filament types
- 2.18.7. Equivalent or Comparable Model Required
- Note: For consumables

2.19. WIRE ROPE (ABC- ₱4,950.00) T&S Semi


	<div>2.19.1. Quantity: One (1) Roll</div> <div>2.19.2. Thickness: 3mm</div> <div>2.19.3. Length: 75 meters</div> <div>2.19.4. Material: Steel</div> <div>Note: For tools</div> <div>3. WARRANTY</div> <div>3.1. The item and all its parts must have at least three (3) months of warranty from the time of delivery, which covers defects in materials. Warranty service shall commence from the date of end-user acceptance. Defective and incorrect items shall be replaced.</div> <div>3.2. Any replacement service for defective and incorrect items must be successfully delivered within fifteen (15) calendar days or less upon receipt of notice from the end-user or DOST-ASTI Property and Supply Section.</div> <div>4. PAYMENT AND DELIVERY TERMS</div> <div>4.1. Price must be inclusive of government taxes and other charges.</div> <div>4.2. The goods must be delivered directly to the ASIMOV-HAWKS Project Office, Suite 097, Pryce Tower Condominium Corporation, Pryce Business Park, J.P. Laurel Ave., Brgy. 19-B (Pob.), Davao City, within thirty (30) calendar days upon issuance of Notice to Proceed.</div> <div>4.3. Payment will be processed once the items are completely delivered, inspected, and accepted by the end-user. No payment shall be made for the supplies and materials not yet delivered under this contract.</div> <div>(Please see attached quotation.)</div>			
			TOTAL:	P168,300.00
(Total Amount in Words)			One Hundred Sixty-Eight Thousand Three Hundred Pesos Only	

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,

(Signature over Printed Name of Supplier)




FRANZ A. DE LEON, Ph.D.

Director, DOST-ASTI

(Date)

Digitally signed by Benjamin R. Lara

Fund Cluster:	<u>07</u>	ORS / BURS No.:	<u>053086012025-05-000116</u>
Funds Available:	<u>Php 168,300.00</u>	ORS / BURS Date:	<u>MAY 09, 2025</u>
		Amount:	<u>₱ 168,300.00</u>
<div> <u>GAY CONCEPCION S. BUGAGAO</u> Accountant III</div>			



09 May 2025

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	: Supply and Delivery of One (1) Lot Various Prototyping Supplies and Materials
Purchase Request No.	: ROAMER-25-04-20956
Purchase / Work Order No.	: ROAMER-25-05-002
Total Contract Price	: P168,300.00
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words	: One Hundred Sixty-Eight Thousand Three Hundred Pesos

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.
Director

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

DATE OF ISSUANCE:

May 14 2025

RECEIVED BY:

Signature over Printed Name

Date and Time