



ASTI-FM 03-17  
REV 2 / 31 January 2020

**PURCHASE ORDER**

<b>Supplier:</b>	<b>ACE ELECTRONIC TECHNOLOGY, INC.</b>	<b>PO No.:</b>	<b>23-05-083</b>
<b>Address:</b>	<b>#12 Timog Ave., Brgy. Laging Handa, Quezon City 1103</b>	<b>PO Date:</b>	<b>May 30, 2023</b>
<b>TIN:</b>	<b>005-423-495-000</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:

<b>Place of Delivery:</b>	<b>ASTI Bldg., C.P. Garcia Ave., U.P. Technology Park Complex, U.P. Campus, Diliman, Quezon City 1101</b>	<b>Delivery Term:</b>	<b>Thirty (30) calendar days upon issuance of NTP</b>
<b>Date of Delivery:</b>		<b>Payment Term:</b>	<b>Government Terms</b>
		<b>Warranty Term:</b>	

Stock / Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	Lot	<p><b>PCB Fabrication and Assembly</b></p> <p><b>1GENERAL OVERVIEW</b></p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the PCB Fabrication with Assembly of one (1) lot of LoRa-E5 Daughter Boards (EM1) which will be used in upgrading the current arQ datalogger's data transmission capabilities.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated. Detailed specs based on actual manufacturing files from end-user shall supersede.</p> <p><b>2TECHNICAL SPECIFICATIONS</b></p> <p><b>2.1. PCB Fabrication with Assembly</b></p> <p>2.1.1. Quantity: 5 pcs</p> <p>2.1.2. Board specification:</p> <p>2.1.2.1. Board type: Single piece</p> <p>2.1.2.2. Assembly side: Top side</p> <p>2.1.2.3. Test method: Flying Probe/Nail Bed</p> <p>2.1.3. PCB assembly specification:</p> <p>2.1.3.1. Number of components: 26</p> <p>2.1.4. PCB fabrication specs:</p> <p>2.1.4.1. Material: FR-4</p> <p>2.1.4.2. Number of layers: 2</p> <p>2.1.4.3. Dimension: 37 x 50 mm</p> <p>2.1.4.4. Board thickness: 1.6 mm</p> <p>2.1.4.5. Copper weight: 1 oz.</p> <p>2.1.4.6. Silkscreen: White</p> <p>2.1.4.7. Surface finish: ENIG-RoHS</p> <p>2.1.4.8. Solder mask: Blue</p> <p>2.1.4.9. Minimum trace width: 0.254 mm</p> <p>2.1.4.10. Hole Specs</p> <p>2.1.4.10.1. Minimum hole size: 0.4 mm</p> <p>2.1.4.10.2. Number of holes: 118</p> <p>2.1.4.10.3. Via size: 0.4 mm</p> <p><b>3AFTER-SALES SUPPORT</b></p>	1	P24,850.00	P24,850.00

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;  
Fax No. : +632 8426-9764

		<p>3.1. Technical support service must be available Monday to Friday (including holidays), during business hours, 9AM –6PM Philippines Standard Time (UTC+8).</p> <p>3.2. Any repair or replacement service must be successfully done within thirty (30) calendar days.</p> <p>3.3. The end-user must be able to request technical support by phone, email or through a website.</p> <p>4NOTES</p> <p>4.1. This procurement includes:</p> <p>4.1.1. Board fabrication and components assembly</p> <p>4.1.2. Component sourcing based on Bill on Materials (BOM)</p> <p>4.1.3. Gerber, BOM and other manufacturing files are available upon request.</p> <p>4.2. Manufacturing files will be provided by the end-user once the supplier has signed the Non-Disclosure Agreement (NDA).</p> <p>5WARRANTY</p> <p>5.1. These LoRa-E5 Daughter Boards must have at least six (6) months of warranty from the time of delivery which covers defects in components, workmanship, and fabrication issues. Warranty service shall commence from the date of end-user acceptance.</p> <p>5.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>6DELIVERY AND PAYMENT TERMS</p> <p>6.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>6.2. Full payment will only be given once the item is 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.</p> <p>6.3. Charging: arQ 2.0</p> <p>(Please see attached quotation.)</p>			
2	Lot	<p><b>PCB Fabrication and Assembly</b></p> <p>1GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the PCB Fabrication with Assembly of one (1) lot of Intelligent Solar Charge Controller Board (EM2), which will be used for arQ 2.0.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated. Detailed specs based on actual manufacturing files from end-user shall supersede.</p> <p>2TECHNICAL SPECIFICATIONS</p> <p>2.1. PCB Fabrication</p> <p>2.1.1. Quantity: Five (5) pieces</p> <p>2.1.2. PCB fabrication specs:</p> <p>2.1.2.1. Material: FR-4: TG150</p> <p>2.1.2.2. Number of layers: 4</p> <p>2.1.2.3. Dimension: 85mm x 56mm</p> <p>2.1.2.4. Board thickness: 1.6mm</p> <p>2.1.2.5. Finished Copper: 2 oz Cu (Inner Copper:1 oz)</p> <p>2.1.2.6. Silkscreen: White</p> <p>2.1.2.7. Surface finish: Immersion gold (ENIG) (1U")</p> <p>2.1.2.8. Solder mask: Blue</p>	1	P59,950.00	P59,950.00

	<p>2.1.2.9. Minimum trace width: 8/8mil</p> <p>2.1.2.10. Hole Specs</p> <p>2.1.2.10.1. Minimum hole size: 0.25mm</p> <p>2.1.2.10.2. Number of holes(Round/Slotted): 233</p> <p>2.1.2.10.3. Via size: 0.5mm</p> <p>2.2. PCB Assembly</p> <p>2.2.1. Quantity: Four (4) Pieces</p> <p>2.2.2. Board specification:</p> <p>2.2.2.1. Board type: Single pieces</p> <p>2.2.2.2. Assembly side: Top Side</p> <p>2.2.2.3. Test method: None</p> <p>2.2.3. PCB assembly specification:</p> <p>2.2.3.1. Number of unique components: 127 pieces</p> <p><b>3AFTER-SALES SUPPORT</b></p> <p>3.1. Technical support service must be available Monday to Friday (including holidays), during business hours, 9AM –6PM Philippines Standard Time (UTC+8).</p> <p>3.2. Any repair or replacement service must be successfully done within thirty (30) calendar days.</p> <p>3.3. The end-user must be able to request technical support by phone, email or through a website.</p> <p><b>4NOTES</b></p> <p>4.1. This procurement includes:</p> <p>4.1.1. Board fabrication and components assembly</p> <p>4.1.2. Component sourcing based on Bill on Materials (BOM)</p> <p>4.1.3. Gerber, BOM and other manufacturing files are available upon request.</p> <p>4.2. Manufacturing files will be provided by the end-user once the supplier has signed the Non-Disclosure Agreement (NDA).</p> <p><b>5WARRANTY</b></p> <p>5.1. These Intelligent Solar Charge Controller Boards must have at least six (6) months of warranty from the time of delivery which covers defects in components, workmanship, and fabrication issues. Warranty service shall commence from the date of end-user acceptance.</p> <p>5.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p><b>6DELIVERY AND PAYMENT TERMS</b></p> <p>6.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>6.2. Full payment will only be given once the item is 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.</p> <p>6.3. Charging: arQ 2.0</p> <p>(Please see attached quotation.)</p>		
		<b>TOTAL:</b>	<b>₱84,800.00</b>
<b>(Total Amount in Words)</b>	<b>Eighty Four Thousand Eight 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,



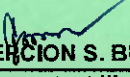
**FRANZ A. DE LEON, Ph.D.**

Digital Signature  
by Franz A. De Leon

Director, DOST-ASTI

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

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

<b>Fund Cluster:</b>	<u>01</u>	ORS / BURS No.:	<u>011011012023-05-000360</u>
		ORS / BURS Date:	<u>May 31, 2023</u>
<b>Funds Available:</b>	<u>PHP 84,800.00</u>	Amount:	<u>₱ 84,800.00</u>
 <b>GAY CONCEPCION S. BUGAGAO</b> Accountant III			



Republic of the Philippines  
Department of Science and Technology

**ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE**



30 May 2023

**NOTICE TO PROCEED**  
ALTERNATIVE MODE OF PROCUREMENT

**Ms. MARIBELLE UY**  
General Manager  
**ACE ELECTRONIC TECHNOLOGY, INC.**  
12 Timog Avenue, Barangay Laging Handa  
Quezon City

Dear Ms. Uy,

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

Contract Name	: <b>Supply and Delivery of Two (2) Lots of PCB Fabrication and Assembly</b>
Purchase Request No.	: <b>GAA-23-04-16493</b>
Purchase / Work Order No.	: <b>23-05-083</b>
Total Contract Price	: <b>Php 84,800.00</b>
(inclusive of taxes, import duties and all other charges or fees)	
Total Contract Price in Words	: <b>Eighty Four Thousand Eight Hundred Pesos</b>

Upon issuance of this Notice, your company, **ACE ELECTRONIC TECHNOLOGY, INC.** 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

DATE OF ISSUANCE:

JUNE 02, 2023

RECEIVED BY:

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

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

Postal Address : ASTI Bldg., U.P. Technology Park Complex,  
CP Garcia Ave., Diliman, Quezon City 1101  
Website : [www.asti.dost.gov.ph](http://www.asti.dost.gov.ph)  
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Fax No. : +632 8426-9764

ASTI-FM 03-19  
REV 1 / 13 January 2020