



PURCHASE REQUEST

Dept./Office: **DABE**PR #: **GF-2021-05-00264**Date: **05-31-2021**Section/End-User: **Lorbert G. Mazo**Category: **IT Supplies and Equipment**Funding Source: **General Fund - MOOE**Project Title/Code: **VSU-IP-2021-5**

Item #	Item Description	Unit	Qty	Unit Cost	PAR/ICS	Total Cost
1	3.5 inch TFT Touch Screen	pc	1	2,000.00		2,000.00

Specification:

- LCD Type: TFT
- LCD driver IC: ILI9486L
- LCD Interface: SPI (up to 125MHz SPI input Max FPS: 50Mhz)
- Touch Screen Type: Resistive
- Touch Screen Controller: XPT2046
- Colors: 65536
- Backlight: LED
- Resolution: 320*480 (Pixel)
- Backlight Current: 120ma
- Power: 0.16A x 5V
- Operating Temp. (?):-20~70
- Includes: 1 x Touch pen, 3 x Heatsink

2	3D printer	set	1	14,500.00		14,500.00
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Specification:

- Extruder Compatibility: CR10 (MK8 Hotend)
- Printing Technology: FFF (Fused Filament Fabrication)
- Filament Diameter: 1.75mm
- Layer Resolution: 100?m
- Max. Print Speed: 180mm/sec
- Precision: ±0.1mm
- Extruder Quantity: Single
- Max Nozzle Temp.: 255?
- Heated Build Plate (Heated Bed): Yes
- Max Bed Temp: 110?
- Bed Type: Glass
- Leveling: Automatic
- Build Volume X: 220mm
- Build Volume Y: 220mm
- Build Volume Z: 250mm
- Supported Materials: ABS, FLEX, PET, PLA, TPU,
- File Format: G-Code, OBJ, STL
- Working Mode: Offline (SD Card/USB Stick), Online (USB)

- Nozzle diameter: 0.4mm can be in 0.2, 0.3mm
- Max Traveling Speed: 180mm/s
- Slicer: Cura (Works with Simplify3D not included)
- Operating System: Windows/Mac/Linux
- Chassis: Imported V-Slot Aluminum Bearings
- Electrical Input: AC 100-265V 50-60Hz
- Output: DC 24V 15A 360W

3	3D Printer Filament (ABS)	pcs	1	2,000.00		2,000.00
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Specification:

- Mass: 1 KG (approximately 2.20 lbs) Spool
- Filament Diameter: 1.75mm (Dimensional Accuracy +/- 0.03mm)
- Extrusion/Nozzle Temperature: 210°C - 240°C (410°F - 464°F)
- Spool Diameter: 7.88"
- Spool Width: 2.69"
- Spool Hub Hole Diameter: 2.20"
- Color: Black
- Material Type: ABS

4	3D Printer Filament (TPU)	set	1	1,500.00		1,500.00
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Specification:

- Color: black
- Item Diameter: 1.75 millimeters
- Item weight: not less than 15.7 ounces
- Material: Rep-Flex-Tpu- Vacuumed Sealed With Desiccant
- Outside Diameter: 1.75 millimeters (+/- 0.05mm)
- Recommended Extrusion/Nozzle Temp: 195 - 230 degree celsius
- Recommended Platform Temperature: 40 - 60 degree celsius
- Packing List: TPU Flexible Filament 1.75mm 250g(vacuum sealed)

5	3D Printer PLA filament	pcs	2	2,000.00		4,000.00
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Specification:

- Recommended Extrusion/Nozzle Temp: 90°C - 220°C (374°F~ 428°F)
- Heated Bed Temp: 25°C - 60°C (77°F~ 140°F)
- Filaments Diameter and Accuracy: 1.75 mm +/- 0.05
- Filaments Net Weight: 1 kg (2.2 lbs) / Spool
- Build Surface: 200 mm x 200 mm (7.88" x 7.88")
- Type of filament: PLA

6	Automatic Voltage Regulatory (AVR), 1500W, heavy duty	unit	1	5,000.00		5,000.00
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7	CPU Cooler, Fan and Heatsink	set	1	1,500.00		1,500.00
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Specification:

- CPU Compatibility: Intel LGA/1150/1151/1155/1156/775
- TDP: 160W
- Heatsink Material: Aluminum
- Heat Base Material: 45X38mm HDT(Heat pipes Direct Touch)
- Heat Pipes: 5X6mm Copper powder heat pipes 3*U type + 2*L type

- Surface Treatment: Anti-oxidation Protective Layer
- Fan Speed: 1000~1800±10%RPM
- Max. Air Flow: 65CFM
- Power Input: 4.5W
- Rated Voltage: 12VDC
- Operating Voltage: 8~13.2VDC
- Bearing Type: Hydraulic Bearing
- Rated Current: 0.22~0.35A

8	External Hard Disk Drive (Portable, 1TB), USB 3.1	unit	2	3,800.00		7,600.00
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Specification:

- ?Shock-absorbing silicon casing
- ?Interface: USB 3.1 (Max.5Gb/s)
- ?Capacity: 1TB
- ?Texture: Plastic/Rubber
- ?Operating Voltage: DC 5V, 900mA
- ?System Requirements: Windows XP / Vista / 7 / 8 / 8.1 / 10, Mac OS X 10.6 or later, Linux Kernel 2.6 or later

9	Globe Simcard tri cut with 5G	pcs	5	200.00		1,000.00
10	Home Prepaid Wifi	pc	1	2,500.00		2,500.00

Specification:

- LTE Technology: LTE-Advanced
- WiFi Band: 2.4 & 5GHz Dual Band
- Network Type: 3G and 4G
- LAN Port: 4 LAN Ports

11	Micro Card Memory Shield Module	pcs	3	500.00		1,500.00
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Specification:

- Power supply voltage: VCC: 4.5-5.5 volt
- Electric Current: 0.2 – 200 mA
- Interface level: 3.3 or 5 V
- Support Card Type:Micro SD Card (<=2G) micro SDHC cards (<= 32G)
- Compatibility: Arduino
- Communication interface: Standard SPI interface
- Number of pins: Six (GND,VCC,MISO,MOSI,SCK,CS)

12	Mini Voltage Regulator	pcs	2	200.00		400.00
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Specification:

- Input Voltage: 3.2V ~ 40V
- Output Voltage: 1.25V ~ 35V
- Output Current: 3A (maximum)
- Connection port: IN + input positive IN - input negative, OUT + output positive OUT - output negative

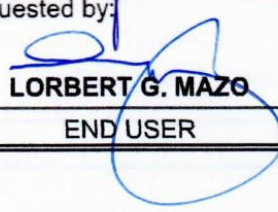
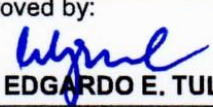
13	Smart Sim card tri cut with 5G	pcs	5	200.00		1,000.00
14	Wi-Fi Module	pcs	3	300.00		900.00

Specification:

- Protocols: 802.11 b/g/n (HT20)
- Frequency Range: 2.4G – 2.5G (2400 – 2483.5)
- TX Power: 802.11 b: +20 dbm, 802.11 g: 17 dBm, 802.11 n – 14 dBm
- Antenna: PCB Trace, External, IPEX Connector, Ceramic Chip
- CPU: Tensilica L106 32-bit processor
- Operating Voltage: 2.5-3.6V
- Operating Current: Average value: 80 mA
- Operating Temperature Range: -40 ? C - 125? C
- Wi-Fi Mode: Station/SoftAP/SoftAP + Station
- Security: WPA/WPA2
- Encryption: WEP/TKIP/ AES
- Firmware Upgrade: UART Download / OTA (via network)
- Software Development: Supports Cloud Server Development/ Firmware and SDK for fast on-chip Programming
- Network Protocols: IP4, TCP / UDP/ HTTP
- User Configuration: AT Instruction Set, Cloud Server, Andriod/IOS App
- Compatibility: Arduino and Raspberry pi

	TOTAL					45,400.00
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Purpose: For Research and Project

Checked by:		Funds Available:	
MICHAEL ANTHONY JAY B. REGIS		MYRNA S. PANCITO	
TWG - IT Supplies and Equipment		HEAD, BUDGET OFFICE	
Signature:	Requested by:	Noted by:	Approved by:
			
Printed Name:	LORBERT G. MAZO	ELDON P. DE PADUA	EDGARDO E. TULIN
Designation:	END USER	UNIT HEAD, PROJECT LEADER	PRESIDENT, VSU