



Republic of the Philippines  
 DEPARTMENT OF SCIENCE AND TECHNOLOGY  
 Regional Office No. 13, Caraga  
 CSU Campus, Ampayon, Butuan City  
 Telephone #: (085) 342-5345, 341-9551, Fax #: 342-5684

***Supply and Delivery of Equipment for the Establishment of the City of Butuan Innovation and Makers Space (BIMS)***

**INVITATION TO BID**

Bid Bulletin No : **2019-12-906**

1. The **DEPARTMENT OF SCIENCE AND TECHNOLOGY-CARAGA**, through the General Appropriations Act 2020 intends to apply the sum of ₱ 4,700,000.00 being the Approved Budget for the Contract (ABC) the Supply and Delivery of Three (3) units Motor Vehicles to payments under the contract for PR # 2019-11-877. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The **DEPARTMENT OF SCIENCE AND TECHNOLOGY-CARAGA** now invites bids for the following.

Quantity / Unit	Particulars	Approved Budget for the Contract	
		UNIT COST	TOTAL
<b>LOT 1</b>	<b>Tools for BIMS Project</b>		<b>157,360.00</b>
	- 14 units Handheld Digital Multimeter. 400V ac, 10A ac, 400V dc, 10A dc		
	- 14 units Electric Soldering Iron, 230V, 40W		
	- 14 units Standard Desoldering Pump		
	- 14 units Helping Hand Workstation, Work clip fixture with Magnifier, LED Illuminator and Soldering Iron Stand		
	- 14 units Soldering Wire Lead, 0.7mm		
	- 14 units Soldering Sponge		
	- 14 units 830 Tie Point Solderless Breadboard		
	- 14 units Electrical grade 200mm Long Nose Pliers with 53mm jaw length		
	- 14 units Electrical grade Side-type Wire Cutter 125mm overall length 1.5mm		
	- 14 units Electrical grade Phillips Screwdriver 100mm overall length 2.5mm tip		
	- 14 units Electrical grade Flat Screwdriver 100mm overall length 2.5mm tip		
	- 14 units PCB Mini Hand drill Set with 24V Power Supply Adapter		
	- 14 units Extension Cord 4 gang x 5 meters		
	- 14 units Soldering Tool set with Soldering Iron, Desoldering pump, Wire Stripper, Screwdriver, Drill bits		
	***** VAT INCLUSIVE*****		
	*****FOB DOST-Caraga*****		
<b>LOT 2</b>	<b>IT Equipment for BIMS Project</b>		<b>672,000.00</b>
2 UNITS	<b>A. LAPTOP</b>	48,000.00	96,000.00
	Specifications:		
	CPU: Core i5		
	Processor Model: i5-7200U		
	Processor Speed: 2.5GHz		
	RAM: 4GB		

	Memory Type: DDR4		
	Storage Type: HDD+SSD/eMMC		
	HDD: 1TB		
	Display: 15.6 inches		
	Resolution: Full HD 1920x1080		
	Ethernet: RJ45 Gigabit LAN		
	Wifi: 802.11ac		
	Connectivity: HDMI, USB2.0, USB3.0, Camera, Speakers, Microphone, 10 key, USB Type-C, USB3.1		
	Operating System: Windows 10		
	Supplied with: Laptop Backpack		
	Warranty: 1Year Warranty		
1 UNIT	<b>B. SMART Board interactive flat panel</b>	540,000.00	540,000.00
	Specifications:		
	65" 4K ultra-high-definition LED display		
	iQ technology		
	Equipped with SMART Learning Suite software		
	Dimension: 69 1/4" × 49 5/8" × 11 7/8" (175.8 cm × 126.1 cm × 30.3 cm)		
	Weight: 181 lb. (82.1 kg)		
	Touch Technology: DViT® (Digital Vision Touch) technology		
	Multitouch Technology: 8 touches2		
	Object Awareness: Behavior adjusts automatically to the tool or object being used, whether it's a pen, finger, eraser or palm.		
	Pen ID: Two people can write independently and simultaneously, using different colored ink.		
	Display Type: LED		
	Aspect Ratio: 16:9		
	Optimal Resolution: 3840 × 2160 at 30 Hz (HDMI®) or 60 Hz (DisplayPort)		
	Horizontal Frequency: 26.97–75.0 kHz		
	Vertical Frequency: 23.9–60.32 Hz		
	Contrast Ratio: 1200:1		
	Brightness (Max): 338 cd/m <sup>2</sup>		
	Pixel Pitch: 0.372 mm × 0.372 mm		
	Gamut: 68% of NTSC		
	Viewing Angle: 178°		
	Response Time: 8 ms		
	Presence Detection: Presence detection sensor on the bottom frame		
	Audio: 10 W integrated side-firing speakers (×2)		
	Noise Level: <35 dBA		
	Wireless Technology: Bluetooth® 4.0 dual mode (backwards compatible with Bluetooth 2.1 + EDR)		
	Capture Options: Establish a Bluetooth wireless connection with a supported mobile device (see below) by scanning the interactive flat panel's unique QR code		
	Mounting Holes: For a standard VESA® 600 mm × 400 mm mounting plate, Lower mounting holes 13 3/4" (35 cm) from the bottom of the interactive flat panel		
	Included Cables and Accessories: iQ appliance		

	8' (2.4 m) country-specific power cable		
	16' 5" (5 m) USB cable		
	Pen (×2)		
	3-year warranty		
<b>1 SET</b>	<b>C. DSLR Camera with 18-55 III Lens</b>	<b>30,000.00</b>	<b>30,000.00</b>
	Specification:		
	1 x EOS 4000D body		
	1 x EF-S 18-55mm f/3.5-5.6 III		
	1 x Eyecup Ef		
	1 x Camera Cover R-F-3		
	1 x Camera strap EW-400D		
	1 x Battery Pack LP-E10		
	1 x Battery Charger LC-E10E		
	1 x Power cable for battery charger		
	1 x Lens Cap E-58 II		
	1 x Lens Dust Cap E		
	1 x Getting started guide		
<b>2 SET</b>	<b>D. Portable UHF Wireless Lapel Microphone Headset with Receiver for Voice Amplifier Audio</b>	<b>3,000.00</b>	<b>6,000.00</b>
	Specification:		
	HEADSET MICROPHONE		
	Channel A: 600Mhz-649 Mhz / Channel B 650Mhz-699 Mhz		
	Transmitted Power: 10dBm		
	Capsule Type: Condenser		
	Battery Type: Lithium Battery 400MA		
	Working distance: 30meters		
	Channel A: 600Mhz-649 Mhz / Channel B :650Mhz-699 Mhz		
	Frequency Range: 50Hz-15KHz		
	Battery type: 3.7v Lithium Battery 400MA/1200MA		
	<b>Inside the box.</b>		
	1 Lapel		
	1 x Receiver		
	1 x Lithium Battery		
	1 x Usb Charger		
	***** VAT INCLUSIVE*****		
	*****FOB DOST-Caraga*****		
<b>LOT 3</b>	<b>3D PRINTER for BIMS Project</b>		<b>860,200.00</b>
<b>2 UNIT</b>	<b>A. 3D Printer</b>	<b>420,000.00</b>	<b>840,000.00</b>
	<b>Specifications:</b>		
	Software: CURA File types: STL/OBJ/DAE/AMF		
	OS Requirement: Windows/Mac/Ubuntu Linux		
	Material: ABS, non-toxic PLA, Flexible, CPE		
	Print Technology: FFF (fused filament Fabrication)		
	Printing Build Height: 12 inch (223x223x305mm)		
	Sound Operation level: 49dBa avg.		
	Resolution: up to 20 microns Resolution (settings: Low: 200 microns Medium: 100 microns High: 60 microns Ultra high: 40 micron)		

	Layer resolution: Maximum up to 20microns or 0.02mm		
	Precision: 12.5/12.5/5 micron		
	Materials: ABS, non-toxic PLA, Flexible, CPE		
	Print speed: Min. 30- Max. 300mm/s; Travel speed: Min. 30- Max. 350mm/s		
	Open-source filament system; Temperature: Nozzle: 180-260C Bed: 50-100C		
	Electrical: 100-240VAC; 50-60Hz		
	Heated Bed		
	Connectivity: LCD display control SD Card support USB printing direct		
	1 Year Warranty		
	<b>Inside the box:</b>		
	3D printer Power Supply		
	USB cable		
	Toolbox		
	Calibration Card Sample Printout		
	PLA Filament		
5 PC	<b>B. PLA 3D Printer Filament</b>	4,040.00	20,200.00
	Material: PLA (Polylactic Acid)		
	Diameter: 1.75 millimeters		
	Part Number: 3D - FFG - PLABU		
	Color: Blue		
	Item weight: 2.2 pounds		
	***** VAT INCLUSIVE*****		
	*****FOB DOST-Caraga*****		
<b>LOT 4</b>	<b>Programmable interlocking plastic bricks-based robotics for BIMS Project</b>		<b>112,000.00</b>
1 SET	<b>A. Crawler-mounted, all terrain robot+C158:C183C158:C185C158:C186C15C158:C190</b>	56,000.00	56,000.00
	<b>Specifications:</b>		
	Includes all Interlocking plastic bricks for crawler-mounted, all terrain robot		
	14 x decorative stickers		
	1 x print building instruction for crawler-mounted, all terrain robot		
	Programmable Brick		
	Color Sensor		
	Touch Sensor		
	Remote Infrared Beacon		
	IR Sensor		
	2x Large Motors		
	Medium Motor		
	includes visual programming environment computer software		
	Includes Programmer App		
	Includes Robot Commander App		
	1 Year Warranty		
1 SET	<b>B. Scorpion-like six-legged creature robot</b>	56,000.00	56,000.00
	<b>Specifications:</b>		
	Includes all Interlocking plastic bricks for scorpion-like six-legged creature robot		

	14 x decorative stickers		
	1 x print building instruction for scorpion-like six-legged creature robot"		
	Programmable Brick		
	Color Sensor		
	Touch Sensor		
	Remote Infrared Beacon		
	IR Sensor		
	2x Large Motors		
	Medium Motor		
	includes visual programming environment computer software		
	Includes Programmer App		
	Includes Robot Commander App		
	1 Year Warranty		
	***** VAT INCLUSIVE*****		
	*****FOB DOST-Caraga*****		
<b>LOT 5</b>	<b>Electronic Components for BIMS Project</b>		<b>1,196,232.50</b>
<b>18 SET</b>	<b>A. Universal MCU Digital Training Kit</b>	4,712.50	84,825.00
	With on-board Peripherals		
	- 1pc RS 232C I/F		
	- 1pc LCD port with 2x16 LCD display		
	- 1pc Realtime clock circuit		
	- 1pc Magnetic buzzer		
	- 1pc 2-digit 7-segment display		
	- 1pc 8-channel LED monitor		
	- 1pc Serial I/O expander		
	- 1pc 4x3 keypad		
	- 1pc Encoder switch and push button switches		
	- 1pc 8-bit serial DAC		
	- 1pc 3x adjustable analog voltage sources & LM34 analog temperature sensor		
	- 1pc Relay and stepper motor driver		
	- 1pc Breadboard		
<b>20 SET</b>	<b>B. Arduino Advanced Starter Kit with Manual</b>	10,000.00	200,000.00
	Consists of:		
	- 1pc High Quality Hard Case		
	- 1pc Components Introduction Paper		
	- 1pc Arduino Compatible UNO R3 Board		
	- 1pc USB Cable		
	- 35pcs Jumper Wires		
	- 1pc 830 Point BREADBOARD		
	- 15pcs led (Red, Green, Yellow)		
	- 30pcs Resistance (220R, 10K, 1K)		
	- 1pc 10 Pin Dupont Line (Male to Female)		
	- 1pc Potentiometer		
	- 1pc Active Buzzer		
	- 1pc 74HC595N		
	- 1pc Infrared Receiving Head		
	- 1pc LM35DZ		
	- 1pc Flame Sensor		
	- 2pcs Roll Ball Switch		
	- 3pcs 5mm LDR		

	- 4pcs Button Switch with Cap		
	- 1pc IR Remote Control		
	- 1pc One Digital Tube		
	- 1pc Four Digital Tube		
	- 1pc 8*8 Dot Matrix Tube		
	- 1pc UNL2003 Driver Board		
	- 1pc 5V Stepper Motor		
	- 1pc SG90		
	- 1pc LCD 1602		
	- 1pc IIC I2C Adapter		
	- 1pc PS2 Game Joystick Module		
	- 1pc DHT11 Temperature and Humidity Sensor Module		
	- 1pc Water level measurement module		
	- 1pc RFID module		
<b>30 PC</b>	<b>C. Arduino UNO R3 Board</b>	<b>875</b>	<b>26,250.00</b>
	Microcontroller: ATmega328P		
	Operating Voltage: 5V		
	Digital I/O Pins: 14 pins		
	PWM Digital Pins: 6 pins		
	Analog Input Pins: 6 pins		
	Flash Memory: 32KB		
	SRAM: 2KB		
	Clock Speed: 16 MHz		
<b>15 PC</b>	<b>D. Microcomputer Starter Kit</b>	<b>11,000.00</b>	<b>165,000.00</b>
	Kit includes:		
	Microcomputer Board		
	Microcomputer Extension Board		
	40 Pin Flat Cable		
	16G SD Card		
	Card Reader		
	Microcomputer Power Plug		
	Microcomputer Acrylic Enclosure Kit		
	40P M-F Dupont Cable		
	Jumper Wire		
	400 Point Breadboard		
	Two Color LED Module		
	7 Colour Flashing LED Module		
	Tactile Switch Module		
	RGB-LED Module		
	1 Channel Relay Module		
	Laser Head Sensor Module		
	PI2303 module USB to TTL		
	SW520D Golden Angle sensor module		
	SW-420 Motion Sensor Module		
	Infrared Remote-Control Receiving Module		
	Active Buzzer Module		
	Passive Buzzer Module		
	Reed Switch Sensor Module		
	PCF8591 Module AD/DA Converter		
	Rain Steam Sensor		
	Dual-axis XY Joystick Module		
	Adjustable Potentiometer Module		

	Speed Measurement hall Sensor Module		
	Temperature Sensor Module		
	Sound Detection Sensor Module		
	Light Dependent Resistor module		
	3Pin Flame Sensor Module		
	Smoke Gas Sensor Module		
	Remote Control		
	Touch Module		
	Ultrasonic Sensor Module		
	DS18B20 Temperature Sensor Module		
	Rotary Encoder Module		
	Infrared Tracing Obstacle Sensor		
	DS1302 Real Time Clock Module		
	Tracking Sensor Module		
<b>5 PC</b>	<b>E. 8MP Version 2 Camera Module</b>	3,300	16,500.00
	<b>Specification:</b>		
	8-megapixel native resolution high quality Sony IMX219 image sensor		
	Cameras are capable of 3280 x 2464-pixel static images		
	Capture video at 1080p30, 720p60 and 640x480p90 resolutions		
	All software is supported within the latest version of Raspbian Operating System		
	1.4 µm X 1.4 µm pixel with OmniBSI technology for high performance (high sensitivity, low crosstalk, low noise)		
	Optical size of 1/4"		
	Warranty: 7 Days		
<b>14 SET</b>	<b>F. e-Bot (Sumo Bot)</b>	9,637.50	134,925.00
	- Power input of 7.2 VDC Ni-MH Rechargeable Battery		
	- Micro-controller w/ ATmega168P		
	- Length - 180 mm		
	- Width - 138 mm		
	- Height - 120 mm		
<b>15 SET</b>	<b>G. Arduino 37 in 1 Sensor Kit</b>	3,487.50	52,312.50
	Includes basic components and sensors		
	Package Dimensions: 273*190*43mm		
	- 1 x Small passive buzzer module		
	- 1 x 2-color LED module		
	- 1 x Hit sensor module		
	- 1 x Vibration switch module		
	- 1 x Photo resistor module		
	- 1 x Key switch module		
	- 1 x Tilt switch module		
	- 1 x 3-color full-color LED SMD modules		
	- 1 x Infrared emission sensor module		
	- 1 x 3-color LED module		
	- 1 x Mercury open optical module		
	- 1 x Yin Yi 2-color LED module 3MM		
	- 1 x Active buzzer module		
	- 1 x Temperature sensor module		
	- 1 x Automatic flashing colorful LED module		

	- 1 x Mini magnetic reed modules		
	- 1 x Class Bihor magnetic sensor		
	- 1 x Magic light cup module		
	- 1 x Rotary encoder module		
	- 1 x Optical broken module		
	- 1 x Detect the heartbeat module		
	- 1 x Reed module		
	- 1 x Obstacle avoidance sensor module		
	- 1 x Hunt sensor module		
	- 1 x Microphone sound sensor module		
	- 1 x Laser sensor module		
	- 1 x 5V relay module		
	- 1 x Temperature sensor module		
	- 1 x Temperature sensor module		
	- 1 x Linear magnetic Hall sensors		
	- 1 x Flame sensor module		
	- 1 x Sensitive microphone sensor module		
	- 1 x Temperature and humidity sensor module		
	- 1 x XY-axis joystick module		
	- 1 x Metal touch sensor module		
	- 1 x HIGH QUALITY Box		
	- 1 x learn tutorial CD		
<b>1 SET</b>	<b>H. Resistor 1/4 Watts</b>	<b>7,440.00</b>	<b>7,440.00</b>
	- 62 pcs 10 Ohms		
	- 62 pcs 100 Ohms		
	- 62 pcs 1K Ohms		
	- 62 pcs 1M Ohms		
	- 62 pcs 470 Ohms		
	- 62 pcs 220 Ohms		
	- 62 pcs 110 Ohms		
	- 62 pcs 4.7K Ohms		
	- 62 pcs 2.2K Ohms		
	- 62 pcs 22K Ohms		
	- 62 pcs 220K Ohms		
	- 62 pcs 10M Ohms		
<b>1 SET</b>	<b>I. Resistor 1/2 Watts</b>	<b>7,440.00</b>	<b>7,440.00</b>
	- 62 pcs 10 Ohms		
	- 62 pcs 100 Ohms		
	- 62 pcs 1K Ohms		
	- 62 pcs 1M Ohms		
	- 62 pcs 470 Ohms		
	- 62 pcs 220 Ohms		
	- 62 pcs 110 Ohms		
	- 62 pcs 4.7K Ohms		
	- 62 pcs 2.2K Ohms		
	- 62 pcs 22K Ohms		
	- 62 pcs 220K Ohms		
	- 62 pcs 10M Ohms		
<b>1 SET</b>	<b>J. Electrolytic Capacitors</b>	<b>25,000.00</b>	<b>25,000.00</b>
	- 62 pcs 1uF 16V		
	- 62 pcs 10uF 16V		



	- 62 pcs 100uF 16V		
	- 62 pcs 1000uF 16V		
	- 62 pcs 0.47uF 16V		
	- 62 pcs 1uF 25V		
	- 62 pcs 10uF 25V		
	- 62 pcs 100uF 25V		
	- 62 pcs 1000uF 25V		
	- 62 pcs 0.47uF 25V		
<b>1 SET</b>	<b>K. Potentiometers/Single</b>	9,800.00	9,800.00
	- 20 pcs 1K Ohms		
	- 20 pcs 10K Ohms		
	- 20 pcs 100K Ohms		
	- 20 pcs 500K Ohms		
	- 20 pcs 20K Ohms		
	- 20 pcs 50K Ohms		
	- 20 pcs 5K Ohms		
<b>1 SET</b>	<b>L. Potentiometers/Dual</b>	9,800.00	9,800.00
	- 20 pcs 1K Ohms		
	- 20 pcs 10K Ohms		
	- 20 pcs 100K Ohms		
	- 20 pcs 500K Ohms		
	- 20 pcs 20K Ohms		
	- 20 pcs 50K Ohms		
	- 20 pcs 5K Ohms		
<b>1 SET</b>	<b>M. Diodes</b>	7,000.00	7,000.00
	- 20 pcs FL406 Bridge Rectifier diode 600V 4A		
	- 20 pcs SIVB 10 Bridge Rectifier Package 100V 1A		
	- 20 pcs KBP2016G Bridge Rectifier diode 600V 2A		
	- 20 pcs 1N4002 Diode 100V 1A		
	- 20 pcs 1N4004 Diode 400V 1A		
<b>1 SET</b>	<b>N. Transistors</b>	3,000.00	3,000.00
	- 20 pcs NPN 2N3904		
	- 20 pcs PNP 2N3906		
<b>1 SET</b>	<b>O. Voltage Regulators</b>	16,640.00	16,640.00
	- 20 pcs 7818CT 18V 1A		
	- 20 pcs 78L05AC 5V 100mA		
	- 20 pcs 78L08 8V 100mA		
	- 20 pcs 78L12 12V 100mA		
	- 20 pcs 78M05 5V 1.5A		
	- 20 pcs EZ1084CT 3.3V 5A		
	- 20 pcs EZ1085CT 3.3V 3A		
	- 20 pcs EZ1086CT 3.3V 1.5A		
<b>1 SET</b>	<b>P. Safety Fuses</b>	2,000.00	2,000.00
	- 20 pcs 1A 250V 20mm Fuse (Wired Fuse) Glass Type		
	- 20 pcs 3A 125V 20mm Fuse (Wired Fuse) Glass Type		
	- 20 pcs 5A 125V 20mm Fuse (Wired Fuse) Glass Type		
<b>1 SET</b>	<b>Q. Adapter and Batteries</b>	11,000.00	11,000.00

	- 8 pcs Universal Plug Adapter - 250V, 10A		
	- 20 pcs 9V Rechargeable Battery		
<b>1 SET</b>	<b>R. Sensors</b>	124,000.00	124,000.00
	<b>- 20 units pH Sensor</b>		
	Specifications:		
	- Power Input - 5V DC		
	- Working Current - 5-10mA		
	- Detection Concentration Range - PH 0-14		
	- Detection range of temperature - 0-80 °C		
	- Response time < 5s		
	- Output - Analog		
	- Stability time < 60s		
	- Power Consumption < 0.5W		
	- Working Temperature -10 ~ +50 °C		
	- Working Humidity 95% RH (Nominal Humidity 65% RH)		
	- Weight - 25g		
	- PCB Dimensions 42x32x20mm		
	<b>- 20 units TDS Sensor Meter</b>		
	Specifications:		
	- Input Voltage: 3.3 ~ 5.5V		
	- Output Voltage: 0 ~ 2.3V		
	- Working Current: 3 ~ 6mA		
	- TDS Measurement Range: 0 ~ 1000ppm		
	- TDS Measurement Accuracy: ± 10% F.S. (25 °C)		
	- Module Interface: PH2.0-3P		
	- Electrode Interface: XH2.54-2P		
	TDS Probe		
	- Number of Needle: 2		
	- Total Length: 83cm		
	- Connection Interface: XH2.54-2P		
	- Other: Waterproof Probe		
<b>1 SET</b>	<b>S. Arduino-Compatible Shields</b>	183,800.00	183,800.00
	- 8 units 2x16 LCD Module with I2C Board		
	- with I2C Board		
	- with backlight		
	- 8 units HN-528 Power Supply		
	- Output - 5V 2A		
	- 5.5mm/2.1mm DC		
	- Barrel Plug, Centre position		
	- 8 units Bluetooth Shield		
	- EGBT-04MS series		
	- Data Interface - Serial UART		
	- Available Functions - Master    Slave		
	- Microcontroller board portable		
	- 8 units ESP-11 Wi-Fi Shield		
	- Power Input - 3.3V		
	Operating voltage (ESP8266)		

	- +5V DC (Internal supply)		
	- 5-7V DC (External Supply)		
	- Data Interface - UART connection		
	- 802.11b/g/n		
	- @2.4 GHz, support for WPA/WPA2		
	- 8 units GSM Shield (SIM900D)		
	- Power Input 5VDC 1.5A		
	- Serial UART		
	- Command Line - AT Commands		
	- 8 units LCD & Keypad Shield		
	- 2x16 and 4x20 LCD Display		
	- Microcontroller and X extension pins		
	- 5 Push buttons and 1 Reset button		
	- Power port (GND, +5V, +3v3) on board		
	- 8 units OLED Shield (128 x 160 pixels)		
	- 128 x 160 pixels		
	- LED Controller - LD7222 COG		
	- 8 units SD/MMC Card Shield		
	- Powered via Microcontroller board		
	- SD-Card Sockets 2x SDHC Slots		
	- 8 units Sensors Shield		
	- Built -in On-board sensor and modules pins		
	- with 28 LED Monitor		
	- 2CH tiny DC Motor Driver		
	- 8 units UHF-STD Data Transceiver		
	- Frequency Range: 431.1 MHz – 437.3 MHz		
	- Channel Separation: 400kHz		
	- Modulation: FSK		
	- TX RF power: 100mW (20dbm) typica		
	- Frequency Range: 431.1 MHz – 437.3 MHz		
	- Rx sensitivity: -105dbm typical		
	- UART Baud Rate: 9600bps		
	- Operating Voltage: 5V/3.3V jumper selectable		
	- Transmit to Receive latency: 20-30ms		
	-RSSI: YES 150-635, with 635 corresponding to -38dbm antenna RF input signal strength		
	-10 units 20x4 LCD Display Module I2C (Arduino Platform Compatible)		
<b>2 SET</b>	<b>T. Laser Engraving Engraver Machine Kit</b>	15,000.00	30,000.00
	Specifications:		
	Name: Laser Engraver		
	Model: 483959		
	Frame Material: Aluminum Alloy+ Acrylic		
	Machine Color: Silver		
	Laser Power: 500mW 5V/12V		
	Power Supply: DC 12V 2A		
	Input: AV 100-240V		

	Adapter Model: GE-12300		
	Adapter Input: AC 100-240V 50/60Hz		
	Adapter Output: DC 12V 3A		
	Adapter Plug Standard: US Plug		
	Stepper Motor: 3 Motors		
	Control Board: 3 Axis USB Standard Control Panel		
	Support System: For Windows 7		
	USB Cable Port: MiNI USB		
	USB Cable Length: 140cm		
	Machine dimension: 31x26x23cm		
	Max. Engraving Area: 20x17cm		
	Engraving Density: 0.1mm		
	Can Be Carved Materials: bamboo, wood, paper, plastic, leather, etc.		
<b>1 SET</b>	<b>U. Drone and hovercraft</b>	33,500.00	33,500.00
	<b>Specifications:</b>		
	Size: Aircraft:232 x 223 x 53 mm (9.13 x 8.78 x 2 inches) Hovercraft:335 x 208 x 127 mm (13.2 x 8.19 x 5 inches)		
	Weight Aircraft: 150g Hovercraft: 195g		
	Battery: 7.4V, 700mAh		
	Connectivity: Bluetooth		
	Sensors: Ultrasonic, barometer, 6-axis gyroscope		
	Motor: Hollow cup motor x 6		
	Software and programming: Makeblock app for iOS and Android		
	Parts List:		
	1× Main Control Module		
	1× Hovercraft Base		
	1× Battery		
	10× Protective Cover		
	6× Rotors		
	1× Charger		
	1× Charging Cable		
<b>1 SET</b>	<b>V. Ultimate 2.0 10-in-1 Robot Kit</b>	46,000.00	46,000.00
	<b>Specifications:</b>		
	Microcontroller: ATMEGA2560-16AU		
	Input voltage: 6V-12V DC		
	Operating Voltage: 5V DC		
	I/O Pins: 43		
	Serial Ports: 3		
	Analog Input Pins: 15		
	I2C Interface: 1		
	SPI Interface: 1		
	<b>Parts Lists:</b>		
	4 x Beam0824-016		
	5 x Beam0824 - 032		
	3 x Beam0824-064		
	2 x Beam0824-128		
	1 x Slide Beam0824-176		
	2 x Slide Beam0824-192		
	2 x Beam0808-024		

2 x Plate0324-056		
3 x Plate0324-088		
4 x Beam0412-076		
4 x Beam0412-092		
4 x Beam0412-140		
6 x Beam0412-188		
2 x Beam0412-220		
2 x Bracket P3		
3 x 25mm DC Motor Bracket		
4 x Bracket 3x3		
2 x Plate 3x6		
1 x Plate 7x9-B		
6 x Shaft Connector 4mm		
4 x Stiffener1616-08-M4		
1 x Plane Bearing Turntable D34x24mm		
1 x Quick Release Plate		
2 x 25mm Motor Bracket-72T		
2 x MegaPi Acrylic Bracket		
4 x Rubber Blanket		
4 x Tire 90T B		
6 x Plastic Timing Pulley 90T		
3 x Plastic Gear 8T		
3 x Plastic Gear 56T		
2 x Plastic Gear 72T		
1 x 360 degrees Mobile Phone Bracket		
2 x Track 80x139mm		
1 x Battery Holder 6AA		
12 x Flange Copper Sleeve 4x8x4mm		
12 x Shaft Collar 4mm		
6 x Threaded Shaft 4 x 39mm		
2 x D shaft D4x50mm		
2 x Shaft D4x88mm		
1x D shaft D4x160mm		
4 x Brass Stud M4 x 16		
4 x Plastic Ring 4x7x2		
8 x Plastic Ring 4x7x3		
2 x Plastic Ring 4x7x10		
20 x Plastic Rivet 4060		
20 x Plastic Rivet 4100		
20 x Plastic Rivet 4120		
12 x Headless Set Screw M3 x 5		
8 x Headless Set screw M3 x 8		
6 x Countersunk Screw M3 x 8		
4 x Countersunk Screw M3x10		
50 x Screw M4x8		
46 x Screw M4x14		
10 x Screw M4 x 16		
4 x Screw M4 x 22		
4 x Screw M4 x 30		
47 x Nut M4		
10 x Nylon Lock Nut M4		
1 x 25mm DC encoder Motor 9V/86RPM		
2 x 25mm DC encoder Motor 9V/185RPM		
1 x Makeblock Robot Gripper		

	3 x 25mm DC Encoder Motor Cable		
	1 x MegaPi		
	4 x MegaPi Encoder/DC motor Driver		
	1 x MegaPi shield for RJ25		
	1 x Bluetooth Module		
	1 x Me Ultrasonic Sensor		
	1 x Me Line Follower		
	1 x Me Shutter		
	1 x Me-3-Axis Accelerometer and Gyro Sensor		
	1 x Me Adapter		
	1 x USB cable B-1.3m		
	2 x 6P6C RJ25 Cable 20cm		
	1 x 6P6C RJ25 Cable 35cm		
	10 x Rubber Bank		
	10 x Nylon Cable Tie 1.9x100		
	1 x Cross&2.5mm HEX Screwdriver		
	1 x Small Four-way Socket Wrench		
	1 x Wrench 5mm & 7mm		
	1 x HEX key 1.5mm		
	***** VAT INCLUSIVE*****		
	*****FOB DOST-Caraga*****		
	<b>GRAND TOTAL</b>		<b>2,997,792.50</b>

Delivery of the Goods is required within **90 days upon receipt of Notice to Proceed**. Bidders should have completed, within **120 days from the date of submission and receipt of bids**, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.

3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the “Government Procurement Reform Act”. Bidding is open to all interested bidders, whether local or foreign, subject to the conditions for eligibility provided in the IRR of RA 9184.

4. Interested bidders may obtain further information from **DEPARTMENT OF SCIENCE AND TECHNOLOGY-CARAGA** and inspect the Bidding Documents at the address given below during **8:00 AM to 5:00 PM**

5. A complete set of Bidding Documents may be acquired by interested Bidders on **February 3 to March 3, 2020** from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of:

- LOT 1 - ₱ 500.00
- LOT 2 - ₱ 500.00
- LOT 3 - ₱ 500.00
- LOT 4 - ₱ 500.00
- LOT 5 - ₱ 1,200.00
- LOTS 1 to 5 - ₱ 3,000.00

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. The **DEPARTMENT OF SCIENCE AND TECHNOLOGY-CARAGA** will hold a Pre-Bid Conference on **February 11, 2020 @ 10:30 AM** at **DOST Caraga Conference Room, CSU Campus, Ampayon, Butuan City**, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat at the address below on or before **12:00 NOON of March 3, 2020**. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB Clause 18**.

Bid opening shall be on **March 3, 2020 at 1:00 PM** at **DOST Caraga Conference Room, CSU Campus, Ampayon, Butuan City**. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

8. The **DEPARTMENT OF SCIENCE AND TECHNOLOGY-CARAGA** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

9. For further information, please refer to:

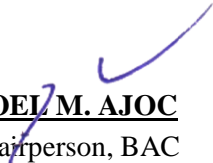
**BAC SECRETARIAT**

DOST CARAGA, CSU CAMPUS, AMPAYON BUTUAN CITY, 8600

Tel.: 085 342-5345,

Email: bacsec.dost13@gmail.com

Fax: 085 342-5684

  
NOEL M. AJOC  
Chairperson, BAC