

Date: Thursday, September 14, 2023  
From: Jennifer Severson, Grants & Compliance Manager  
Subject: Bid Prices for 3D Printers

To Whom It May Concern:

The enclosed materials are being submitted to your firm requesting bid prices for equipment items. The bid proposal form and bid documents are also available for download at the following website address: <http://www.lakeareatech.edu/bids>. All items available through your business must be quoted as F.O.B. Watertown, SD. This is a request for prices only and is not an order for shipment.

The bid opening is scheduled on Wednesday, September 27, 2023, at 2 p.m. in Conference Room 420 in the Lake Area Tech Student Center and is open to the public. Please return the bid proposal form and supporting documentation in a **sealed envelope clearly marked "3D Printer Bid"** prior to the bid opening date and time to:

Jennifer Severson, Grants & Compliance Manager  
Lake Area Technical College  
1201 Arrow Avenue  
PO Box 730  
Watertown, SD 57201

Thank you for your interest.

  
Jennifer Severson





## GENERAL SPECIFICATIONS

September 14, 2023

1. Sealed bids for furnishing 3D Printers will be received by the School Board of Watertown School District No. 14-4 of Codington County, South Dakota, up until 2 p.m. on Wednesday, September 27, 2023, at the Administrative Offices at the Lake Area Technical College, 1201 Arrow Ave., PO Box 730, Watertown, South Dakota. Please contact Jennifer Severson, Grants & Compliance Manager, at (605) 882-5284, ext 253, for any questions you may have regarding the bid documents or process. All bids will be opened and tabulated at said time, referred for study and acted upon by the School Board at its next scheduled meeting.

2. Bidding Form: The School Board requests that bidders use the Bid Proposal Form as prepared by the School District which is entitled "BID PROPOSAL FORM – 3D Printers." Bidders will be furnished with an electronic copy of said Bid Proposal Form upon request. The bid proposal form and bid documents are also available for download at the following website address: <http://www.lakeareatech.edu/bids>. Please complete and return one (1) copy to Jennifer Severson, Grants & Compliance Manager, 1201 Arrow Avenue, PO Box 730, Watertown, South Dakota 57201. **Bidder shall clearly mark on the envelope that a "3D Printer Bid" is enclosed.**

3. Addenda/Revisions: In the event that it becomes necessary to clarify or revise this Bid Memo, Specifications and/or Attachments, such clarification or revision will be by addendum. Any addenda will become part of the bid package and any contract awarded as a result of the bid opening. All addenda will be available at the following website address: <http://www.lakeareatech.edu/bids>. There are no designated dates for release of addenda. Interested bidders should check the bids website on a daily basis from time of bid package posting through bid opening. It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this procurement.

4. Equal Clause: Where names and model numbers of certain manufacturer's items are mentioned in the Specifications or Bid Proposal Form, other names and model numbers of like nature, utility or merit, may be submitted; but the bidder must furnish complete data to show that their items are equal to that specified. The School Board reserves the right to determine whether the items are of equal value to the items as specified and the right to determine and select the items it feels are most suitable to the needs of the District. If bidder is bidding a different item than the specified, the bidder shall indicate the make and model numbers of like nature, utility or merit may be submitted; but the bidder must furnish complete data to show that their items are equal to that specified.

5. Awarding of Contracts: The board reserves the right to contract with the lowest responsible bidder whose unit bid price per item is lowest. Bidders are requested to extend the unit bid price per item to the total price per item for the quantity specified in the space provided on the Bid Proposal Form.

6. Time of Delivery: All items shall be delivered and tested before November 30, 2023. If additional time is needed, indicate the requested delivery date on the bid proposal form. Winning bid must coordinate equipment delivery schedules with LATC. All bids shall be F.O.B. Watertown, South Dakota.

7. Guarantee: The successful bidder shall guarantee said items against defects in materials and workmanship for a minimum period of one year from the date of delivery. All items bid shall be the latest model of manufacture as indicated by serial number. This paragraph not applicable to used equipment.

8. Applicable Taxes: Bid amounts must include all applicable taxes. Typically, the District is exempt from State, County or Municipal sales tax. Exemption Certificates will be furnished by the Lake Area Technical College upon request.

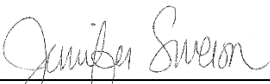
9. State Sales Tax Requirement: Public corporations in South Dakota, such as the Watertown School District, may not purchase goods or services from any retailer who fails or refuses to collect and remit sales tax.

10. The School Board reserves the right to reject any and all bids and to waive informalities.

11. By virtue of statutory authority, preference will be given to contractors, labor, materials, products, and supplies found or produced within the State of South Dakota in a manner provided by law.

Watertown School District No. 14-4  
Of Codington County, South Dakota

Lake Area Technical College

By   
\_\_\_\_\_  
Jennifer Severson, Grants & Compliance Manager

## DETAILED SPECIFICATIONS

3D Printers  
Lake Area Technical College

In addition to the "GENERAL SPECIFICATIONS" provided, the following, more detailed requirements are set forth for supplying the proposed 3D Printers for Lake Area Technical College's Robotics/Electronic Systems Technology program. Please contact Jennifer Severson, Grants & Compliance Manager, at (605) 882-5284, ext 253, for any questions you may have regarding the bid documents or process.

### **QUANTITY:**

Lake Area Technical College intends to purchase three (3) stereolithography 3D printers and four (4) 3D circuit board printers, depending on budget constraints, to satisfy the specifications included in Attachments A, B, C and D.

### **BASE BID:**

The base bid(s) shall include 3D Printers with capabilities as outlined in Attachments A, B, C and D.

### **EQUAL QUALITY AND FUNCTIONALITY CLAUSE:**

Bidder must furnish complete data to show that their items are equal to that specified in quality, performance, and functionality. The School Board reserves the right to determine whether the items are of equal quality, performance, and functionality to the items as specified and the right to determine and select the items they feel are most suitable to the needs of the District.

### **SERVICE AGREEMENT:**

All proposals must outline a service agreement which provides timely replacement or repair of defective or damaged items. Bidder must provide service agreement which allows any item to be repaired or replaced within seven days of notification.

Watertown School District No. 14-4  
Of Codington County, South Dakota

Lake Area Technical College

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### ATTACHMENTS:

- A. B9 Core 6 Series-MPro Stereolithography 3D Printer Bid Specs
- B. B9 Core 5 Series XL-385 Stereolithography 3D Printer Bid Specs
- C. Voltera V-One 3D Circuit Board Printer Bid Specs
- D. LPKF ProtoMat S64 3D Circuit Board Printer Bid Specs

**Attachment A**  
**B9 Core 6 Series-MPro Stereolithography 3D Printer Bid Specs**

**Preferred Make/Model**

B9 Core 6 Series-MPro

**Required Features**

Machine Dimensions: 20 x 22 x 39"  
Print Dimensions: 192 x 108 x 320 mm.  
Effective Resolution: <40µm XY, 50-150µm Z  
DLP Light Engine: 385nm Wave Length

1 Year Manufacturer's Warranty

Real-time 3D printing adjustments for optical distortion and material properties

**Accessories/Additional Features:**

- Resin, approximately 16 kg total volume
- Post-processing bundle including a post-processing cleaning unit and model curing unit
- One-year manufacturer's extended warranty
- Annual premium service package including:
  - On-site installation and setup
  - Four (4) -hour training session each semester for educators and new hires
  - Fifteen (15) hours consulting
  - Four (4) print optimization workshops
  - One (1) master class for students with additive subject matter experts
  - Four (4) additional hours of support

***Bid Price to include 1) Shipping and/or Freight to the Lake Area Technical College campus and 2) installation, if needed.***

**Attachment B**  
**B9 Core 5 Series XL-385 Stereolithography 3D Printer Bid Specs**

**Preferred Make/Model**

B9 Core 5 Series XL-385

**Required Features**

Machine Dimensions:	10.5 x 16.5 x 23.5"
Print Dimensions:	124.8x 70.2 x 127 mm.
Effective Resolution:	< 25µm XY, 30-150µm Z.
DLP Light Engine:	385nm Wave Length
Connectivity:	Wi-Fi, Ethernet & USB drive
Printer Dimensions:	267 x 420 x 593mm (10.5 x 16.5 x 23.3")
Printer Weight:	19kg (42lbs)
Power:	12VDC 7A

1 Year Manufacturer's Warranty

Real-time 3D printing adjustments for optical distortion and material properties

**Accessories/Additional Features:**

- Resin, approximately 16 kg total volume
- LED light curing unit with multi-wavelength curing solution
- Post-processing cleaning unit with build table
- One-year manufacturer's extended warranty
- Annual premium service package including:
  - On-site installation and setup
  - Four (4) -hour training session each semester for educators and new hires
  - Fifteen (15) hours consulting
  - Four (4) print optimization workshops
  - Hot swap program
  - One (1) master class for students with additive subject matter experts
  - Four (4) additional hours of support

***Bid Price to include 1) Shipping and/or Freight to the Lake Area Technical College campus and 2) installation, if needed.***

**Attachment C**  
**Voltera V-One 3D Circuit Board Printer Bid Specs**

**Preferred Make/Model**

Voltera V-One w/Drill Attachment 100-120V Bundle

**Required Features**

- Direct ink write (DIW)
- Open loop pressure control
- 0.2 mm minimum trace width
- 128 mm x 116 mm print area
- 10  $\mu\text{m}$  x 10  $\mu\text{m}$  x 1  $\mu\text{m}$  XYZ resolution
- Up to 3 mm substrate thickness
- Substrates: rigid
- Manual alignment and registration
- Up to 2mL syringe capacity
- Dispensable materials: solder paste, conductor 3
- Integrated hot plate for cure and reflow soldering

**Accessories/Additional Features:**

Drill attachment 100-120V Bundle including:

- PCB drill set - metric range
- 3" x 4" FR1 substrate - 6 pack
- 2" x 3" FR1 substrate - 10 pack
- Punk Console component kit
- FR1 sacrificial layer
- M3x10 thumbscrews - 4 pack
- V-One drill replacement screw set - 2 pack
- 1.0mm rivet tool
- 0.4mm rivet tool
- 1.0mm ID copper rivets - 200 pack
- 0.4mm ID copper rivets - 200 pack
- All necessary power supply, power adapter, cables, and user guides

***Bid Price to include Shipping and/or Freight to the Lake Area Technical College campus.***



**Attachment D**  
**LPKF ProtoMat S64 3D Circuit Board Printer Bid Specs**

**Preferred Make/Model**

LPKF ProtoMat S64

**Required Features**

- Fiducial recognition camera
- 15-position auto tool change (option for up to 20)
- Auto tool depth adjustment with +/- 1µm precision auto switch sensor
- Acoustic cabinet
- Software with working area of 9" x 12" x 1.6" (z-axis clearance); 0.3" or 8mm (max pocket depth for 2.5D operations)

**Accessories/Additional Features:**

- Starter Package, including 10 x Universal Cutter, 2 x Micro Cutter; End Mills: 1 x 31 mil, 2 x 39 mil, 2 x 79 mil; Long End Mills: 1 x 39 mil, 1 x 79 mil; Contour Routers: 2 x 39 mil, 2 x 79 mil; Drill Bits: 2 x 15.8 mil, 2 x 19.7 mil, 2 x 23.6 mil, 2 x 27.6 mil, 2 x 31.5 mil, 2 x 35.4 mil, 2 x 39.4 mil, 1 x 47.0 mil, 1 x 55.1 mil, 2 x 59.1 mil, 1 x 63 mil, 2 x 70.9 mil, 2 x 78.7 mil, 2 x 118.1 mil
- RF Starter Package, including end Mills: 5 x 10 mil, 3 x 16 mil, 3 x 6 mil, 5 x 39 mil, 2 x 79 mil; Long End Mill: 2 x 79 mil
- Auto-Switched Variable Speed Dust Extraction System

***Bid Price to include Shipping and/or Freight to the Lake Area Technical College campus.***