

COMPLETE THIS FORM TO INITIATE SUPPLIER SCOUTING MEPNN Supplier Scouting Opportunity Synopsis

*The submitting entity agrees to notify NIST MEP of the status of actions taken as a result of this scouting instance within 30 days after receiving a results report. For instances where the submitting entity is an MEP Center submitting on behalf of a client, the MEP Center agrees to notify NIST MEP on behalf of their client. For instances where the submission is direct from federal/state agencies or is a private company, the submitting federal/state agency or private company entity agrees to notify NIST MEP. Notification should be via email to scouting@nist.gov, indicating the following:

- Contact with matches identified in report complete and supply contract awarded, process complete
- Contact with matches identified in report complete and no supply contract awarded, process complete
- Contact with matches identified in report complete and supply negotiations underway, process in progress
- Contact with matches identified in report underway; supply negotiations not yet begun; process in progress
- · Contact with matches identified in report not yet begun, process in progress
- Contact with matches identified in report will not occur within the next 6-months, process complete

High-Resolution 100 keV Electron Beam Lithography Systems

days
Opportunities will be postedfor 30 days unless specified

Item to be Scouted

Please describe the item application/ the end use of item.* Provide the item number if applicable: (N95 Mask vs Protective Mask).

The National Institute of Standards and Technology (NIST) seeks information on commercial vendors capable of providing a two high-resolution 100 keV electron beam lithography systems for the fabrication of aggressively nano scaled devices. The system will be sited and used as a shared resource accessible to researchers from industry, academia, NIST, and other government agencies in the CNST NanoFab. The NanoFab is a state-of-the-art nanofabrication laboratory and has a myriad of projects that rely on direct lithographic definition of complex shapes down to the single digit nanometer dimensions.

2022-131 Supplier Scouting Number (NIST MEP use)				
333242				
Scouting customer/product <u>NAICS Code</u> , if known a. Type of supplier being sought*				
TECHNICAL INFORMATION:	1. Supplier Information	Manufacturer Other		
		b. Reason for scouting submission*		
		□ 2 nd Supplier □ Price □ Re-shore □ Past supplier no longer available		
		New Product Startup		
	2	Other		
Ň.				
	an 2	a. Describe the manufacturing processes (elaborate to provide as much detail as possible).*		
	2. Summary of Te and Performance	Item to be purchased as a standalone unit		
	ny o	b. Provide dimensions / size / tolerances / performance specifications for the item.*		
	of Technic nce Requ	The NanoFab currently operates two high-resolution 100 keV electron beam lithography systems that were purchased over a decade ago and are based on a technology that was introduced 18+ years ago, in 2004. These two 100 keV systems are a direct replacement for the current two electron beam lithography systems in the CNST NanoFab and are furthermore intended to be used by NanoFab users to acilitate access to nanoscale lithographic capability that provides patterning and alignment accuracy at nanometer dimensions.		
	al siren	c. List required materials needed to make the product, including materials of product components.*		
	Technical Specifications ce Requirements:	Item to be purchased as a standalone unit		



	2. 3	d. Are there applicable certification requirements?* 🛛 Yes 🗧 No Please explain
	Sum	
	ımar	
	Summary of Technical Specifications cont:	
		e. Are there applicable regulations?* 🗌 Yes 🛛 🔳 No Please explain
	spec	
	ificat co	
	ations and Performance cont:	f. Are there any other standards, requirements, etc.?* 🗌 Yes 🛛 🔳 No Please explain
		g. Additional Comments: Is there other information that would impact the item's performance or usefulness? Please explain.
	ice R	
	lequi	
	Requirements	
	ents	
Π	p.ω	3a. Estimated potential business volume (i.e., # Units Per Day, Month, Year) *:
3USI		Two Units
VES	ne	
BUSINESS INFORMATION:	and .	
		b. Estimated target price / unit cost information (flexible and negotiable <u>not</u> accepted) *:
		Unknown
	4. Delive	a. When is it needed by? (Immediate, 30 Days, 6 months, etc.)*
		ASAP
	ry Re	b. Describe packaging requirements (i.e., individually/group packaging)*
	əquir	Flexible
	Delivery Requirements:	c. Where will this item be shipped?*
		NIST, 100 Bureau Drive, Gaithersburg, MD 20899
	5. Additional Comments:	Is there other information you would like to include?
	al Co	
	mm	
	ents:	