

COMPLETE THIS FORM TO INITIATE SUPPLIER SCOUTING

MEPNN Supplier Scouting Opportunity Synopsis

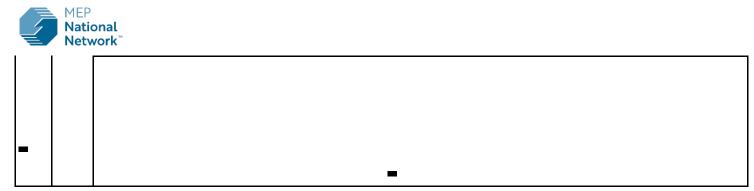
- *The submitting entity agrees to notify NIST MEP of the status of actions taken as a result of this scouting instance within 30 days after receiving a results report. For instances where the submitting entity is an MEP Center submitting on behalf of a client, the MEP Center agrees to notify NIST MEP 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

	• Co	ntact with matches identifie	d in report underway; supply negotiations not yet begun; process in progress
	 Co 	ntact with matches identifie	ed in report not yet begun, process in progress
	 Co 	ntact with matches identifie	d in report will not occur within the next 6-months, process complete
			1
Mechani	cal Clamp	Based Single Wafer Deep Silicon Etcher	days
Item to be Scouted			Opportunities will be postedfor 30 days unless specified
Please d	escribe t	the item application/ the end use of i	tem.* Provide the item number if applicable: (N95 Mask vs Protective Mask).
support r industry,	nanofabrica academia	ation in the Center for Nanoscale Science ar , NIST, and other government agencies in th	eks information on commercial vendors that can provide a mechanical clamp based single wafer deep silicon etching system to nd Technology (CNST) user facility. The system will be sited and used as a shared resource accessible to researchers from ne CNST NanoFab. The mechanical clamp based deep silicon etching system is a pattern transfer tool that uses fluorocarbon -scale structures in silicon materials. Applications include fabricating nano-semiconductor and nano-photonic devices.
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		g Number (NIST MEP use)	
		B realises (1815) their east,	1
3332		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Scouting	custom	er/product NAICS Code, if known	
TEC		a. Type of supplier being Manufacturer	
포	Sup		☐ Contract Manufacturer ☐ Distributor
ĮC.	Supplier	☐ Other	
2		b. Reason for scouting su	hmission*
TECHNICAL INFORMATION:	Information		Price
R	mat	• •	
ΙA	ion	☐ New Product Startu	ıb
ō		Other	
		5 " the feet	
	anc		uring processes (elaborate to provide as much detail as possible).*
	2. Summary of Te and Performance		urchased as a standalone unit
	ry of man	_	ize / tolerances / performance specifications for the item.*
	f Te		le wafer deep silicon etching system is a pattern transfer tool that uses inductive coupled plasma (ICP)
	Re	using fluorocarbon and other etch	icate micron- and nano-scale structures in silicon with vertical sidewall of high aspect ratio, primarily ing gases. This new mechanical clamp based single wafer deep silicon etching system will be used to
	nical Specifiquirements	minimize the system down time, ir	nprove the process repeatability and add new NanoFab's etching process capabilities. 2. Tool
	rem	process chamber. 2) A process ch	e equipped with following components: 1) A load-lock that transfers the samples in and out of the namber that is compatible with reactive chemicals such as SF6, C4F8. 3) An ICP that operates from 0 to
	pec	3500 W or higher. 4) A reactive io	n etching (RIE) electrode that operates from 0 to 300 W or higher. 5) Software that supports both manual
	pecificati ents:		ty interlocks to keep users safe. 3. Wafer compatibility and cooling: 1) The system shall be able to zes including 75 mm, 100 mm, 150 mm, and 200 mm substrate. 2) The system shall have a wafer
		carrier loading system which can a	adapt various wafer sizes without opening the process chamber. 3) The wafer carrier loading system
	ons		I backside helium cooling. 2. Established process library: 1) The system shall have established stablished process documentation shall include process parameters such as etch rate, selectivity, and

profile with scanning electron microscope pictures.



		c. List required materials needed to make the product, including materials of product components.*	
		Item to be purchased as a standalone unit	
	2. Summary of Technical Specifications and Performance Requirements cont:	d. Are there applicable certification requirements?* Yes Please explain	
		e. Are there applicable regulations?* Yes Please explain	
		f. Are there any other standards, requirements, etc.?* Yes Please explain	
		g. Additional Comments: Is there other information that would impact the item's performance or usefulness? Please explain.	
ВЦ	3. Pr	3a. Estimated potential business volume (i.e., # Units Per Day, Month, Year) *:	
BUSINESS INFORMATION:	3. Volume and Pricing	One unit	
	В	b. Estimated target price / unit cost information (flexible and negotiable not accepted) *:	
		\$700.000.00	
	4. Delivery Requirements:	a. When is it needed by? (Immediate, 30 Days, 6 months, etc.)*	
		ASAP	
		b. Describe packaging requirements (i.e., individually/group packaging)*	
		Flexible	
		c. Where will this item be shipped?*	
		NIST, 100 Bureau Drive, Gaithersburg, MD	
	5. Ad dit	Is there other information you would like to include?	



Photos or diagrams of the item (helpful but not required).