

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

Dicing Saw

Item to be Scouted

_____ 30 _____ days

Opportunities will be posted for 30 days unless specified

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 that are capable of providing one dicing saw and accessories to support nanofabrication in the Center for Nanoscale Science and Technology (CNST), NIST's nanotechnology user facility. The dicing saw and accessories will be sited and used in the CNST NanoFab as a shared resource accessible to researchers from industry, academia, NIST, and other government agencies.

2022-114

Supplier Scouting Number (NIST MEP use)

334516

Scouting customer/product [NAICS Code](#), if known

TECHNICAL INFORMATION:	1. Supplier Information	<p>a. Type of supplier being sought*</p> <p> <input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Contract Manufacturer <input type="checkbox"/> Distributor </p> <p> <input type="checkbox"/> Other <u>Replace Legacy Equipment</u> </p>
		<p>b. Reason for scouting submission*</p> <p> <input type="checkbox"/> 2nd Supplier <input type="checkbox"/> Price <input type="checkbox"/> Re-shore <input type="checkbox"/> Past supplier no longer available </p> <p> <input type="checkbox"/> New Product Startup </p> <p> <input checked="" type="checkbox"/> Other _____ </p>
	2. Summary of Technical Specifications and Performance Requirements:	<p>a. Describe the manufacturing processes (elaborate to provide as much detail as possible).*</p> <p style="font-size: 1.5em; text-align: center;">Purchased as a single unit</p> <p>b. Provide dimensions / size / tolerances / performance specifications for the item.*</p> <p>The NIST CNST NanoFab presently operates a dicing saw which is over 20 years old. This tool is quickly becoming obsolete, as well as problematic, owing to the difficulty of procuring spare parts and the rarity of knowledgeable service technicians. We therefore are seeking to procure a new, up to date, dicing saw. 1. DICING SAW GENERAL DESCRIPTION a. The tool shall be new (i.e. not refurbished). b. The tool shall be floor mounted (i.e. not table top). c. The tool shall accept wafers up to 300 mm in diameter. d. The tool shall be capable at a minimum of dicing standard wafers of silicon, various glasses, fused silica, quartz, sapphire, silicon carbide, lithium niobate, as well as pieces of wafers. e. The tool shall be equipped with a touchscreen-based graphical user interface (GUI). f. The GUI shall be user friendly and allow the user to create dicing recipes, stored for later reuse. g. The chuck shall hold the wafer/workpiece in place by vacuum suction. h. Spindle: single i. Size: 2" in diameter ii. Power: equal to or greater than 1.8 kW at 60,000 rpm. iii. Air bearing</p>

		<p>iv. DC brushless motor i. Vision system i. Digital camera ii. LED illumination with variable intensity iii. Vertical and oblique illumination iv. Digital zoom optics v. Auto focus vi. Pattern recognition system vii. Kerf check: manual and automatic viii. Wafer alignment: manual and automatic j. Dicing modes i. Manual and automatic ii. Chopping/plunge cut capable iii. Programmable entry, cutting and exit speeds k. Dressing station i. The tool shall be equipped with a dressing station to keep the blade square ii. Manual dressing mode iii. Automatic dressing mode during cutting l. Non-contact blade setup m. Monitoring i. Motor load monitoring displaying motor current ii. Broken blade detector iii. Blade wear monitoring n. Miscellaneous i. Database backup to USB drive ii. Quick change chuck iii. The vendor shall recommend specific types of dicing blades to cut various materials</p> <p>2. ACCESSORIES a. Wafer mounter to mount wafers, up to 300 mm in diameter, on dicing tape b. Film frames for 200 mm and 300 mm wafers c. Blade flanges</p> <p>3. TRAINING The vendor shall provide on-site operation and maintenance training following installation.</p> <p>4. PROCESS SUPPORT The vendor shall demonstrate a high level of expertise in the dicing process and offer assistance in process development.</p>
		<p>c. List required materials needed to make the product, including materials of product components.*</p>
		<p>Purchased as a single unit.</p>
	<p>2. Summary of Technical Specifications and Performance Requirements cont:</p>	<p>d. Are there applicable certification requirements?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain</p>
		<p>e. Are there applicable regulations?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain</p>
		<p>f. Are there any other standards, requirements, etc.?* <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Please explain</p>
		<p>g. Additional Comments: Is there other information that would impact the item's performance or usefulness? Please explain.</p>
<p>BUSINESS INFORMATION:</p>	<p>3. Volume and Pricing</p>	<p>3a. Estimated potential business volume (i.e., # Units Per Day, Month, Year) *:</p>
		<p>1 unit.</p>
		<p>b. Estimated target price / unit cost information (flexible and negotiable <u>not</u> accepted) *:</p>
		<p>\$200,000.00</p>
<p>4. Delivery Requirement</p>		<p>a. When is it needed by? (Immediate, 30 Days, 6 months, etc.)*</p>
		<p>6-10 months after contract awarded</p>
		<p>b. Describe packaging requirements (i.e., individually/group packaging)*</p>

■		Flexible
		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?
		■

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