

Advance Contract Award Notice (ACAN)

23-58209

White Light End Point Detector

1. Advance Contract Award Notice (ACAN)

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

2. Definition of the requirement

The Department of The National Research Council (NRC) of Canada has a requirement for the upgrade of SPTS i2L055 white light EPD System, to support and expansion of fabrication activities and to align with NRC's environmental stewardship objectives. The work will involve the following:

1. Supply White Light Interferometric End-Point Detection System for SPTS Omega i2L055 system and provide operational manuals for WL EDP system and 90 Day Warranty;
2. Install of WL EPD system on SPTS Omega i2L055 system at NRC site; and
3. Provide On-site Applications training for use of WL EDP system on i2L055 tool:
 - Phase 1: Field Service Engineer will, on installation of the WL EPD system provide on-site training to assigned CPFC technical staff on the required maintenance support and calibration activities required to sustain WL EPD system.
 - Phase 2: SPTS Apps Engineer will provide assigned CPFC Engineer(s) WL EPD Application training for using the WL EPD system on the i2L055 tool

3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)

Any interested supplier must demonstrate by way of a statement of capabilities that its product/equipment/system (as appropriate) meets the following requirements:

Spectrometer:

- Designed for demanding semiconductor process applications.
- It's optical system employs a 1024-element, scientific-grade CCD array designed for multi-channel spectroscopy
- The system should include:
 - an excellent ultraviolet (UV) response (down to 200nm)
 - Stability against degradation under UV exposure
 - High sensitivity and wide range and excellent output linearity
 - Excellent S/N ratio
 - Multi-fiber input capability
- Wide range of spectrometer options
- Use for endpoint detection, fault detection, and process diagnostics
- 200-800 nm range

- Excellent software integration and compatibility with the etching system

Flashlamp:

- The flashlamp output should have a strong UV content
- Capable of measuring relatively thin film layers
- Pulsed or continuous light source
- In-situ measurement by substitution of plasma
- High brightness for excellent S/N ratio

Software:

- Algorithm for quick generation of endpoint trend lines.
- SPC charting allows the tracking of variables such as endpoint time over many wafers runs.
- Line ID functionality helps identifying a gas species by examination of the optical spectrum at a wavelength or group of wavelengths
- Capability of plotting wavelength vs. intensity at a selected point in time and the time vs. intensity for the selected trends.
- Data analysis of large numbers of files to be simultaneously analyses
- Event statistics for visually comparing multi-step processes
- Capability of reprocessing several data files in a list against a configuration to analyse performance
- Having "Parallel Sequence" capability

4. Applicability of the trade agreement(s) to the procurement

This procurement is subject to the following trade agreement(s)

- Canadian Free Trade Agreement (CFTA)
- Canada-Korea Free Trade Agreement

5. Justification for the Pre-Identified Supplier

The proposed procurement is required to match a similar unit previously purchased for this cluster tool. KLA/SPTS is the OEM of this etch system. Compatibility for this requirement is required for both systems so another supplier would not be capable of providing a requirement that is compatible with KLA white point detectors.

6. Government Contracts Regulations Exception(s)

The following exception(s) to the Government Contracts Regulations is (are) invoked for this procurement under subsection 6(d) - "only one person is capable of performing the work".

7. Exclusions and/or Limited Tendering Reasons

The following exclusion(s) and/or limited tendering reasons are invoked under the:

- a. Canadian Free Trade Agreement (CFTA) – Article 513 (1) (b) (iii): due to an absence of competition for technical reasons;
- b. Canada-Korea Free Trade Agreement – referencing the WTO Protocol Amending the GPA, Article XIII (1) (b) (iii): due to an absence of competition for technical reasons;

8. Period of the proposed contract or delivery date

The system must be delivered and installed by March 28st 2024.

9. Cost estimate of the proposed contract

The estimated value of the contract, including option(s), is \$ 99,500.00 USD

10. Name and address of the pre-identified supplier

KLA Corp,
SPTS Technologies Division
1 Technology Drive
Milpitas, CA 95035-7916, USA

11. Suppliers' right to submit a statement of capabilities

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

12. Closing date for a submission of a statement of capabilities

February 21, 2024 at 2:00 p.m. EST

13. Inquiries and submission of statements of capabilities

Inquiries and statements of capabilities are to be directed to:

Name: Shawn Doyle

Address: 1200 Montreal Road, M58 Ottawa, ON, K1A 0R6

Telephone: 343-551-3688

E-mail: Shawn.Doyle@nrc-cnrc.gc.ca