



ENQUIRY LETTER

ENQUIRY NO. HD/PUR/SP-35/SCW/06/2016-17/ 8672

Date: 23.12.2016

To

Subject: Procurement of Single Crystal Wafers - regarding

Due date for receipt of the quotations 12.01.2017 TIME BY:15.30 hours [IST]

Sir,

Sealed quotations conforming to the specifications are invited for the following item/s:-

S. No.	Description of the item	Qty	Specifications
01	2" 6H Sic Single Crystal Wafer (As per Specifications attached)	40	Pl. see Annexure enclosed
02	2" Semi-insulating (SI) - 6H-SiC Single Crystal Wafer (as per Specifications attached)	10	

The envelope, superscribed as under should be sent to the undersigned:-

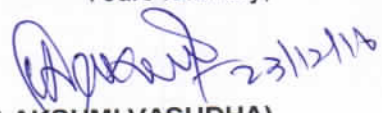
QUOTATION NO.	
DUE DATE	
ITEM	

Quotation may please be submitted, keeping in view, the terms and conditions overleaf, otherwise quotations will be rejected.

- Note: (i) Firms or their authorized representatives are requested to attend the opening of **Combined/Technical bids** after closing time i.e. **on 12th January, 2017 at 15:45 hours.**
Note: If there is any delay in opening of technical bids will be intimated to all bidders.
- (ii) The **Technical & Financial bids** should be in **separate sealed covers**
- (iii) **Delivery period should be within 8 weeks from the date of Supply Order**
- (iv) These details are also available in our website: <http://www.cmet.gov.in>

Thanking you,

Yours faithfully,


(A. LAKSHMI VASUDHA)
Administrative Officer (A)
lakshmi@cmet.gov.in

**SPECIFICATIONS OF SEMI-INSULATING SI 6H SiC SINGLE
CRYSTAL SUBSTRATE**

Sl. No	Sic Wafer Properties	Specifications
1.	SiC wafer type (Polytype)	Semi-insulating (SI) 6H SiC
2.	Bandgap	3.0 eV
3.	Diameter	2" (inch)
4.	Quantity	10 no.
5.	Conductivity Type	SI - type
6.	Substrate thickness	$\geq 325 \pm 25 \mu\text{m}$
7.	Packing	Single wafer
8.	Full Width Half Maxima (FWHM)	< 30 arc-sec
9.	Micropipe density (MPD)	< 10 cm^{-2}
10.	Orientation	Off axis : 3.5° towards $\langle 11-20 \rangle \pm 0.5^\circ$ / On-axis: $\langle 0001 \rangle \pm 0.5^\circ$
11.	Surface finish	Double side polished:- a) One side:- C-face - CMP, Epi-ready (Preferred) b) Other side:- Si-face - optical polish / CMP
12.	Surface Roughness	$R_a < 2 \text{ nm}$
13.	Resistivity	$> 1\text{E}5 \text{ Ohm-cm}$



SPECIFICATIONS OF 6H N-SiC SINGLE CRYSTAL SUBSTRATE

Sl. No	Sic Wafer Properties	Specifications
1.	SiC wafer type (Polytype)	6H SiC
2.	Bandgap	3.0 eV
3.	Diameter	2" (inch)
4.	Quantity	40 no.
5.	Conductivity Type	N - type
6.	Substrate thickness	$\geq 325 \pm 25 \mu\text{m}$
7.	Packing	Single wafer
8.	Full Width Half Maxima (FWHM)	< 30 arc-sec
9.	Micropipe density (MPD)	< 10 cm^{-2}
10.	Orientation	Off axis : 3.5° towards $\langle 11-20 \rangle \pm 0.5^\circ$
11.	Surface finish	Double side polished:- a) One side:- C-face - CMP, Epi-ready (Preferred) b) Other side:- Si-face - optical polish / CMP
12.	Surface Roughness	$R_a < 2 \text{ nm}$
13.	Resistivity	$> 0.05 \text{ Ohm-cm}$

Indear