

# Industrial Session Company Presentation

## **EL-CAT Inc. Semiconductor Materials Producer & Supplier**

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**20th GADEST (2024)**

September 8 to 13, Bad Schandau, Germany

September 9th, 2024

# About us



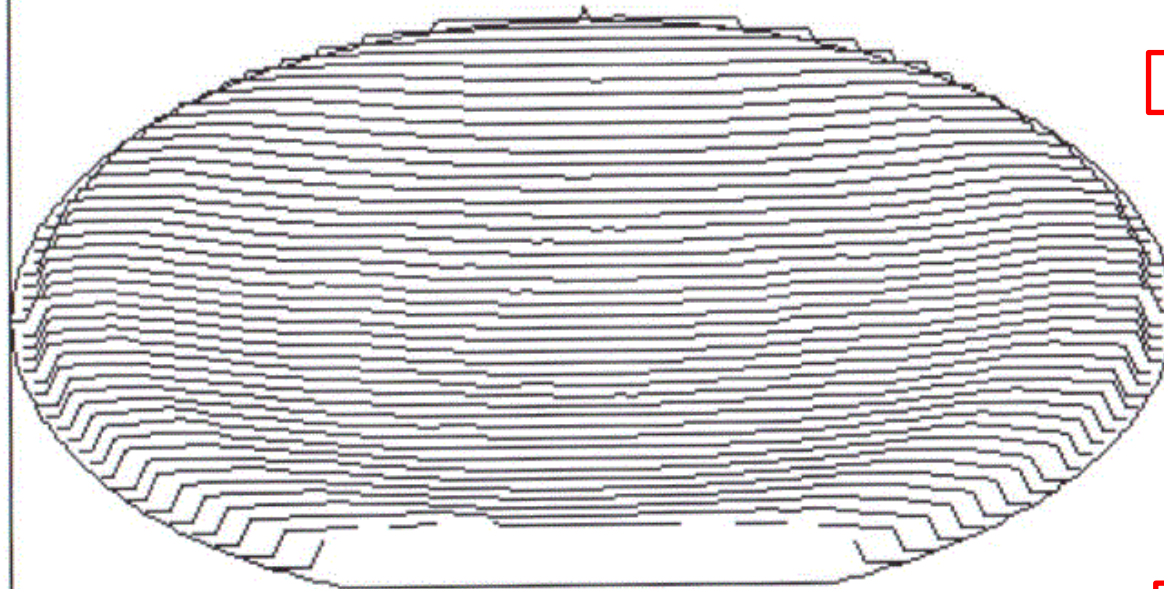
- EL-CAT Inc. is a New Jersey Corporation, in business since 1990.
- EL-CAT is a Silicon wafers producer  
(standard and with special properties)
- EL-CAT Inc. is an importer and stocking distributor of Semiconductor and other Electronic Materials, such as
  - monocrystalline silicon ingots and wafers,
  - III-V materials,
  - piezoelectric materials,
  - substrates for EPI deposition,
  - EPI structures both on silicon and 3-5 materials.
  - We primarily source our products from manufacturers and supply them to semiconductor, electronic, and optoelectronic fabrication plants, as well as commercial research facilities. Our clients include silicon wafer manufacturers both in the USA and internationally.
- EL-CAT Inc. exports instruments, raw materials, and packaging to its suppliers of electronic materials.



In 2019 El-Cat Europe was established.

# We produce Si wafers in Ridgefield Park facility.

- SEMI standard wafers and specialized wafers
- Specialized production includes:
  - As – cut, as lapped, Single-Side Polishing (SSP) and Double-Side Polishing (DSP) Si wafers
  - With diameters from 2” to 6”
  - Ultra Low TTV (<0.5 $\mu$ m, <1.0 $\mu$ m)
  - Low TTV (<2 $\mu$ m)
  - Ultra Low Bow/Warp (<5 $\mu$ m for 150mm)
  - Low Bow/Warp (<10 $\mu$ m for 150mm)
  - Extra-Thin (100 $\mu$ m and thinner)
  - Extra-Thick (1 to 12mm)
  - Common crystallographic orientations such as: (100) (111) (110)
  - Uncommon crystallographic orientations such as: (211) (433) (510) (511) (643) (911)
  - any offset to major directions (100) and (111)



|             |              |
|-------------|--------------|
| System ID   | EI-Cat, Inc. |
| Plant Order | EI-Cat, Inc. |
| Inspector   | Mark         |
| Wafer #     | 41           |

|                |        |
|----------------|--------|
| Wafer Diameter | 150 MM |
|----------------|--------|

|                 |           |
|-----------------|-----------|
| FQA             | 144.00 MM |
| Prim Fid Radius | 68.20 MM  |
| Sec Fid Radius  | 71.80 MM  |
| Class #         | 2-Accept  |

|                |            |
|----------------|------------|
| Graph Content  | Flatness   |
| Rotation Angle | 30.0 DEG   |
| Scale          | 7.00 UMTR  |
| FLAT Ref Plane | Best Fit   |
| FPD-bf         | -0.25 UMTR |
| TIR-bf         | 0.46 UMTR  |
| TTV            | 0.47 UMTR  |

|          |             |
|----------|-------------|
| Ave. THK | 766.34 UMTR |
| Min. THK | 766.06 UMTR |
| Max. THK | 766.53 UMTR |
| Cen. THK | 766.06 UMTR |

Action: Printing graph...  
Entry:



# Stock of materials ready for shipment

<https://www.semiconwafers.com>

|                           |                                   |
|---------------------------|-----------------------------------|
| Silicon Wafers            | MOCVD Epitaxy on III-V substrates |
| Silicon EPI Wafers        | SoS Wafers                        |
| Silicon Ingots            | SiC Wafers                        |
| Diced silicon wafers      | SOI Wafers                        |
| Germanium Wafers & Ingots | Silica (Fused Quartz)             |
| ➤ Compound Semiconductors | Quartz (Monocrystalline)          |
| GaN (Gallium Nitride)     | Sapphire                          |
| GaAs (Gallium Arsenide)   | Piezoelectrics                    |
| GaP (Gallium Phosphide)   | Other Crystal Substrates          |
| GaSb (Gallium Antimonide) | Other Electronic Materials        |
| InAs (Indium Arsenide)    | Solar Cells & Wafers              |
| InP (Indium Phosphide)    | Wafer Cassettes & Accessories     |
| InSb (Indium Antimonide)  | Semiconductor Tweezers            |

# Stock of materials ready for shipment

<https://www.semiconwafers.com>

Home News About us Register FAQ Contact RFQ   **Semiconductors On-Line**  Cart 0  Login

[Silicon wafers](#) [Si EPI Wafers](#) [Si ingots](#) [Diced wafers](#) [Germanium](#) [Compound Semiconductors](#) [SoS](#) [SiC](#) [SOI](#) [Miscellaneous Materials](#)

Material: Silicon Diameter: 6" Type: Any Dopant: Any Orientation: Any Thick. [μm]: ±50 Surface: Any Resistivity [Ohm-cm]: Min - Max TTV: Any Growth: Any

Silicon wafers: 212 items were found.

| Add To Cart                            | Quantity | Item  | Available Quantity | Price USD/wafer | Diam. [inch] | Material Dopant | Orientation       | Thick. [μm] | Surface | Resistivity [Ohm-cm]    | Source         | Comments  |
|--|----------|-------|--------------------|-----------------|--------------|-----------------|-------------------|-------------|---------|-------------------------|----------------|---|
| <input type="button" value="To cart"/> | 25       | 10348 | 325                | \$33.60         | 6"           | n-type Si:P     | [100]             | 675         | P/P     | 3-9 {6.9-8.5}           | ATC            | SEMI Prime, 1Flat (57.5mm), TTV<5μm, Empak cst        |
| <input type="button" value="To cart"/> | 25       | 11219 | 75                 | \$39.60         | 6"           | p-type Si:B     | [100]             | 381         | P/E     | 10-20 {11.5-17.0}       | ATC            | SEMI Prime, 2Flats, TTV<7μm, Bow/Warp<20μm, Empak cst |
| <input type="button" value="To cart"/> | 25       | 11036 | 75                 | \$28.80         | 6"           | n-type Si:Sb    | [100]             | 625         | P/E     | 0.01-0.02 {0.017-0.018} | ATC            |   |
| <input type="button" value="To cart"/> | 3        | G228  | 3                  | \$50.00         | 6"           | n-type Si:P     | [111] ±0.5°       | 300 ±15     | BROKEN  | FZ >6,000               | ATC            | BROKEN  |
| <input type="button" value="To cart"/> | 15       | S5861 | 15                 | \$40.00         | 6"           | n-type Si:P     | [100]             | 675 ±15     | P/E     | 3-10                    | CEMAT Aro 1 wk |   |
| <input type="button" value="To cart"/> | 23       | X9093 | 23                 | \$6.00          | 6"           | Si              | -                 | 650         | P/EOx   | -                       | Crystc         |   |
| <input type="button" value="To cart"/> | 10       | X9112 | 10                 | \$10.00         | 6"           | n-type Si:As    | [100]             | -           | E/E     | 0.001-0.005             | Crystc         |   |
| <input type="button" value="To cart"/> | 25       | X6869 | 25                 | \$8.00          | 6"           | n-type Si:As    | [100]             | 550         | E/E     | 0.001-0.005             | Crystc         |   |
| <input type="button" value="To cart"/> | 25       | A7222 | 48                 | \$5.00          | 6"           | p-type Si:B     | [100]             | 650         | E/E     | 0.001-1.000             | Crystc         |   |
| <input type="button" value="To cart"/> | 25       | X2194 | 42                 | \$3.00          | 6"           | p-type Si:B     | [100]             | 675         | E/E     | -                       | Crystc         |   |
| <input type="button" value="To cart"/> | 1        | A1925 | 1                  | \$198.00        | 6"           | p-type Si:B     | [100-9.74°] ±0.1° | 275         | P/P     | 1-35                    | CSW            |   |

- Searchable
- Prices listed on – line
- No Login/Password
  
- Traceble (Certificate)
- Same day delivery

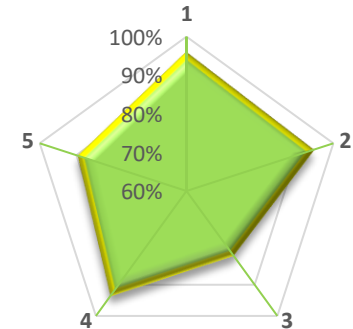
# Customer satisfaction

## Categories description:

- 1. Product conformance:** How does product meet customer's specification?
- 2. Paperwork accuracy:** How do the paperwork aims needs (CofC, Invoice, PL)?
- 3. Delivery service:** Information on shipment & deliveries, punctuality rate also L/T.
- 4. Customer service:** Commitments, support and response time from sales staff.
- 5. Recommendation:** Would you recommend El-Cat as vendor ?

## 2023 Customer satisfaction

Radar Plot



| Year | Satisfaction |
|------|--------------|
| 2020 | 84%          |
| 2021 | 88%          |
| 2022 | 85%          |
| 2023 | 91%          |

## 2020 - 2023 Customer satisfaction



Thank you for attention.

[www.semiconwafer.com](http://www.semiconwafer.com)  
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9/9/2024

