



NanoSILICON, Inc.

NanoSILICON, Inc. Facility

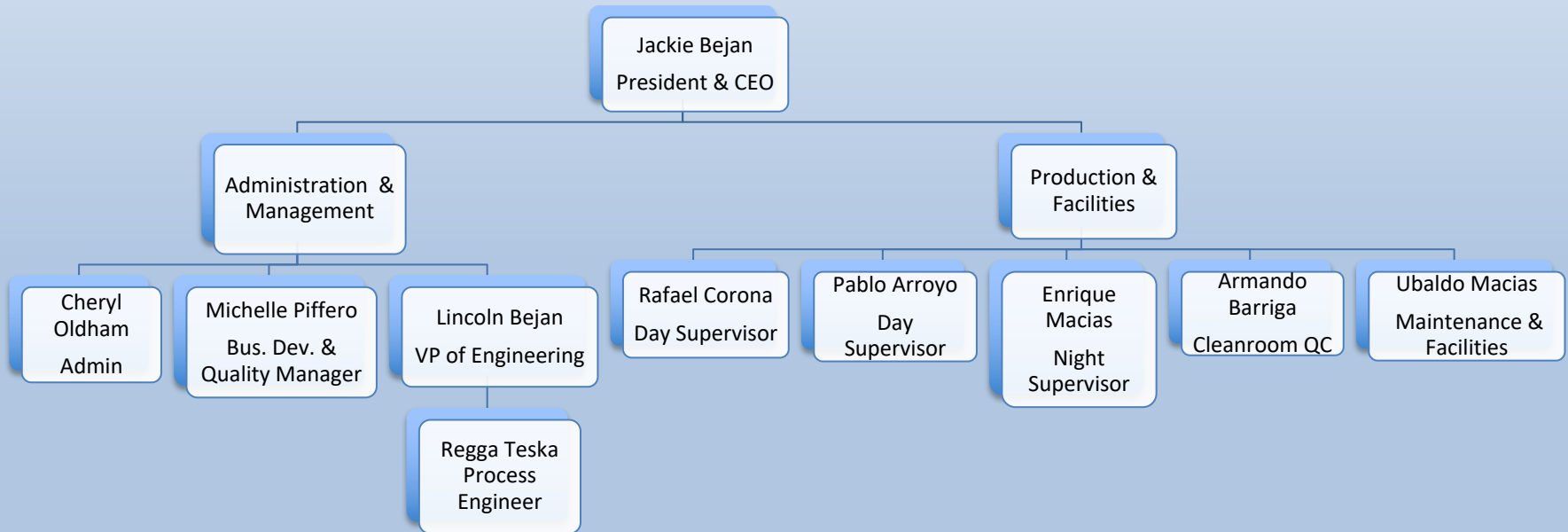
Located in the heart of Silicon Valley
San Jose, California

Founded in 2010

ISO 9001:2015 Certified 2022



Organizational Chart



Facility #1, 9,400 sqft *
Facility #2, 5,440 sqft *
Approximately 28 Employees*

NSi Product Offerings



- Full Silicon Reclaim Services: 50.8mm Through 300mm Diameters
- Silicon Wafer Sales: 50.8mm Through 300mm Diameters
 - Virgin Test, Virgin Prime, Reclaim Grade
- Alternative Substrates: Borofloat, Quartz, Fused Silica
- Thermal Oxide And Other Thin Film Deposition
- Semi Standard And Custom Wafer Specifications
- Metrology: ADE, KLA-Tencor 6220, Nanometrics 210
- Inventory Management And Consignment
- Laser Cut Down - Edge Profiling - Laser Scribe
- Cassette And FOUP Cleaning, Destruction Of Scrap, R & D Services

NSi Reclaim Capabilities

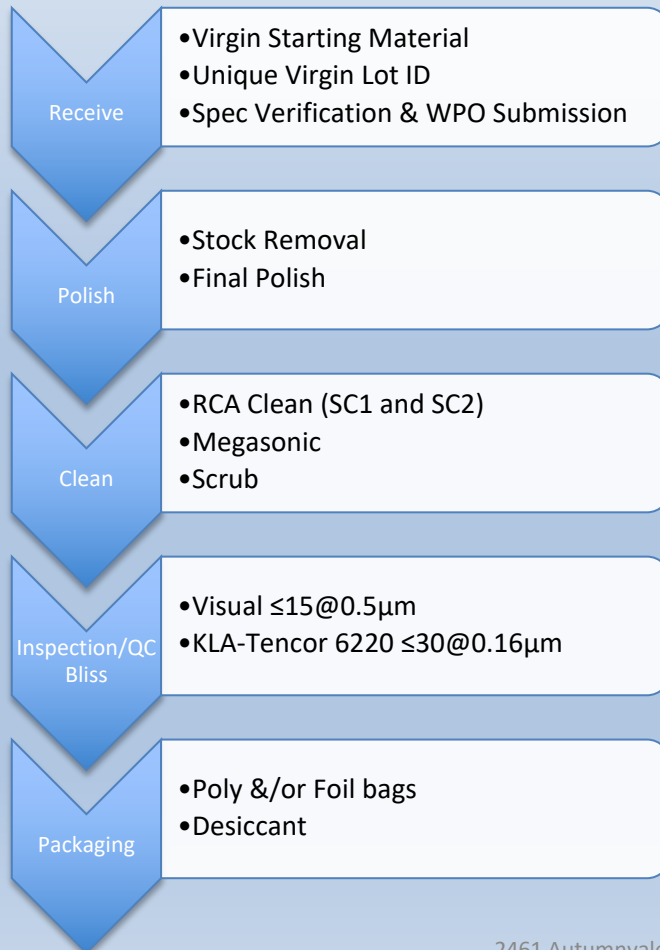
- Film Strip / Etch
 - Metal And Non-Metal Films
 - Separate Metal And Non-Metal Lines To Prevent Contamination
- Polish / Lap / Etch
- Laser Scribe
- Class 100 Clean Room
- Metrology
 - Type, Resistivity, Orientation, Particle Counting $\leq 30@0.16\mu\text{m}$
- Specification Binning
- Full Final Disposition For Wafer Accountability



NSi Process Flow

Reclaim

Virgin Test & Prime



NSi Customer Lot Integrity

- Annual Yield Average of 90%
- Unique Traveler And Lot ID Per Specification
- Traveler Accompanies Wafers Throughout Production
- Production Alternates Diameters With Every Lot Change
- Each Department Records Yields And Approves Quality Before Passing To The Next Production Step
- QA Checks, Guarantees, And Applies A Final QA Sticker Signifying Specification Compliance



Production Order: TEST 1234
Start date: 04/01/2022 - 03:00 PM Due date: 05/02/2022 - 03:00 PM



Product	Obs	Quantity
12P0 0-100 ~675 SN R 1KA TOX	12P0 0-100 ~675 SN R 1KA TOX	1000
12P0 0-100 700-725 SN R	12P0 0-100 700-725 SN R	1000
Order Nr	Client	Box quantity
		Box Nr.
		0

Product	Lot	Quantity	Estimated production time
12P0 0-100 ~675 SN R 1KA TOX (12P0 0-100 ~675 SN R 1KA TOX)	TEST 1234-A	1000	11000H00



Operation	Notes Machine	Time
-----------	---------------	------

Sort/PC		
1. Sort/PC -	#3 Low Resistivity - ADE Microsense 6033 , #2 High Resistivity - ADE Microsense 6033 , #1 Thickness - ADE Microsense 6033 , #4 Thickness - ADE Microsense 6033 , No Machine (Sort)	1000H00

Polish		
		1000H00
		2. Strip -

Sort/PC		
3. Sort/PC -	#3 Low Resistivity - ADE Microsense 6033 , #2 High Resistivity - ADE Microsense 6033 , #1 Thickness - ADE Microsense 6033 , #4 Thickness - ADE Microsense 6033 , No Machine (Sort)	1000H00

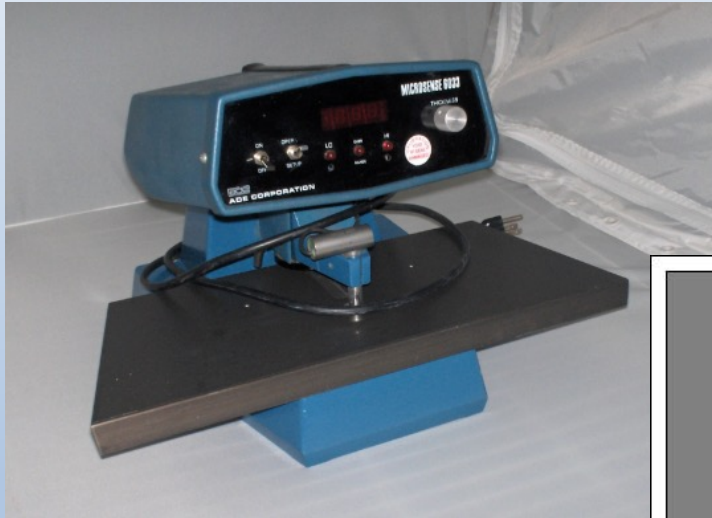
Polish		
	Polish , #11 P - Gigamat , #10 P - Strausbaugh , #13 P - Gigamat , #12 P - Gigamat , #7 P - Siltec , #6 P - Siltec , #9 P - Strausbaugh , #1 L - Peter Wolter's , #8 P - Siltec , #3 P - Siltec , #5 P - Siltec , #4 P - Siltec , #1 P - Siltec , #2 P - Siltec , #16 P - Siltec , #1 F - Strausbaugh , #14 P - Strausbaugh , #15 P - Siltec , #4 F - Strausbaugh , #2 F - Strausbaugh , #3 F - Strausbaugh	1000H00
		4. Polish -

Clean		
5. Sort/PC -	#3 Low Resistivity - ADE Microsense 6033 , #2 High Resistivity - ADE Microsense 6033 , #1 Thickness - ADE Microsense 6033 , #4 Thickness - ADE Microsense 6033 , No Machine (Sort)	1000H00

QA/QC		
	Polish , #11 P - Gigamat , #10 P - Strausbaugh , #13 P - Gigamat , #12 P - Gigamat , #7 P - Siltec , #6 P - Siltec , #9 P - Strausbaugh , #1 L - Peter Wolter's , #8 P - Siltec , #3 P - Siltec , #5 P - Siltec , #4 P - Siltec , #1 P - Siltec , #2 P - Siltec , #16 P - Siltec , #1 F -	1000H00

(page) 1/4

NSi Metrology Tools



ADE Microsense 6033

Indicates Thickness, Resistivity, & TTV

KLA Tencor Surfscan 6220
Maps Defects And Particles



Nanometrics 210



Verifies Oxide Film
Thickness And Uniformity



NSi Metals Policy



- Chem Trace Quarterly Metals Testing
- VPD ICP-MS Method
 - Vapor Phase Decomposition Inductively Coupled Plasma – Mass Spectroscopy
- Thirty Different Elements Tested
- Focus On Nine Elements Important To The Semiconductor Industry

NSi Metals Data:

Aluminum Al	<5E10
Calcium Ca	<5E10
Chromium Cr	<5E10
Copper Cu	<1E10
Iron Fe	<5E10
Nickel Ni	<5E10
Potassium K	<5E10
Sodium Na	<5E10
Zinc Zn	<5E10



**PERRY JOHNSON
REGISTRARS, INC.**

Certificate of Registration

Perry Johnson Registrars, Inc., has audited the Quality Management System of:

NanoSilicon, Inc.
2461 Autumnvale Drive, San Jose, CA 95131 United States
(This single site has more than one location. See appendix for details.)

*(Hereinafter called the Organization) and hereby declares that
Organization is in conformance with:*

ISO 9001:2015

This Registration is in respect to the following scope:

**Polishing, Reclaiming, Processing, Sales, and Brokering of Silicon Wafers and Alternative
Substrates for the Semiconductor, Optics, Photovoltaics, Biomedical, and Aerospace Industries**

*This Registration is granted subject to the system rules governing the Registration referred to above, and the
Organization hereby covenants with the Assessment body duty to observe and comply with the said rules.*



COPY

Verry Boboige
Perry Boboige, President
Perry Johnson Registrars, Inc. (PIR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48064
(248) 358-3388

Effective Date: Novom
Expiration Date: Novem



Appendix

2461 Autumnvale Drive,
San Jose, CA 95131 United States

Polishing, Reclaiming, Processing, Sales, in

2475 Autumnvale Drive,
San Jose, CA 95131 United States

Polishing

COPY



Verry Boboige
Perry Johnson Registrars, Inc. (PIR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48064
(248) 358-3388

Certificate No. 17
Page 1 of 1

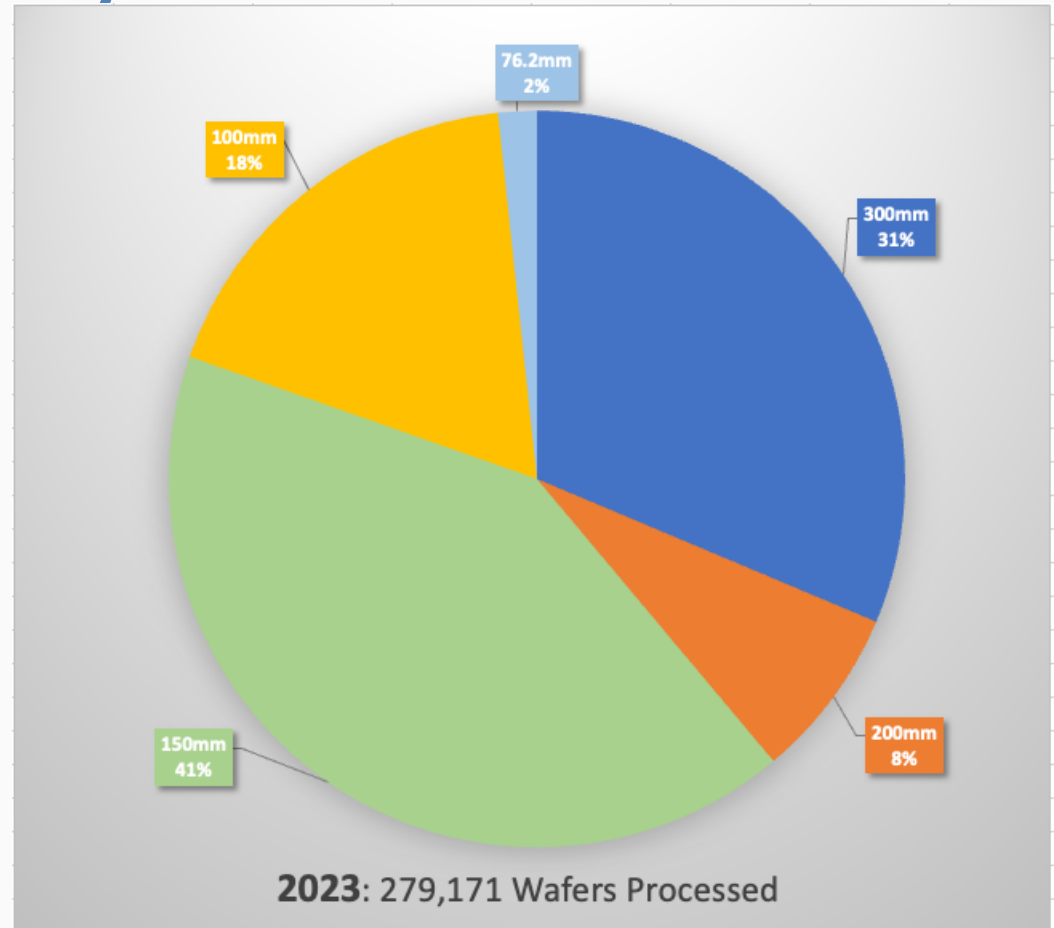
NSi ISO 9001:2015

ISO Certified Since 2022



NSi Processed By Diameter

- Annual Yield Average 90%
- Annual OTD Average 100%
- Wafers Processed Per Diameter
 - 41% 150mm
 - 31% 300mm
 - 18% 100mm
 - 8% 200mm
 - 2% 76.2mm





NSi BCP And CSR

Business Continuity Plan

- Secondary Backup Tools And Tool Parts
- Sizable Inventory Of Consumables And Scheduled Routine Deliveries
- Adequate Insurance Coverage For All NSi Tools, Consumables, And Inventory

Corporate Social Responsibility

- Woman Owned And Managed
- $\geq 90\%$ Minority Employees
- Recycle Programs For E-waste, Plastics, And All Regular Waste
- Wet Scrubber System Surpasses Emission Standards Allowing Bay Area Air Quality Management District To Grant Permit Exemption
- Clean Harbors Collects All Hazardous Materials In Lieu Of Neutralizing In House And Eliminating Through The POTW System



NSi Summary

- NanoSILICON, Inc. is interested in becoming your wafer vendor, with the focus on following your lead.
- NanoSILICON, Inc. is a service driven entity and understands today's high demand to remain flexible with our customers.
- We will be price competitive and will not compromise our quality standards for the sake of market share.
- Thank you for your time. We look forward to working with you.



NanoSILICON, Inc.