Ultra-Thin
Ultra-Flat
SuperPolish

ISO 9002

valley design corp.
www.valleydesign.com

Lapping
Polishing
Edge Polishing
Dicing
Grinding
Shaping
Wafering

Optic & Photonic Processing

Windows • Wedges • Lenses
Polarizers • Mirrors •
Etalons • Laser Diodes • DWDM
Filters • Glass Rods & Spacers •
Waveguides • Beamsplitters • Bandpass Filters •
V-Grooves/Slots • Fiber Arrays/Bundles •
Telecom Glass Blocks/Spacers • Patterned Optics •
Angle & Edge Polishing • Optical Coatings

Fused Silica: 1”x 1” and 1” x 2” x .006” thick, polished b/s
Aluminum Nitride: 1” sq. and 2” sq. x .025” thick, polished b/s
96% Alumina: 1”sq.-4” sq. x .004” thick, fine lapped b/s
R-Plane Sapphire: 100 mm dia. X .5 mm thick, polished 1 side

In Stock NOW

Now Serving Silicon Valley

Flat Optics ● Dicing ● Wafers

Materials

Fused Silica • Aluminum Nitride • Glass
Quartz • Pyrex • 99.6% & 96% Alumina
Sapphire • Float Glass • Lithium Niobate
BK7 • B270 • 1737 • 7070 • UV&IR Materials
Ceramics • Filter Glass • Metals • Silicon
Crystals • Borosilicates • PZT • PLZT
Soda Lime • Ferrites • GaP, GaAs, GaN
PLUS MANY OTHER MATERIALS

Services & Capabilities

EDGE & ANGLE POLISHING
Optically polished flat edges and angled edges
Minimal edge chipping < 1 micron
Edge faces/lengths
Single side or opposing edges
LiN, SiO2, Si, LiTa03
Sapphire

<10/5 scratch/dig or 1 Ang
Chips less than 1 micron
Precision lapping up to 48”
Dicing as small as .005” sq
Thickness tol. ± .1 micron
Parallelism to .1 micron
1/20 Wave flatness
Precision Machining
Low kerf wafering

Sales & Customer Service
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Custom Dicing Service

www.customdicing.com

Valley Design, offers increased capacity in advanced high-speed CNC dicing, cutting and sawing, enabling us to provide a complete spectrum of shapes and materials to suit any application.

Precision Dicing Services are provided by Valley Design from the R&D phase through to high volume production requirements. Our dicing saws are fully programmable and are equipped with microscope and video for precision alignment.

Over the past **25 years**, we have routinely processed customer or Valley supplied materials up to **8" (200 mm) diameter,** and even larger by special request. Valley dices not only standard types of materials, but will also develop dicing/cutting procedures for untried materials. We have worked with all types of **Glass, Fused Silica, Crystals, Quartz, Aluminas, Silicon, Aluminum Nitride, Lithium Niobate, Ferrites and Ceramics**, as well as delicate compound semiconductors such as GaN and InP.

Depending on the material, the dicing **kerf** may be as small as **20 microns**, and **die size** as small as **.005" (125 microns)**.

We also have extensive experience in working with **coated/patterned/ circuited substrates** and **wafers,** taking special care in protecting these surfaces.

Call Us With Your Specifications
831.420.0595

We Have GANG SAW Capabilities

●

Multiple Blades
per pass for
Production Dicing

THICK

WAFERS & SUBSTRATES

Minimal Chipping

>.250" Thick Fused Silica, Glass
>.120" Thick Sapphire,
Ceramics
Photolithography Plates

Patterned Wafers
Circuited Substrates
Patterned Optics
Optically Coated Wafers
Slotted Heat Sinks
Step and Repeat
Slots/Steps
V-Grooves