

Applications

Our customised Double-Sided Polished substrates are used in the following fields:

- DSP solutions for MEMS/MST
- Microfluidics/flow sensors
- RF MEMS
- Optoelectronics

End Markets:

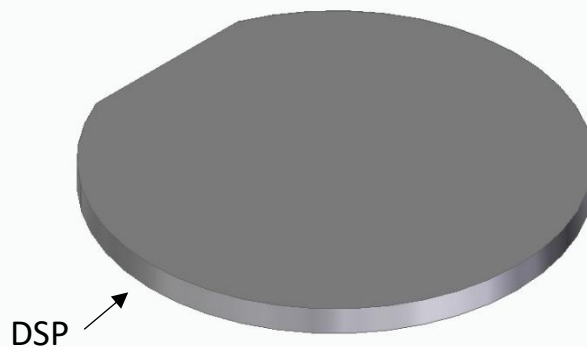
- Telecommunications
- Medical
- Automotive
- Consumer
- Security

IceMOS uses over 20 years of experience to offer the marketplace world class custom DSP solutions (Double Sided Polished).

Our highly skilled team has many years of design and manufacturing experience to help develop a DSP solution to your requirement.

IceMOS DSP wafers are an excellent substrate for double sided lithography processing; the IceMOS expertise and knowledge of the product and the processes allow for exceptional thickness control and surface roughness – ideal for a downstream wafer bonding process. Additionally, non-standard specifications for demanding applications will always be considered.

Our world class product quality, competitive cost structure plus rapid turnaround makes IceMOS Technology your ideal DSP partner.



Wafer can be oxidised if required

DSP Specification

Parameter	Specification Range	
Wafer Diameter	100, 125, 150mm	200mm
Wafer Thickness	300–1150 μm	450–1150 μm
Wafer Thickness Tolerance	$\pm 2 \mu\text{m}$	$\pm 5 \mu\text{m}$
Total Thickness Variation (TTV)	$\leq 1 \mu\text{m}$	$\leq 2 \mu\text{m}$
Bow	$\leq 40 \mu\text{m}$	
Warp	$\leq 40 \mu\text{m}$	
Roughness	$\leq 2\text{\AA}$	
Dopant Type	N or P	
Doping	N type: Phos, Red Phos, Sb & As P type: Boron	
Resistivity	$\leq 0.001 - \geq 10000 \Omega\text{-cm}$	
Growth Method	CZ, MCZ or FZ	
Crystal Orientation	$\langle 100 \rangle$, $\langle 111 \rangle$ or $\langle 110 \rangle$	
Thermally Oxidised Field Oxide Thickness	0.2–4.0 μm	

The above is a standard IceMOS specification; however, we are always happy to work with our customers to engineer specific solutions. If you would like to discuss an alternative specification, please contact our sales team:
sales@icemostech.com