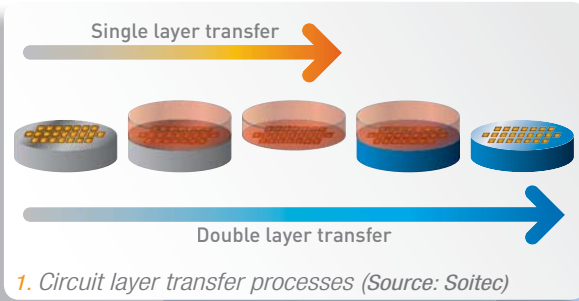


## Circuit layer transfer services

For CMOS logic, RF components, image sensors, memories and solid state lighting

*Transferring a circuit layer from a processed wafer onto another substrate decouples the exigencies of circuit fabrication from the needs of the final application*



### Technical capabilities

- ▶ Based on core Tracit Technologies: direct bonding and thinning techniques
- ▶ Fully or partially processed incoming wafers
- ▶ 150 and 200mm capability (scalability to 300mm)
- ▶ Low temperature bonding process capability to maintain IC functions
- ▶ Single & double layer transfer process available (1)
- ▶ Bonding available on Si, SiO<sub>2</sub>, Si<sub>3</sub>N<sub>4</sub>, fused silica, glass, polycrystalline silicon carbide...
- ▶ Dedicated line for wafer bonding treatment
  - Metallization compatible

### Benefits

Enhanced circuit performance thanks to new support

- ▶ High insulation for power & RF
- ▶ Optical transparency (IR visible) (2)

Backside access of the device layer

- ▶ New circuit architecture (for example: backside illumination structure)

3D IC

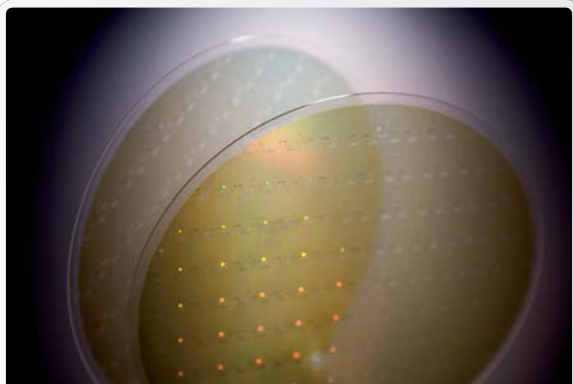
- ▶ High density integration
- ▶ Hetero structure integration

### Device type:

CMOS Logic  
RF components  
Image sensors  
Memories: NV, DRAM, SRAM  
Solid state lighting

### End-applications:

Consumer  
Automotive  
Wireless



2. 200mm processed silicon layer transferred onto fused silica substrate (Source: Soitec)

