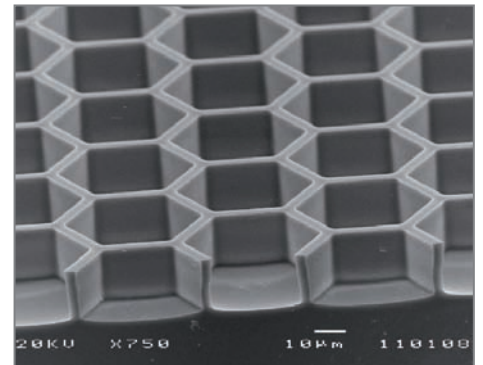
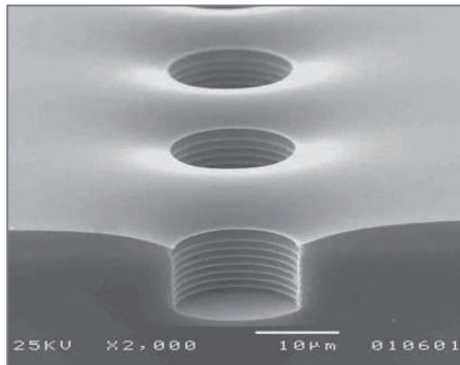
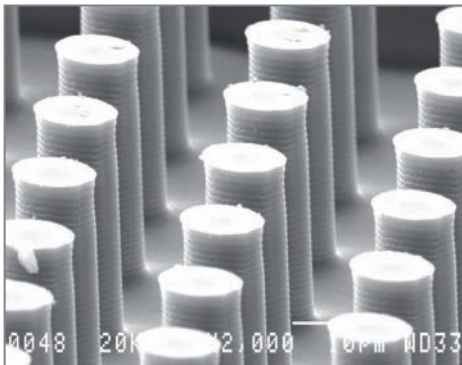
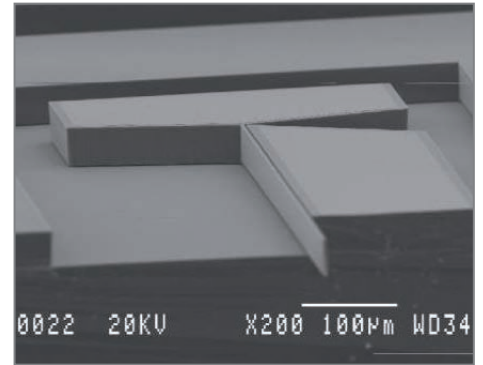
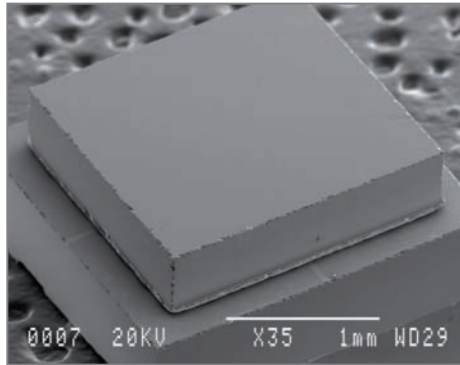
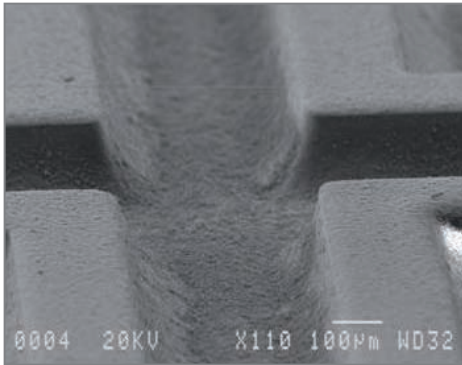


olivetti



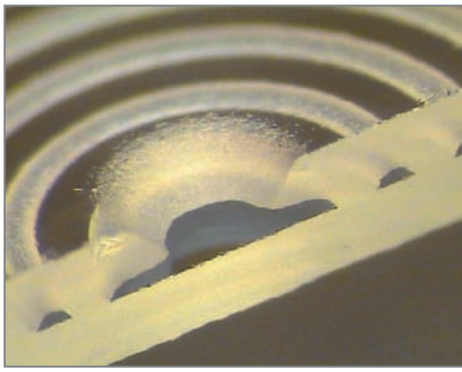
SILICON TECHNOLOGY

Thanks to huge investments made over the past years, Olivetti can now present the compelling offer of a Silicon Foundry to those Companies, Research Centers, and Universities looking for a highly competitive, time-focused, flexible silicon foundry service, covering virtually all product ranges.

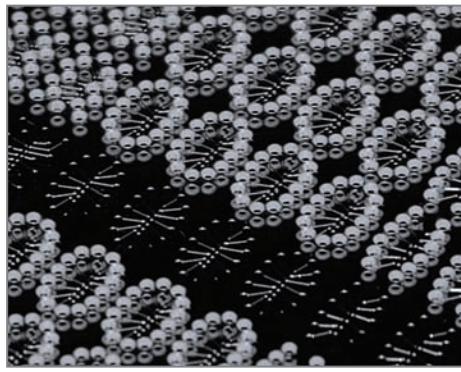
The Olivetti offer in the MEMS field ranges from providing the single process phase through to the whole wafer production cycle; the experience on many diverse technologies helps on offering strong support on concept and product developments and prototyping.

The technology is suited to realize complex microfluidic circuits comprising high precision pass-through holes and micro channels both on silicon and glass substrate; when required by the application also polymers are involved on the process.

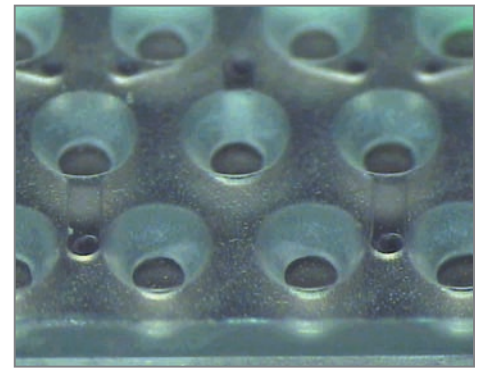
Something really peculiar is the exploitation of technology processes like sand-blasting, wet etching, laser micromachining and wafer bonding aside the standard silicon technology to obtain a wide range of devices for MEMS and Bio-MEMS applications



Glass and silicon micromachining



Glass and silicon micromachining



Glass and silicon micromachining

SILICON TECHNOLOGIES

SEMICONDUCTORS & THIN FILMS	Sputtering	Al-Cu, Al-Si, Ta, Ti, TaN, TiN, Au, Pt, ITO	Ion Implantation	Medium energy, Medium current
	Evaporation	Ti, Al, Ag, Au, Ni, Pt, Pd,	Photolithography	Single & Double side, Contact, Projection, Stepper
	P.E.C.V.D.	SiO _x , SiN, SiC, SiON, Surface treatment		
	L.P.C.V.D.	Si ₃ N ₄ , Poly-Si, TEOS, USG, BPSG	Dry Etching	(RIE & ICP: Si, Poly-Si, SiO ₂ , Nitrides, Carbides, Metals)
	A.P.C.V.D.	USG, PSG, BPSG		
Thermal Furnaces	Pre-deposition, Diffusion, Oxidation, Annealing	Wet Etching	Metals, Oxides	
MICROMACHINING TECHNOLOGIES	Silicon Micromachining	DRIE & Wet (TMAH)	Structural Polymers	Thick polymer deposition and patterning
	Laser Micromachining	Excimers Lasers (193nm, 248nm, 351nm)	Sand-blasting & Micro-sand-blasting	
	Electroplating			
	Thick Photoresist		Wafer Bonding	Anodic, Direct, Fusion

STRUCTURED GLASS & SILICON WAFERS

Applications	<ul style="list-style-type: none"> - Pressure sensors - Bio - Spotting - Micro fluidics - Others 	Example	<ul style="list-style-type: none"> - Kit personalizzazione tastiera Structured - Polymers - Micro-through hole - Patterned micro grooves (through mask sandblasting) - Microfluidics - Others
	Technologies		