SiMETRICS

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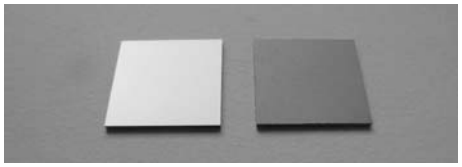
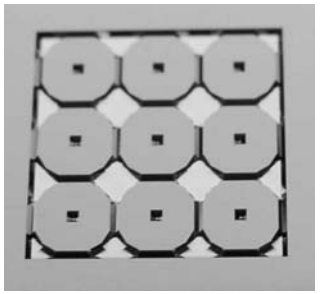
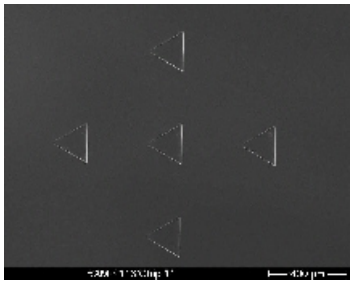
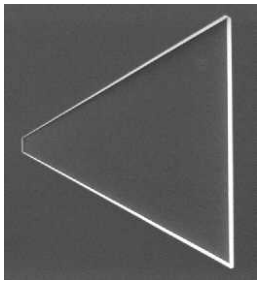
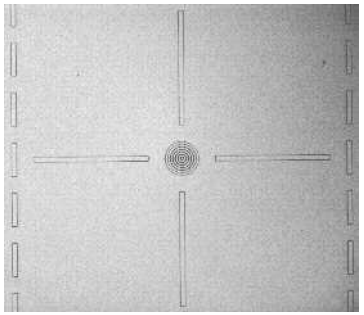
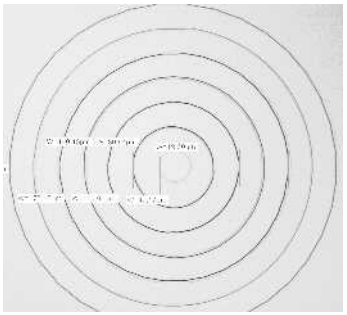
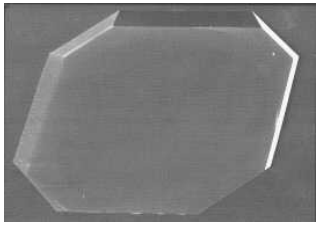
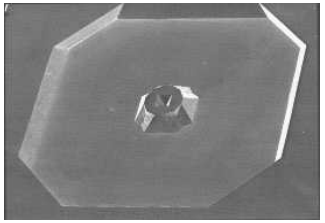
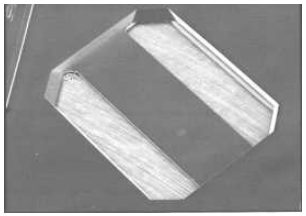
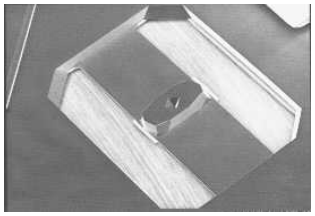
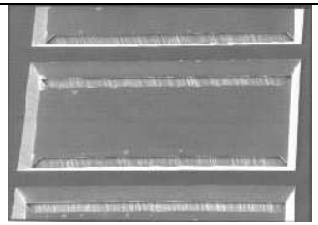
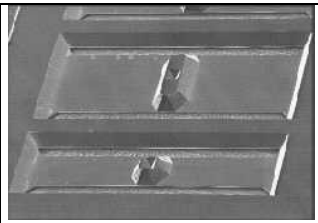
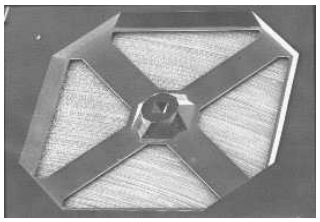
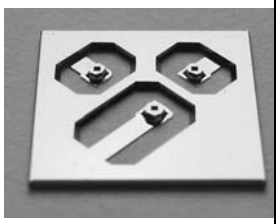
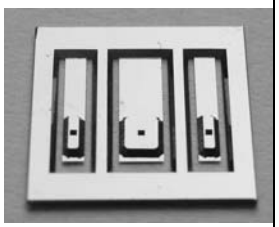
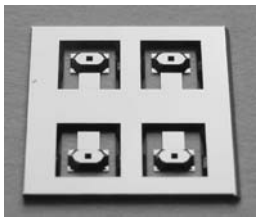
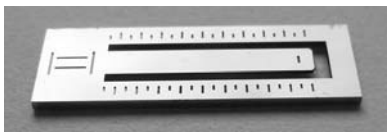
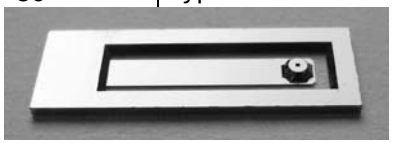
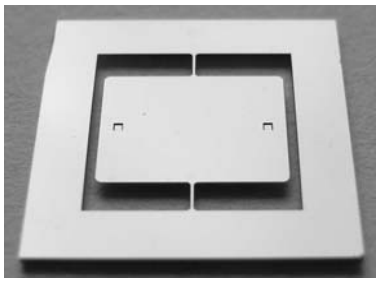
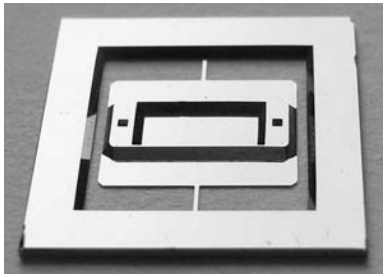
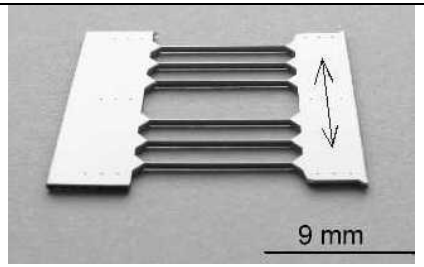
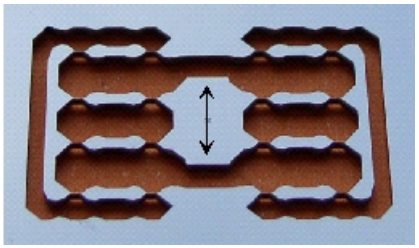
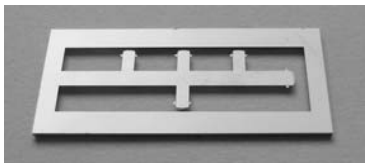
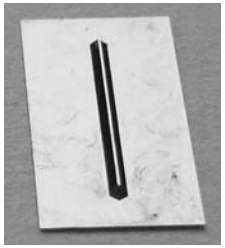
Treasure Chest
Examples of available chips and structures

Do not hesitate to tell us your requests

Chip resp. **Structure** (Measures rounded)	**Type**	**View**
{100}Si-Chip without Structure (further orientations, sizes, thicknesses and coatings by request) Square (sawed along <110>) square 10 mm x 10 mm, 525 µm thick, 2-side polished square 10 mm x 10 mm, 525 µm thick, front polished, back lapped Stripe (long side etched, narrow side sawed) rectangular 4 mm x 20 mm, 525 µm thick, 2-side polished, along <110> rectangular 4 mm x 20 mm, 525 µm thick, 2-side polished, along <100> rectangular 4 mm x 40 mm, 525 µm thick, 2-side polished, along <110> rectangular 4 mm x 40 mm, 525 µm thick, 2-side polished, along <100>	 CQ10-525pp CQ10-525pl C4:20P-525pp C4:20D-525pp C4:40P-525pp C4:40D-525pp	 Type CQ10-525pp (left) Type CQ10-525pl (right)  Type CR4:20P-525pp (top) Type CR4:40P-525pp (bottom)
Concave (Hollow)-Pyramids inside an {100}Si-Chip square pyramid, length of edges 410 µm, depth 290 µm Single pyramid chip size 3 mm x 3 mm about dodecagonal, thickness 300 µm Array of 3 x 3 pyramids chip size 10 mm x 10 mm, thickness 300 µm	 HP3 HP3x3	 Type HP3  Type HP3x3

Chip with Deepenings of Increasing Depth (3°-Ramp) {111}Si tilted about 3° around <110> trapezoidal deepening: basis 250 µm, height 150 µm, trapezoidal angle 60° depth increasing from the narrow side (1 µm) up to the basis (8 µm) chip size 10 mm x 10 mm 5 Groups of ramps (cross like arranged) each with 5 trapezes	TR3	 Group of trapezes  Single-trapeze (ramp)
Chip with Systems of Rings dry etched, other depths by request system of rings:- circular deepening in the centre, diameter 20 µm - 3 rings (width 15 µm), outer diameter 80, 140, 200 µm chip with 3 x 3 systems of rings (distance 2 mm) inside a centre of crosses chip size 10 mm x 10 mm System with depths 100, 200, 300, 400 nm from the centre up to the outside System with depths 400, 300, 200, 100 nm from the centre up to the outside System with depths 300, 100, 200, 400 nm from the centre up to the outside System with depths 200, 400, 100, 300 nm from the centre up to the outside	RS100:400 RS400:100 RS300:400 RS200:300	 Rings inside the cross  System of rings
Chip with a Deepening (Membrane) depth 350 µm, thickness of the membrane 50 µm (others by request) membrane 6 mm x 6 mm (corners blunted) boss: stump of an 8-angular pyramid, top 1 mm x 1 mm chip size 10 mm x 10 mm Membrane without boss Membrane with boss in the centre	M10-50 MB10-50	 Type M 10-50  Type MB 10-50
Chip with Structured Membrane depth 350 µm, thickness of the membrane 50 µm (others by request) boss: stump of a pyramid chip size 10 mm x 10 mm Stripe-membrane (bridge) along <100>, width 2 mm, without boss along <100>, width 2 mm, with boss (2 mm x 1 mm)	BD10-50 BDB10-50	 Type BD10-50  Type BDB10-50

3 Stripe-membranes (bridges) along <110> without boss, width 1, 2, 1 mm along <110> with boss, width 1, 2, 1 mm	3BP10-50 3BPB10-50	 Type BP10-50  Type BPB10-50
Crosslike-membrane along <100> with a central boss (1 mm x 1 mm), width 1 mm	KFDB10-50	 Type KFDB 10-50
Chip with Cantilever cantilever thickness 50 µm (others by request) 3 Cantilevers along <100>, width 1 mm, length 1, 1, 3 mm, boss 1 mm x 1 mm 3 Cantilever s along <110>, width 1, 3, 1 mm,length 6 mm, boss 1(3)mm x 3 mm 4 Cantilevers along <110>, width 1 mm, length 1 mm, boss 2 mm x 1 mm chip size 10 mm x 10 mm 1 Cantilever along <110>, width 1.5 mm, length 8 mm, with boss 1 x 1 mm chip size 5 mm x 15 mm frame with scale	3CD-50 3CP-50 4CP-50 1CP-50	 Type 3CD-50  Type 3CP-50  Type 4CP-50  Type 1CP-50 front side  back side
Chip with Torsional Plate (Mirror) plate 4 mm x 6 mm, thickness 50 µm frame for stiffening at the back side no metallization torsional beams at the broadside of the plate: thickness 50 µm, length 1 mm width 0.1 mm chip size 10 mm x 10 mm	TS10-50	 Type TS10-50 front side  back side

Parallel springs (in plane-bending) size 20 mm x 16 mm springs: width 525 µm (thickness of the chip), length about 9 mm mounting bar 5 mm x 16 mm coupling bar 3 mm x 16 mm thickness of springs 50 µm 2x1-Spring system 2x2-Spring system 2x3-Spring system	 PSS1 PSS2 PSS3	 Type PSS3
Straight guide (horizontal) (solid hinges: in plane-bending) stage about 4 mm x 4 mm, travel up to +/-1 mm, load max. 0.1 N chip size 30 mm x 40 mm, thickness 1.2 mm	SGH1	 Type SGH1
Hall-Structure electrical resistivity 0.1 Ohmcm stripe: width 2 mm, thickness 50 µm bosses for electrical contacts (without metallisation) for current, potential and Hallvoltage chip size 5 mm x 20 mm	HE-50	 Type HE-50 front side  back side
Chip with Edges height of edges 350 µm trapezoidal cross section (narrow side 10 µm) thickness of the membrane 50 µm (others by request) 2 Edges, short (4 mm, distance 10 mm) chip size 5 mm x 15 mm 1 Edge, long (8 mm) chip size 5 mm x 10 mm	 E10-350 2E10-350	 Type 2E10-350  Type E10-350