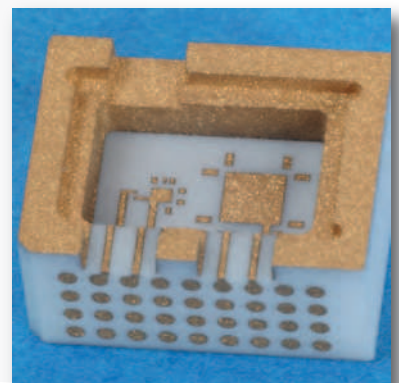
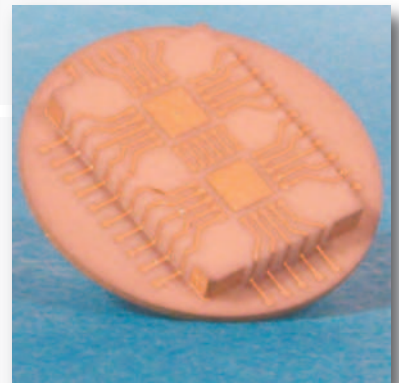
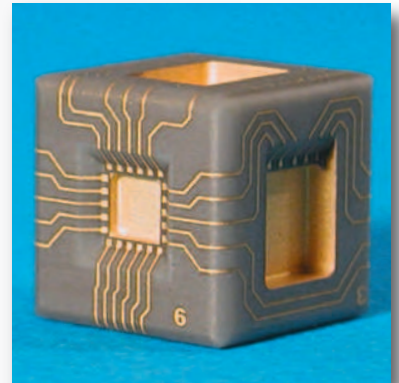


## 3D CERAMIC INTERCONNECT DEVICES

### Products & Applications

- 3D-circuit carriers for the packaging of sensors, chips, LED's, MEMS
- For airborne electronics, photonic sensors, medical devices, antennas...



### Technology

High precision 3D-components made of advanced ceramics (alumina and AlN)

#### Metal thin-film sputtering :

- For assembly technologies (soldering, bonding)
- Ti/Pt/Au, Cr/Ni/Au, NiCr/Au
- Silver, aluminium, indium..

#### High-selectivity laser ablation :

- Track width  $\leq 50 \mu\text{m}$  (0.002")
- Insulation width  $50 \mu\text{m}$  min (0.002")
- Tight tolerance down to  $10 \mu\text{m}$  (0.0004")

### Benefits

- 3D packaging with electrical & mechanical functions
- Good electrical insulation
- High thermal conductivity
- High dimensional stability
- Flexible process from prototypes to medium-size production batches
- No expensive tooling

