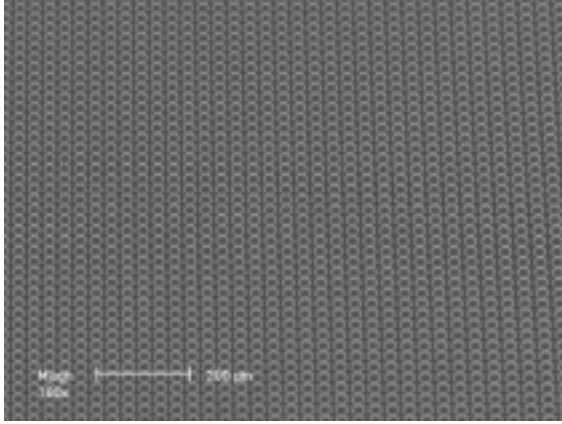


<Reference Photos>

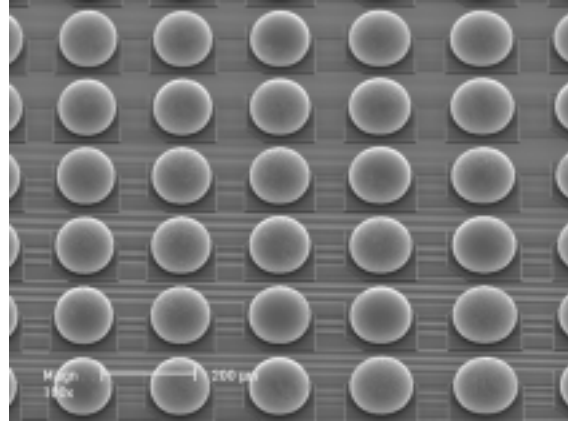
Photo 1: 35 μ m-pitch lead free bumps formed on detection signal-processing CMOS device

Photo 2: Cross section of interconnect area for chip-on-chip that employs high-precision flip-chip bonding technology to package detection signal-processing CMOS device with X-ray detection device

Photo 3: Exterior view of X-ray image sensor in VATECH's X-ray imaging system using this technology



0.200mm
Photo 1: 35 μ m-pitch bumps



0.200mm
Reference: 220 μ m-pitch bumps



0.200mm
Photo 2: 35 μ m-pitch bumps mounting cross section



0.200mm
Reference: 220 μ m-pitch bumps mounting cross section



Photo 3: X-ray imaging sensor



Reference: Chip-on-Chip MCM
(Upper portion: X-ray detection device,
Lower portion: 4 units of detection signal-processing)