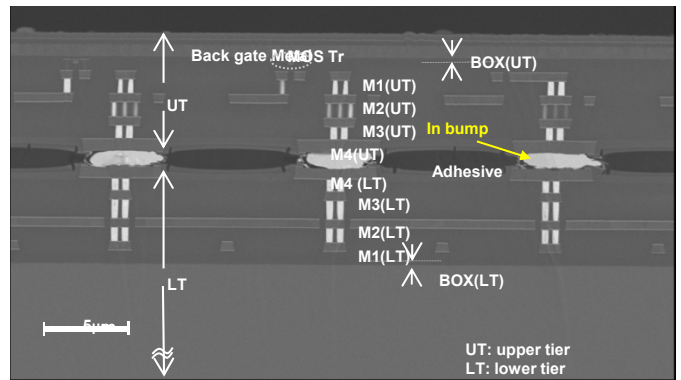
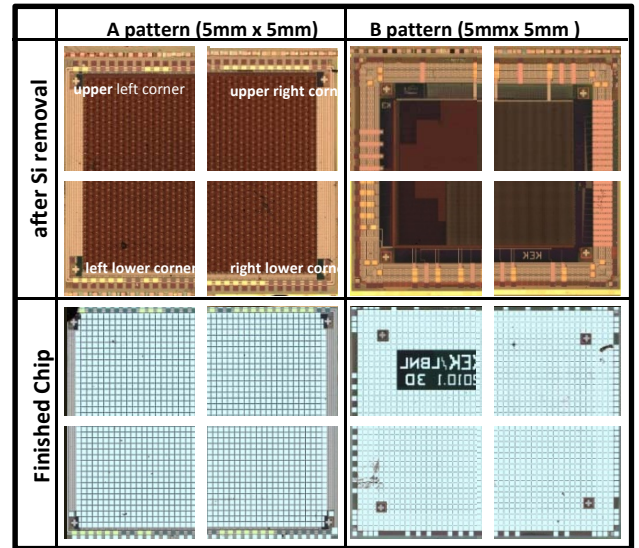
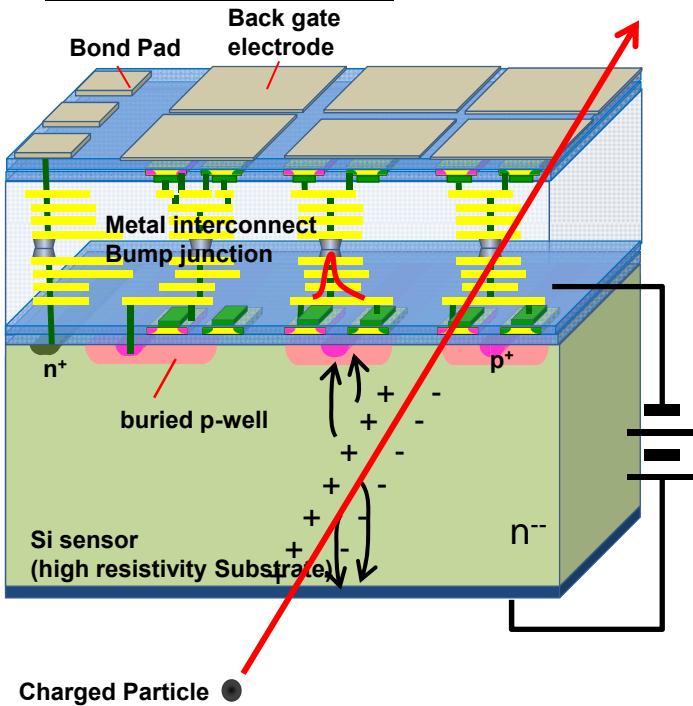


## Stacked 3D-IC technology using $\mu$ -bumps

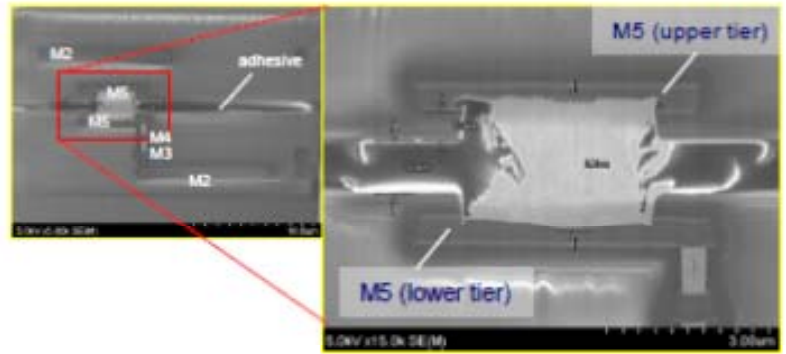
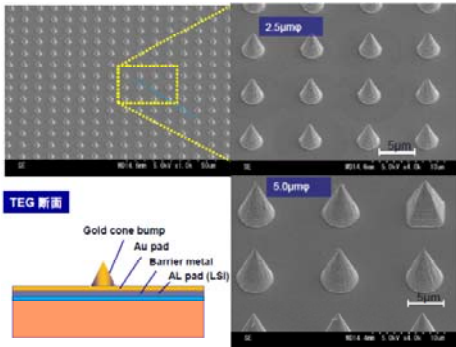
3D stacking technology with  $2.5\mu\text{m} \times 2.5\mu\text{m}$  Au (Gold) bump connections with adhesive injection. This technology is applicable **image sensor and X-ray detector, IR detector and element particle detector** with high frame rate and high resolution

Min. bump pitch	: 5 $\mu\text{m}$
Bump size	: 2.5 $\mu\text{m} \times 2.5 \mu\text{m}$
Min. pad opening size	: 3.0 $\mu\text{m} \times 3.0 \mu\text{m}$
Bump height	: 1.7 $\mu\text{m}$
Highest process Temperature	: 200°C

### Demonstration chip



### 5 $\mu\text{m}$ pitch Au cone bump connection



**Tohoku-MicroTec Co., Ltd.** (<http://www.t-microtec.com>)

Japan Headquarter

6-6-40 Aza-Aoba Suite 203, Aramaki, Aoba-ku, Sendai, 980-8579 Japan

Phone: +81-22-398-6264, Fax: +81-22-398-6265

info@t-microtec.com

Information in this document is subject to change without notice.

US Office

135 Rio Roboles East Unit 160, San Jose, CA 95134 USA

Phone: 408-464-7972

hasegawa@t-microtec.com

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