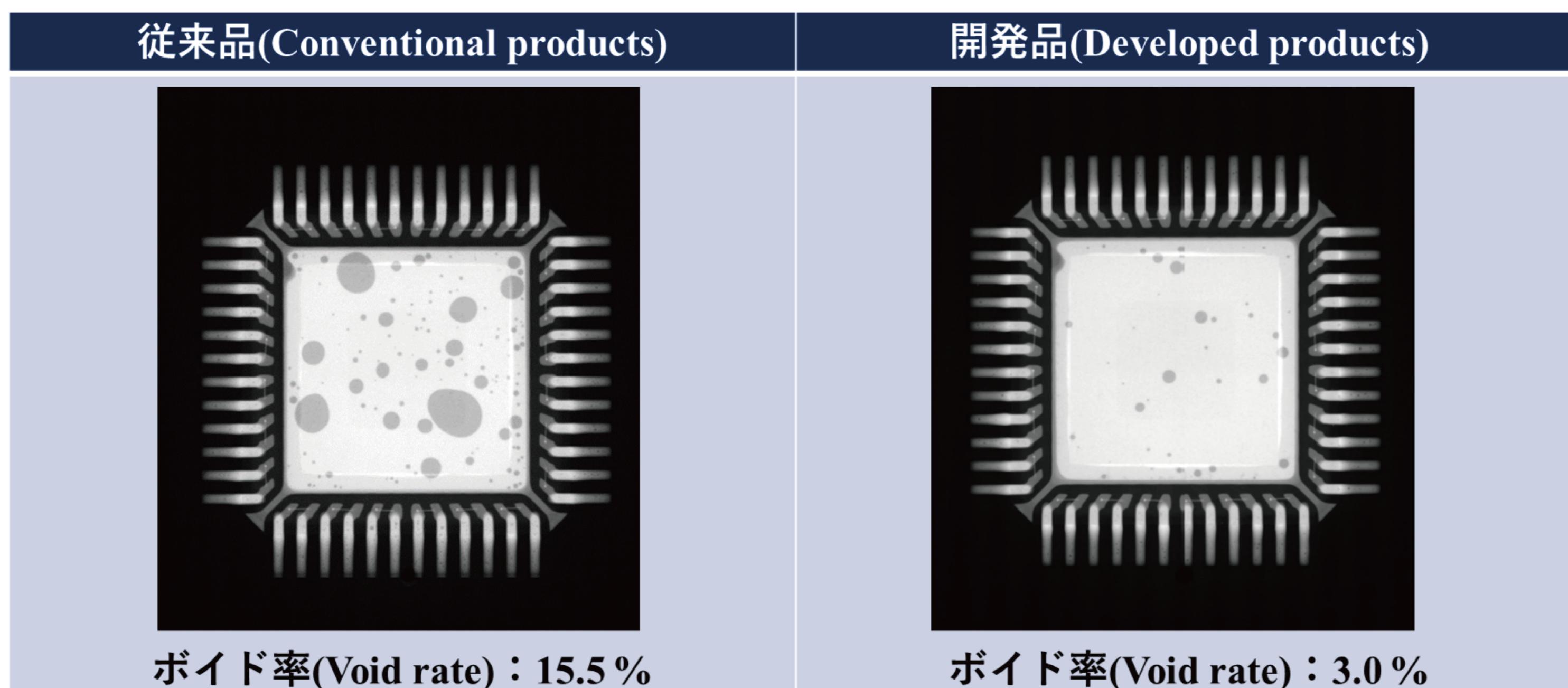


# 車載、高信頼性製品に対応!超低ボイドはんだペースト!

Ultra-low void solder paste for automotive and high reliability products

## NP303-VLP102-T4 フラックス開発で大幅なボイド抑制実現

Flux development achieves significant void suppression.



### ボイド低減へのフラックス設計

Flux design for void reduction

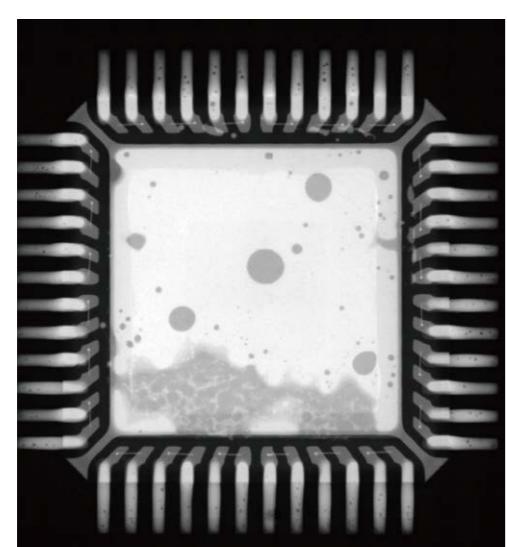
- 高い濡れ性により、  
溶融時のはんだ内部のガス排出を促進

Excellent wettability facilitates gas emissions  
from the flux of solder paste during melting.

- ガスが発生しやすい成分を低減

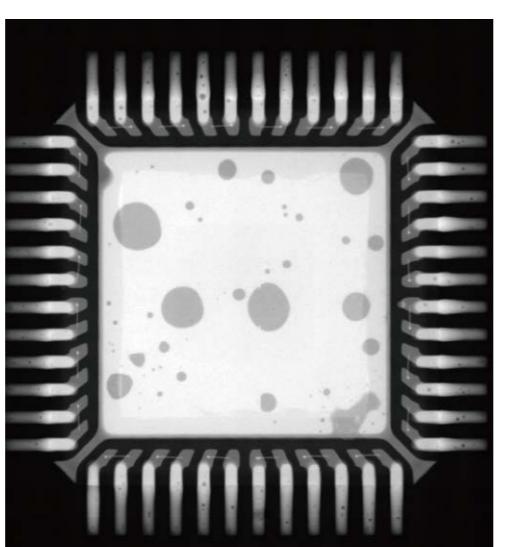
Reduce ingredient prone to occurrence of gas.

#### 不良事例① Defective case1



ぬれが悪くガス排出が不十分  
Poor wetting and insufficient gas discharge.

#### 不良事例② Defective case2



揮発成分が多くはんだ内部に滞留  
High volatile components remain inside the solder.

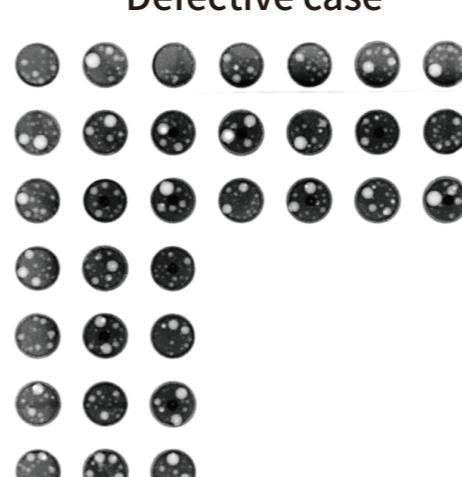
#### NP303-VLP102-T4

ボイド率10%以下を実現  
Void are:less than 10%

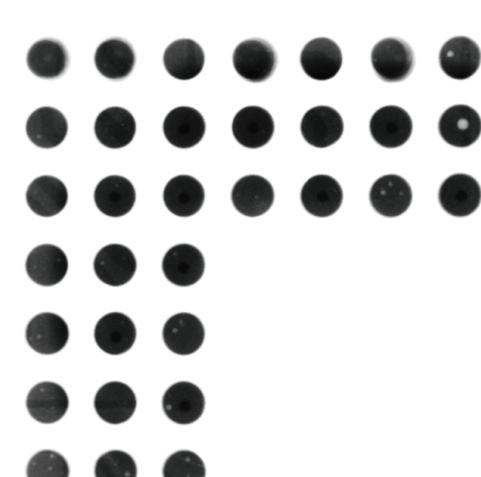
### BGA部品への適用

Applied for Ball Grid Array components

#### 不良事例 Defective case

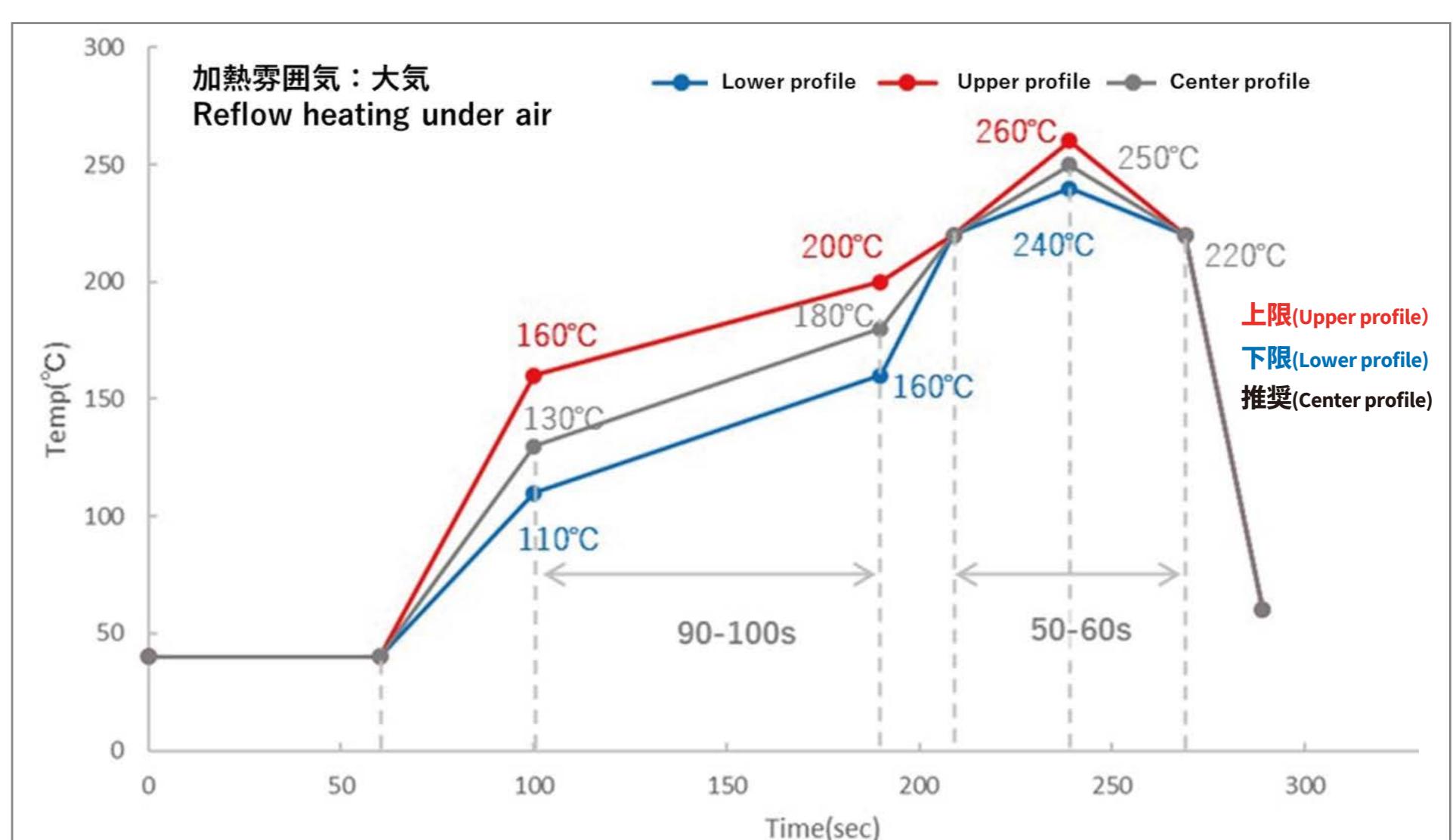


#### NP303-VLP102-T4



### リフロープロファイルの制約を受けません

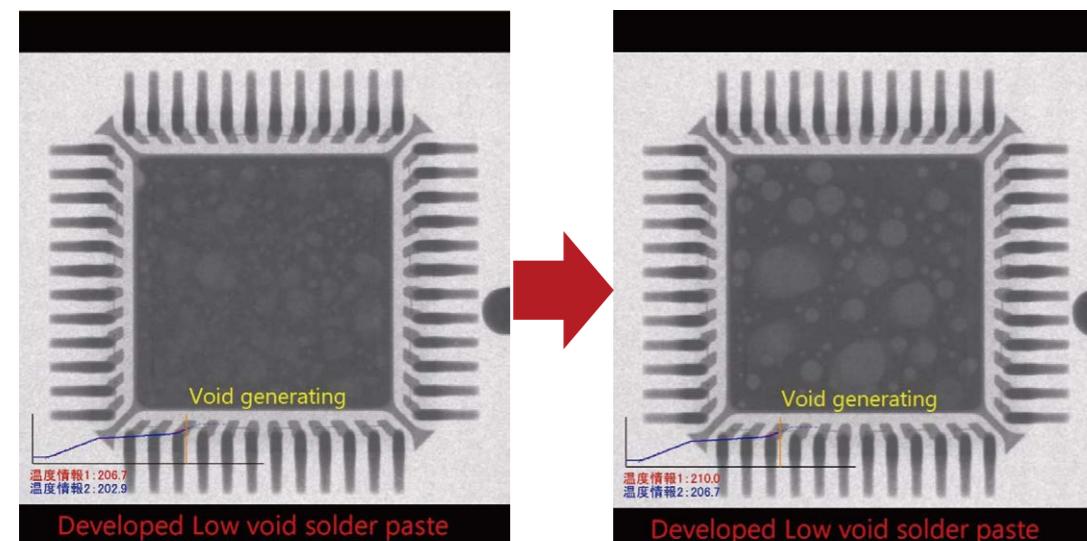
Not constrained by reflow profiles



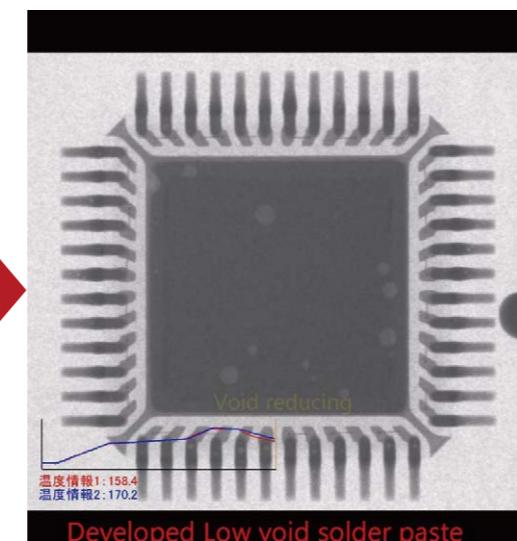
### 加熱時のボイド発生挙動

Voiding behaviour during heating

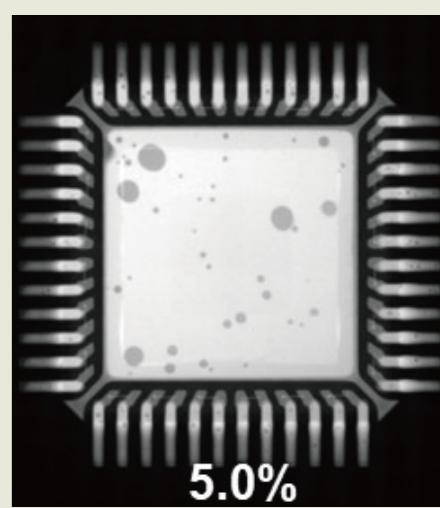
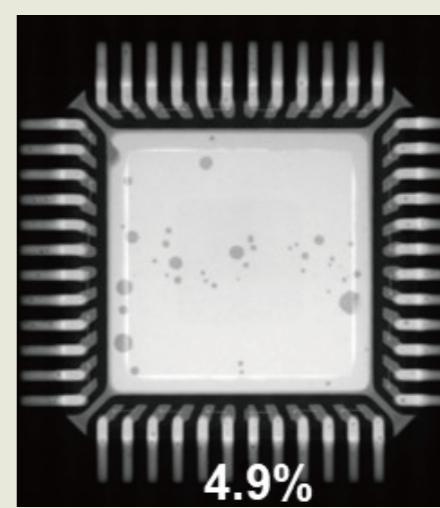
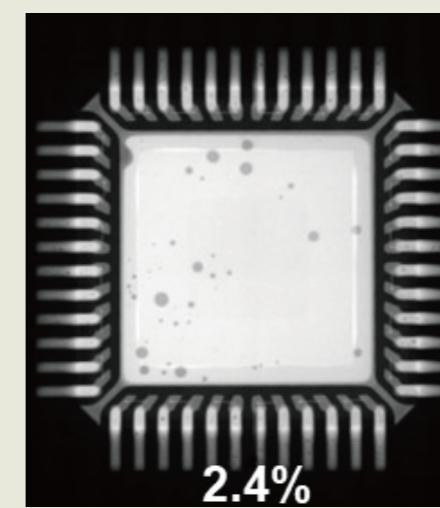
#### ボイド発生段階 Void generation stage



#### ボイド消失段階 Disappearance stage



#### ボイド Void



#### 溶融性 Molten state

