

# Software for design optimal land and stencil opening pattern of SMDs.

# Land Navigator

for Microsoft Windows 2000 / Windows XP

**Abstract of the product** *Trial version download*  
<http://www.ss-technologies.co.jp>

Panasonic Factory  
Solutions

Joint development

Sohwa & Sophia  
Technologies

This is software for design optimal land and stencil opening pattern of SMDs.

☆Applications  
 —Chips  
 —QFPs, SOPs  
 —Connectors  
 —QFJs, SOJs  
 —BGA/FBGA

Calculates automatically by  
mounting know-how  
From  
Panasonic Solutions Inc

Input [each dimension of SMDs]

Output [each optimal dimension of land, stencil and resist]

Sample: Kyusyu Matsushita Electric / FA mounter.

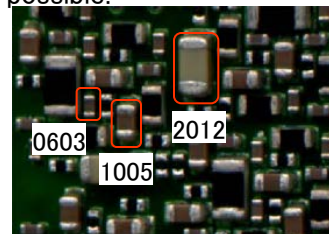
## Feature

### 1. Easy operation & high quality design

- \* A quality Land . mask design is obtained based on mounting know-how (16 items) only by inputting a Parts Size.
- \* The correspondence to Pb free solder is also possible.

### 2. Correspond to Various components.

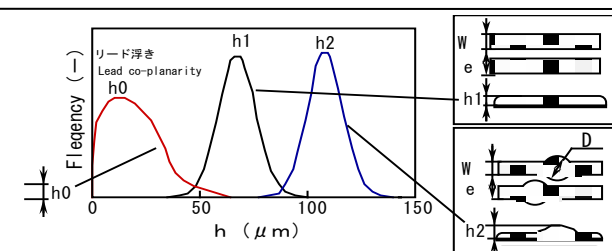
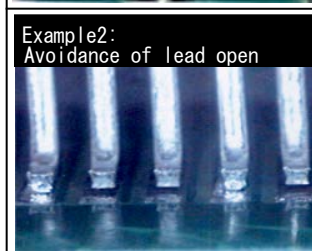
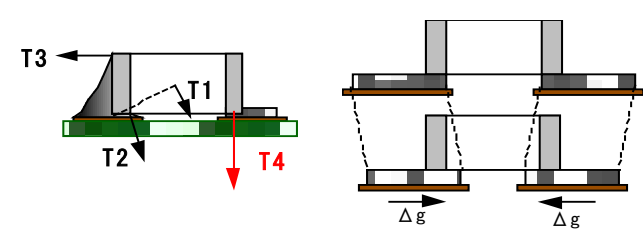
- \* 0603 chips – variant connector (design track record of 300 or more kinds)



### 3. User can customize design specifications

- \* The change in Ryo Handa is possible for every product specification.
- \* Reflection of a visitor's existing design rule

## Contents



Other design techniques are included.

To poor and troubled you

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## Function UP –Ver2 –

### 1. Design Mode Addition!

- User customization function
- Manual design function
- Mask design function [under development]

### 2. Pb Free Correspondence!

- Red-eye prevention optimal Clearance
- Flux content automatic compensation func
- Side ball occurrence prevention mask opening

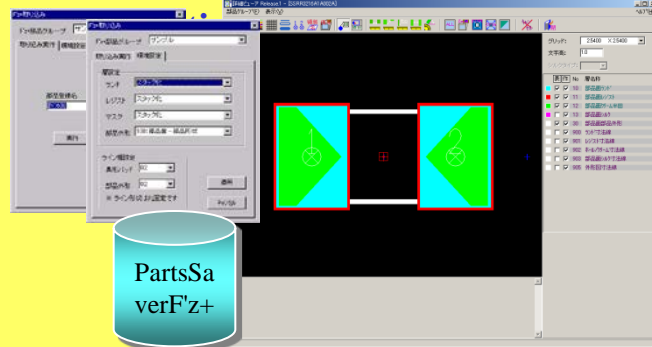
### 3. Calculation Result Rounding

### 4. Data Administration Facility Improvement

- Database-import / Export
- History Check / Parts Size Copy

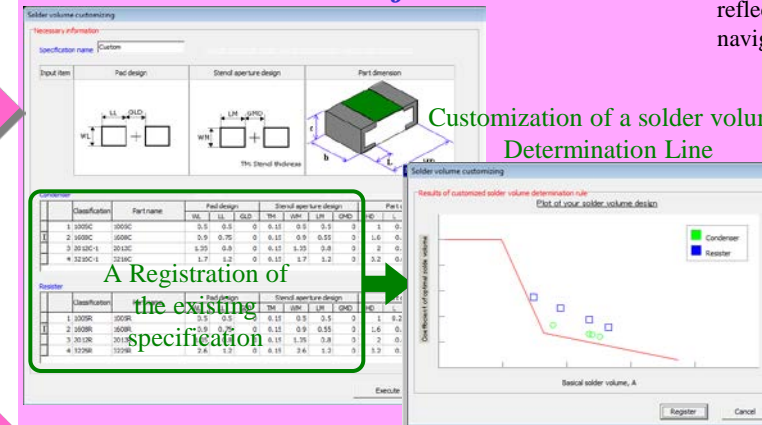
### 5. PartsSaverF'z+ Corabolation

### \* PartsSaverF'z+

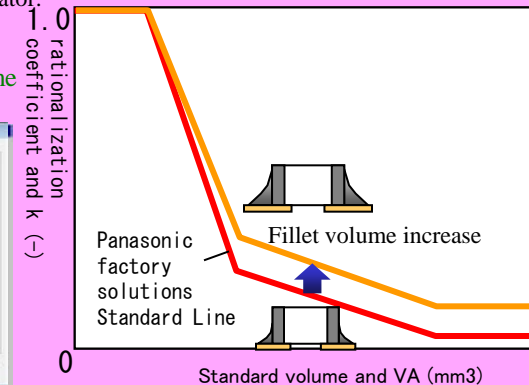


Save to the PartsSaverF'z+ database from LandNavigator is possible.

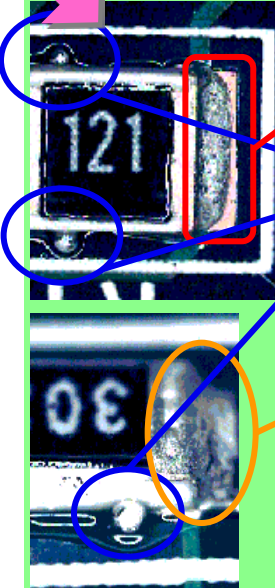
### \* User customization feature



The existing specification which it has by the User can be reflected on the solder volume Determination logic of a Land navigator.



### \* Pb free correspondence function



**Red eye**

The factor of the corrosion of copper

**Side ball**

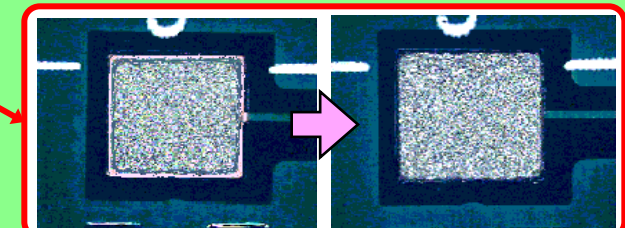
The factor of electrode short-circuit

\* With Pb free solder, it is the generating frequency UP.

**It is based on change of solder specific gravity. Change of flux content**

Change of junction life

The same various rules as the time of other SnPb(s) eutectic crystal solder are applied..



Quadrangle opening



Home base opening



Printing appearance

Cream solder

Mark	Set item	Set value
CRF	Flux content rate(vol%)	50
CS	Solder composition	Eutectic Sn-Pb

Flux Content Adjustment is possible.