

IGBT

Failure chips on Wafers and e-wafer map

Introduction

This document describes the specifications of mapping data for failure chips on Renesas IGBT wafer products include sawn wafer products.

Target Device

IGBT wafer products

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1. About the mapping data of failure area for wafer products

Renesas provides failure area information for wafer products by using the electronic data called "E-wafer map".

1.1 Providing flow of E-wafer map

Providing flow of E-wafer map from a wafer production flow is shown below.

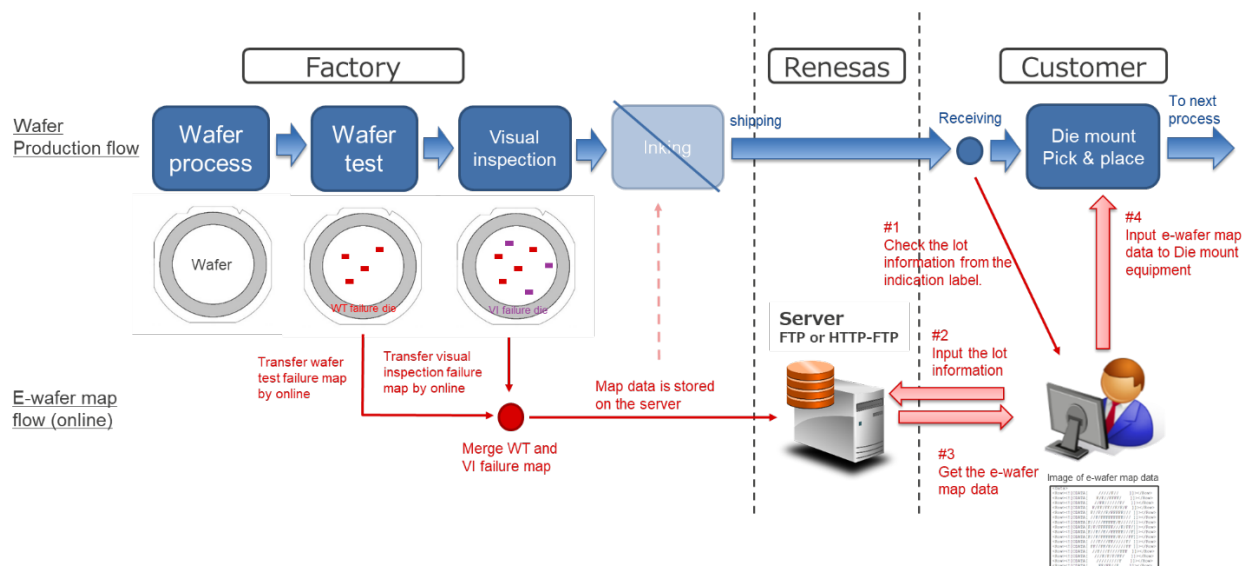


Figure 1-1 Providing flow of E-wafer map

1.2 e-wafer map format

The specification for e-wafer map format is shown below.

1.2.1 Specification for e-wafer map format

Table 1 e-wafer map format

items	Contents	Note.
File format	XML format	
Data format	SEMI standard compliant Version : SEMI G85-0303	See an example on the next page
File unit	One file for one wafer	E-map files is compressed for each lot and stored on the FTP server.
File name	(Wafer ID).xml →ex1. DQ6393 10.xml Lot No. space Wafer No. ex2. DQ6393@10.xml	The "wafer ID" in the file name matches the reading on the barcode label attached to the wafer.

XML data for e-wafer map is shown below.

Figure 1-2 Example for e-wafer map data

1.2.3 Example of coordinates for e-Wafer map data

Example of coordinates for e-Wafer map data is shown below.

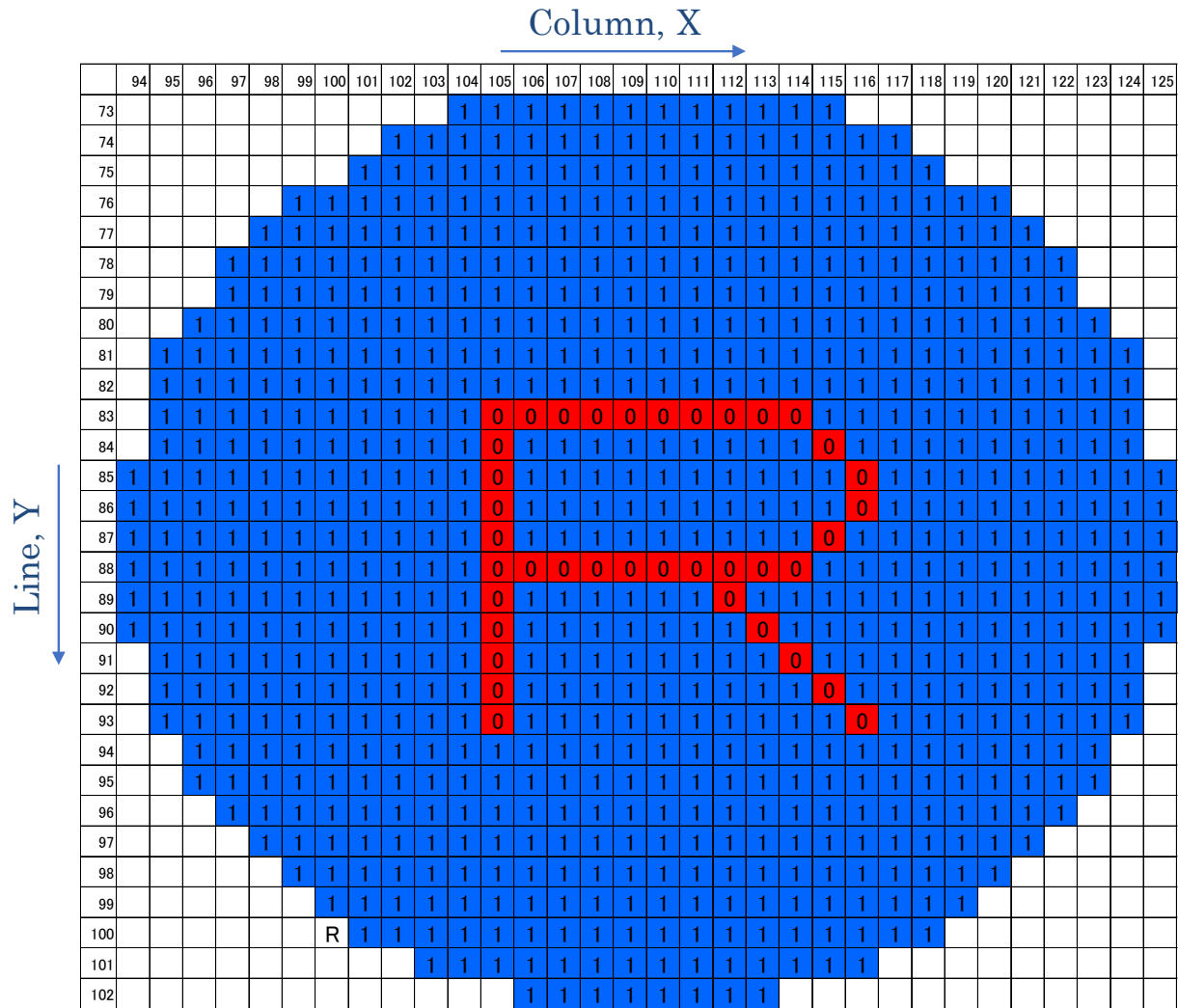


Figure 1-3 Example of coordinates for e-Wafer map data*1

*1: This diagram shows some failure chips on a wafer to explain failure area simply. So those failure chips are not concerned with the actual failure rate and failure area.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.31.24	-	First edition

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