

# Mapping



Provides order level fulfillment and tracking

## Overview

Some manufacturing industries such as semiconductor, PCB and SMT, require that the system keeps track of units inside a two-dimensional surface. In some cases, the surface is divided into uniform regular rectangles in the form of a matrix while in other cases the shape, position, and orientation of each unit within the two-dimensional space can be very different.

The Mapping module provides support for two-dimensional structures that can be linked and integrated with material tracking for the purposes of tracking quantities, defects, or other sub-material level properties.

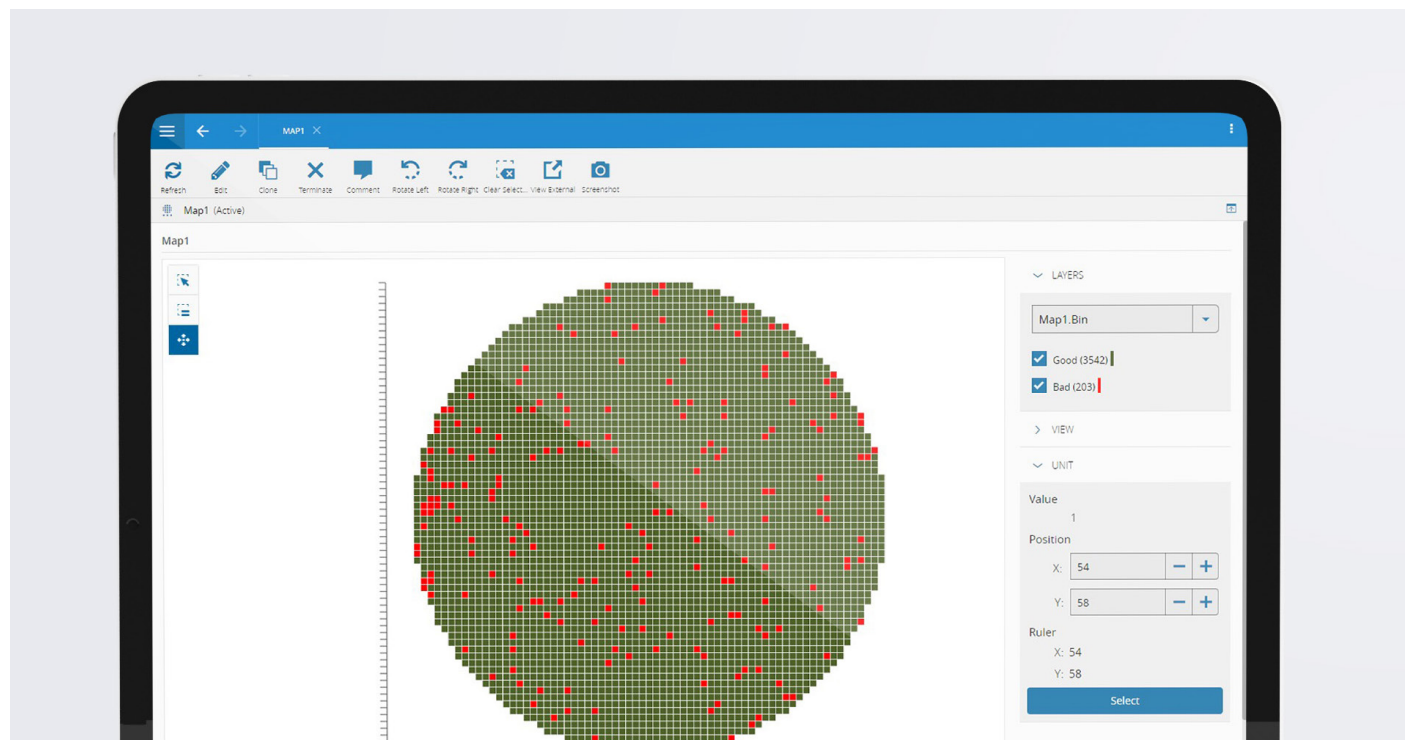


Figure 1 Map viewer example (regular map)



**Critical**  
manufacturing 11.2

**Disclaimer** · The information contained in this document represents the current view of Critical Manufacturing on the issues discussed as of the date of publication. Because Critical Manufacturing must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Critical Manufacturing, and Critical Manufacturing cannot guarantee the accuracy of any information presented after the date of publication. This document is for informational purposes only. Critical Manufacturing makes no warranties, express, implied or statutory, as to the information herein contained.

[contact@criticalmanufacturing.com](mailto:contact@criticalmanufacturing.com) · [www.criticalmanufacturing.com](http://www.criticalmanufacturing.com)

## Key Features

- Support for multiple Map Definitions that act as templates from which maps can be created.
- Support for regular and irregular layout (with different shapes, sizes and orientations) map structures.
- Support for multiple layers per map and multiple maps per material.
- Support for map regions.
- Native support for SEMI G85 and E142 map structures.
- Interactive visualization of maps, including flip, zoom, rotation, and filters.
- Support for editing E142 bin code maps.
- Support for automatic merge of multiple maps into a master map.
- Support for merged maps, in which a master map aggregates the results of multiple individual maps.
- Native integration with Material Tracking so that when recording losses in the map, the Material quantity is automatically synchronized.
- Capability to define and apply Substrate Masks.
- Capability to search for a E142 map based on Substrate, Carrier, Lot, Alias or Device.
- E142 die-level forward and backward traceability.
- Capability to define and apply Substrate Masks.
- Capability to convert E142 bin codes when downloading to or uploading from equipment.

## Benefits

- Spatial tracking of units, including their defects
- Die-level traceability
- Automatic material quantity synchronization with the map good units
- Die-level traceability

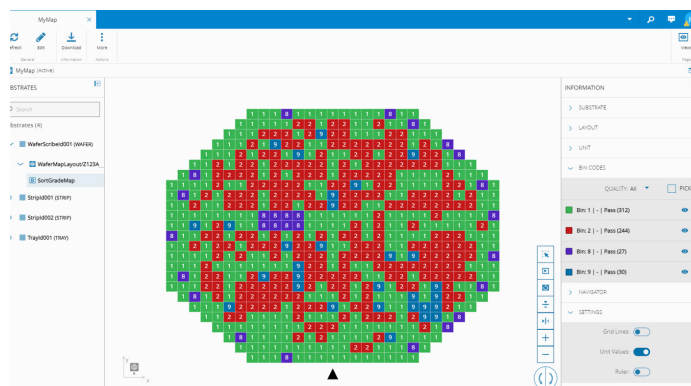


Figure 2 Map viewer example (E142 map)

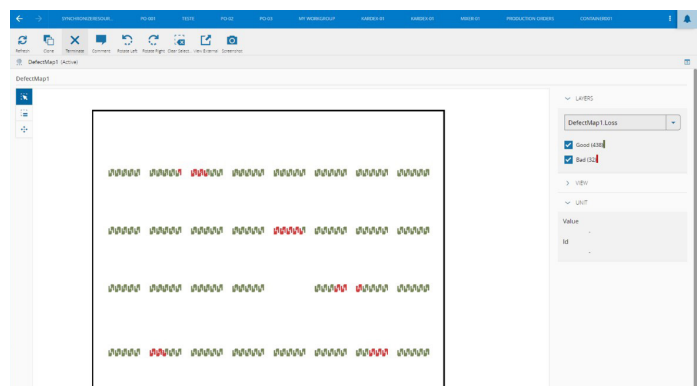


Figure 3 Map viewer example (irregular map)