



ALPS 3 FOR WAFER MAPPING

The most striking new features in ALPS 3 (ALPS NET, ALPS OEM) compared with ALPS 2 (ALPS LT, ALPS EL) are strip mapping, support for Single-Device Tracking (SDT) and for complicated substrate layouts (multi-project wafers, SiP, etc.).

However, also for applications that require not more than “classical” inkless processing of wafers, ALPS OEM and ALPS NET have advantages over the ALPS 2 products. These result partly from an overall more modern system design using the newest available implementation methodologies and partly from following newer requirements we hear from users.

The following table offers a short overview of these advantages.

Feature	Benefits	ALPS 3 ALPS 2			
		NET	OEM	LT	EL
Simplified system architecture, moving server tasks to the ALPS Server	Higher reliability and robustness	✓			
Automatic recovery from computer restarts and network failures	Higher system availability	✓	✓		
Automatic health monitoring of ALPS background programs	Higher reliability and robustness	✓	✓		
Support for redundant server computers (“failover cluster”)	Availability improvement for large system configurations	✓			
No conflicts with Microsoft Remote Desktop	Better facilities for remote ALPS system maintenance	✓			
SEMI standards compliance for wafer mapping applications	Industry requirement	✓	✓	✓	✓
Full SEMI E142 compliance (different map types, bin codes >255, ... *)	More recent industry requirement	✓	✓		
Merging of (e.g.) probe and bump maps on map import	Increases usability for production	✓	✓	✓	✓
Dynamic merging of (e.g.) maps from wafer probe and wafer bump	More flexible and reliable than the static merging	✓	✓		
Support for physical device location information on wafers *	Allows equipment faster and more reliable wafer alignment procedures	✓	✓		
Multi-project wafers *	Production flexibility	✓	✓		
ALPS Recipes to specify map-related production parameters	More flexible and reliable production			✓	✓

Feature	Benefits	ALPS 3		ALPS 2	
		NET	OEM	LT	EL
ALPS 2 Recipes replaced by much more flexible PDE mechanism	Better facilities for production parameter settings	✓	✓		
Lot TrackIn/TrackOut	Simplified production procedures	✓			
Detailed equipment status on connected ALPS computer	External equipment monitoring	✓	✓	✓	✓
Detailed equipment status on all ALPS computers	Better facilities for equipment monitoring	✓			
Export function supported, in addition to Import	Allows ALPS to be used for (e.g.) bump inspection	✓	✓	✓	
Map import (and export) by operator	Allows using any map format (600+ converters)	✓	✓	✓	✓
Automatic import/export function	Option in ALPS EL, often demanded	✓	✓	✓	
Simplified operator facilities for manual map import	Easier to use, less risk of human failures	✓	✓		
Extended operator facilities for automatic map import	Easier to use	✓	✓		
Access of external files (import/export, logfiles etc.) with Windows File Sharing	No need to use portable storage devices for data transfer	✓	✓	✓	✓
Access of external files (import/export, logfiles etc.) with FTP	Important feature, also for small installations	✓	✓	✓	
Multiple formats per converter	Allows specifying different map conversion settings for different products	✓	✓	✓	✓
Extensive ALPS Format features: bin codes used, meaning, translation	Allows setting up more reliable production procedures	✓	✓		
Entry-level SQL Server 2000 system	Reliable data management, upgradeable to large systems			✓	✓
Built-in SQL Server allows larger databases and more users	Allows larger systems, better maintainability	✓	✓		
Map and Lot Print facility, fixed reports, printouts only	Simple reporting system			✓	
Compatible with ALPS EMI** which offers data warehousing, historical archiving, reporting and analysis.	Get the most out of your critical production and single device tracking data for recall containment, commonality analysis and yield enhancement.	✓			
Flexible web service interface	Allows for custom integration with the MES and 3 rd party applications	✓			

Notes: * To be able to make full use of the * marked features, support by connected production equipment is required
 ** ALPS EMI is not included with ALPS NET and must be purchase separately.