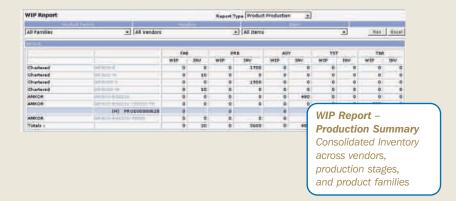
TENSOFT. SemiOps

Operations and Outsourced Manufacturing

SOLUTIONS FOR THE FABLESS INDUSTRY

Complete WIP and inventory management support

for semiconductor operations, including yield and cycle time history, consolidated WIP status, complete forward and backward product genealogy, complete lot and product attribute tracking, all fully integrated with planning, customer service, and ERP.



	Yield Analysis			Raport Type Yield by Attribute Set							
	01/01/2000 [12/31/		[Rot] Ba								
	Attribute Settling To	Outo	yl Dam	Completion Of	In Qty	Out Qty	Yld Loss	Vnd Loss	Ope Yld	50 Y1470	Variance
	AR CH00002 PR CHRT000024 PR AR-		RQUS-BGA216 RQUS-P		1600 4000	1500 0400	600	20	99.00%	99.75% 85.00%	
			D00000620 D00000619	03/07/2006 03/20/2006	2000 2000	1600	400 200	0	80.00% 80.00%	80.00% 90.00%	0.00%
			ARGUS-W ARGUS2-S		90		100	0	100.00% 90.00%	100.00% 95.00%	
					2000						
	FR 6012-976	ARG	362-W		40	40	0		100.00%	100.00%	0.00%
					6193	5688	472	25	56.25%	91.96%	-35,71%
Product Family Yield analysis by product,			PY:		20351	19759	491	101	97.00%	97.09%	-0.09%
			MOS	4235	4004	112	119	99.00%	94.55%	4,45%	
			MOS-SRT		647	691	- 11		100.00%	97.52%	2.47%
			EME.		4119	3633	278	208	95.00%	88.20%	6.60%
			PB.		23068	21131	1076	81	100,00%	91.92%	8.40%
	; lot, and tion attribute										

Completion Da		The second secon				tion Input Units Ou		
07/26/2004	FAB-TSMC/1	R5000/1 R5000 Attribute Name		TSMC TSMC TW F1		25	25	
Collected Attribute		Wafer Lot Vnd Lot Wafer Size Mask Set ID Proc Flow ID		T\$984801 T\$984801 12 inch MSK-R\$000 ver A PRC F8 R\$000 ver A				
08/06/2004	Process/Rev SRT-ASE/1	R5000-P/1	Resulting Item No R5000-P	Responsible Compan	Oompany Loca ASE KS	tion Input Units Our	4536	
		Vnd Lot Test Prog Test Temp Proc Flow ID		ASP424423 TST PRB R5000 ver B ROOM PRC PB R5000 ver A				
Completion Da 08/19/2004	ASY-ASE/1	R5000-BGA249/1	Resulting Item No R5000-BGA249	ASE	ASE KS	tion Input Units Our 2036	2013	
Collecte	Attribute	Vnd Lot Date/Trace Code BOM ID Mea ID Mark Spec ID Num of I/O Pkg Outline Pkg Type Proc Flow ID Sub-LF ID Environ Type	ute Kame	249 23 × 23 8GA PRC ASY R5000 8GA ver 8		Lot and uni	Product Genealo Lot and unlimited production attribu tracking, forward a	

Streamlines Business Processes

Lot routing, procurement, and inventory valuation are integrated into one transaction flow, eliminating unneeded steps and streamlining the overall outsourced manufacturing process.

Supports Semiconductor Manufacturing

E N E

T S

> Production models are based on an inverted BOM and many to one production model. Multiple production models, yield and cycle time requirements, binning and multiple package options, as well as downgrades and rework, are all fully supported.

Delivers Full Lot Genealogy

Wafer lot, internal lot, and vendor lot can be tracked for every step in the process. Unlimited production attributes can be tracked and used for detailed analysis. Every part has full genealogy associated with it at all times.

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Tensoft[™] **SemiOps**

Industry-Specific Manufacturing, Supply Chain, and Logistics Management

FEATURES OVERVIEW	
Operation Cycle Time Management	Ability to track cycle time data by product, vendor, production step, and product variables for detailed sorting and analysis.
Streamlined Processes	Integrated procurement, production, and lot routing business processes, to streamline management of outsourced production.
Operations Yield Management	Ability to track yield data by product, vendor, production step, and product variables, for detailed sorting and analysis.
Vendor Integration	Automated updates from vendors and contract manufacturers to status WIP and inventory, and for real-time analysis of vendor data. Enables improved data quality and supports on-time delivery.
Lot Routing (Split/Merges, Genealogy)	Track wafer lot, vendor lot, and internal lot at every step of the production process. Maintain and track complete lot history, product identification and process genealogy, for forward and backward tracking. Fully supports lot splits and merges.
Semiconductor Production Model	Support for multiple units of measure including input, output, and procurement. Built around the concept of the inverted bill of materials. Support for genealogy, and multiple packaging options.
Multi-Chip Module	Support for multiple die in one package. Includes indented genealogy and consigned material consumption management for tracking substrate lots or other production materials.
Re-work, Re-Screen, Re-Test	Supports test analysis and production enhancement, reclamation and bonus processes, as well as re-test and re-screen production processes. Captures detailed scrap and yield information, quarantine material, and variances.
Fully Auditable	Tracks and saves a complete process history of every vendor and production step, including detailed product and production information by step.
Easy Integration	Full integration with planning and forecasting modules. Flexible integration options for integration success, providing benefits such as a closed loop process for 3-way match of order to approved production completion, to vendor invoice, and production pay-points fully integrated with payables process.

