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QUESTOR SYSTEMS

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3.0 QUESTOR SYSTEMS

Questor systems consist of those types of equipment used in the design, verification, handling, inspection and test of integrated circuits. This equipment, although critical in assuring device design or design performance or process performance, is distinct from either wafer fabrication or assembly.

The questor systems market composes approximately 35% of the total equipment market for all semiconductor manufacturing equipment. Exact percentages of the total segment and its subsegments will be found in the database sections of each of the following chapters.

As a point of reference, historical sales and bookings are shown in Figure 3.0.0-1. The questor systems equipment market reached an all-time sales peak of \$2200M in the mid-eighties. However, this market—just as others—was adversely affected by the slow-down in 1985 & 1986.

Figure 3.0.0-2 lists the Questor Systems VIC product code used throughout, by VLSI Research.

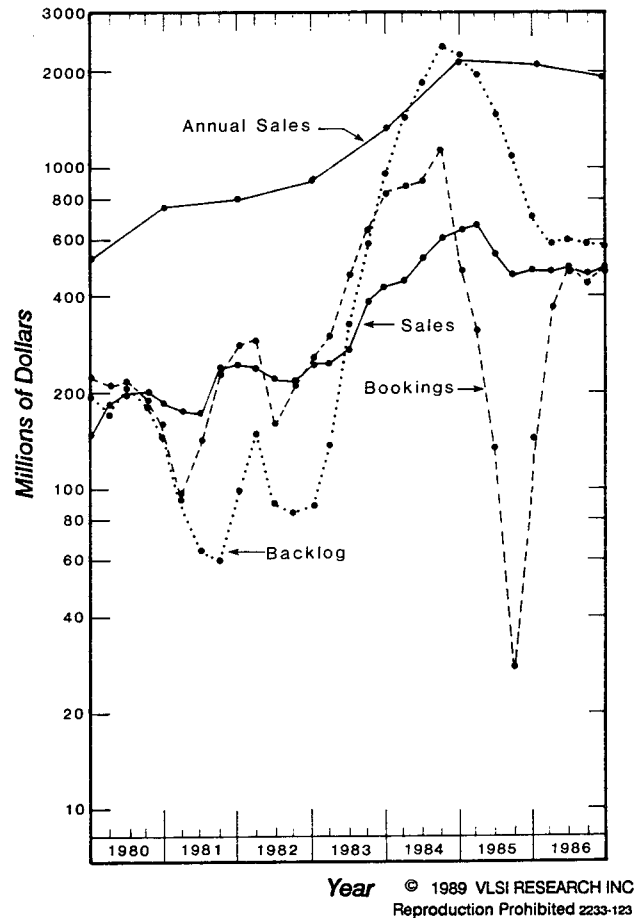


Figure 3.0.0-1
QUESTOR SYSTEMS
SALES AND BOOKINGS 1980-86

TABLE 3.0.0-2

QUESTOR EQUIPMENT VIC CODES

VLSI Research uses a standard industry code that is self-consistent throughout all VLSI Research databases—both those provided in printed media and those on magnetic media. The code is called the VIC code for 'VLSI Research Industry Code'. A complete code listing can be obtained by ordering the document entitled 'Master Source Codes in use at VLSI Research'. Abbreviated portions are found throughout this document. The VIC code numbering system follows the section-by-section outline of 'The VLSI Manufacturing Outlook'. For questor systems equipment it is as follows:

300.00	Questor Systems				
330.00	Automated Test Systems			345.43	Burn-in Transfer Systems
333.00	Logic ATE			345.44	Cassette-to-boat transfer systems
333.30	VLSI Logic Test Systems			345.45	Cassette-to-susceptor Transfer Systems
333.33	Class 0 Logic Test Systems			345.46	SMIF Systems
333.34	Class 1 Logic Test Systems				
333.35	Class 2 Logic Test Systems			350.00	Process Diagnostic Equipment
333.36	Class 3 Logic Test Systems			353.00	Wafer Inspection Equipment
333.37	Class 4 Logic Test Systems			353.30	Laboratory Instruments
333.38	Class 5 Logic Test Systems			353.33	FTIR
333.39	Class 6 Logic Test Systems			353.34	Film Thickness Instruments
333.40	General Purpose Logic Test Systems			353.35	Wafer Flatness Instruments
333.43	Class 7 Logic Test Systems			353.36	Surface Profiling Instruments
333.50	Focused Logic Test Systems			353.37	Wafer Measuring Instruments
333.60	Dedicated Logic Test Systems			353.38	Energy Dispersion Systems
333.70	Complex VLSI Logic Test Systems			353.39	Misc Metrology Tools
334.00	Memory Component Test Equipment			353.40	Electrical Instruments
334.30	General Purpose Memory Test Systems			353.43	CV & DLTS Plotters
334.40	Dedicated Memory Test Systems			353.49	Misc Electrical Measuring Tools
334.50	Bubble Memory Test Systems			353.50	CD Measuring Tools
335.00	Linear IC Test Systems			353.53	Linewidth Instruments
335.30	Analog LSI Test Systems			353.54	LoV SEM's
335.40	Focused Analog Test Systems			353.55	Conventional Imaging Systems
335.50	General Purpose Linear Test Systems			353.56	Coherent Scanning Laser Microscopes
335.60	Dedicated Linear Test Systems			353.57	Coherent Scanning Optical Microscopes
335.70	Traditional Linear Test Systems			353.58	Coherence Probe Microscopes
335.80	Mixed Signal Linear Test Systems			353.60	Defect Inspection Tools
335.83	Mixed Signal 1 Linear Test Systems			353.63	Automated Defect Inspection Systems
335.84	Mixed Signal 2 Linear Test Systems			353.64	Manual Defect Measuring Tools
335.85	Mixed Signal 3 Linear Test Systems			353.65	Surface Particulate Scanners
336.00	Discrete Test Systems			353.70	General Purpose Microscopy Tools
337.00	Burn-in Systems			353.73	HiV SEMs
337.30	Monitored Burn-in			353.79	Misc Microscopy Tools
337.40	Dynamic Burn-in			354.00	Mask & Reticles Inspection
337.50	Static Burn-in			354.30	Mask Master Inspection Systems
338.00	AC Performance Monitors			354.40	Reticles Inspection Systems
340.00	Material Handling Systems			354.50	Mask Repair Systems
343.00	Wafer Probing & Laser Repair Stations			354.60	Mask Qualification Systems
343.30	Automatic Probing Equipment			355.00	Process Monitoring & Curve Tracers
343.33	Semi-Automatic Wafer Probers			355.30	Automatic Process Monitors
343.34	Fully-Automatic Wafer Probers			355.40	Curver tracers
343.40	Manual Wafer Probers			356.00	Materials Monitoring Systems
343.60	Laser Repair Stations			356.30	Solid Monitoring Systems
343.63	IC Trim			356.40	Liquid Monitoring Systems
343.64	IC Repair			356.50	Gas Monitoring Systems
343.65	Hybrid Trim			360.00	CIM Systems
344.00	Package Handling Equipment			363.00	Global CAM
344.30	DIP Handlers			364.00	Cellular CAM
344.40	LCC Handlers			365.00	Networks
344.50	Transistor Handlers			366.00	Application Software
344.60	SO Handlers			370.00	Design Affirmation Software
344.70	Misc. Handlers			373.00	Design Verification Systems
345.00	Transport & Transfer Equipment			373.30	Test Verification Systems
345.30	Transport Systems			373.40	Design Diagnostic Systems
345.40	Transfer Systems				CAD Interface Tools
				374.30	CAD/Design Verif/Test Interface Tools
				374.40	CAD/Masking Interface Tools