COMPANY REPORT

May 25, 2004

DR. KALLIWODA E Q U I T Y R E S E A R C H

VALOR COMPUTERIZED SYSTEMS Buy

Software; Technology

Last price: EUR 2,60
Fair value: EUR 4,80

Promising orders from Asia like actually Inventec
Excellent product Trilogy 5000 for assembly engineering with high profit margins
Relatively high R&D expenses burdens EBIT
Stock is significantly undervalued. Fair value EUR 4,80

COMPANY DESCRIPTION

VALOR COMPUTERIZED SYSTEMS is the leader in integrated engineering software solutions throughout the design-through-manufacturing electronics supply chain. The company´s powerful software tools, based on ODB++ ensures the rapid transfer of optimized data from the design through manufacturing stages. All Valor products are sold and supported by a worldwide network that includes global subsidiary offices.

Source: Deutsche Börse AG

Figures in EUR	2002	2003	2004e	2005e	2006e
EPS Dr. Kalliwoda	-0,04	0,11	0,20	0,26	0,27
EPS Consensus	-0,04	0,11	0,19	0,23	0,26
Revenues (mln)	23,0	25,6	30,5	34,2	37,0
net Income (adj.)	-0,8	1,9	3,6	4,6	5,0
net cash per share	1,8	1,7	1,9	1,8	1,8
net Cash	32,7	30,7	33,9	32,0	32,0
Free Cash Flow	3,3	9,4	1,6	0,6	1,0
P/ E	-	56,4	30,1	23,4	21,8
P/ S	-	0,5	0,4	0,4	0,4

Price (curr)	2,6	Shares out (mln)	18,00
52W high	4,35	6M Avrg Vol (000s)	12,7
52w low	1	Free Float (in %)	39,2%
Market Cap (mln)	46,8	Weight in TecDaxPrimeStandard	0,005%
ROE curr	n.m.	Reuters code	VCR
Sales CAGR 00-04	12%	Bloomberg	VCR
Web Page	www.valor.com	WKN	928731

Source: Dr.Kalliwoda Research

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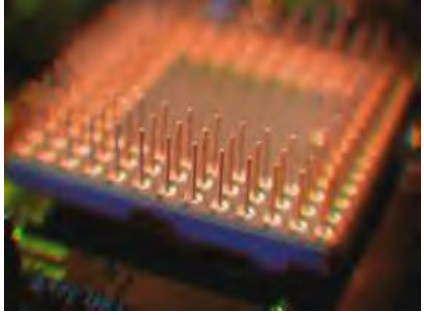

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1. BUSINESSMODEL OF VALOR COMPUTERIZED SYSTEMS

Valor Computerized Systems is considered as one of the best providing engineering productivity solutions to electronics design and manufacturing companies.
Valor continues to revolutionize the electronics industry with its best-in-class engineering systems. These systems are used by international electronic companies like Sony, Toshiba and Nokia. Based on Valor´s Research & Development for their core Software-Solutions and successfully integration of acquired companies Valor became expert for the business segments of **Manufacturing Process Simulation** (MPS) and **Manufacturing Execution Systems** (MES). These products guarantee clients enhancing their productivity for every single production step of complex products **(Product Lifecycle Management).** .

Furthermore Valor was able to develop a powerful software tool, based on the Valor-funded ODB++ open data format for high level data exchange. This tool ensures the rapid transfer of optimized data from design through all areas of manufacturing.

Valor offers following Software-Solutions:

- Enterprise 3000 DFM-System (**Design For Manufacturability**): Physical design and Manufacturability Verification
- Trilogy 5000: Manufacturing Process Simulation (MPS) and handling of the full engineering dataflow of PCB assembly process preparation
- Valor Parts Library : Online-Databank for already 35 Mio electronic components
- TraceXpert: Real-time production monitoring, machine control, stock management and exact data traceability.

Valor products secure fast manufacturing execution, massively improving product quality and enhancing productivity.

Valor holds a leading position in the Design-For-Manufacturability-Market (DFM) and expands its clear technological edge over other candidates in the business segment Manufacturing Process Simulation (MPS), PCB manufacturing (e.g. Integrated Circuits, IC´s) and Manufacturing Execution Systems (MES).

One of Valor´s most impressive development is the integrated equipping procedure of the whole manufacturing range from design to manufacturing (PCB assembly operations). Even huge top-manufacturers in the electronic and semiconductor markets in China decided to take Valor Software-Products. These companies are Foxconn (China) and Jabil Circuit Inc. Nearly all worldwide manufacturing-locations of Jabil Circuit Inc. are in the process of implementing from Valor´s Trilogy 5000 platform.

Valor established a Joint Venture with TraceXpert A/S. The subsidiary is called Valor Denmark A/S. Valor and TraceXpert are each holding 50% ownership. This partnership is promising due to the increasing market-segment for Manufacturing Execution Systems (MES). TraceXpert is specialist in developing real-time production

monitoring, machine control, storage-management and traceability-solutions. The TraceXpert-product is distributed globally using the same distribution-channels as all Valor-Product. In our view the business is growing fastly and Valor should take care about stabilizing this business and partnership with TraceXpert. Besides Valor has to consider closing detailed contracts for the future to receive adequate profit margins. The Valor–Product Trilogy 5000 system is designed for assembly and test engineering whereas TraceXperts remains on real time SMT monitoring, exact traceability and materials management. We expect profitable synergies between both product-lines. In our opinion these two product-lines should have the biggest growth rates of Valor´s product portfolio because clients prefere more and more integrated software solutions from one software vendor. Fragmented product lines with different engineering systems endanger market-progress in miniaturization and exact traceability supporting to identify defects in manufacturing-processes.

2. MARKET OPPORTUNITIES FOR VALOR PRODUCTS

The electronic manufactury industry is changing: Production capacity is increasing. Producers who are specialized in EMS (**Electonics Manufacturing Services**) and ODM (**Original Design Manufacturers**) strive for changing their technology platforms for optimizing the whole added valuation from the design to the production.

Despite the cautious behaviour of clients investing hesitantly in new software we expect increasing demand especially in regards to TraceXpert. The most important market for Valor is China and its surrounding countries. There is an unbreakable trend towards changing the growing production volumes from the western hemnisphere to China. ODM-clients (Original Design Manufacturer) ask for high standards of quality. In most cases they don´t want to add elder existing systems but to establish totally new systems where the whole range of electronic products like Personal Computers and Laptops could be designed and manufactured.

Actually Valor generates the tallest amount of sales in USA for NPI (**New Product Introduction**) and DFM-Solutions (Design For Manufacturability). An interesting point is the fact that beneath China, South-America (especially Mexico) became a genuine location for producing electronic products.

Generally we await decreasing growth in USA and Western Europe and due to low wage costs we see increasing growth in China, Eastern Europe and South-America. Valor is an intelligent player but should continue to invest in product-solutions. Valor´s costs for Research & Development emphasize the companies´ concentration on the segment of PCB assembly operations and complementary technologies combining existing solutions. We expect further acquisitions in 2004, especially since the company generates an operating cash-flow of $ 4 Mio (in 2003) and has liquid cash of $ 30 Mio. An alternative to acquisitions would be organic growth based on company-owned product-development. But it is to consider that in the fast changing world of production methodologies it would be risky needing too much time for planning and researching in a new specific area. Besides it would be more expensive.

3. FINANCIALS

Q1 2004 Results

VALOR Q1/2004 Figures in MIO $			
	Q1 2004	*Change to Q1 2003*	Q1 2003
Product Sales	**4,61**	*19,70%*	**3,85**
Maintenance	**2,54**	*10,91%*	**2,29**
Total Revenues	**7,15**	*16,44%*	**6,14**
Gross Profit	**6,67**	*17,09%*	**5,70**
EBIT	**0,11**	*-79,75%*	**0,55**
EBITDA	**0,35**	*-61,65%*	**0,91**
Net Profit	**0,30**	*-52,65%*	**0,62**
EpS i US $ (basic)	**0,02**	*-33,33%*	**0,03**
Shareholder´s Equity	**33,23**	*-15,52%*	**39,33**
Total Assets	**41,42**	*-8,69%*	**45,36**
Capital Investments	**199,00**	*16,37%*	**171,00**
Research & Development	**2,66**	*59,64%*	**1,67**
Employees (Period End)	**199,00**	*16,37%*	**171,00**
	Quelle: VALOR		

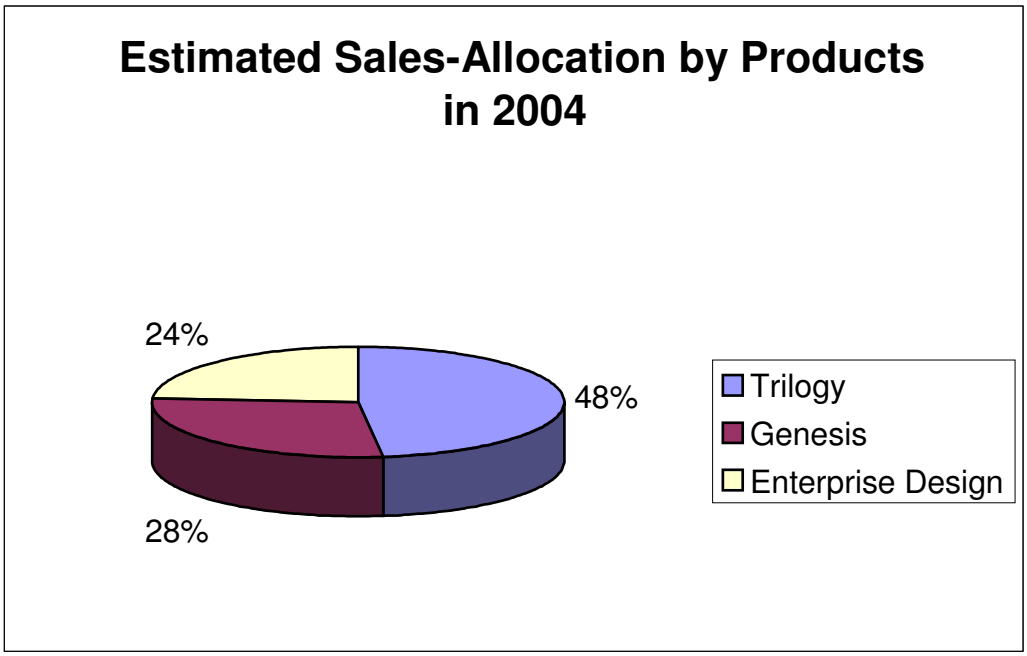
In Q1/2004 sales increased by 16,4% to $ 7,15 Mio. Even the traditional strong Q4 was beaten. In Q4/2003 Valor Computerized Systems reached $ 6,8 Mio. In Q1/2004 Valor experienced a steep increase in Research & Development investments, based on the purchase of 50% of Danish company TraceXpert and the development of further new products. Compared with Q1/2003 R & D expenses raised from $ 1,67 Mio to $ 2,66 Mio in Q1/2004. Despite that Valor generated a positive operating cash flow of $ 1,25 Mio which is significantly higher than in Q1/2003.

Earnings expectations for 2004 supported by actual contract with Inventec

For current 2004 we await an ongoing strong orderflow. Actually Inventec (Taiwan), one of the leading Electronics Manufacturing Service Providers ordered Valor´s Trilogy 5000 Assembly Engineering Platform. Inventec is an ODM (Original Design Manufacturer) primarely producing PC Desktops and Laptops as well as Server-Technologies and take huge advantage of Valor´s integrated engineering software solutions for the manufacturing industry.

In 2004 we expect total sales of $ 30,5 Mio compared with $ 25,6 Mio in 2003. Following picture shows sales of Valor´s different business segments, considering that Trilogy amounted to 42%, Genesis (Fabrication) to 33% and Enterprise (Design) to 25%:

VALOR COMPUTERIZED SYSTEMS:



Source: Dr. Kalliwoda Research 2004

Sales- and Profit-Estimates for 2005 to 2007

In 2005 to 2007 we calculate sales increasing from $ 30,5 Mio in 2004 to $ 34,2 Mio in 2005, $ 37 Mio in 2006 and $ 44,2 Mio in 2007.
We expect EBIT in 2004 to $ 4 Mio. EBIT should take progress to $ 5,4 Mio in 2005 following with $ 6,3 Mio in 2006 and $ 7 Mio in 2007. This is an annually average EBIT-growth rate of astonishing 21% from 2004 to 2007.
Based on pretax-profit (Earnings Before Tax) of $ 3,6 Mio in 2003 we see following EBT-Figures:
$ 4,6 Mio in 2004, $ 6 Mio in 2005, $ 6,4 Mio in 2006 and $ 7,6 Mio in 2007 (EBT-row should be slightly better than the EBIT-row due to the positive financial results in each year). This comes up to an average growth rate of eminental 22%. Our figures are based on expected accelerated growth in Asia/China.

4. VALUATION

Fair Value of EUR 4,80 and Market-Capitalization of EUR 87 Mio

Based on our Discount-Cash-Flow-Modell, assuming a WACC of 8,7% and a beta of 1,1 to the TecDax PrimeStandard we determine a fair value of EUR 4,80, corresponding to a market capitalization of EUR 87 Mio (Valor is listed in Frankfurt/Germany therefore values in EUR-Currency). We initiate coverage with a BUY rating.

Valuation based on DCF-Analysis

The valuation of Valor Computerized Systems is based on a Three-Stage Discount-Cash-Flow-Model for determining the fair value of the company resp. the stock.
We met following assumptions: We use the average yield of the ten year´s German government bond of 3,8% as the risk free rate. As an adequate risk premium for this well positioned company within the Software/Technology we choose 5%. We apply the raw beta of 1,1 calculated against the TecDax PrimeStandard. Applying these parameters we derive the stage specific WACC and obtain the respective discount factors for each year observed. Thereby we deduce a DCF-fair-value for the stock of EUR 4,80 per share which means an upside potential of 84% to the current share price of EUR 2,60.

Sensitivity-Analysis

We made a sensitivity-analysis for visualizing the variability of the derived fair value under different economic scenarios. As the results show, even under unrealistic economic circumstances there is no downrisk of the stock compared to the actual share-price. We believe that the current stock price is definitely a buying opportunity.

SENSITIVITY ANALYSIS

(EUR)	Discount factor				
ß = 1	0,07	0,08	0,09	0,10	0,11
0,0%	5,61	4,96	4,48	4,10	3,81
0,5%	5,82	5,10	4,57	4,17	**3,86**
1,0%	6,06	5,26	4,68	**4,25**	3,92
1,5%	6,35	5,45	**4,81**	4,34	3,98
2,0%	6,70	**5,66**	4,95	4,44	4,05
2,5%	**7,14**	5,92	5,12	4,55	4,13

CAGR of revenues in terminal phase

Source: Dr. Kalliwoda Research

SENSITIVITY ANALYSIS

(Mio. EUR)	Discount factor				
ß = 1	6,7%	7,7%	8,7%	9,7%	10,7%
0,0%	101	90	81	74	69
0,5%	105	92	83	75	**70**
1,0%	109	95	85	**77**	71
1,5%	115	98	**87**	78	72
2,0%	121	**102**	89	80	73
2,5%	**129**	107	92	82	74

CAGR of revenues in terminal phase

Source: Dr. Kalliwoda Research

Following table shows the last Profit & Loss-Figures as well as our expected figures for the future (current 2004 and 2005).

PROFIT & LOSS VALOR COMPUTERIZED SYSTEMS AG

$ mln

	1999	2000	2001	2002	2003	2004e	2005e	CAGR 00-05
Revenues	**25,1**	**29,3**	**24,9**	**23,0**	**25,6**	**30,5**	**34,2**	**8,1%**
% change		16,9%	-15,1%	-7,4%	11,2%	19,1%	12,1%	
COGS	**-4,3**	**-3,6**	**-3,3**	**-2,3**	**-1,7**	**-2,2**	**-2,8**	
% of revenues	**17%**	**12%**	**13%**	**10%**	**7%**	**2%**	**3%**	
Gross income	**20,7**	**25,7**	**21,6**	**20,7**	**23,9**	**28,3**	**31,4**	**8,1%**
% change		23,8%	-16,0%	-4,0%	15,6%	18,2%	11,0%	
Gross margin	**83%**	**88%**	**87%**	**90%**	**93%**	**93%**	**92%**	
R & D	**-3,5**	**-6,9**	**-10,5**	**-8,5**	**-9,1**	**-10,0**	**-10,0**	
% of revenues	14%	23%	42%	37%	35%	-33%	-28%	
S, S&A (Distr./Mark.)	**-12,9**	**-15,9**	**-16,5**	**-13,0**	**-12,4**	**-14,3**	**-16,0**	
% of revenues	52%	54%	66%	56%	49%	-47%	-45%	
Other op. Income	**0,0**	**0,0**	**0,0**	**-0,4**	**0,0**	**0,0**	**0,0**	
EBITDA	**4,3**	**2,9**	**-5,4**	**-1,4**	**2,4**	**4,0**	**5,4**	
% of revenues	17%	10%	-22%	-6%	9%	13%	16%	
EBITDA margin	**17%**	**10%**	**-22%**	**-6%**	**9%**	**4%**	**5%**	
EBIT	**4,3**	**2,9**	**-5,4**	**-1,4**	**2,4**	**4,0**	**5,4**	
% of revenues	17%	10%	-22%	-6%	9%	13%	16%	
EBIT margin	**17%**	**10%**	**-22%**	**-6%**	**9%**	**4%**	**5%**	
Financial result	**1,3**	**-0,4**	**2,1**	**0,7**	**1,2**	**0,6**	**0,6**	
Pre tax income	**5,6**	**2,5**	**-3,3**	**-0,8**	**3,6**	**4,6**	**6,0**	
% of revenues	22,4%	8,5%	-13,2%	-3,3%	14,2%	15,0%	17,5%	
Taxes	**-0,2**	**0,2**	**0,0**	**0,0**	**-1,7**	**-1,0**	**-1,4**	
Tax rate	3,5%	-8,3%	-0,5%	-2,1%	47,3%	21,8%	23,3%	
Minorities	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	
Net income (Ex adj.)	**5,4**	**2,7**	**-3,3**	**-0,8**	**1,9**	**3,6**	**4,6**	
% of revenues	22%	9%	-13%	-3%	7%	12%	14%	
Net margin	**22%**	**9%**	**-13%**	**-3%**	**7%**	**4%**	**5%**	
# shares out (mln)	15,52	18,75	18,54	18,07	18,05	18,05	18,05	
EPS	**2,58**	**0,15**	**-0,18**	**-0,04**	**0,11**	**0,20**	**0,26**	

Quelle: Dr. Kalliwoda Research

5. VALOR COMPUTERIZED SYSTEMS GROWTH DRIVERS

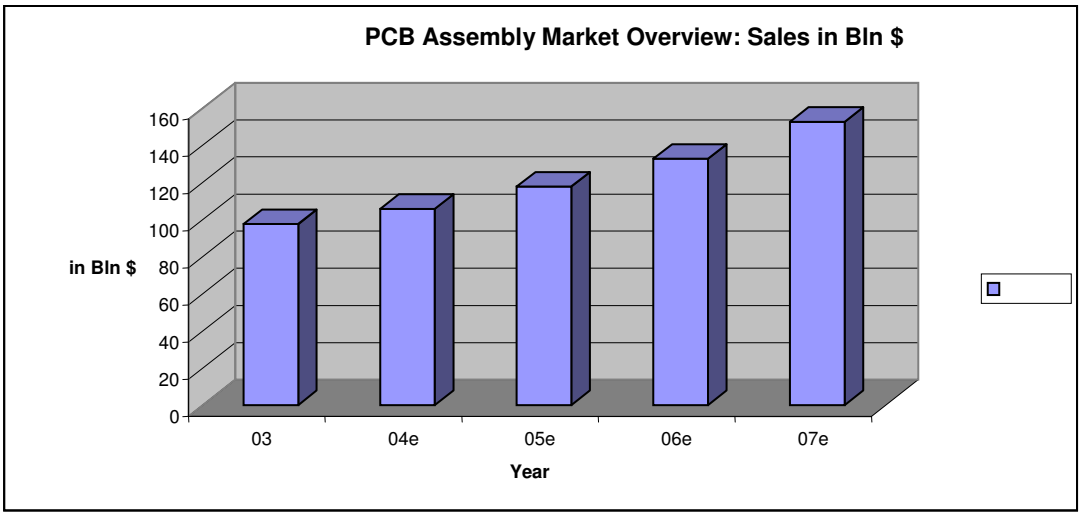
The market of Manufacturing Execution Systems (MES) for PCB assembly operations has a size of around $ 3,2 billion. In our view Valor should serve increasing parts of the market due to Valor´s intelligent sales operations. Valor should grow successfully due to effective acquisitions and professional Research & Development-activities. Market opportunities are improving as following trends in the electronic-industry shows.

- Trend of growing functions and more complex design on tighter integrated circuit boards.
- Trend towards increasing quality standards i.e. at electronic boards and minimizing production defaults
- Strong competition in the electronic industry leads to pressure of price and time-to-market for electronic manufacturers. Valor´s clients have to deliver designed-in quality assurance and have to reduce NPI (New Product Introduction) cycle times.
- Growing product-innovation leads to increasing NPI with detailed product-variations. Producers are forced to optimize their planning-capabilities and assembly-line-capacities.

These trends should lead to growing demand for the full range of design-to-assembly services such as design verification, prototyping and initial manufacturing services like Valor offers.

Following table gives an outlook of market growth for the business segments of Valor Computerized Systems.

VALOR COMPUTERIZED SYSTEMS:
PCB Assembly Marked Overview



Source: Eletronic Trend Publications (ETP)

The Valor product Trilogy 5000 offers clients a vehement advantage: The Trilogy 5000 CAD-to-Machine solution provides an integrated dataflow which allows the clients a huge flexibility. Then it is possible for them to meet the needs of any assembly line even when they are using mixed machine-vendor lines. Valor´s Trilogy guarantees a high final assembly line performance which is necessary for the worlds´ fastest growing market.

The flexibility includes software-solutions for prototyping – for small-lot producer as well as for worldwide mass production.
A further advantage of Trilogy 5000 is the Assembly Line Engineering module (ALE) which allows an ideal adaption on set-up procedures. Based on this feature, clients are able to reduce set-up times and have fewer changeovers.

One of the main reasons for the effectiveness of the Trilogy 5000-features is its logical top-down approach. This approach allows the handling of the full engineering dataflow of PCB assembly process preparation. The main characteristics are

- Intelligent CAD data input and validation
- Automated DFM verification (Design for Manufacturability)
- Mixed machine-vendor assembly line programming
- Cycle time optimization

.

All these stages of the CAD-to-machine processes are controlled from the unified Valor technology platform. Another interesting point is the ability to identify default components for example delivered from chip-suppliers. The Trilogy 5000 System is moving forward to take the leadership position in the electronics manufacturing market based on effective R&D and realized acquisitions.
Nevertheless it does make sense to widen Valor´s product-range: For clients´ all-in-one-solutions Valor should improve the capability of electronics PCB test engineering.

6. CONTACT

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7. APPENDIX

Abbreviations

DFM: Design For Manufacturability

DTM: Design – To – Manufacture Process at global OEMs

EMS: Electronics Manufacturing Services

MES: Manufacturing Execution Systems

MPS : Manufacturing Process Simulation

Nemi: National Electronics Manufacturing Initiative

NPI: New Product Introduction

ODM: Original Design Manufacturers

PCB: Assembly solution equipping integrated circuits (boards)

PLM: Product Lifecycle Management

SCADA: Supervisory Control and Data Acquisition

Trilogy : Virtual Prototyping

VPL: Valor Parts Library