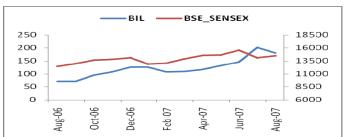


Bartronics India Ltd (BIL)

Recommendation		BUY		
CMP (03/09/2007)		Rs.200		
Sector		AIDC		
Stock Details				
BSE Code			532694	
NSE Code		BAR	TRONICS	
Market Cap (Rs. cr)			338	
Free Float (%)			49	
52- wk HI/Lo			214/65	
Avg. volume BSE (Monthly)			2783332	
Face Value			Rs.10	
Dividend (FY06)			NIL	
Shares o/s (Nos.in crore)			1.78	
Relative Performance(%)	1Mth	3Mth	6Mth	
BIL	7.58	55.40	89.57	
Sensex	3.48	9.51	18.79	



Shareholding Pattern as of 31/03/2007.

Promoters Holding	34%
Institutional (Incl. FII)	27%
Corporate Bodies	14%
Public & others	25%

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Bartronics India Ltd. (BIL), promoted by Mr.Sudhir Rao is a Hyderabad based company incorporated in 1990 as Super bar Tronics Pvt.Ltd and later became Public Ltd. company in 1995 in its current name of Bartronics India Ltd. (BIL). BIL is pioneer in introducing Automatic Identification and Data Collection (AIDC) technologies like Barcoding, Radio Frequency Identification Device (RFID) and Smart Card which has manifold application in Manufacturing, Service and Retail Industry.

Investment Argument

- BIL has near Monopoly position in the Industry as there are hardly any competitor in RFID and AIDC products.
- The Government of India favors Foreign Direct Investment (FDI) in retail sector. BIL is at an advantageous position to meet the growing demands of retail sector with its experience and dominant position.
- BIL is India's first and only Smart Card manufacturer as of now, having 100% EOU status from Govt. Of India.
- BIL is ISO 9001 and 2000 certified company and all the card manufactured conforms to ISO 7816 standard.
- BIL has tied up with a German company Giesecke and Devrient (G&D), for 70% of its Smart Card production capacity till 2 years i.e. July 2009.
- Strong Order Book Position of Rs.196 crore for FY08 and Rs.250 crore for FY09.

Business Outlook & Valuation:

BIL robust performance driven by strong growth in its product has generated Topline growth for FY07 at 119% over previous years 60% in FY06 and Bottom line growth at 152% over the previous years FY06.

Going ahead, we expect revenue will grow by 85% Y-o-Y and Net Margins of 19 - 22% will be stable because of only player in RFID and Smart Card with fully backward integration. We recommend <u>BUY</u> rating with Price target of Rs.440 in 12 months period.

Year	Sales (Rs. cr.)	Growth	EBIDTA (Rs. cr.)	EBIDTA (%)	PAT (Rs. cr.)	PAT (%)	EPS (Rs.)	P/E(x)	P/BV
FY07A	64	119%	17	27%	13	21%	7	26	3.03
FY08E	196	209%	64	33%	38	19%	21	9	1.38
FY09E	373	90%	127	34%	82	22%	36	5	1.51

N B Research(Division of Nirmal Bang Securities Pvt. Ltd)

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Bartronics India Ltd (BIL)

BIL has application in areas such as Inventory Management, Attendance Recording, Dispatch management etc.....



BIL has just completed first phase of Smart Card Project with an installed capacity of 80 million cards.

60% of **BIL** revenue of Rs.29 crore in FY06 is generated from Barcodes.

Business Background:

The company came out with its maiden IPO during Dec-05 in which 65,00,000 equity shares of Rs.10 each were offered and subscribed for cash at a premium of Rs.65/- per share aggregating Rs.48.75 crore. The funds were raised to establish branches, setting up R&D Technology centre, to repay high cost loan and meeting working capital requirement.

BIL is in the business of providing Barcode solution since 1990, one of the oldest AIDC Technology, which has application in areas such as Inventory Management, Attendance Recording, Dispatch Management etc. Over the last 2 years, the company has successfully expanded into other area of AIDC Technology like RFID, Biometric solution.

Further, BIL has just completed first phase of Smart Card Project with an installed capacity of 80 million cards per annum and has commenced production from July, 2007. The second phase is for manufacturing silicon chips which will commence production by January, 2008. This chips are currently imported and thus BIL will be the first in India to manufacture them. This unit is supposed to start contributing revenues by Q4 FY08. However, the full impact of this backward integration project would only be visible over FY09.

BIL has strong local and international presence and has established Ten regional and Five overseas distribution centers. This puts BIL in good positioned to meet the growing demand not only within the country but also in countries like Dubai, Singapore, Malaysia, Sri Lanka, Bangladesh etc.

Business Model:

BIL commenced operation as a distributor of Barcoding equipment in India, on behalf of its foreign partners. Over the years the company has moved up the value chain from being only a distributor to a provider of Hardware, Solution as well as Maintenance Service for such application.

Since its inception, BIL had presence only in its traditional Business Barcoding. Currently, 60% of BIL revenue of Rs.29 crore in FY06 is generated from Barcodes, while the rest is split between AMC, RFID, Biometrics and consumables. However, since last two years BIL has been able to build a strong business model by focusing on Total solution in AIDC space i.e. AIDC Technology like RFID and Biometrics. Hence 100% of the sales is through solutions.

(Solution refers turnkey solution in the AIDC space which includes consulting, Hardware procurement, developing solution architecture, developing application software, developing middleware, implementing solutions and providing post implementation support).

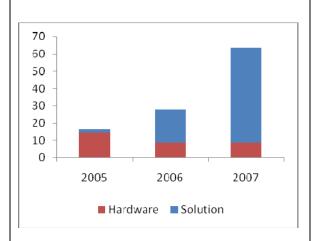
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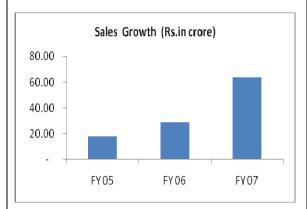
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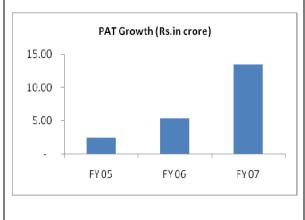
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Bartronics India Ltd (BIL)







Product Mix over last	(Rs. in crore)	
YEAR	HARDWARE	SOLUTION
2005	14.31	2.19
2006	8.62	19.27
2007	8.67	54.88

Further from July, 2007 the company has also forayed into manufacturing of Smart Card. Thus BIL has dual revenue sourceone from solutions and other from Smart Card. Thus BIL has completely de-risked its Business Model. Presently company's product can be categorized into four segment namely Bar Codes, Biometrics, RFID and Smart Card. With the expertise, BIL also offers after sales service to the customer which makes it only an integrated player in the industry offering after sales service. This adds value to the business model. Every Hardware/Solution contract that BIL gets into also involves an Annual Maintenance Contract (AMC), which has tenure of one year. Currently, AMC represents 12% of BIL's total revenue, which provides BIL with stability and visibility in its revenue stream.

Segment Mix:

Product	FY 06(%)	FY 07(%)	FY 08 e(%)	FY 09 e(%)
AIDC	85	50	20	20
RFID	15	50	30	20
Smart Card	-	-	50	60

During the year FY07, AIDC Technology and RFID both contributed 50% each to the total revenue. However, Smart Card would contribute 50% to the revenue from FY08 as the Smart Card has commenced production from July, 2007.

Smart Card globally includes SIM card, National ID cards, Banking Debit/Credit Cards and Loyalty cards, PAN Cards etc. However in India, SIM card constitute around 80-85% of total Smart Card seament.

Currently, Indian Telecom operators source their SIM card requirement from the Global System Integrator. In this regard, BIL has tied up with a German company Giesecke and Devrient (G&D) for supply of SIM card manufactured by BIL for 2 years. G&D is a leading supplier of Banknote paper, Currency Automation system, Smart Card and Complex System Solution.

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Bartronics India Ltd (BIL)

Smart Card to be a major growth driver, SIM card constitute around 80-85% of total Smart Card segment.

These SIM card will in turn be supplied by G&D to the leading Indian Telecom operator like Airtel, Reliance Communication and Idea. The scheme of arrangement with G&D includes supply of BIL's 70% of the capacity for first two years of operation.

Frust & Sulhivan has put the demand for Smart Card at over 150 million units in FY07, growing at CAGR of 45% in India, major demand is coming from Telecom and Banking sector, while SIM card market size is put at Rs.150 crore annually.

A further boost to the Smart Card market is expected in about a year with Banking sector going for aggressive switch from the current magnetic tap cards as the Visa / Master card deadline is set to expire in a few years.

Strong order book provides earning visibility.

BIL has an unexecuted order Book to the tune of Rs.196 crores for FY08 and Rs.250 crores for FY09. Besides this 70% of its Smart Card capacity is already tied up with G&D for supply of SIM cards for the two years i.e. FY08 and FY09.

Exports to spur growth

BIL has established five distribution centers, where it has already strong presence with dominance in Middle East, Singapore, Sri Lanka, Bangladesh and Malaysia. It has recently incorporated a wholly owned subsidiary company, M/s Bartronics Asia Pte.Ltd. in June, 2007 in the Republic of Singapore. The subsidiary will provide local support to the companies operations in Singapore, Malaysia and Far East Market.BIL has received positive response from many customers in South East Asia.

Strong Client Base

The company has strong client base of more than 1500 companies, few of them includes:

Domestic Cos.

Tata Motors, TISCO, HLL, ITC, TVS, CMC, Ranbaxy, Whirlpool, VST, ITW, Dr.Reddy, Satyam, Ashok Leyland, Pantaloon Retail, BPCL, Videocon etc.

MNC Cos.

IBM, GM, Mercedez, Compag, Panasonic etc.

Besides Corporate, BIL has some state Government Organization into its client portfolio namely, Andhra Pradesh Police Department, A.P.Road Transport Authorities and Chattisgarh Police Department.



Bartronics India Ltd (BIL)

Lower client's dependency.

Pilgrims Management System

MoU with Harley's group of Srllanka

Joint Ventures with Almoayyed Commercial Services, Bahrain

Inorganic Growth will further support to its business.

BIL is not dependent on any single client for its business as its top 5 clients accounts less than 10% of its over all business

BIL also provides services to the Devotees of Lord Balaji (Tirupati) by managing the Inflow Logistics of the Pilgrims. The company has implemented management system in Vaishnao Devi Temple (Jammu) and Siddhi Vinayak Temple, Mumbai which minimizes the waiting time in queue. Pilgrims register their finger prints and the barcode gives them a specific time for visit.

Recent Initiatives and tie ups:

BIL has entered into Memorandum of Understanding(MoU) dated 14th Sep,2006 with Logiventure Ltd., a subsidiary of Harleys Advantis Itd. for collaborating forward implementation of project in Sri Lanka, thereby providing solution and Smart Card. BIL will be the preferred supplier of hardware for AIDC, RFID, Biometrics, Smart Card and other necessary software. The profit arising from the business will be divided equally between them.

BIL entered into Joint Ventures with Almoayyed Commercial Services, Bahrain, dated 19th Dec, 2006. As per this MoU parties shall co-operate with each other in providing RFID, Bar Code, Smart Card and AIDC based Solution to customers. The hardware shall be procured from BIL and profit will be shared equally.

Going forward BIL is further looking at possible acquisition opportunities of RFID firms for US \$ 25 million each especially in US, where the demand for AIDC solution is growing.

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Bartronics India Ltd (BIL)

Smart Card



Bio-Metric

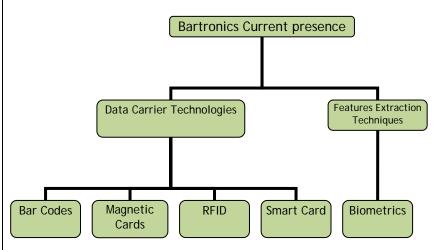


Memory Card



Domestic Industry Outlook:

In FY 2005-06, the market size of the AIDC Industry which primarily included Bar Codes and Smart Cards was at Rs.1000 crore over the last 2 years. The industry is growing at CAGR of 40% with new emerging technologies like RFID and Biometrics making presence felt in large way. The growth in these emerging technologies is expected to be much higher as they have low base. The retail and manufacturing sector are expected to drive further growth in the coming years. In India retail industry has been growing at a CAGR of 6% and is estimated at US\$ 320 billion.



Biometric Solutions:

The market size of biometric in India is around Rs.150 crore, growing at 80-100% Y-o-Y. There is growing demand for both physiological and behavioral biometrics devices; fingerprint recognition is current hot favorite, as both private and Government Organization is becoming aware of Biometric technology as it is near the foolproof security.

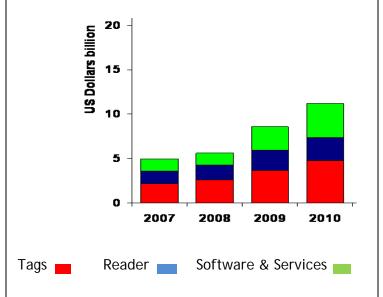
The Government has decided to introduce e-passport also known as Biometric passport which is going to be implemented by Oct-2008 as per the authority. There are nearly 40 million passports which are in use currently and the number of passports will multiply manifold as the country gets more and more wired, more and more Indians will travel abroad.



Bartronics India Ltd (BIL)

Bar Codes





What is RFID?

Radio Frequency Identification & Data Capture (RFID) is a method of identifying unique items using radio waves. Typically, a reader communicates with a tag, which holds digital information in a microchip. But there are chip less forms of RFID tags that use material to reflect back portion of the radio waves beamed at them.

What is Barcodes?

Barcodes store data in widths and spacing of printed parallel lines. They also come in pattern of dots, concentric circle and hidden in images. Barcodes can be read by optical scanner called bar code reader and widely used to implement AIDC systems that improve the speed and accuracy of computer data entry. A barcode can store data up to maximum of 30 characters.

Courier & Logistic Industry, Aviation, Auto, Pharma, Retail & manufacturing industry are the large user of barcodes.

Global Industry Outlook:

Globally, bottom-line in FY06 for RFID tags, system and services were \$1.94 billion resulted a growth of more than 50% i.e. sale of RFID tags from 1.8 billion tags in 2005 to 3.1 billion tags in 2006.

A new research report from ID Tech EX, project RFID market \$24.50 billion by 2015. ID Tech Project item level tagging especially Pharma, tagging of baggages, books, animals, tickets, postal packages and other retail markets are strongly growing in value. In 2008, 6.8 billion tags will be sold for such application and 15.3 billion tags for pallets & cases. By 2010, 48% of RFID tags will be sold in East Asia and 32% in North America. Somewhere ten trillion tags will be printed by 2020.

Bartronics India Ltd (BIL)

Major Opportunities where volumes of tags are required:

- Universities tagging certificates, Bar coded mark sheet to beat forgery.
- Items.
- Pallets/case
- **Smartcards**
- Bank notes / secured documents
- Air baggage
- Freight
- Vehicles

Many smaller opportunities where there is even competition, which includes:

- Passport page
- Live stock and food
- Intermodal container
- Healthcare
- Those in *prison*
- Army / military

Financial Outlook:

We expect the company's Top line to touch Rs.373 crore in FY09, which represents a CAGR of 113 % from FY05 to FY09 and the Bottom line to touch Rs.81.59 crore at CAGR of 141% from FY05 to FY 09. We expect major growth will come from Smart Card segment, while other segment of AIDC solution business would grow at CAGR of 35% over the next few years.

The basic input for BIL's product is chips and the prices of the same have been falling over the years and hence the margin is not likely to see any down side from the current level. In the existing business BIL has been able to generate OPM (operating profit margin) of 25-27%. However, the Smart Card business is likely to give better margin i.e. 30-32%.



Bartronics India Ltd (BIL)

Equity Dilution:

- To fund the Smart Card project of Rs.262 crore, the company had issued 46.30 Lakhs convertible warrants to promoters at price of Rs.130/- each, aggregating Rs.60 crores.
- Further, BIL has also raised Rs.35 crore through Qualified Institutional Placement at price of Rs.110/-
- BIL also avails a term loan of Rs.60 crores
- Recently in 4th guarter, BIL had issued 250 zero coupon unsecured foreign currency convertible bonds due by 2012 of US\$ 1.00.000 each for an aggregating amount of US \$ 25 million (Rs. 101.83 crores) with a conversion price of INR 140.00 per share.
- BIL at its board meeting on 30th July, 2007 subject to approval of the Members at Annual General Meeting on 10th Sep, 2007 issue of FCCB/ADR/GDR for an aggregate sum of US\$ 50 million.

Employee Stock Option Policy (ESOP):

BIL in its Extra Ordinary General Meeting held on 29th January 2007 has taken approval of shareholders to implement Employee Stock Option Scheme. Under the Scheme of ESOS-2007 8, 00,000 option were granted and the exercise price for ESOP shall be Rs.10/- per share.

Risk & Concern:

BIL is dependent on external supplier for most of its key raw material and Hardware components that the company deals. Any failure of such supplies in time or in necessary quantities for the purpose of adhering to the delivery schedules could adversely affect the business of BIL.

BIL may face competition from new entrants into the market which may affect the profitability of the company.



Bartronics India Ltd (BIL)

Sensitivity Analysis for Smart Card

	S.P. Rs.27	S.P. Rs.30		
	FY 08	FY 08 FY 09		
Sales	57	151.2	63	168
EBIDTA	15.31	45.36	17.01	50.40
PBT	12.47	34.78	13.86	38.64
PAT	11.34	31.75	12.60	35.28

Valuation and Recommendations:

AIDC Industry is growing at 35-45% with the new technologies of RFID & Bio-Metric making their presence in large way. Since last two years BIL has the first mover advantage and is all set to take advantage of rising demand present in the country.

At the CMP of Rs. 200 the stock is trading at 9.33x its FY08 earnings of Rs. 21 and at 5x its FY09 earnings of Rs. 36. We recommend a <u>BUY</u> rating with price target of Rs.440 in 12 months period. The Global valuation for AIDC & Smart Card Industry is around 48x of the earnings.

Peer Comparison:

	BIL (FY 07)	GEMALTO (FY06) (Paris)	OBERTHUR CARD (FY 06)(Paris)	INTERMECH TECH.(USA) (FY 06)
	(Rs.cr)	(mn euro)	(mn euro)	(mn \$)
SALES	63.49	1,698.20	524.00	804
EBIDTA	16.85	131.00	52.80	30
PAT	13.47	1.60	9.50	19
EPS	7.56	0.02	0.13	0.20
PE	26.46	932	46.92	127.00

Bartronics India Ltd (BIL)

Profit & Loss A/c. (Rs.in Crore)

	FY 05	FY 06	FY 07	FY 08e	FY 09e
Sales	18.05	28.97	63.50	196.00	373.34
Cost of Goods Sold	11.17	18.77	41.37	121.52	224.00
Employees Remuneration & Benefits	1.15	1.46	2.48	4.03	7.25
Administrative, Selling And Other Exp.	1.16	1.36	2.79	5.88	14.93
Total Expenses	13.48	21.59	46.64	131.43	246.19
EBIDTA	4.57	7.38	16.86	64.57	127.15
Other Income	0.12	0.50	0.95	1.00	1.00
Depreciation	0.84	1.00	1.68	17.64	27.19
EBIT	3.85	6.88	16.12	47.93	100.96
Interest & Financial Charges	1.08	0.76	1.34	4.96	8.24
Misc. Expenditure Written Off	0.01	0.01	-	-	-
EBT	2.76	6.11	14.78	42.97	92.72
Provision For Taxation	0.35	0.75	1.30	4.30	11.13
PAT	2.41	5.36	13.48	38.67	81.59

Growth Matrix

Particulars	FY 05	FY 06	FY 07	FY 08e	FY 09e
SALES	44%	60%	119%	209%	90%
EBIDTA	114%	62%	128%	283%	97%
PBT	29%	122%	142%	191%	116%
PAT	78%	123%	152%	183%	114%

Margin Matrix

Particulars	FY 05	FY 06	FY 07	FY 08e	FY 09e
EBIDTAM	25%	25%	27%	33%	34%
PBTM	15%	21%	25%	22%	27%
PATM	13%	18%	21%	19%	22%



Balance Sheet (Rs.in crore)

Particulars	FY-05	FY-06	FY-07	FY-08 e	FY-09 e
	F1-05	F1-00	F1-07	F1-06 E	F1-03 E
SOURCE OF FUNDS					
Share Capital	4.38	14.57	17.82	17.82	22.45
Reserves & Surplus	5.20	53.83	99.80	239.90	274.86
Net Worth	9.58	68.40	117.62	257.72	297.31
Share Application Money	0.00	0.00	6.01	6.01	6.01
Secured Loans	7.40	8.31	9.11	43.32	72.83
Deferred Tax Liability	0.87	1.42	1.79	2.30	2.80
Total	17.85	78.13	134.53	303.34	372.94
APPLICATION OF FUNDS					
Fixed Assets					
Gross Block	9.83	11.86	16.59	226.59	226.59
Less: Depreciation	2.26	3.26	4.94	22.58	49.78
Net Block	7.57	8.60	11.65	204.01	176.82
Capital work in Progress	0.00	16.11	10.91		
Current Asets, Loans & Advances:					
Inventories	3.03	6.42	8.25	24.16	46.03
Debtors	9.77	16.98	72.93	48.33	92.06
Cash in Hand	0.00	0.00	0.00	0.02	0.05
Balance with Banks	0.00	35.81	0.20	40.00	86.00
Loans and Advances	0.69	1.22	70.52	30.64	54.00
Total Current Assets	13.49	60.43	151.90	143.15	278.13
Less: Current Liabilities & Provisions	3.25	7.05	41.32	43.82	81.99
Net Current Assets	10.24	53.38	110.58	99.33	196.14
Miscellaneous Expenditure					
to the extent not Written Off	0.03	0.02	1.61		
Total	17.84	78.11	134.75	303.34	372.96

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Bartronics India Ltd (BIL)

Valuation Ratios

Particulars	FY 06	FY 07	FY 08e	FY 09e
Profitability Ratios				
EBIDTA	25%	27%	33%	34%
PAT	19%	21%	20%	22%
RoE	8%	11%	15%	28%
RoCE	9%	12%	19%	34%
Growth Ratios				
Sales	38%	119%	209%	90%
EBIDTA	62%	116%	283%	97%
PAT	122%	151%	187%	111%
Valuation Ratios				
PE	54.30	26.46	9.33	5.49
P/BV	4.24	3.03	1.38	1.51
EV/EBIDTA	35.57	21.68	5.56	3.42
P/Sales	6.91	3.15	1.02	0.54
Per Share Data				
EPS	3.68	7.56	21.44	36.43
BVPS	47.17	66.00	144.79	132.73
Leverage Ratios				
Debt / Equity	0.12	0.08	0.17	0.24
Interest Coverage	9.05	12.02	9.66	12.25

PE Band



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Bartronics India Ltd (BIL)

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