

Andrew S. Hua, CFA
Senior Research Analyst
ahua@harbingerresearch.com

Worldwide Manufacturing USA, Inc. (WWMU-OTC:BB)

**Achieving Rapid Growth and Expansion through Vertical
Integration, Acquisitions, and Increasing Levels of Profitability**

Recent Price: \$4.00

Market Data

Market Capitalization (mln)	\$8.12
Enterprise Value (mln)	\$8.04
Fully Diluted Shares (mln)	2.03
Earnings Per Share (2005)	\$0.29
Float (mln)	0.27
Avg. Volume (90 day, approx.)	1,000
Institutional Ownership (%)	0.0
Insider Ownership (%)	86.59
Exchange	OTC-BB

Company Overview

Worldwide Manufacturing is a rapidly growing engineering and contract manufacturing company. Positioned as a quality leader in the niche market segment for smaller scale production orders, the company operates four wholly-owned China-based subsidiaries, Shanghai Intech Electro-Mechanical Products Co., Shanghai Intech Electronics Manufacturing Co., Shanghai Intech Precision Mechanical Products Manufacturing Co., and Chengde Science Technology Co.

Company Contact Information

Worldwide Manufacturing USA, Inc.
1142 Cherry Avenue
San Bruno, California 94066
www.wwmusa.com
Phone: (650) 794-9888
Fax: (650) 794-9878

Investor Relations Contact Information

Alan Stone & Company, LLC
Alan Stone
astone@alanstone.com
590 Madison Avenue, 21st Floor
New York, NY 10022
Phone: (212) 521-4102

John Keffalas
johnskeffalas@hotmail.com
10940 Wilshire Boulevard, 16th Floor
Los Angeles, CA 90024
Phone: (949) 233-2972

Summary and Investment Opportunity

- Consistent Proven History of Revenue and Profit Growth**

The company has achieved seven consecutive years of revenue and profit growth. Through a combination of acquisitions and organic growth, management is anticipating exponential growth over the next two to three years.

- Proven Expertise in Quality Control for China-based Manufacturing**

The company's unique strength and competitive advantage is its ability to maintain strict quality control of foundry, mechanical, electronic and fiber optic products and components for its customers that require low cost China-based production.

- Profit Expansion through Vertical Integration**

Worldwide Manufacturing is transitioning itself from a value-added middle man to a full-scale contract manufacturer with directly owned production facilities in the People's Republic of China.

- Growth through Acquisitions at Favorable Prices**

With well developed relationships in China, management has the ability and opportunity to expand the company's scale and scope through selective acquisitions of factories and business units in China.

- Continued Secular Growth of the Contract Manufacturing Industry**

Contract manufacturing as a form of outsourcing continues to be a compelling means for Original Equipment Manufacturers to reduce costs and improve operating and capital efficiency, virtually without regard to the state of the overall economic cycle.



Company Overview

Worldwide Manufacturing USA, Inc. (“Worldwide” or the “Company”) is a rapidly growing engineering and contract manufacturing company. The Company has positioned itself as a quality leader in the niche market segment for smaller scale production orders. Formed in September 1993 and incorporated nine years ago, Worldwide has grown from strictly an intermediary or “middle man” focusing on maintaining high quality standards of mechanical and electronic components made in China for U.S.-based customers, to an emerging contract manufacturer with its own factories in China. The Company aims to continue its vertical integration into manufacturing by acquiring and developing additional factories in the People’s Republic of China over the coming years. Worldwide’s reputation is based on quality of production, timely delivery, and logistical expertise.

Currently, the corporation consists of five inter-related business units. In addition to its headquarters in the U.S., which manages sales, service, logistics, and administration, Worldwide also operates four wholly-owned Chinese subsidiaries: Shanghai Intech Electro-Mechanical Products Company (Intech), Shanghai Intech Electronics Manufacturing Company (EMC), Shanghai Intech Precision Mechanical Products Manufacturing Company (PMP), and Chengde Science Technology Company (Chengde). All are located in Shanghai Municipality except for Chengde, which is in Changchun City in northeast China. Intech is the engineering and quality control arm of the company, and has historically managed and overseen the many sub-contractors that the company employs to manufacture products for its customers based in the U.S. More recently, Intech has also become the Shanghai-area holding company for Worldwide’s newly formed factory production units, EMC and PMP. EMC manufactures electronics, including printed circuit (PC) board, cable, coil, and chassis assembly. PMP produces die casting and machining components for automobiles, home appliances and wireless telecommunications devices. Chengde is a manufacturing unit which produces air conditioning systems for automobiles. Throughout these business units, the company’s unifying strength is in ensuring high standards of quality control on low cost production. Management asserts that its competitive advantage is its ability to deliver high quality components in a timely manner at manufacturing costs that are at least 50% lower than comparable production in the United States. In addition, it is also able to provide superior service and support to North American customers through its California customer service center.

Industry Background

Contract manufacturing is a form of outsourcing whereby Original Equipment Manufacturers (OEMs) outsource various aspects of the design, planning, development, assembly, and manufacturing process to outside parties. In the past, most production was kept in-house. Gradually, the concept of outsourcing has gained acceptance and shifted from a decade ago when it was an acceptable part of an OEM’s business, to today where it is increasingly a necessity. By outsourcing mass production to contract manufacturers, OEMs are able to better streamline their operations, eliminate costly manufacturing plants, reduce capital expenditures, and in most cases, better meet sudden rises or fast changes in end-customer demand. In many instances, OEMs drastically or completely eliminate their production factories, preferring to rely on contract manufacturers. Importantly, eliminating factories has enabled OEMs to avoid idle factories or low factory utilization during demand lulls. Contract manufacturers are able to ensure better factory utilization by producing products for many customers within the same factory, typically running production 24 hours a day. This, in turn, results in contract manufacturers being able to provide products and services at lower costs than most OEMs can provide for themselves.

A secular growth industry, contract manufacturing has grown tremendously over the years, yet is still only a fraction of the overall electronics manufacturing business. The contract manufacturing industry generated approximately \$45 to \$60 billion in revenues in 1999/2000. By 2002, the industry grew to about \$92 billion in revenues; still representing only about 18% of electronics outsourcing penetration in North America. In 2004, the industry grew another 20% to revenues of \$109 billion. In 2005, the industry grew about 13% to \$123 billion. Interestingly, observers forecast in 2001 that the industry would grow to this level of revenues in 2007; thus we have witnessed contract manufacturing achieve this target two years earlier than expected. By 2010, as much as 50% of all electronics production may be outsourced.

Over the long term, the contract manufacturing industry is expected to maintain a 15% to 20% annual growth rate. This consists of 5%-7% underlying growth in electronics and related sectors, with the remainder coming from increased rates of outsourcing utilization. As of 2003, over 80% of contract manufacturing was related to the telecommunications and computing industries; however, increasingly other technologically demanding industries, such as aerospace, automotive, and medical devices, are also turning to outsourcing through contract manufacturers. Worldwide is positioned to benefit from these robust industry growth trends.

To remain competitive, both OEMs and contract manufacturers have been shifting production to low cost locations such as Latin America (especially Mexico), developing Asia (especially China and Malaysia), and Eastern Europe (especially Romania and Czech Republic). However, low cost labor is not the sole factor; total acquisition costs are what OEMs find truly relevant. Logistics could completely wipe out any labor cost advantage. For example, it has long been less expensive to build a labor-intensive product such as a Toyota automobile in high labor cost Japan than in low labor cost China. In the electronics industry, however, components are small in size and China is fortunate to have a favorable geographic location next to advanced industrialized countries such as Japan, Taiwan, and South Korea, which makes for shorter supply and logistics chains.

China's role as a low cost manufacturing location is well known today. With the country's universities producing nearly 450,000 engineers per year, China is developing talent domestically to support the continued growth of the electronics industry. Since low cost labor and land are only one part of the equation, China is also making strides to improve its logistics and transportation systems. Links within China are still relatively poor, but with most manufacturing concentrated along the coastal areas, sea and air transport are relatively efficient.

The mid-year 2005 adjustment of the Chinese Renminbi currency exchange rate from one that was fixed to the US\$ to one that is a managed float based on a secret basket of currencies had resulted in the Chinese currency appreciating about 2% against the US\$. This event would tend to increase the cost of Chinese-made exports. However, there may be some offset in the form of lower US\$ priced imports of raw materials, such as oil and iron ore.

The greatest risks with China-based production, however, tend to be more political. In an authoritarian regime with a less developed rule of law and weak intellectual property rights, doing business in China can be frightening for those without a high level of experience and strong-standing relationships, since rules and regulations may often arbitrarily change or be intermittently enforced. China's interaction with the United States can generally be described as mutually beneficial and one that has shown enormous economic growth over the past two and a half decades. Undoubtedly, this relationship will continue to grow; however, it will certainly also be prone to stumbling blocks such as trade disputes, protective quotas, and national security concerns.

Business Description

The Organization

Worldwide's headquarters are located in Silicon Valley, California, where employees perform sales, service, and logistical support. In the U.S., the company employs approximately 16 people, of which four are full-time salespeople. In addition, the company works with five independent sales representation companies that work on commission only. Whether in-house or subcontracted, all manufacturing is done in China. The company has no plans to expand its production into other countries. The company has four wholly-owned subsidiaries in China. Two of these, Intech and Chengde, are direct wholly owned subsidiaries of Worldwide. The other two are wholly owned subsidiaries of the Intech subsidiary. Worldwide employs about 200 full-time personnel in China and California.

As the quality control arm, Intech employs approximately 30 engineers that supervise all aspects of the manufacturing process, regardless of whether that production is in-house or performed by sub-contractors. Worldwide's engineering staff manages the entire manufacturing process from writing production and inspection procedures and conducting materials audits to performing the work-in-progress and final inspections. Since most production is currently performed by sub-contractors, Worldwide maintains responsibility for ensuring that products meet its customers' specifications and quality standards.

Intech established EMC, the electronics manufacturing unit, in August of 2005 with the purchase of about \$250,000 of manufacturing equipment from one of its former sub-contracting vendors. Located in Shanghai, the unit assembles PC boards, cables, coils, chassis and similar products. Intech established PMP in Shanghai in October 2005. This unit performs die casting and machining services for the automotive, motorcycle, wireless telecommunications, and home appliances and home supply industries. These two manufacturing subsidiaries combined employ over 110 factory workers.

Chengde, which was acquired in March 2005, mainly produces air conditioning systems for automobiles for Chinese auto assemblers. The company currently employs approximately 20 employees at Chengde, in Changchun city in northeast China.

The Products

Worldwide Manufacturing fabricates all of its production within China. Within the company's four main product categories there are a total of 13 product lines, listed as follows.

Category and Product Line	Percentage of 2005 Sales
Mechanical Foundry	20%
Die casting components	
Plastic injection components	
Investment casting components	
Sand casting components	
Forging components	
Machining and Stamping	60%
Machining	
Stamping	
Extrusion	
Electronics	16%
PC board fabrication manufacturing	
PC board assembly house	
Wire harness cable assembly house	
Coil winding assembly house	
Fiber Optic Components	4%
Fiber optic components manufacturing with multi-capabilities (i.e. DWDM, attenuator, coupler and switches)	

Currently about 80% of the company's revenues are derived from the production of mechanical parts and components. Sales are expected to continue growing rapidly in all areas; however, among these four categories, Electronics is currently experiencing the most rapid growth. Management anticipates that this category could comprise 25% of total revenues within the next few years.

Worldwide's products are mainly parts, components, and sub-assemblies for use in final products within the aerospace, automotive, construction and home supply-related, machinery, medical equipment, and electronics (both personal computer and wireless communications segments) industries. The company differentiates itself through better quality control, yielding an incredibly low product rejection rate, by Chinese standards, of less than 2%, which is comparable to that of U.S.-based factory made products. As a point of reference, for Chinese production, a 10% rejection rate is considered "very good" in the industry; whereas an even worse rejection rate would be considered average.

The Customers

Worldwide's customers are mainly based in the U.S., and primarily in the aerospace, automotive, and electronics industries. However, as a result of the company's recent expansion in China, the company is now also producing for customers indigenous to China. Meanwhile, overseas expansion by its U.S.-based customers is also resulting in customers based in Europe. The company has a total of 115 customers, six of which are Fortune 500 corporations. The company is also targeting foreign companies, mainly European and Japanese, as potential new customers.

Historically, Worldwide gains about ten new customers per year. During 2005, the company won over 12 new customers. About 40% of new customers come from referrals or the company's web page advertisement, 30% from internal sales efforts, and another 30% from independent sales representation companies.

Worldwide's customer base is fairly well diversified with its six largest customers in 2005 representing approximately 52% of total sales. Its top three customers in 2005 accounted for approximately 38% of total revenues. This is roughly similar to the five dominant North American contract manufacturers, where each company's ten largest customers account for approximately 60%-70% of total sales, on average. Worldwide's top six customers for 2005 were Joslyn Manufacturing (MacLane Power), Radio Waves Corp (Smith Industries), Joslyn Sunbank (Danaher Corp, NYSE: DHR), Pacific Scientific (Danaher Corp, NYSE: DHR), Teleflex Electrical (NYSE: TFX), and Crossman Corporation.

For 2006, Ryko Manufacturing (Ryko) is expected to be the largest customer by order size and is a relatively new customer win. Ryko, which produces automated car wash equipment, is expected to account for over \$1 million of Worldwide's 2006 revenues. Joslyn Manufacturing is expected to remain a top customer with over \$1 million in orders. This company is a subsidiary of MacLean Power Systems, producing electric generation company power supply and transmission cables and systems. Joslyn Sunbank, a subsidiary of Danaher Corporation (NYSE: DHR), which makes aerospace equipment for companies such as Boeing, is also expected to remain a top customer. Worldwide just qualified as a supplier for Jar Systems, which makes computer cabinets for Hewlett Packard. This new relationship is expected to be among Worldwide's 5 or 10 largest for 2006, but is poised to ramp up to possibly be the company's largest by 2007 with orders possibly achieving \$3 million to \$4 million. The company has also brought in about 10 additional smaller new customers for 2006; these include Rhotech and Access Manufacturing.

The Subcontractors

Worldwide Manufacturing employs many sub-contractors to manufacture actual products for its clientele. The stable of sub-contractors includes approximately 100 companies and factories located in various parts of China, but mainly in the Shanghai region. Of this total, about 40 are considered active sub-contracting partners, while the remaining 60 are dormant, meaning that they are given a lower amount of orders within a 12-month timeframe. The two largest sub-contractors are Shanghai Xinli Trading Company and Shanghai Shangji Tool Company. Each of these two accounts for only about 3% of Worldwide's total 2005 procurement.

All active sub-contractors have achieved the International Standard Organization-9000 (ISO-9000) certification, helping to ensure a high level of quality control. Through these long cultivated relationships with subcontractors, Worldwide is able to keep them motivated in supporting Worldwide's business efforts as the Company is a consistent source of stable business for these factories.

Recent Achievements and Future Plans

Although Worldwide's earlier success was based on its skill in securing U.S.-based customers and applying its understanding of and skill in doing business in China, company management is currently working on rapidly expanding the scope and scale of the company's activities in China in terms of acquiring or developing factories. The initial goal is to own one factory specializing in each of its four main product categories; but the Company hopes to bring most production in-house within the next three years, and to make other selective profitable acquisitions. Through acquisitions, Worldwide intends to gain complete control over its manufacturing business from sales to engineering, production, delivery, and customer service.

During 2004, Worldwide began to enter discussions to acquire several factories among its 40 active sub-contractors. Leading this effort, the first factory purchased was Chengde, completed in March 2005. Subsequently in August 2005, Worldwide opened an electronics factory, EMC, in Shanghai with the purchase of machinery and equipment from a sub-contractor. This factory is slated for an initial level of revenues of about \$500,000 per annum. In October 2005, PMP was established by acquiring an existing die casting factory and upgrading it at a cash cost of \$300,000 initially and committing another \$800,000 over the next two years. This unit was then renamed as Shanghai Intech Precision Mechanical Products Manufacturing Company (PMP). With a 30,000 square foot facility and about 100 employees in Shanghai, PMP is expected to ramp up to generate about \$3 million per year in revenues producing die cast components for autos, home appliances, and wireless telecommunications hardware.

Over the next two years, Worldwide plans to expand with three additional factories in China, either through acquisitions or greenfield developments, as well as to upgrade of its two existing factories, EMC and PMP. For the three new factories, management targets one specializing in each of the following production categories: computer numerical control machining, stamping, and investment casting. Currently, one large acquisition is in advanced negotiations, which management believes will likely be completed in 2006. Management is also currently in mergers and acquisition discussions with additional targets. Worldwide requires a potential acquisition target to currently achieve a minimum 10% net profit margin. With these acquisitions, as well as internal growth in excess of 30%, management expects 2006 revenues to reach between \$12 million and \$15 million, producing a net after tax profit of close to \$1.15 million. Further out, Worldwide is targeting \$50 million in revenues in 2008, generating over \$2 million in net income, which would be well over \$1.00 per share.

Recently, Worldwide decided that the Chengde subsidiary is not the best fit for the company and has entered negotiations with the unit's management and former owners to buy back the unit for the cash cost that Worldwide paid plus interest.

On April 21, 2006, the company effected a reverse share split whereby 15 old shares became one new share. The company believes that the new share price range will be more attractive to many investors. Management is also hoping to move the share listing to a larger exchange in order to improve liquidity and make the shares more attractive as an acquisition currency.

Key Management

Jimmy Wang, President, Chief Executive Officer, and Chairman

Jimmy Wang is Worldwide Manufacturing's President, Chief Executive Officer, and Chairman, and has over 15 years of experience in component manufacturing. Prior to forming Worldwide Manufacturing in 1993, Mr. Wang was an executive at privately-held MP World Manufacturing, a contract component manufacturer, where he held various positions including General Manager and Sales Manager and was principally responsible for increasing that company's annual sales from \$2 million to \$8 million. Mr. Wang received a Masters degree in Applied Economics from the University of Minnesota and a Bachelor of Science degree in Economics from the Shanghai Institute of Foreign Trade.

John Ballard, Chief Financial Officer

John Ballard is the Chief Financial Officer of Worldwide Manufacturing and has over 15 years of experience in business, project, and accounting management, as well as mergers & acquisitions know-how. Mr. Ballard is also an Advisor and Director for Reveal Systems, Inc., a software development company and internet service provider in Colorado. Prior to this, Mr. Ballard was Chief Financial Officer for Call Solutions, Inc., a publicly-traded company in the call center business. Mr. Ballard received a Master of Business Administration degree from Regis University and a Bachelor of Science in Management and Marketing from the University of Colorado, where he graduated magna cum laude.

Mindy Wang, Corporate Secretary

Mindy Wang is Worldwide Manufacturing's Corporate Secretary and brings with her over 14 years of accounting and financial management experience. Prior to co-founding Worldwide Manufacturing, Mrs. Wang worked for Technology Power. Mrs. Wang attended the graduate program in Business Education at the University of Minnesota and received a Bachelors degree in International Business from the University of California at Los Angeles Institute of Economics and Management in Beijing.

Philip Zhang, Vice President of Operations and General Manager

Philip Zhang is Vice President of Operations and General Manager of Shanghai Intech. Mr. Zhang received a Master of Science degree in Computer Science from the San Francisco State University and a Bachelor of Science degree in Mechanical Engineering from the East China Textile University.

Financial Description

Worldwide Manufacturing is a profitable company with a proven and consistent history of revenue and profit growth. Over the past three years, Worldwide has achieved compound revenue growth of over 30% and increasing profitability. In the medium-term, management anticipates growing annual revenues to \$50 million in about 3-years time. Worldwide's actual revenue and profit figures are shown in the following chart along with the company's projections for 2006 and 2007.

	2001A	2002A	2003A	2004A	2005A	2006CE	2007CE
Revenues (\$ thousands)	3,450	4,434	5,993	6,700	8,713	15,000	30,000
Gross Profit (\$ thousands)	1,449	1,874	1,948	2,547	2,802	5,700	11,400
Operating Income (\$ thousands)	155	454	521	770	517	1500	3120
Net Income (\$ thousands)	161	426	540	521	581	1150	2400
EPS (\$)	0.08	0.21	0.27	0.26	0.29	0.57	1.18

Note: 2006 and 2007 forecasts provided by Worldwide Manufacturing USA management.

Note: EPS figures adjusted for 15-1 reverse split effective April 21, 2006.

In 2004, the company experienced a decline in net profit margins due to the additional costs associated with being a publicly listed company as well as a change in tax structure, resulting in a higher income tax rate. In 2005, gross profit margins

declined due to large expenses incurred relating to the establishment of the new EMC factory. Operating profits declined in 2005 due to acquisition costs as well as writing off over \$150,000 in bad debts. However, \$60,000 of these written off bad debts have subsequently been recovered in 2006 to date. Management anticipates collecting the balance over the next year.

In the medium to longer-term, management expects to grow revenues by 30% per year organically from existing business units, and to further increase revenue growth beyond that to exceed 50% including acquisitions. The company also anticipates increasing net profit margins to 8% or higher after additional acquisitions are integrated into the company.

From a balance sheet perspective, Worldwide Manufacturing is essentially debt free and operating cash flow positive. At year-end 2005, current assets were \$4.9 million versus current liabilities of \$3.5 million, resulting in a current ratio of 1.4. Looking forward, management anticipates that the principal use of cash would be for acquisitions, capital expenditures, and working capital. The company foresees completing a fundraising in the second half of 2006 to raise cash for these purposes.

Key Partners and Competitors

The company's key partners are its customers and sub-contractors. Worldwide Manufacturing works with about 100 sub-contractors, of which approximately 40 are active and the other 60 are dormant. Relationships are maintained with at least 10 sub-contractors in each of the four product categories. Each of the sub-contractors is a relatively small business unit and none are major corporations. As such there is little fear that Worldwide Manufacturing would be in the awkward situation of not being able to provide contracted services, or of being excessively squeezed by suppliers on pricing as the suppliers tend to have little pricing power in this type of commodity production, which many sub-contractors are able to perform.

The contract manufacturing industry is populated by thousands of companies. In North America, the top tier is dominated by five major competitors: Flextronics, Celestica, Sanmina-SCI, Jabil Circuit, and Solectron. Each of these companies has multi-billion dollar market capitalizations and annual revenues. Collectively these five companies dominate one-half to two-thirds of the North American contract manufacturing market. Their target customers tend to be large multinational companies that require large production runs. The next tier consists of about a dozen mid-market capitalization companies, such as Plexus, Benchmark, and Synnex, with revenues in the billion dollar range. The final tier consists of hundreds of small- or micro-capitalization companies that tend to serve selective niche markets.

Placed within this final tier, Worldwide Manufacturing is a niche operator in a highly fragmented segment of the outsourcing market. In general, accounts that are served by smaller companies such as Worldwide Manufacturing are too small to be attractive to the larger and middle tier contract manufacturers, so there is little apprehension with competition from that group which has substantial financial strength and business scale. Of somewhat more concern are the accounts that Worldwide has with Fortune 500 customers. It could be possible that these larger customers may want to consolidate the number of contract manufacturers that they employ; this would present some risk to Worldwide Manufacturing as it would be unlikely to win when competing against top and middle tier contract manufacturers. However, the tendency in contract manufacturing in most large corporations is that each division or business unit is given the authority and freedom by corporate headquarters to choose its own suppliers as it sees most fit and appropriate.

The most intense competition that Worldwide sees is based on pricing from other smaller-sized contract manufacturers, such as E-Business International, Telecom Communications, Inc. (TCOM.OB), Genesis Technology Group (GTEC.OB), Amstar Corporation (AMTA.OB), and Oplink Communications (OPLK). Competitors such as these can match Worldwide's pricing without much difficulty; however, often they are not able to meet the quality demands of U.S. customers, which Worldwide can achieve. Management reports that 90% of the direct competitors that they compete with on bids are smaller in revenue size than Worldwide. Nonetheless, Worldwide's key competitive advantage relative to these rivals and challengers is its unique strength in high-quality production through the application of a seasoned and dedicated quality control operating unit.

Conclusion

Worldwide Manufacturing USA, Inc. is a company with exciting growth opportunities arising from the continued secular growth of outsourcing as a means for companies to reduce costs and improve capital and operating efficiency. With strong relationships in the U.S., where companies continue to seek lower cost yet high-quality production, and in China, which continues to be a low cost source of production, this company is well positioned to grow its business through new contracts as well as facility acquisitions. Furthermore, a developed and proven system of quality control gives Worldwide a competitive advantage that many of its peers simply do not possess. Barring unforeseen macroeconomic and political events or execution risks, Worldwide appears to be on a trajectory for an impressive growth run.

Disclaimer

This report was prepared for informational purposes only. Harbinger Research, LLC (“Harbinger”) was indirectly compensated by Worldwide Manufacturing USA, Inc. (“Company”) in the amount of US\$1,500 for the update of a prior report. All information contained in this report was provided by the Company. To ensure complete independence and editorial control over its research, Harbinger has developed various compliance procedures and business practices including but not limited to the following: (1) Fees from covered companies are due and payable prior to the commencement of research; (2) Harbinger, as a contractual right, retains complete editorial control over the research; (3) Analysts are compensated on a per-company basis and not on the basis of his/her recommendations; (4) Analysts are not permitted to accept fees or other consideration from the companies they cover for Harbinger except for the payments they receive from Harbinger; (5) Harbinger accepts payment for research only in cash and will not accept payment in shares, warrants, convertible securities or options of covered companies; (6) Harbinger will not conduct investment banking or other financial advisory, consulting or merchant banking services for the covered companies.

Harbinger did not make an independent investigation or inquiry as to the accuracy of any information provided by the Company is relying solely upon information provided by the companies for the accuracy and completeness of all such information. The information provided in the Report may become inaccurate upon the occurrence of material changes, which affect the Company and its business. Neither the Company nor Harbinger is under any obligation to update this report or ensure the ongoing accuracy of the information contained herein. This report does not constitute a recommendation or a solicitation to purchase or sell any security, nor does it constitute investment advice. This report does not take into account the investment objectives, financial situation or particular needs of any particular person. This report does not provide all information material to an investor’s decision about whether or not to make any investment. Any discussion of risks in this presentation is not a disclosure of all risks or a complete discussion of the risks mentioned. Information about past performance of an investment is not necessarily a guide to, indicator of, or assurance of, future performance. Harbinger cannot and does not assess, verify or guarantee the adequacy, accuracy or completeness of any information, the suitability or profitability of any particular investment, or the potential value of any investment or informational source. Harbinger and its clients, affiliates and employees, may, from time to time, have long or short positions in, buy or sell, and provide investment advice with respect to, the securities and derivatives (including options) thereof, of companies mentioned in this report and may increase or decrease those positions or change such investment advice at any time. Harbinger is not registered as a securities broker-dealer or an investment adviser either with the U.S. Securities and Exchange Commission or with any state securities regulatory authority.

ALL INFORMATION IN THIS REPORT IS PROVIDED “AS IS” WITHOUT WARRANTIES, EXPRESSED OR IMPLIED, OR REPRESENTATIONS OF ANY KIND. TO THE FULLEST EXTENT PERMISSIBLE UNDER APPLICABLE LAW, HARBINGER EQUITY RESEARCH, LLC WILL NOT BE LIABLE FOR THE QUALITY, ACCURACY, COMPLETENESS, RELIABILITY OR TIMELINESS OF THIS INFORMATION, OR FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES THAT MAY ARISE OUT OF THE USE OF THIS INFORMATION BY YOU OR ANYONE ELSE (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOSS OF OPPORTUNITIES, TRADING LOSSES, AND DAMAGES THAT MAY RESULT FROM ANY INACCURACY OR INCOMPLETENESS OF THIS INFORMATION). TO THE FULLEST EXTENT PERMITTED BY LAW, HARBINGER EQUITY RESEARCH, LLC WILL NOT BE LIABLE TO YOU OR ANYONE ELSE UNDER ANY TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY, PRODUCTS LIABILITY OR OTHER THEORY WITH RESPECT TO THIS PRESENTATION OF INFORMATION.



Harbinger Research is a New York-based independent equity research firm with a focus on providing coverage to small-cap companies. Our mission is to help our clients achieve fairer market valuations, an expanded shareholder base, improved liquidity and easier access to capital markets. We do this by providing insightful, in-depth research reports and by making sure those reports are widely distributed and made available to both institutional and individual investors. We strive to deliver superior research coverage and the result is compelling – consistent coverage from industry-expert analysts that is well-written and consists of insightful analysis, cogent arguments, and in-depth financial models. To learn more about Harbinger Research and view our research reports, we invite you to visit our website located at www.harbingerresearch.com.

Analyst Highlight

Andrew S. Hua, CFA, Senior Research Analyst **Technology and Asia Focus**

In addition to his position as a Senior Research Analyst at Harbinger Research, Mr. Hua is currently Managing Director of MAP Capital Advisors, where he manages an Asia focused long-short equity fund. Previously, Mr. Hua was a founding member and Director of Investments of Axiom International Investors, an equity management firm which achieved \$800 million in Assets Under Management during his tenure, where he managed the development of the research process and directly covered Asia and global technology equities. Mr. Hua has also held positions as a Securities Analyst for PIMCO Advisors, and as an Associate at Merrill Lynch Asset Management.

Mr. Hua received his M.B.A. and B.S.E. in Finance, with honors, from the Wharton School of the University of Pennsylvania, as well as his A.M. and B.A. with honors in International Studies, also from the University of Pennsylvania. Mr. Hua is a CFA charter holder and a member of the CFA Institute, the Los Angeles Society of Financial Analysts, and the New York Society of Securities Analysts.

Leadership Team

Brian R. Connell, CFA

Chief Executive Officer

Michael A. Bain, CFA

Director of Research

Client Team

David W. Boral

Director, Business Development

Elizabeth A. Frederick

Operations Manager

Equity Research Team

Michael A. Bain, CFA

Director of Research, Healthcare, Special Situations

Michael R. Anderegg, CFA

Information Security and Data Storage

David M. Parr, CFA

REITs, Banks, and Financial Institutions

Andrew S. Hua, CFA

Technology and Asia Focus

Stephanie Loiacono, CFA

Banks and Specialty Retail

Lisa Springer, CFA

Natural Resources

Harbinger Research, LLC
257 Park Avenue South, 12th Floor
New York, NY 10010