Cereplast, Inc. (CERP – NasdaqCM)

Global Plastics Industry Exceeds US$2.5 Trillion; Bioplastics Have Become Fundamentally Competitive but still Have Only 0.1% Global Market Share. Extreme Industry Growth Is Probable.

Recent Price: US$5.10

Summary and Investment Opportunity

- **Traditional Plastics are Ubiquitous and Environmentally Damaging**
  The global market for plastics currently exceeds US$2.5 trillion dollars annually, making plastics one of the largest raw materials industries in the world. Plastics comprise an integral part of many modern products, making the material crucial to the global economy. However, plastics manufacture also consumes approximately 8% of the world’s oil production, and are responsible for millions of tons of landfill material each year. As a result, several companies are seeking to commercialize new plastics that are not based on petrochemicals, and in many cases are biodegradable. These new plastics are known as **bioplastics**.

- **The Bioplastics Industry is Nascent but Rapidly Developing**
  Historically, bioplastics have been more expensive and less functional than traditional plastics. However, bioplastics technology has been maturing rapidly, and can now offer plastics materials that are both price and performance competitive. Given bioplastics’ environmental advantages, and given that rising oil prices have made traditional plastics more expensive, we believe that bioplastics could be poised to garner a significant share of the global plastics market in the very near future. Given that bioplastics currently comprise less than 0.1% of the global plastics market, this would constitute hyper-growth in the bioplastics industry.

- **Cereplast is Well Positioned to Benefit from Growth in the Bioplastics Industry**
  Cereplast produces two types of bioplastics resin, which have broad market appeal for a variety of applications. Its bioplastic resin formulations are protected by approximately 50 patents, and it has recently made strong inroads with major customers and prospective strategic partners. Although it does face challenges regarding financing and product acceptance, we believe its strong management team, solid product portfolio, and valuable technology base will eventually carry the day.

- **We Believe CERP Shares Offer an Excellent Risk-Reward Tradeoff at Current Levels**
  Despite Cereplast's position as an emerging leader in a hyper-growth industry, the Company’s total market capitalization is just over US$50M. The Company has no long-term debt and has recently made significant progress on multiple fronts. Given the strong political and fundamental drivers of the bioplastics industry, and given Cereplast’s status as a serious industry contender, we believe CERP shares warrant a premium valuation. **We believe that CERP shares represent an excellent investment opportunity at these levels, and are therefore initiating coverage of CERP shares with a Strong Speculative Buy rating.**
Industry Background

Introduction
The term “plastic” actually refers to a large group of natural and synthetic chemicals, which consist of extremely large “chain” molecules, known as polymers. Polymers are comprised of relatively simple molecular building blocks (such as glucose) that bind to each other to form long chain-like structures. Based on the specific chemicals that comprise the chain, polymers can exhibit a wide range of physical properties; those polymers that can be melted and molded at relatively low temperatures are classified as plastics.

Most plastics are relatively inexpensive to manufacture, and depending on their chemical formulation they tend to be cost-effective alternatives to more traditional materials such as wood, ivory, cotton, stone, and metal. Furthermore, chemical engineering has created plastics with a wide range of density, flexibility, strength, gas permeability, and melting point characteristics, making them ideal for a wide variety of product applications. These applications include nearly every product category that exists today, making plastics one of the most pervasively used materials in the modern world.

History
The first plastic was invented by Alexander Parkes in 1855, and was initially marketed as a substitute for ivory. This first plastic was made from cellulose, an inexpensive and widely available compound that is found in all plants and vegetables (in its purest naturally occurring form cellulose is known as cotton.) Parkes discovered that when treated with nitric acid and a solvent, cellulose would become another compound (cellulose nitrate) that could then be dissolved in alcohol and hardened into a transparent and elastic material. This material could then be heated and molded into any desired shape, and coloring agents could be added to it so that it would appear similar to ivory. This product experienced some success but had very limited practical applications.

About 50 years later in 1909, a Belgian-born American named Leo Baekeland created the first synthetic plastic, called Bakelite, which was originally used for wire insulation. Over time, however, Bakelite’s high strength, durability, and low cost caused it to supplant wood and metal in a wide variety of products, such as radio and telephone casings and a variety of other physical goods. Most importantly, Baekeland’s discovery demonstrated the commercial potential for synthetic polymers, spurring an ever-intensifying research and development effort that eventually led to the highly diverse and pervasive plastic industry of today.

The Plastics Value Chain
Like many physical commodities, plastic has a multi-part value chain. This value chain begins with the raw materials providers, which for standard plastic is the energy companies. The oil these companies produce goes to (typically large and diversified) chemical companies, who apply complex chemical/industrial technologies to transform oil into the gamut of plastic resins used in making plastics. These resins come in a very wide variety of prices and characteristics, and are typically sold to a range of companies known as converters. These companies use specialized machinery to extrude, mold, or otherwise process the plastic resins into finished goods. In most cases these goods are then sold to the brand owners (e.g. Frito Lay, re: potato chip bags), who use them in either the manufacture or delivery of their product. This product is then consumed and eventually discarded; the plastic is collected as waste and is potentially (though not frequently) recycled back into raw material.

In the case of bioplastics, the raw materials do not come from the energy companies, but rather from either plants, bacteria, or other novel sources of plastics-related polymers. Unlike oil, these raw material sources are renewable and will never run out, giving bioplastics (one of several) long-term advantages over oil-based plastics.

Global Market
According to Cereplast and other industry sources, the total global market for plastic resin in 2009 was approximately US$2.5 trillion, or about 1 trillion (1,000,000,000,000) pounds. This is a truly gargantuan
global market that accurately reflects the degree to which plastics have become pervasive in the modern world – and it is a market that continues to grow.

Unfortunately, this level of plastics production and consumption does not come without a price: a very high level of negative impact on the environment and, to some degree, directly on people. Some of the problems caused by traditional oil-based plastics include:

- **Ocean gyre clogging.** Ocean gyres, such as the Atlantic’s Sargasso Sea and the Pacific’s Garbage Patch, are becoming choked with floating plastics and other debris – these debris fields can measure several to hundreds of miles across.
- **Landfill Expansion.** Estimates suggest that only 2% - 3% of plastics are recycled, largely due to the high labor costs involved in separating plastic from general trash materials. This means that the modern world is storing nearly 1 trillion pounds of plastic each year, mostly in landfills. This plastic will remain in these landfills from hundreds to thousands of years before finally decaying, and in some cases this decay will contain very toxic compounds.
- **Toxic chemical “bleeding.”** Recent studies suggest that several commonly-used food and beverage packaging plastics are actually less stable than was previously thought – in some cases certain toxic chemicals are absorbed by the packaged food or beverage.
- **Petroleum Use.** Recent trends in oil prices demonstrate an inexorable truth: the world is demanding ever more oil whereas oil reserves are dwindling. Plastic manufacturing accounts for 8% of global oil consumption, thus intensifying the problem.

Because of these myriad problems, a new type of plastics has recently been commercialized: bioplastics.

**Bioplastics**

According to the Company, the total global market for plastic resin in 2009 was approximately US$2.5 trillion, Bioplastics are made from polymers derived from alternative sources, such as bacteria and plant fibers, and often cause little or no damage to the environment, unlike their petroleum-based cousins. However, the technology for manufacturing these bioplastics is still relatively nascent, and bioplastics at this point comprise less than 1/10th of one percent of the global plastics market. Those bioplastics that are available have historically been more expensive than traditional plastics, and in many cases have also exhibited inferior performance characteristics, severely limiting their acceptance in the market. This is beginning to change, however, as research efforts continue to progress.

Based on current trends in bioplastics research and development, and based on our belief that oil prices are likely to trend higher in the future, we believe that bioplastics could soon comprise a significant percentage of the global market for plastics. Given this industry’s currently small size, even an eventual 10% global market penetration would represent 10,000% growth. Needless to say, any and all of the companies that capture a significant share of this growth will likely prove to be exceptionally good investments.

**Conclusion**

From its humble beginnings some 150 years ago as a largely-decorative substitute for ivory, plastics have come a long way. They now comprise some portion of nearly all manufactured products, including textiles, automobiles, electronics, packaging, and many, many others. Their historically low cost and versatile technical characteristics have made them ubiquitous in the modern world, and they constitute an annual market in excess of US$2.5 trillion dollars.

However, this popularity has come at a cost: plastics are highly stable compounds that do not easily or quickly decay in a natural environment – the result of this has been the accumulation of millions of tons of plastic litter and landfill waste. Furthermore, some plastics can be outright toxic to humans (especially when burned), meaning that their widespread use can in some cases constitute a serious public health risk. But, a new class of plastics promises to change all of this – bioplastics – a family of plastics that can potentially preserve all of the
benefits of traditional oil-based plastics, but without all of the associated issues. We believe this new class of plastics is poised to be a major (and potentially disruptive) force in the global plastics industry, boding very well for all legitimate manufacturers of bioplastics.
Company Analysis

Corporate History and Overview
Cereplast is a specialty chemical company engaged in the design and manufacture of bio-based resins, the primary input in bioplastics. Cereplast manufactures its patent-protected resins from widely available grains, making them price competitive with (and environmentally superior to) more traditional petrochemical-based resins. The Company has approximately 50 formulation patents, and makes resins that address both the disposable and durable plastic markets. Unlike most other bioreins, the Company’s resins work with existing manufacturing equipment, thus removing a key issue in the process of gaining broad market acceptance. The Company is rapidly growing and addresses a very large, multi-billion dollar market.

Cereplast is based in El Segundo, CA and maintains its manufacturing facility in Seymour, Indiana, which is very close to the Company’s source of grains and railways that transport its product. The company was recently up-listed from the over-the-counter bulletin board to the Nasdaq, where it trades under the symbol CERP.

Products and Services
Cereplast is currently producing two primary types of resins: compostable resins, which are biodegradable and primarily used for food packaging, and hybrid resins, which are used for durable plastic goods.

Compostable Resins
Cereplast’s compostable resins degrade into natural, non-toxic chemicals that are typically found in plant decay, giving them a pronounced advantage over traditional plastics that will remain in waste dumps for hundreds of years. These resins address nearly 100% of the foodservice and packaging (plastic) markets, and are manufactured with no petrochemical content whatsoever. Furthermore, they can be used in all major converting processes such as thermoforming, blow molding, and extrusion, without requiring any new or altered processing equipment. Cereplast’s compostable resins are certified as biodegradable in both the United States and Europe and are well-protected by the Company’s patent portfolio.

Disposable Plastic Products Made from Cereplast’s Compostable Resins

Hybrid Resins
Cereplast currently offers two types of hybrid resins, which consist of a blend of a plant-based (up to 50%) and oil-based resin. The Company is conducting ongoing research and development in this product area and hopes at some point to be able to offer 100% plant-based resins. For this product segment the Company targets the automotive, consumer goods, electronics, and toy markets, which as a group potentially represent a much larger market than is addressed by the Company’s compostable product line. These products have significant appeal to converters because of their environmental advantages and because their price is less tied to the price of oil.

Overall, the Company’s products are of exceptional quality, and have won numerous awards to this effect both in the United States and overseas. We believe that the Company and its leaders have demonstrated an ability to
create innovative, environmentally-friendly plastic products, and that (with adequate funding) this is likely to continue for the foreseeable future.

**Manufacturing**
The Company has recently completed the construction of a 105,000 acre manufacturing facility in Seymour, Indiana. This facility is capable of producing approximately US$100M of resin each year (at current prices), which is more than enough capacity for CERP through at least CY2012. This facility is strategically located in the heart of the nation’s breadbasket, where grains are widely available at the lowest costs, and where rail networks are available both for grain delivery and resin transport. We view the completion of this facility as a major milestone for the Company as it seeks to rapidly grow sales over the coming years.

**Growth Plan**
At this point, management has what we believe to be a well thought-out growth plan, and if they are able to execute on it Cereplast should be very successful in the coming years. Management’s plan is based on three primary objectives: to raise additional operating and growth capital for the Company, to expand the Company’s product portfolio, and to gain the support of a major chemical company. Achieving each of these goals will be crucial to Cereplast’s long-term success.

**Additional Capital**
Cereplast recently raised approximately $1.5M in a private placement, and plans to raise an additional capital in the near future, both to fund ongoing operational needs and to continue to invest in the research and development of its new products. Given its current cash position and burn rate of $250K - $300K per month, we view the completion of at least some of this planned financing as being absolutely crucial to the Company and its success.

**Expand Product Portfolio**
Cereplast continues to invest in improving its products, and among other things has under development a new form of resin that is based on cyanobacteria (algae) rather than traditional plant fiber. This and other aspects of the Company’s product development initiatives could prove to be strong drivers of the Company’s future success.

**Seek Backing of Major Chemical Company**
In order to truly scale this business into the tens or hundreds of millions in annual sales, management believes that the backing of a major diversified chemical company will be crucial. This relationship, if and when it can
be consummated, would immediately give Cereplast access to a fully mature distribution channel and extensive customer base. Notably, its competitor Metabolix (MBLX – NasdaqGM) already has a strategic partnership with Archer Daniel Midland (ADM – NYSE), thus validating the strategy and the potential attractiveness of Cereplast to another major chemical company. We also believe it is noteworthy that at scale CERP should enjoy gross and operating margins well in excess of those experienced by the large chemical companies, potentially making CERP an attractive acquisition candidate at some point in the future.

It remains to be seen whether or not management will be successful in achieving their goals, although many recent trends seem to suggest that they will. If they do succeed, Cereplast will almost certainly grow to many times its current size, as it emerges as one of the few market leaders in the bioplastics industry. And while this outcome is still far from certain, we believe it is likely enough to make CERP shares quite attractive on a risk-adjusted basis.

Key Management

Frederic Scheer, Chairman, Chief Executive Officer

Mr. Scheer became involved in the biodegradable plastics industry in 1994 through Montedison SpA, a large chemical conglomerate operating Novamont SpA, an Italian resin manufacturer and research company. Foreseeing that the demand for biodegradable products in North America would expand rapidly by the end of the decade, Scheer secured the exclusive distribution rights in North America for Mater-Bi™ resins. Soon thereafter, he began North American distribution of Mater-Bi, a 100% biodegradable resin patented and produced by Novamont.

Scheer created the Biodegradable Products Institute (BPI), and this non-profit organization has quickly become the largest biodegradable association in the world, with more than 40 members, including BASF, DuPont, GeorgiaPacific, NatureWorks, Dow and Eastman. Prior to his involvement in the biodegradable industry, Scheer was a merchant banker in Europe. He holds a Doctor of Laws from the University of Paris, a Masters Degree in Finance and a Masters Degree in Political Sciences from Institut d'Etudes Politiques, Paris, France. Scheer, a US citizen, is fluent in French, Spanish, Italian and English.

William Kelly, Senior Vice President, Technology

Mr. Kelly is a specialist in polymer product development, with 26 years of related industrial experience innovating new thermoplastic materials, which have been useful for serving demanding applications. He led technical efforts to develop fiber forming polylactide material with a unique property set for Chronopol. He also established process parameters for numerous grades of polylactic acid polymers. He planned and directed activities leading to product commercialization for over 50 new polymer systems and products to meet customer needs.

For example, Kelly invented a ‘novel’ stabilization package for poly (lactic acid) polymer, which completely prevents molecular weight loss upon thermal processing. Without this improvement, PLA would lose about 50% of its molecular weight within one heat history. Kelly also developed many diverse forms of polylactic acid polymers and co-polymers – both low and high molecular weight. He received Academy Award recognition for technical achievement for BIOSNOW2 – a movie special effect for “snow” (based on a polylactic acid polymer) for outdoor scenes.

He innovated and enhanced processing parameters for polylactic acid resin with revised material reformulations, which improved processing via fiber forming, injection molding, blow molding, film extrusion, and foam processing. Kelly invented and qualified the RADEL® R7000, polyethersulfone product line at Boeing and other airframe companies, which exceeding all FAA and industry requirements for performance. He transformed AMODEL® PPA resin into palatable material using existing ABS plating technology maintaining high heat capability. Kelly qualified and produced both amorphous and semi-crystalline polymers for many diverse customer applications. He has originated 20 patent applications with six issued, participated in numerous technical trials and presented papers worldwide.
Margaret McMurray, Chief Administrative Officer
Margie joined Cereplast in June of 2006 and has over 30 years of experience in operations primarily in administrative management services to a variety of private and government agencies. Margie was recently promoted to her current position of Chief Administrative Officer and she oversees Cereplast’s administrative functions by providing administrative direction, supervision and support to the staff pertaining to Human Resources, property management and purchasing, as well coordinating the duties of the office staff and general operation of the administrative offices. Prior to joining Cereplast, Margie spent ten years performing administrative duties for Conwell Shonkwiler’s & Associates in San Diego, Grossmont Community College and CompuSoft Publishing. Her background also includes advising the Directors of the U. S. Information Services offices in Bogotá, Colombia and Jakarta, Indonesia on government procedures pertaining to administrative and management matters.

Mark Barton, Senior Vice President, Manufacturing
Mr. Barton joins Cereplast to lead overall manufacturing operations. With over 25 years of successful plastic compounding industry experience, most recently as Vice President of Toray Resin Company, Barton has held a succession of resin manufacturing leadership positions. Under Barton’s leadership, Toray Resin’s engineering resin compounding operations became an industry leader, achieving registrations of ISO 9001/TS16949 for quality systems, ISO 14001 for environmental systems and receiving the Toray Industries, Presidents Award in 2006 for overall performance and achievement. Barton’s experience includes championing successful lean manufacturing and continuous improvement systems in resin compounding operations. Barton holds a B.S in Management Science/Business Administration from Franklin University in Columbus, Ohio.

Competition
Although there are multiple early-stage companies competing in the bioplastics industry, few truly represent a real competitive threat to the Company, mainly due to the nascent size of the bioplastics industry. We believe the real competition and competitive threat facing the Company comes from the entrenched raw materials providers and processors: the large diversified energy and chemical companies. Because bioplastics still comprise such a small percentage of the overall global market for plastics, they have not yet attracted the real attention of the world’s large energy companies, which derive approximately 8% of their sales from plastic resin producers. This is almost sure to change, however, as bioplastics capture and ever-larger share of the global plastics market. Although we cannot at this time predict how this scenario will play out, these energy companies will surely respond eventually in some way to the ever-growing threat bioplastics represent.

The large chemical companies are quite different, however, in that they are more focused on the creation of plastic resin than on where it comes from, per se. So despite currently being competitive, it would in fact make much more sense for these companies to either independently develop or acquire bioplastics technology, rather than to continue to compete with it via solely oil-based products. Based on historical precedent, we believe these companies are more likely to acquire any and all companies with important bioplastics technology, rather than try to independently develop it on their own. This of course means that these “competitors” are in fact more likely to become acquirers of bioplastics companies than they are to compete with them – a fact that could eventually be highly beneficial to Cereplast and its shareholders.

Other Risks
Without a doubt, the greatest risk to Cereplast relates to its ability to raise adequate growth capital on a timely basis, and (secondarily) to raise that capital under attractive terms. Although CERP potentially has a very bright future, it will only be able to realize this potential if it is able to attract adequate operating and growth capital. Given current market conditions, we believe that it probably can and will – but this cannot be considered a certainty until it has occurred.
Another potential risk is technological obsolescence, which could conceivably occur if new technologies completely change the way in which plastics are designed and manufactured. We do not believe this is a near-term risk, but nonetheless it is in theory possible.

Valuation and Investment Opinion
By traditional trailing sales and earnings metrics, it would be difficult to call Cereplast undervalued. It currently carries a market capitalization of $55M, and if all goes well it will only do $10M - $12M in sales this year. However, this type of analysis tends to systematically undervalue extremely high growth companies, which in some cases can legitimately warrant extremely high trailing price-to-sales and price-to-earnings ratios. In fact, several of the most successful companies today (i.e. Google) have consistently carried price-to-sales and price-to-earnings ratios that have seemed excessive, but in fact have been reasonable given these companies’ high growth rates. In the case of Cereplast, management believes that 2011 sales will be in the range of $25M - $30M, and 2012 sales as high as $90M - $100M. With this type of growth potential, and given the Company’s position in what could be a hyper-growth industry, we believe CERP shares represent an excellent risk-reward ratio.

Also, investors should consider the current valuation of Metabolix (MBLX – NasdaqGM), perhaps the Company’s most similar U.S. traded comparable. Metabolix is different from Cereplast in certain regards, some of which are positive and some negative – but its valuation constitutes at least a good indication of the potential in the bioplastics industry. On the positive side, Metabolix went public through a highly-publicized IPO, leaving it with almost $90M in net cash, and it has a strategic partnership with Archer-Daniel Midland (ADM – NYSE), a major chemical company. However, on the negative side, it has yet to generate significant revenues from its bioplastics technology – and despite this it has an enterprise value of $248 million dollars, nearly five times the current valuation of CERP.

Conclusion
Cereplast has innovative and unique technology in the field of bioplastics. It has a solid portfolio of intellectual property and has been making solid inroads with potential customers (e.g. Georgia Pacific, Wal-Mart, Target). Overall, we have confidence in both its technology and management team, and believe that it operates in an industry poised for hyper-growth. Although it is too early to be certain of Cereplast’s eventual success, we believe that is shares currently represent an excellent risk-reward trade off for risk-tolerant investors. Therefore, we are initiating coverage of Cereplast with a rating of Strong Speculative Buy. As 2010 progresses, Cereplast’s success at raising additional capital will probably determine its eventual attractiveness, and we will view any progress in this regard as an extremely positive sign.
Our Rating System

We rate enrolled companies based on the appreciation potential we believe their shares represent. The performance of those companies rated “Speculative Buy” or “Strong Speculative Buy” are often highly dependent on some future event, such as FDA drug approval or the development of a new key technology.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRONG BUY</td>
<td>We believe the enrolled company will appreciate more than 50% relative to the general market for U.S. equities during the next 12 to 24 months.</td>
</tr>
<tr>
<td>BUY</td>
<td>We believe the enrolled company will appreciate more than 30% relative to the general market for U.S. equities during the next 12 to 24 months.</td>
</tr>
<tr>
<td>STRONG SPECULATIVE BUY</td>
<td>We believe the enrolled company could appreciate more than 50% relative to the general market for U.S. equities during the next 12 to 24 months, if certain assumptions about the future prove to be correct.</td>
</tr>
<tr>
<td>SPECULATIVE BUY</td>
<td>We believe the enrolled company could appreciate more than 30% relative to the general market for U.S. equities during the next 12 to 24 months, if certain assumptions about the future prove to be correct.</td>
</tr>
<tr>
<td>NEUTRAL</td>
<td>We expect the enrolled company to trade between -10% and +10% relative to the general market for U.S. equities during the following 12 to 24 months.</td>
</tr>
<tr>
<td>SELL</td>
<td>We expect the enrolled company to underperform the general market for U.S. equities by more than 10% during the following 12 to 24 months.</td>
</tr>
</tbody>
</table>

Analyst Certification

I, Brian R. Connell, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report.
Disclaimer

This report was prepared for informational purposes only. Harbinger Research, LLC ("Harbinger") was paid in the amount of US$15,000 for the preparation and distribution of this research report. All information contained in this report was provided by Cereplast, Inc. ("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 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 an 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

Brian R. Connell, CFA    Senior Research Analyst

Mr. Connell has over 15 years’ experience in the securities industry, as an equity analyst and portfolio manager, and as the founder and CEO of StreetFusion (acquired by CCBN/StreetEvents), a software company serving the institutional investment community. On the sell-side, Mr. Connell served as the technology analyst for Neovest, an Atlanta-based boutique, and as a Senior Analyst - Internet for Preferred Capital Markets, an investment bank based in San Francisco. Mr. Connell has also held the position of Executive Director of Marquis Capital Management, a technology-focused investment management organization.

Mr. Connell holds degrees in Economics and Psychology from Duke University, and is a CFA Charterholder.

Mr. Connell is also associated with StreetCapital, an Atlanta-based broker-dealer. By written policy, Harbinger Research does not work with StreetCapital clients in any capacity, and StreetCapital does not work with Harbinger Research clients in any capacity.