Ascent Solar Technologies, Inc. Form 424B5 October 30, 2013 Filed Pursuant to Rule 424(b)(5) Registration No. 333-178821 PROSPECTUS SUPPLEMENT (To the Prospectus Dated February 3, 2012)

Ascent Solar Technologies, Inc.

Up to \$10,000,000 of

Series B-1 Preferred Stock and Series B-2 Preferred Stock and Common Stock

We are offering up to an aggregate of \$10,000,000 of our newly designated Series B-1 preferred stock ("Series B-1 Shares"), Series B-2 preferred stock ("Series B-2 Shares"; together with the Series B-2 Shares, the "Series B Preferred Shares"), up to 8,695,653 shares of common stock issuable upon conversion of the Series B Preferred Shares, and additional shares of common stock that we may choose to issue in payment of dividends on the Series B Preferred Shares, to Ironridge Technology Co., a division of Ironridge Global IV, Ltd. ("Ironridge"), pursuant to this prospectus supplement and the accompanying prospectus.

We are offering the Series B Preferred Shares to Ironridge in two tranches. In the first tranche, we are offering 500 Series B-1 Shares to Ironridge at a purchase price for each Series B-1 Share of \$10,000 per share. We expect the first tranche to close shortly after the date of this prospectus supplement, resulting in gross proceeds to us of \$5,000,000. In the second tranche, we are offering either 500 Series B-1 Shares or 500 Series B-2 Shares (but not both) to Ironridge at a purchase price for each Series B-1 Share or B-2 Share of \$10,000 per share, which would result in additional gross proceeds to us of \$5,000,000. The Series B-1 Shares will be convertible into common stock at a fixed conversion price of \$1.15 per share of common stock. The Series B-2 Shares (if issued) will be convertible into common stock at a fixed conversion price of \$1.50 per share of common stock. For a more detailed description of the terms of the Series B-1 shares and the Series B-2 Shares, see the section entitled "Description of Series B Preferred Stock" beginning on page S-17 of this prospectus supplement.

The second tranche will not close until after our stockholders approve certain issuances of our shares related to this offering in accordance with Nasdaq Listing Rule 5635(d). That rule requires stockholders to approve certain stock issuances that may aggregate to 20% or more of our outstanding common stock. We intend to hold a special stockholder meeting as soon as practicable in order to obtain such approval. If our stockholders do not vote to approve such issuances of our shares in accordance with such rule, then the second tranche will not close and we would not receive the related proceeds.

The shares issued in the second tranche will be Series B-2 Shares if the closing price of our common stock on the Nasdaq Stock Market has reached \$1.35 or more on any trading day. If this condition is satisfied, the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder approval or (ii) the date that the closing price was \$1.35 or more.

If the closing price of our common stock on the Nasdaq Stock Market has not yet reached \$1.35 or more, we have the option (exercisable until April 28, 2014) to request that the closing of the second tranche occur within 30 days. In this case, we would issue Series B-1 Shares to Ironridge and the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder approval or (ii) the 30th day following our notice to Ironridge.

The Series B Preferred Shares will not be listed on any national securities exchange. There is no established public trading market for the Series B Preferred Shares, and we do not expect a market to develop. Our common stock is quoted on The NASDAQ Global Market under the symbol "ASTI." On October 28, 2013, the last reported sale price of our common stock on The NASDAQ Global Market was \$0.90.

Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our securities in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million. On the date of this prospectus supplement, the aggregate market value of our outstanding voting and non-voting common equity as calculated pursuant to General Instruction I.B.6 is approximately \$45.1 million. During the 12 calendar months prior to and including the date of this prospectus supplement, we have not offered any securities pursuant to General Instruction I.B.6 to Form S-3. For purposes of this calculation we have used the closing price on October 22, 2013, which was \$1.07.

Investing in our securities involves risks. See "Risk Factors," beginning on page S-6 and the risk factors discussed in our most recent Annual Report on Form 10-K, each subsequently filed quarterly report on Form 10-Q and other information we file from time to time with the Securities and Exchange Commission.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is October 30, 2013.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated February 3, 2012, including the documents incorporated by reference, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date, the statement in the document having the later date modifies or supersedes the earlier statement. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference and any free writing prospectus that we may provide to you in connection with this offering, in their entirety before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any free writing prospectus that we may provide to you in connection with this offering. We have not authorized anyone to provide you with different or additional information. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we may provide to you in connection with this offering is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

As used in this prospectus supplement, the terms "Ascent," "we," "us" and "our" refer to Ascent Solar Technologies, Inc.

PROSPECTUS SUPPLEMENT SUMMARY

The following summary highlights selected information contained elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. It does not contain all the information you will need in making your investment decision. You should carefully read this entire prospectus supplement, the accompanying prospectus and the documents that they incorporate by reference. You should pay special attention to the "Risk Factors" section of this prospectus supplement beginning on page S-6 and our Annual Report on Form 10-K for the year ended December 31, 2012 and each subsequently filed annual report on Form 10-K and quarterly report on Form 10-Q.

OUR BUSINESS

Overview

We are a development stage company formed in October 2005 to commercialize flexible photovoltaic ("PV") modules using proprietary technology. Our technology was initially developed at ITN Energy Systems, Inc. ("ITN") beginning in 1994 and subsequently assigned and licensed to us. Our proprietary manufacturing process deposits multiple layers of materials, including a thin film of highly efficient copper-indium-gallium-diselenide ("CIGS") semiconductor material, on a flexible, lightweight, plastic substrate using a roll-to-roll process and then laser patterns the layers to create interconnected PV cells, or PV modules, in a process known as monolithic integration.

We believe that our technology and manufacturing process, which results in a lighter, flexible module package, provides us with a unique market opportunity relative to both the crystalline silicon ("c-Si") based PV manufacturers that currently lead the PV market, as well as other thin-film PV manufacturers that use substrate materials such as

glass, stainless steel or other metals that can be heavier and more rigid than plastics.

We believe that our use of CIGS on a flexible, durable, lightweight, high tech plastic substrate will allow for unique and seamless integration of our PV modules into a variety of electronics products, defense, transportation and space applications, as well as other products and applications that may emerge.

Recent Strategic Developments

Introduction of EnerPlexTM Consumer Products

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Following the appointment of our new President and CEO in February 2012, we began to reposition our business model with an immediate focus into developing downstream consumer products. In June 2012, we launched our new EnerPlex brand line of consumer products, and introduced the first product under the EnerPlex brand with a solar-assisted charger for the iPhone® 4/4S smart phone featuring our ultra-light CIGS thin film technology.

This charger incorporates our ultra-light and thin solar module into a sleek, protective iPhone® 4/4S case, along with a thin battery. The charger adds minimal weight and size to an iPhone® smart phone, yet provides significantly improved battery life by harnessing sunlight for electric power. With this line of products we plan to move up the value chain with a much improved profit margin as products are developed and designed in-house and sold directly to end consumers or through distributors globally.

This charger is the first product in our planned line of smart phone chargers and related consumer portable power products. We intend to introduce a wide range of EnerPlex solutions for a variety of consumer products.

In August 2012, we announced the launch of the second version of SurfrTM, a solar assisted charger for the Samsung® Galaxy S® III, which provides 85% additional battery life.

In December 2012, we launched the EnerPlex KickrTM and EnerPlex JumprTM product series. The EnerPlex Kickr IV is an extremely portable, compact and durable solar charging device, approximately seven inches by seven inches when folded, and weighing only 316 grams, or less than half a pound. The Kickr IV provides 4.5 watts regulated power that can help charge phones, tablets, digital cameras, and other devices. Complementing the Kickr IV is the Jumpr 4400 and the Jumpr 4800, rechargeable, portable battery packs providing from three to five complete charge cycles for a smart phone. Currently, we are working to develop the iPhone® 5 and Samsung Galaxy S® 4 versions of the Surfr solar assisted charger. Our consumer products are available to customers through third party distributors and retailers and through our website at www.goEnerPlex.com, our retail website.

We continue to design and manufacture PV integrated consumer electronics, as well as portable power applications for commercial and military users, and we have adjusted our equipment utilization to meet our near term sales forecast. Products in these consumer oriented markets are priced based on the overall product value proposition as compared with directly competitive products or substitute products rather than on a cost per watt basis, typically used in commodity solar markets.

In 2013, we launched our new retail relationship with Fry's Electronics Inc., a premier California-based retailer. Our entire EnerPlex series of consumer solar-integrated products is now available at all Fry's retail locations, as well as online through www.frys.com. In addition, the EnerPlex line is now listed at Walmart.com and Newegg.com. We also established a number of additional distributor relationships to reach consumers internationally. We also launched our retail presence in Colorado through the operation of sales kiosks at Denver International Airport (Concourse B) as well as malls in the Denver metropolitan area, and also at the world famous Red Rocks Amphitheater.

In addition, we announced our agreement with the Denver Broncos Football Club to become a 'Hometown Sponsor' for the NFL franchise, an agreement which will include in-stadium advertising rights at Sports Authority Field at Mile High and promotional rights for our EnerPlex products.

For the balance of 2013, we plan to continue our expansion of distribution channels in the U.S. and worldwide.

Sugian Joint Venture

On July 2, 2013, we entered into a framework agreement (the "Suqian Agreement") for the establishment of a joint venture with the Government of the Municipal City of Suqian in Jiangsu Province, China ("Suqian"). The agreement

covers a multi-faceted, three-phase project. Completion of all three phases would involve an anticipated investment of up to \$500 million over six years, primarily funded by Suqian.

Under the Suqian Agreement, in the first phase we will form a joint venture entity ("JV") with Suqian, in which we will have majority interest of up to 80%. The JV will build a factory to manufacture our proprietary photovoltaic modules. We will contribute proprietary technology and intellectual property, approximately \$1.6 million in cash and certain equipment from our Colorado facility. Suqian will provide cash of approximately \$32.5 million as well as rent-free use of a 270,000 square foot factory that is currently being built in the Suqian Economic & Industrial Development Science Park. The total project size of phase one under the agreement is expected to be approximately \$160 million. We will have the right to purchase this factory within the first five years at the initial construction cost, as well as the right to purchase Suqian's ownership interest in the JV for a modest nominal cost above Suqian's cash investment.

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The implementation of the Suqian Agreement, including the formation of the JV entity, will be subject to a number of contractual conditions and governmental approvals. Such conditions and approvals must be obtained in the future in order for the Suqian factory to be built and become operational.

Need for Additional Capital

Since inception, the Company has incurred significant losses. The Company expects to continue to incur net losses in the near term. For the six months ended June 30, 2013, our cash used in operations was \$10.0 million. At June 30, 2013, the Company had cash and equivalents of approximately \$4.0 million. At September 30, 2013, the Company had cash and equivalents of approximately \$3.9 million.

Following the completion of this offering, the Company believes it will need to raise additional capital at some point during 2014 in order to continue the current level of operations through the end of 2014 and into 2015. There is no assurance that the Company will be able to raise such additional capital on acceptable terms or at all. If the Company's revenues do not increase rapidly, and/or additional financing is not obtained, the Company will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on the Company's future operations.

Corporate Information

We are incorporated under the laws of Delaware. Our principal business office is located at 12300 Grant Street, Thornton, Colorado 80241, and our telephone number is (720) 872-5000. Our website address is www.ascentsolar.com . Information contained on our website or any other website does not constitute part of this prospectus supplement.

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The Offering

Securities offered

Offering price

Manner of offering

Up to \$10,000,000 of our Series B Preferred Shares. Up to 8,695,653 shares of common stock issuable upon conversion of the Series B Preferred Shares. Also, additional shares of common stock that we may choose to issue in payment of dividends on the Series B Preferred Shares.

The per share purchase price for the Series B Preferred Shares will be \$10,000.

The Series B Preferred Shares will be issued directly to Ironridge pursuant to a Stock Purchase Agreement between us and Ironridge. The Series B Preferred Shares will be issued and sold to Ironridge in two tranches.

In the first tranche, we are offering 500 Series B-1 Shares to Ironridge at a purchase price for each Series B-1 Share of \$10,000 per share. We expect the first tranche to close shortly after the date of this prospectus supplement. In the second tranche, we are offering either 500 Series B-1 Shares or 500 Series B-2 Shares (but not both) to Ironridge at a purchase price for each Series B-1 Share or B-2 Share of \$10,000 per share.

The second tranche will not close until after our stockholders approve the issuance of the second tranche shares in accordance with Nasdaq Listing Rule 5635(d). If our stockholders do not vote to approve the issuance of the second tranche securities, then the second tranche will not close and we would not receive the related proceeds.

The shares issued in the second tranche will be Series B-2 Shares if the closing price of our common stock on the Nasdaq Stock Market has reached \$1.35 or more on any trading day. If this condition is satisfied, the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder approval or (ii) the date that the closing price was \$1.35 or more.

If the closing price of our common stock on the Nasdaq Stock Market has not yet reached \$1.35 or more, we have the option (exercisable until April 28, 2014) to request that the closing of the second tranche occur within 30 days. In this case, we would issue Series B-1 Shares to Ironridge and the closing of the second tranche would occur immediately after the later of (i) the date of the stockholder approval or (ii) the 30th day following our notice to Ironridge.

We intend to use the net proceeds from this offering for working capital, including to fund the continued operations and expansion of our retail channels for our EnerPlex products in the U.S., Europe and Asia, brand building, as well as the launch of additional EnerPlex products. See "Use of Proceeds" on page S-17.

We will not receive any proceeds resulting from the sale by Ironridge of common stock issued to Ironridge in respect of the Series B Preferred Shares offered hereby.

There is no established public trading market for the Series B Preferred Shares and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series B Preferred Shares on any securities exchange.

Use of Proceeds

Market for the Series B Preferred Shares

Market for our common stock

Our common stock is quoted on The Nasdaq Global Market under the symbol "ASTI".

Risk Factors

This investment involves a high degree of risk. See "Risk Factors" beginning on page S-6 of this prospectus supplement as well as the other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of risks you should consider carefully

before making an investment decision.

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Series B Preferred Shares

Dividends

Holders of the Series B Preferred Shares will be entitled to dividends in the amount of 5.75% per annum, payable when, as and if declared by the Board of Directors in its discretion. The dividend rate on the Series B Preferred Shares is indexed to the Company's stock price and subject to adjustment in certain circumstances.

The dividend rate on the Series B-1 Shares shall adjust upward by 98.880 basis points for each \$0.05 that the volume weighted average price of our common stock on any trading day as of which the dividend rate is determined and calculated is below \$1.00, subject to a maximum dividend rate of 15%.

The dividend rate on the Series B-1 Shares shall adjust downward by 98.880 basis points for each \$0.05 that the volume weighted average price of our common stock on any trading day as of which the dividend rate is determined and calculated is above \$1.30, subject to a minimum dividend rate of 3%.

The dividend rate on the Series B-2 Shares shall adjust upward by 98.880 basis points for each \$0.10 that the volume weighted average price of our common stock on any trading day as of which the dividend rate is determined and calculated is below \$1.20, subject to a maximum dividend rate of 15%.

The dividend rate on the Series B-2 Shares shall adjust downward by 98.880 basis points for each \$0.10 that the volume weighted average price of our common stock on any trading day as of which the dividend rate is determined and calculated is above \$1.80, subject to a minimum dividend rate of 3%.

The Company has the option to pay dividends on the Series B Preferred Shares in cash or in additional shares of common stock. If the Company elects to pay in the form of common stock, the number of shares to be issued shall be calculated by using the lesser of (i) 92% of the volume weighted average price for the common stock over a 60 day measuring period or (ii) the lowest single day closing price for the common stock occurring during such measuring period.

Conversion rights

The Series B-1 Shares will be convertible into common stock at a fixed conversion price of \$1.15 per share of common stock. The Series B-2 Shares (if issued) will be convertible into common stock at a fixed conversion price of

\$1.50 per share of common stock. The Series B Preferred Shares may be converted into shares of common stock at any time at the option of the holder. The Series B Preferred Shares may also be converted into shares of common stock at the option of the Company if the closing price of the common stock exceeds \$2.00 for 20 consecutive trading days.

In addition to the issuance of the applicable number of conversion shares, upon any conversion of Series B Preferred Shares the Company will also pay to the holder an "embedded dividend liability" amount equal to the dividends (calculated at the then applicable dividend rate) on the converted Series B Preferred Shares for a full five year period from the date of issue (less any period for which dividends have previously been paid). Such embedded dividend liability amount may be paid in cash or, at the Company's option, additional shares of common stock. If the Company elects to pay the embedded dividend liability amount in the form of common stock, the number of shares to be issued shall be calculated by using the lesser of (i) 92% of the volume weighted average price for the common stock over a 60 day measuring period or (ii) the lowest single day closing price for the common stock occurring during such measuring period.

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Redemption

Upon or after the fifth anniversary of the initial issuance date of the Series B Preferred Shares, the Company will have the right, at its option, to redeem for cash all or a portion of the Series B Preferred Shares at a price per share equal to \$10,000 plus any accrued but unpaid dividends (the "Series B Liquidation Value").

At any time prior to the fifth anniversary of the date of the initial issuance of Series B Preferred Shares, the Company will have the option to redeem for cash all or a portion of the Series B Preferred Shares at a price per share equal to (a) \$10,000 plus (b) the "embedded dividend liability" amount equal to the dividends on the redeemed Series B Preferred Shares for a full five year period from the date of issue (less any period for which dividends have previously been paid).

Liquidation value

Upon our liquidation, dissolution or winding up, holders of Series B Preferred Shares will be entitled to be paid out of our assets, on a parity with holders of our common stock and our Series A preferred stock, an amount equal to \$10,000 per share plus any accrued but unpaid dividends thereon.

Voting rights

Except as otherwise required by law (or with respect to approval of certain actions), the Series B Preferred Shares will not have voting rights.

Please see "Description of Series B Preferred Stock" beginning on page S-17 for more information.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment in our securities, you should carefully consider the risk factors set forth below and discussed under the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for the year ended December 31, 2012 and each subsequently filed annual report on Form 10-K and quarterly report on Form 10-Q, which are incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, together with the other information contained in this prospectus supplement, the accompanying prospectus and the documents we have incorporated by reference. If one or more of the possibilities described below or in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2012 or Forms 10-K or Forms 10-Q filed thereafter actually occur, our operating results and financial condition would likely suffer and the trading price of our common stock could fall, causing you to lose some or all of your investment in the securities we are offering.

Risks Relating to Our Business

We have a limited history of operations, have not generated significant revenue from operations and have had limited production of our PV modules.

We have a limited operating history and have generated limited revenue from operations. Currently we are producing consumer oriented products in quantities necessary to meet current demand. Under our current business plan, we expect losses to continue until annual revenues and gross margins reach a high enough level to cover operating expenses. Based upon preliminary data, for the quarter ended September 30, 2013, the Company expects to post revenue of \$275,000.

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We plan to continue manufacturing at our current facilities and we are leveraging contract manufacturers in Asia for components and for final assembly of finished goods. Our ability to achieve our business, commercialization and expansion objectives will depend on a number of factors, including whether:

we can generate customer acceptance of and demand for our products;

we successfully ramp up commercial production on the equipment installed;

our products are successfully and timely certified for use in our target markets;

we successfully operate production tools to achieve the efficiencies, throughput and yield necessary to reach our cost targets;

the products we design are saleable at a price sufficient to generate profits;

our strategic alliance with TFG Radiant Investment Group Ltd. ("TFG Radiant") results in the design, manufacture and sale of sufficient products to achieve profitability;

we raise sufficient capital to enable us to reach a level of sales sufficient to achieve profitability on terms favorable to us;

we are able to be successful in designing, manufacturing, marketing, distributing and selling our newly introduced line of consumer oriented products;

we effectively manage the planned ramp up of our operations;

we successfully develop and maintain strategic relationships with key partners, including OEMs, system integrators and distributors, who deal directly with end users in our target markets;

our ability to maintain the listing of our common stock on the NASDAQ Global Market or Capital Market;

our ability to achieve projected operational performance and cost metrics;

our ability to enter into commercially viable licensing, joint venture, or other commercial arrangements; and availability of raw materials.

Each of these factors is critical to our success, and accomplishing each of these tasks may take longer or cost more than expected, or may never be accomplished. It also is likely that problems that we cannot now anticipate will arise. If we cannot overcome these problems, our business, results of operations and financial condition could be materially and adversely affected.

We have to date incurred net losses and may be unable to generate sufficient sales in the future to become profitable.

Since inception, the Company has incurred significant losses. The Company expects to continue to incur net losses in the near term. For the six months ended June 30, 2013, we incurred a net loss of \$14.1 million. We incurred a net loss of \$28.8 million for the year ended December 31, 2012 and reported an accumulated deficit of \$211.8 million as of December 31, 2012. We expect to incur net losses in the near term. Our ability to achieve profitability depends on a number of factors, including market acceptance of our consumer oriented products at competitive prices. If we are unable to generate sufficient revenue to achieve profitability and positive cash flows, we may be unable to satisfy our commitments and may have to discontinue operations.

We will need to raise additional capital in order to continue its current level of operations into 2015.

Since inception, the Company has incurred significant losses and the Company expects to continue to incur net losses in the near term. For the six months ended June 30, 2013, our cash used in operations was \$10.0 million. At June 30, 2013, the Company had cash and equivalents of approximately \$4.0 million. At September 30, 2013, the company had cash and equivalents of \$3.9 million.

Following the completion of this offering, the Company believes it will need to raise additional capital at some point during 2014 in order to continue the current level of operations through the end of 2014 and into 2015. There is no assurance that the Company will be able to raise such additional capital on acceptable terms or at all. If the Company's

revenues do not increase rapidly, and/or additional financing is not obtained, the Company will be required to significantly curtail operations to reduce costs and/or sell assets. Such actions would likely have an adverse impact on the Company's future operations.

Our newly introduced EnerPlex line of consumer oriented products exposes us to many new risks and uncertainties.

Following the appointment of our new President and CEO in February 2012, we repositioned our business model with an immediate focus into developing downstream consumer products. In 2012 we launched our new EnerPlex brand line of consumer products, and introduced the first product under the EnerPlex brand with a solar assisted mobile phone charger incorporating our CIGS PV thin film technology. This new line of consumer oriented products exposes us to many risks and uncertainties that are new to our business.

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We have extremely limited experience in the design, manufacture, marketing, distribution and sale of consumer oriented products. Our ability to be successful with our newly introduced line of consumer oriented products will depend on a number of factors, including whether:

- •we can achieve and maintain customer acceptance of our new consumer oriented products;
- •we can rapidly develop and successfully introduce large numbers of new consumer oriented products in response to changing consumer preferences, the introduction of new consumer electronics products (such as new mobile phone models) that our EnerPlex products are designed to integrate with, and the introduction of new products by competing manufacturers:
- •we can maintain an adequate level of product quality over multiple consumer oriented products which must be designed, manufactured and introduced rapidly to keep pace with changing consumer preferences and competitive factors:
- •we can successfully manage our third party contract manufacturers located outside the U.S. on whom we are heavily dependent for the production of our consumer oriented products;
- •we can successfully distribute our consumer oriented products through distributors, wholesalers, internet retailers and brick and mortar retailers (many of whom distribute products from competing manufacturers) on whom we are heavily dependent; and
- •we can successfully manage the substantial inventory and other asset risks associated with the manufacture and sale of consumer electronic products, given the rapid and unpredictable pace of product obsolescence in such consumer markets.

Our business is based on a new and unproven technology, and if our PV modules or processes fail to achieve the performance and cost metrics that we expect, then we may be unable to develop demand for our PV modules and generate sufficient revenue to support our operations.

Our CIGS on flexible plastic substrate technology is a new and unproven technology in commercial scale production. Our business plan and strategies assume that we will be able to achieve certain milestones and metrics in terms of throughput, uniformity of cell efficiencies, yield, encapsulation, packaging, cost and other production parameters. We cannot assure you that our technology will prove to be commercially viable in accordance with our plan and strategies. Further, we or our strategic partners and licensees may experience operational problems with such technology after its commercial introduction that could delay or defeat the ability of such technology to generate revenue or operating profits. If we are unable to achieve our targets on time and within our planned budget, then we may not be able to develop adequate demand for our PV modules, and our business, results of operations and financial condition could be materially and adversely affected.

Our failure to further refine our technology and develop and introduce improved PV products could render our PV modules uncompetitive or obsolete and reduce our net sales and market share.

Our success requires that we invest significant financial resources in research and development to keep pace with technological advances in the solar energy industry. However, research and development activities are inherently uncertain, and we could encounter practical difficulties in commercializing our research results. Our expenditures on research and development may not be sufficient to produce the desired technological advances, or they may not produce corresponding benefits. Our PV modules may be rendered obsolete by the technological advances of our competitors, which could harm our results of operations and adversely impact our net sales and market share.

Failure to expand our manufacturing capability successfully at our facilities or through our strategic alliances would adversely impact our ability to sell our products into our target markets and would materially and adversely affect our business, results of operations and financial condition.

Our growth plan calls for production and operation at our own facilities and at contract manufacturers in Asia. Successful operations will require substantial engineering and manufacturing resources and is subject to significant risks, including risks of cost overruns and delays, risks that we may not be able to successfully operate. Furthermore, we may never be able to operate our production processes in high volume or at the volumes projected, make planned process and equipment improvements, attain projected manufacturing yields or desired annual capacity, obtain timely delivery of components, or hire and train the additional employees and management needed to scale our operations. Failure to meet these objectives on time and within our planned budget could materially and adversely affect our business, results of operations and financial condition.

We may be unable to manage the expansion of our operations and strategic alliances effectively.

We will need to significantly expand our operations and form beneficial strategic alliances in order to reduce manufacturing costs through economies of scale and partnerships, secure contracts of commercially material amounts with reputable customers and capture a meaningful share of our target markets. To manage the expansion of our operations and alliances, we will be required to improve our operational and financial systems, oversight, procedures and controls and expand, train and manage our growing

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employee base. Our management team will also be required to maintain and cultivate our relationships with partners, customers, suppliers and other third parties and attract new partners, customers and suppliers. In addition, our current and planned operations, personnel, facility size and configuration, systems and internal procedures and controls, even when augmented through strategic alliances, might be inadequate or insufficient to support our future growth. If we cannot manage our growth effectively, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures, resulting in a material and adverse effect to our business, results of operations and financial condition.

We depend on a limited number of third party suppliers for key raw materials, and their failure to perform could cause manufacturing delays and impair our ability to deliver PV modules to customers in the required quality and quantity and at a price that is profitable to us.

Our failure to obtain raw materials and components that meet our quality, quantity and cost requirements in a timely manner could interrupt or impair our ability to manufacture our PV modules or increase our manufacturing cost. Most of our key raw materials are either sole-sourced or sourced by a limited number of third party suppliers. As a result, the failure of any of our suppliers to perform could disrupt our supply chain and impair our operations. Many of our suppliers are small companies that may be unable to supply our increasing demand for raw materials as we implement our planned expansion. We may be unable to identify new suppliers in a timely manner or on commercially reasonable terms. Raw materials from new suppliers may also be less suited for our technology and yield PV modules with lower conversion efficiencies, higher failure rates and higher rates of degradation than PV modules manufactured with the raw materials from our current suppliers.

Our continuing operations will likely require additional capital which we may not be able to obtain on favorable terms, if at all or without dilution to our stockholders.

With the receipt of the \$10.0 million gross proceeds from this offering, the Company believes it will not require additional cash liquidity to continue operations through the end of the 2013 year. The Company will need to raise additional capital, however, to continue the current level of operations through the end of 2014 and into 2015. The Our planned production ramp up and continuing operations will require additional capital. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our existing stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we raise additional funds through debt financing, which may involve restrictive covenants, our ability to operate our business may be restricted. We cannot assure you that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, if and when needed, our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our products, expand capacity or otherwise respond to competitive pressures could be significantly limited, and our business, results of operations and financial condition could be materially and adversely affected.

In addition, the terms of a loan we obtained from the Colorado Housing and Finance Authority ("CHFA") in connection with our purchase and improvement of our Thornton, Colorado facility contain covenants that limit our ability, without the consent of CHFA, to create or incur additional indebtedness (other than obligations created or incurred in the ordinary course of business); merge or consolidate with any other entity; or make loans or advances to our officers, shareholders, directors or employees. The presence of these negative covenants gives CHFA the ability to bar us from engaging in certain transactions in the future that we may determine are necessary or advisable to meet our business objectives, including debt offerings and acquisitions of or by other companies. If CHFA were to withhold its written consent under these or other circumstances, we could be forced to prepay such loans at a premium, which could adversely affect our business, results of operations and financial condition.

Future sales or the potential for future sales of our securities may cause the trading price of our common stock to decline and could impair our ability to raise capital.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities.

Our products may never gain sufficient market acceptance, in which case we would be unable to sell our products or achieve profitability.

Demand for our products may never develop sufficiently, and our products may never gain market acceptance, if we fail to produce products that compare favorably against competing products on the basis of cost, quality, weight, efficiency and performance. Demand for our products also will depend on our ability to develop and maintain successful relationships with key partners, including distributors, retailers, OEMs, system integrators and value added resellers. If our products fail to gain market

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acceptance as quickly as we envision or at all, our business, results of operations and financial condition could be materially and adversely affected.

We are targeting emerging markets for a significant portion of our planned product sales. These markets are new and may not develop as rapidly as we expect, or may not develop at all.

Our target markets include consumer electronics, defense and portable power, transportation, space and near space and BIPV/BAPV. Although certain areas of these markets have started to develop, we believe they are in their infancy. We believe these markets have significant long term potential, however, some or all of these markets may not develop and emerge as we expect. If the markets do develop as expected, there may be other products that could provide a superior product or a comparable product at lower prices than our products. If these markets do not develop as we expect, or if competitors are better able to capitalize on these markets our revenues and product margins may be negatively affected.

Failure to consummate strategic relationships with key partners in our various target market segments, such as consumer electronics, defense and portable power, transportation, space and near space and BIPV/BAPV, and the respective implementations of the right strategic partnerships to enter these various specified markets, could adversely affect our projected sales, growth and revenues.

We intend to sell thin film PV modules for use in consumer electronics, defense and portable power systems, transportation, space and near space solar panel applications and BIPV/BAPV. Our marketing and distribution strategy is to form strategic relationships with distributors and value added resellers to provide a foothold in these target markets. If we are unable to successfully establish working relationships with such market participants or if, due to cost, technical or other factors, our products prove unsuitable for use in such applications; our projected revenues and operating results could be adversely affected.

If sufficient demand for our products does not develop or takes longer to develop than we anticipate, we may be unable to grow our business, generate sufficient revenue to attain profitability or continue operations.

The solar energy industry is at a relatively early stage of development, and the extent to which PV modules, including our own, will be widely adopted is uncertain. If PV technology proves unsuitable for widespread adoption or if demand for PV modules fails to develop sufficiently, we may be unable to grow our business, generate sufficient sales to attain profitability or continue operations. Many factors, many of which are outside of our control, may affect the viability of widespread adoption of PV technology and demand for PV modules.

We face intense competition from other manufacturers of thin-film PV modules and other companies in the solar energy industry.

The solar energy and renewable energy industries are both highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with the larger electric power industry. We believe that our main sources of competition are other thin film PV manufacturers and companies developing other solar solutions, such as solar thermal and concentrated PV technologies. Many of our existing and potential competitors have substantially greater financial, technical, manufacturing and other resources than we do. A competitor's greater size provides them with a competitive advantage because they often can realize economies of scale and purchase certain raw materials at lower prices.

Many of our competitors also have greater brand name recognition, established distribution networks and large customer bases. In addition, many of our competitors have well-established relationships with our current and potential partners and distributors and have extensive knowledge of our target markets. As a result of their greater

size, these competitors may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Our failure to adapt to changing market conditions and to compete e development of new products that provide heat therapies relating to cancer and other health concerns. We intend to pursue compatible technologies other than those developed within our company to further strengthen our product offering and the markets that we can address. In the future, we expect to spend substantially more on sales and marketing, including the development of new channels of distribution, sales partnerships, regulatory efforts to increase our offering of FDA approved products, and on new technology, developed both outside our company and internally. These actions are intended to boost our sales to levels anticipated in our forward business plan. Because our plan requires an investment in our business as described above, we anticipate that we will incur substantial losses until our sales rise significantly above past levels. Critical Accounting Policies and Estimates The following is a discussion of our critical accounting policies and estimates that management believes are material to an understanding of our results of operations and which involve the exercise of judgment or estimates by management. Revenue Recognition. Revenue from the sale of cancer treatment systems is recognized when a purchase order has been received, the system has been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Most system sales are F.O.B. shipping point, therefore shipment is deemed to have occurred when the product is delivered to the transportation carrier. Most system sales do not include installation. If installation is included as part of the contract, revenue is not recognized until installation has occurred, or until any remaining installation obligation is deemed to be perfunctory. Some sales of cancer treatment systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized when the training has been provided. The sales of our cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return except in cases where the product does not function as guaranteed by BSD. We provide a reserve allowance for estimated returns. To date, returns have not been significant. Revenue from manufacturing services is recorded when an agreement with the customer exists for such services, the services have been provided, and collection is reasonably assured. Revenue from training services is recorded when an agreement with the customer exists for such training, the training services have been provided, and collection is reasonably assured. Revenue from service support contracts is recognized on a straight-line basis over the term of the contract, which approximates recognizing it as it is earned. Our revenue recognition policy is the same for sales to both related parties and non-related parties. We provide the same products and services under the same terms for non-related parties as with related parties. Sales to distributors are recognized in the same manner as sales to end-user customers. Deferred revenue and customer deposits payable include amounts from service contracts as well as cash received for the sales of products, which have not been shipped. 30 Inventory Reserves, As of May 31, 2004, we had recorded a reserve for potential inventory impairment of \$140,000. During fiscal 2003, due to the level of usage of certain inventory items, we estimated that such items on hand potentially exceeded the estimated near-term usage. As a result, we determined to increase the inventory reserve by \$90,000 in the fourth quarter of fiscal 2003. This estimate is determined based on our forecasted sales and related inventory usage to fill such sales orders as well as evaluation of technological enhancements that may render inventory items obsolete in the near-term. We periodically review our inventory levels and usage, paying particular attention to slower-moving items. If projected sales for fiscal 2004 do not materialize or if our hyperthermia systems do not receive increased market acceptance, we may be required to increase the reserve for inventory in future periods. We have projected a decrease in future orders placed with us for TherMatrx systems, but do not project a requirement for any inventory impairment based on this decline. In the past we have purchased inventory only after receiving orders for TherMatrx systems, and only in quantities sufficient to fulfill those orders. We have no inventory for TherMatrx systems that is currently at risk, whether or not future orders are placed with us for TherMatrx systems. Product Warranty. We provide product warranties on our BSD-500 and BSD-2000 systems. These warranties vary from contract to contract, but generally consist of parts and labor warranties for one year from the date of sale. To date, expenses resulting from such warranties have not been material. We record a warranty expense at the time of each sale. This reserve is estimated based on prior history of service expense associated with similar units sold in the past. Allowance for Doubtful Accounts. We provide our customers with payment terms that vary from contract to contract. We perform ongoing credit evaluations of our customers and maintain allowances for possible losses which, when realized, have been within the range of management's expectations with exception of the bad debt expense of approximately \$300,000 recorded in fiscal 2003 as discussed below. Our allowance for doubtful

accounts at August 31, 2003 was approximately \$67,000, or approximately 14% of the total outstanding receivables. Bad debt expense for the fiscal year ended August 31, 2003 was approximately \$300,000. This resulted from a sale of BSD-2000 that was recorded in fiscal year 2002 to a customer that was determined to be uncollectible in the fourth quarter of fiscal 2003. Allowance estimates are recorded on a customer-by-customer basis and are determined based on the age of the receivable, compliance with payment terms, and prior history with existing clients. To date, actual results have not differed materially from management's estimates, with the exception of the above-mentioned bad debt. The non-payment of a receivable related to the sale of a BSD-500 or BSD-2000 could have a material adverse impact on our results of operations. As of May 31, 2004, our allowance for doubtful accounts was approximately \$82,000 or approximately 26% of total outstanding receivables. Results of Operations Nine Months Ended May 31, 2004 Compared to Nine Months Ended May 31, 2003 Revenue. Sales decreased from \$1,982,827 in the nine months ended May 31, 2003, to \$1,541,397 in the nine months ended May 31, 2004, a decrease of \$441,430, or 22%, primarily due to a decrease in sales to our unconsolidated subsidiary, TherMatrx. Sales to Thermatrx declined from \$915,913, or 46% of total revenue for the nine months ending May 31, 2004 to \$99,503, or 6%, of total revenue, for the nine months ending May 31, 2004. At present we do not have any further orders for additional TherMatrx systems. TherMatrx is under no contractual obligation to purchase products from us or manufacturing, assembling, testing or other services. We believe TherMatrx has and will 31 continue to develop alternative sources of such products and services. Consequently, we currently expect revenue from TherMatrx to be significantly less in fiscal 2004 than it was in fiscal 2003, and that sales to TherMatrx in future fiscal years could decrease to zero. We project that in fiscal year 2004, the decline of TherMatrx sales will create a significant decline in our total revenue as compared to fiscal 2003, and that we will incur a greater loss in fiscal 2004 than in 2003. In future fiscal years we intend to increase revenue through our expanded sales effort for the BSD-500 and the BSD-2000, and we have not projected sales to TherMatrx in our business planning for future years, Related Party Revenue. The remaining related party revenue of \$881,738 in the May 31, 2004 period, representing 57% of total sales and 90% of total related party revenue, was for two BSD-2000 systems and component parts sold to Medizin-Technik GmbH. Dr. Gerhard Sennewald, one of our directors, is a stockholder, executive officer and a director of Medizin-Technik GmbH. Non-related party revenue consisted of \$471,724 from the sale of three BSD-500 systems, \$51,631 for service contracts, and \$36,801 for miscellaneous items, Gross Profit, Gross profit for the nine months ending May 31, 2004 was \$698,290, or 45%, as compared to \$1,261,776, or 64%, of total product sales for the nine months ending May 31, 2003. The decline in gross profit margin was primarily due to the cost of excess production employees resulting from the decrease in sales and due to a sales incentive we agreed to in connection with the sale of the BSD-2000 to Medizin-Technik. We agreed to provide an extra applicator at no additional charge as a sales incentive in connection with the sale of the BSD-2000. The cost of the additional applicator lowered the gross margin recognized on the sale. Also, we made an adjustment to inventory to reflect the lower of cost or market which resulted in an increase in cost of sales of approximately \$48,000. In addition, we had sales of higher margin hyperthermia system products accompanied by production efficiencies obtained from a higher volume of hyperthermia system sales in the period ending May 31, 2003. Selling, General and Administrative Expenses. Selling, general and administrative expenses were \$803,947 for the nine months ended May 31, 2004, as compared to \$743,614 in the nine months ended May 31, 2003, an increase of \$60,333, or 8%, primarily due to increase in sales and marketing expense of approximately \$55,753, an increase in warranty costs of approximately \$17,200 that was associated with a European sale, charges to bad debt expense of \$14,577 and small increases in employee benefits and insurance, partially offset by a decrease in legal and consulting expense of approximately \$69,000. This increase in selling, general and administrative also included penalties of \$22,656 for delays in getting a registration statement on Form SB-2 declared effective by the SEC. In the nine months ended May 31, 2003, we paid significant legal fees associated with fiscal 2002 compliance with the Sarbanes-Oxley Act. Such costs were not repeated in the nine months ended May 31, 2004. Total costs and expenses for the nine months ended May 31, 2004 increased by \$171,689, an increase of 9%, primarily due an increase in cost of goods sold, an increase in selling, general and administrative expense partially offset by small decrease in research and development expense and the inventory adjustment of \$48,000 to reflect the lower of cost or market. Research and Development Expenses. Research and development expenses were \$490,006 for the nine months ended May 31, 2004, as compared to \$500,706 in the nine months ended May 31, 2003. Research and development expenses in the period ending May 31, 2004 related primarily to development work on our BSD-2000/3D/MR hyperthermia system and enhancements to our BSD-500 systems.- Net Loss. Net loss for the period ending May 31, 2004 was \$591,324

compared to a profit of \$20,120 for the May 31, 2003 period. The increase in net loss was primarily due to decreased sales volume and higher cost of goods sold. 32 Fiscal Year Ended August 31, 2003 Compared to Fiscal Year Ended August 31, 2002 Revenue. Revenue for fiscal 2003 was \$2,572,682 compared to \$2,672,472 for fiscal 2002, a decrease of \$99,790, or approximately 4%. The decrease in total revenue was primarily due to a decrease in sales during fiscal 2003 to TherMatrx of approximately \$390,000 and a decrease in sales of products to non-related parties of approximately \$474,000, offset by an increase in sales to Medizin-Technik of \$442,000, and an increase in royalty revenue of \$338,000. We expect sales to TherMatrx to decline significantly in fiscal 2004. We also expect royalty revenue to decline significantly as \$275,000 of the total \$338,000 in royalty revenue received during fiscal 2003 was related to a one-time settlement. Sales to Medizin-Technik may fluctuate significantly depending on Medizin-Technik's anticipated sales and ability to place orders in Europe. Our revenue can fluctuate significantly from period to period because we have historically sold relatively few BSD-2000 and BSD-500 systems and these systems are expensive. Sales of very few systems can cause a large change in the revenue from period to period as noted in the increase in sales to Medizin-Technik from 2002 to 2003 and the decrease in sales to non-related parties from 2002 to 2003. Product sales increased to approximately \$1,956,000 in fiscal 2003 from approximately \$1,866,000 in fiscal 2002, an increase of approximately \$90,000, or 5%. Related Party Revenue. We derived \$1,907,585, or 74% of our revenue in fiscal 2003 from sales to related parties as compared to \$1,854,714, or 69%, in fiscal 2002. Approximately \$1,391,443 of such related party revenue in fiscal 2003 was from the sales of thermotherapy systems, component products and contract services to TherMatrx. We also received a royalty payment of \$63,500 paid to us by Thermatrx that is included in other revenue. During fiscal 2002, sales to TherMatrx were approximately \$1,781,000. This decline in sales to TherMatrx in fiscal 2003 was due to increased use of other suppliers in providing products and services. We believe that we provided approximately 38% of the inventory and related manufacturing services purchased by TherMatrx in fiscal 2003 as compared to approximately 55% in fiscal 2002. The remaining related party revenue of approximately \$516,142 in fiscal 2003 was for one BSD-2000 system and various component parts sold to Medizin-Technik. During fiscal 2002, we had sales of approximately \$74,000 to Medizin-Technik. The significant increase in sales to Medizin-Technik in fiscal 2003 was due to the sale of a BSD-2000 system in fiscal 2003. In 2002, Medizin-Technik did not purchase a complete system. Sales to Medizin-Technik may fluctuate significantly from period to period due to the high cost of a BSD-2000 or BSD-500 system. Sales increases of one or two systems can have a material effect on our revenue. Non-related Party Revenue. In fiscal 2003, we derived approximately \$601,597, or 23% of our total revenue as compared to approximately \$817,758, or 31%, in fiscal 2002 from non-related party sales, Our fiscal 2003 non-related party revenue consisted of sales of two BSD-500 systems in fiscal 2003 for approximately \$203,386. The balance of our non-related party revenue consisted of consumable devices of \$36,617, billable labor of \$20,863, service contracts of \$65,731 and royalty revenue of \$275,000. As noted above, we expect royalty revenue to decline significantly as the \$275,000 in royalty revenue was related to a one-time settlement. During fiscal 2002, we sold two BSD-2000 systems and one BSD-500 system for a aggregate of approximately \$630,000. The unit price at which these systems sold was lower than our normal unit price for new systems because they were refurbished. The two BSD-2000 systems sold in fiscal 2002 were purchased by research facilities in the United States, Because the BSD-2000 system can only be sold in the United States pursuant to an Investigational Device Exemption under FDA regulations, sales in the United States may only be made to customers using the system for research purposes. Cost of Sales. Cost of sales for fiscal 2003 was \$1,227,377 compared to \$1,114,846 for fiscal 2002, an increase of \$112,531, or approximately 10%. This increase resulted primarily from charges to cost of sales for obsolete inventory of \$90,000. Cost of sales for fiscal 2003 to unrelated parties decreased to \$94,619 from \$302,431 primarily because of the decrease in sales to unrelated customers. Cost of sales to related parties in fiscal 2003 increased to 33 \$1,042,758 from \$812,415 in fiscal 2002 primarily due to the increase in related party sales and the change in product mix sold to related parties from \$1,854,714 of systems, component products and services in fiscal 2002 to \$1,907,585 of systems, component products and services in fiscal 2003. During fiscal 2003, approximately \$748,000, or 74% of the related party cost of sales were attributable to sales to TherMatrx and approximately \$295,000, or 26%, were attributable to Medizin-Technik. The products sold to TherMatrx generally require less cost per unit to manufacture than our BSD-2000 and BSD-500 systems. Gross Profit. Gross profit for fiscal 2003 was \$1,006,805 or 45% of total product sales and related service compared to \$1,557,626, or 58%, of total product sales in fiscal 2002. The gross margin percentage on sales to TherMatrx decreased from 56% in 2002 to 39% in 2003. During fiscal 2002 and the first half of fiscal 2003, we only provided labor in connection with the

manufacture of the systems sold to TherMatrx. The parts and materials for such systems were purchased from suppliers by TherMatrx and assembled by us. During the second half of fiscal 2003, we began providing both the labor and materials for the systems sold to TherMatrx. While the total revenue recorded per system increased from approximately \$5,000 per unit to \$10,000 per unit, our total gross margin on the systems declined from approximately 38% to approximately 28%. During fiscal 2002, we sold 150 systems to TherMatrx, as compared to 87 in fiscal 2003. We sold 28 systems in the first half of fiscal 2003 and 59 in the last half of fiscal 2003. In addition, sales of our applicators, probes, and other component products to TherMatrx declined as TherMatrx purchased some of its inventory of such products from another supplier. These items have a higher gross margin than the systems we sold to TherMatrx. Our gross margins for sales to Medizin-Technik improved from 55% in fiscal 2002 to 62% in fiscal 2003. This improvement was due to the sale of the BSD-2000 unit in fiscal 2003 while we did not sell any complete units to Medizin-Technik in fiscal 2002. The gross margins on the BSD-2000 and BSD-500 units are higher than the gross margin recognized on component parts, supplies, and contract services. Our gross margins for sales to non-related parties improved from 63% in 2002 to 71% in fiscal 2003. This was primarily due to the higher margin that we received from the first sale of our new BSD-500 system. Research and Development Expenses. Research and development expenses for fiscal 2003 were \$676,867 compared to \$603,137 for fiscal 2002, an increase of \$73,730, or 12%. Research and development expenses in fiscal 2003 related primarily to development of a commercial version of the BSD-2000/3D/MR hyperthermia system and to our BSD-500 systems, Inventory Impairment Expense. We recorded an inventory impairment charge in fiscal 2003 of \$90,000 increasing our total inventory reserve at August 31, 2003 to \$140,000. On at least an annual basis, we attempt to identify inventory items that have shown relatively no movement or very slow movement. Generally, if an item has shown little or no movement for over a year, it is examined for obsolescence. If it is determined that recoverability of the item is impaired, a reserve is established for that item. In addition, if we identify products that have become obsolete due to product upgrades or enhancements, a reserve is established for such products. Selling, General and Administrative Expenses. Selling, general and administrative expenses for fiscal 2003 were \$1,241,561 compared to \$1,667,042 in fiscal 2002, a decrease of \$425,481, or approximately 26%. This decrease was primarily due to decrease in compensation expense in fiscal 2003 as compared to fiscal 2002. This decrease was offset by increases in bad debt expense of approximately \$257,000 and increases in legal fees of approximately \$30,000, 34 mainly resulting from legal assistance provided in our settlement of the royalty dispute discussed elsewhere herein. During fiscal 2002, we issued to certain employees and board members options to purchase 179,300 common shares of TherMatrx, or approximately 7% of our interest in TherMatrx, at an exercise price of \$.001 per share. In connection with the issuance of these options, we recorded \$717,000 of compensation expense. This expense was computed based on the estimated fair value of the options. We conservatively estimated the fair value of the options to be \$4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which 525,321 shares of common stock were sold for \$4.00 per share to existing TherMatrx stockholders who elected to purchase shares in the offering. For accounting purposes, because of the lack of other contemporaneous transaction data indicating the value of these shares in July 2002, and to record a conservative estimate of compensation expense, we recorded the value of each option at \$4.00, resulting in \$717,000 of compensation expense. Because all of the options were exercised prior to year-end, we also recorded a gain of \$717,000 because the TherMatrx stock issued to settle the compensation liability had a book value of \$0. The gain is reflected in the statement of operations as "Gain on transfer of equity interest in affiliate to related parties." The exercise of these options reduced our holdings in TherMatrx from 2,700,000 shares, or approximately 32%, to 2,520,700 shares, or approximately 30%. We recorded a bad debt expense of \$300,394 in fiscal 2002 as a result of a receivable write-off due to our inability to collect payment relating to the sale of a BSD-2000 system in fiscal 2002. The sale in fiscal 2002 was to a non-related party. At the time the sale was made, we were led to believe that the customer had secured payment for the system. After our efforts to collect the receivable failed, we determined to seek return of the system and write off the receivable. Accordingly, during the fourth quarter of fiscal 2003, we recorded a bad debt expense of \$300,394. This bad debt expense was the net result of a receivable write-off of approximately \$346,000 and the value of returned inventory of approximately \$46,000. We believe this is an isolated case and not indicative of a trend. Historically, our bad debt expense has been substantially lower than fiscal 2003 levels. Generally, we require a significant deposit on the sales of our BSD systems which reduces the likelihood of bad debt expense. Other Income. Other income for fiscal 2003 was \$2,838 compared to \$722,198 in fiscal 2002, a decrease of \$719,360. This decrease resulted almost entirely from a gain recognized in 2002 on transfer of equity interest in

affiliate to related parties as noted above. Net Loss. In fiscal 2003 we had a net loss of \$570,285 as compared to net income in fiscal 2002 of \$9,645. The net loss was primarily caused by an increase in bad debt expense of \$300,394, an increase in inventory reserve of \$90,000 and lower overall sales for fiscal 2003. Fluctuation in Operating Results. Our results of operations have fluctuated in the past and may fluctuate in the future from year to year as well as from quarter to quarter. Revenue may fluctuate as a result of factors relating to the demand for thermotherapy systems and component parts supplied by us to TherMatrx, market acceptance of our BSD hyperthermia systems, changes in the medical capital equipment market, changes in order mix and product order configurations, competition, regulatory developments and other matters. Operating expenses may fluctuate as a result of the timing of sales and marketing activities, research and development and clinical trial expenses, and general and administrative expenses associated with our potential growth. For these and other reasons described elsewhere, our results of operations for a particular period may not be indicative of operating results for any other period. 35 Liquidity and Capital Resources Since inception, we have generated an accumulated deficit of \$21,077,431 at May 31, 2004. We have historically financed our operations through cash from operations, licensing of technological assets and issuance of common stock. We used \$227,298 in cash from operating activities in fiscal 2003 compared to cash generated of \$19,800 in fiscal 2002. This was a result of a significant uncollectible receivable of \$300,000 that contributed to a net loss of \$570,285 for fiscal 2003 compared to net income of \$9,645 in 2002, and a reduction of accounts receivable of \$9,614 as compared to \$55,173 in fiscal 2002 offset by an increase in accounts payable of \$217,447 compared to a reduction in accounts payable of \$51,121 in fiscal 2002. Accrued expenses decreased by \$133,066 primarily as a result of a decrease in customer deposits as orders were shipped. Our investing activities resulted in net cash used of \$60,599 relating to the purchase of certain property and equipment. Cash provided by financing activities totaled \$2,000 reflecting proceeds from the issuance of common stock in connection with the exercise of outstanding stock options. On November 28, 2003, we completed the sale of an aggregate of 1,820,000 shares of our common stock to investors for cash consideration of \$1.10 per share, or gross proceeds of \$2,002,000. On December 10, 2003, we issued an additional 239,600 shares to investors at a price per share of \$1.10 for gross proceeds of \$263,560. The net proceeds from the transactions, after paying a commission to our placement agent, T.R. Winston & Company, LLC, and legal and other expenses related to the transaction, were approximately \$2,079,000. We used \$763,736 in cash from operating activities during the period ended May 31, 2004 compared to cash used of \$186,273 in the period ending May 31, 2003. Cash flow from operating activities decreased in the nine months ending May 31, 2004 primarily because of lower sales volume compared to the prior year period. At May 31, 2004, our working capital was \$1,977,565 and our cash and cash equivalents totaled \$1,469,711. We have no bank debt and no credit facility. Our contractual obligations and commercial commitments requiring capital resources include building rent of \$82,000 per year for five years adjusted annually for increases in the cost of living based on the Consumer Price Index for Urban Consumers. Our ability to fund our cash needs and grow our business depends on our ability to generate cash flow from operations and capital from financing activities. Our operating cash flow has fluctuated significantly in the past and may continue to do so in the future. We believe that our current working capital and anticipated cash flow from future operations will be sufficient to fund our anticipated operations for fiscal 2004. We have based this belief, however, on assumptions that may prove to be wrong. We expect our revenue from sales of products to TherMatrx to decline substantially in the fourth quarter of fiscal 2004 compared to the fourth quarter of fiscal 2003. We also expect to incur additional expenses related to the commercial introduction of our BSD-500 systems, which will precede any revenue from the sale of such systems. Due to additional participation at trade shows, expenditures on publicity, additional travel, higher sales commissions and other related expenses, we project that our sales and marketing expenses will be approximately \$250,000 higher in 2004 than in the prior year to support the commercial introduction of the BSD-500 systems. In addition, we anticipate that we will incur expenses of approximately \$100,000 related to governmental and regulatory, including FDA, approvals during fiscal 2004 in excess of fiscal 2003. We are making these investments in sales and marketing and on government and regulatory activities to increase our revenue from sales of our BSD-500 system and, upon receipt of FDA approval, from the sale of our BSD-2000 system 36 in the United States. These increased marketing and regulatory expenses are an investment in generating offsetting revenue against the decline in TherMatrx sales that we have projected, and to provide future revenue growth over the long term. We have not projected any sales to TherMatrx in our business planning beyond fiscal 2004. We are currently subject to the penalty provisions of the terms of the common stock issued in November and December 2003 and as such are required to pay these investors \$1,500 per day until the registration statement, which this prospectus is a part, is declared effective.

We cannot assure when this registration statement will be declared effective and our obligation to pay this penalty will cease. Our cash available for operations will decrease by the amount paid as penalties to these investors. We believe any cash shortfall during fiscal 2004 that results from this decrease in revenues and increase in expenses can be covered through the cash raised in our November and December 2003 private placements and from the initial closing payment of approximately \$8,975,000 from the sale of our TherMatrx shares. However, if our revenues from TherMatrx decrease more rapidly than we currently expect or revenues from the sale of our systems is lower than we currently expect or we are required to pay substantial amounts as penalties to certain investors, we will have to cut expenses or use more of our available cash than we anticipated. We believe we can cover any such cash shortfall with cost cutting or available cash. If we cannot cover any such cash shortfall with cost cutting or available cash, we would need to obtain additional financing. We cannot be certain that any financing will be available when needed or will be available on terms acceptable to us. Insufficient funds may require us to delay, scale back or eliminate some or all of our programs designed to facilitate the commercial introduction of our systems, FORWARD-LOOKING STATEMENTS With the exception of historical facts, the statements contained in sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which reflect our current expectations and beliefs regarding our future results of operations, performance and achievements. These statements are subject to risks and uncertainties and are based upon assumptions and beliefs that may or may not materialize. These forward-looking statements include, but are not limited to, statements concerning: o our anticipated financial performance and business plan; o our expectations regarding the commercial introduction of the BSD-500 system; o our expectations and efforts regarding receipt of FDA approvals relating to the BSD-2000 system; o our technological developments to the BSD-500 and BSD-2000 systems; o our development or acquisition of new technologies; o our expectation that sales to TherMatrx will decline and the rate at which sales to TherMatrx decline; o the amount of expenses we will incur for the commercial introduction of the BSD-500 system; o the amount of expenses we will incur for governmental and regulatory, including FDA, approvals; o our expectation that related party revenue will continue to be a significant portion of our total revenue; o our belief that sales of BSD-500 and BSD-2000 systems will increase through our future sales and marketing efforts; 37 o our belief that our current working capital and cash from operations will be sufficient to fund our anticipated operations for fiscal 2004; o our assumption that we will receive contingent payments from AMS in connection with the TherMatrx acquisition; and o our anticipated use of proceeds from the AMS transaction. We wish to caution readers that the forward-looking statements and our operating results are subject to various risks and uncertainties that could cause our actual results and outcomes to differ materially from those discussed or anticipated, including the factors set forth in the section entitled "Risk Factors" included elsewhere in this prospectus. We also wish to advise readers not to place any undue reliance on the forward-looking statements contained in this prospectus, which reflect our beliefs and expectations only as of the date of this prospectus. We assume no obligation to update or revise these forward-looking statements to reflect new events or circumstances or any changes in our beliefs or expectations, other than as required by law. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS TherMatrx, Inc. We manufacture, assemble and test for TherMatrx, Inc. its TMx-2000 thermotherapy system and supply TherMatrx with equipment components used for its TMx-2000 system. We also have provided regulatory compliance and other consulting services to TherMatrx. TherMatrx has become our largest customer, and for the year ended August 31, 2003, TherMatrx accounted for \$1,391,443, or approximately 54%, of our revenue. We also received a royalty payment of \$63,500 from TherMatrx in fiscal 2003. During fiscal 2002, sales to TherMatrx were approximately \$1,781,000. In the nine month period ending May 31, 2004, sales to TherMatrx were \$99,503. During 2002, we issued to certain employees and board members options to purchase 179,300 common shares of TherMatrx, or approximately 7% of our interest in TherMatrx, at an exercise price of \$.001 per share. In connection with the issuance of these options, we recorded \$717,000 of compensation expense. This expense was computed based on the estimated fair value of the options. We estimated the fair value of the options to be \$4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which 525,321 shares of common stock were sold for \$4.00 per share to existing TherMatrx stockholders who elected to purchase shares in the offering. We issued options to the following officers and directors in the following amounts: Hyrum Mead, 45,000; Paul Turner, 45,000; Gerhard Sennewald, 30,000; J. Gordon Short, 10,000; Michael Nobel, 10,000; Dixie Sells, 2,450; and Ray Lauritzen, 2,600. As described more fully elsewhere in this prospectus, in July 2004, AMS acquired TherMatrx, including all of our TherMatrx shares.

Medizin-Technik GmbH. Additionally, we supply equipment components to Medizin-Technik GmbH located in Munich, Germany, which is a significant distributor of our products in Europe. Medizin-Technik purchases equipment, which it installs, and components to service our hyperthermia therapy systems that it sells to its customers in Europe. We had revenue of approximately \$516,142 in fiscal 2003 from the sale of one BSD-2000 system and various component parts sold to Medizin-Technik, During fiscal 2002, we had sales of approximately \$74,000 to Medizin-Technik. Dr. Gerhard W. Sennewald, one of our directors and significant stockholders, is the President and Chief Executive Officer of Medizin-Technik and its sole stockholder. 38 MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS Our common stock trades publicly on the OTC Bulletin Board under the symbol "BSDM." The following table sets forth the high and low bid transactions, as provided by the OTC Bulletin Board, for the quarters in fiscal year 2002 and 2003. The amounts reflect inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions. Bid Quarter Ended: High Low ------ November 30, 2001.............90 stock. We have not paid any cash dividends on our common stock since our inception and we have no intention of declaring any common stock dividends in the foreseeable future. Equity Compensation Plan Information (as of the end of most recent fiscal year) Number of Securities to Weighted-Average Number of Securities be Issued Upon Exercise Exercise Price of Remaining Available for of Outstanding Options, Outstanding Options, Future Issuance Under Equity Plan Category Warrants and Rights Warrants and Rights Compensation Plans ------ Equity

Compensation Plans 1,275,303 \$0.49 1,802,241 Approved by Security Holders Equity Compensation Plans - - - not Approved by Security Holders Total 1,275,303 \$0.49 1,802,241 PRINCIPAL STOCKHOLDERS The following table sets forth, as of June 30, 2004, the beneficial ownership of our outstanding common stock by: 39 o each person (including any group) known to us to own more than 5% of any class of our common stock, a each of our executive

(including any group) known to us to own more than 5% of any class of our common stock, o each of our executive officers, o each of our directors, and o all executive officers and directors as a group. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting or investment power with respect to securities. For purposes of calculating the percentages shown in the table, each person listed is deemed to beneficially own any shares issuable on the exercise of vested options and warrants held by that person that are exercisable within 60 days after June 30, 2004. Except as indicated by footnote, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown beneficially owned by them. The inclusion of any shares as beneficially owned does not constitute an admission of beneficial ownership of those shares. The percentage calculation of beneficial ownership is based on 19,913,651 shares of

common stock outstanding as of June 30, 2004. Except as otherwise noted, the address of each person listed on the

following table is 2188 West 2200 South, Salt Lake City, Utah 84119. Common Stock Beneficially Owned Title of Class Name of Beneficial Owner Shares Percent

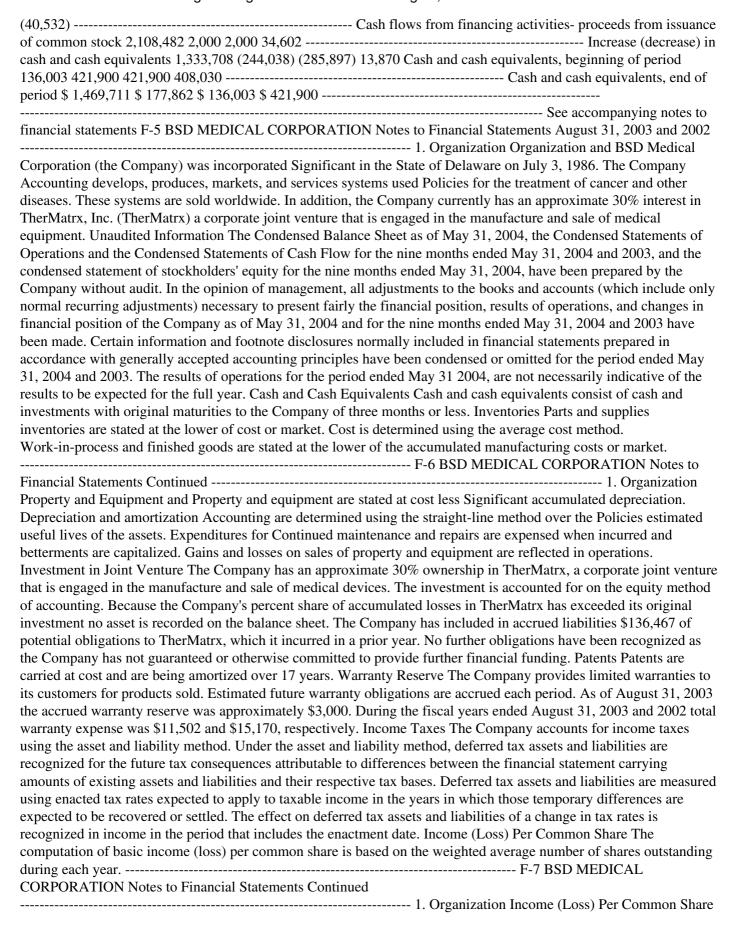
Stock Dr. Gerhard W. Sennewald(1) 6,771,814 33.85% Common Stock Paul F. Turner(2) 1,947,871 9.69% Common Stock Hyrum A. Mead(3) 380,000 1.87% Common Stock Dr. J. Gordon Short(4) 217,635 1.08% Common Stock Dr. Michael Nobel(5) 154,718 * Holders of More Than 5% Common Stock John E. Langdon(6) 1,295,010 6.50% J. Steven Emerson(7) 1,262,787 6.34% Common Stock All Executive Officers and Directors as 9,472,038 45.82% a Group (5 persons)(8) ------- * Less than 1.0%. (1) Includes 90,000 shares subject to options. Does not include 500,000 shares held by Dr. Sennewald's spouse, for which he disclaims beneficial ownership. (2) Includes 180,953 shares subject to options. (3) Includes 300,000 shares subject to options. (4) Includes 110,000 shares subject to options. (5) Includes 75,000 shares subject to options. 40 (6) Includes 351,862 shares owned directly by Mr. Langdon. The remaining shares are held in trusts for which Mr. Langdon is trustee. Does not include 50,000 shares held by Mr. Langdon's spouse, for which he disclaims beneficial ownership. Mr. Langdon's address is: 2501 Parkview Drive, Suite 500, Fort Worth, TX 76102. (7) Mr. Emerson's address is: 1522 Ensley Avenue, Los Angeles, CA 90024. (8) Includes 715,953 shares subject to options. In July 2002, we issued to our employees and board members options to purchase 179,300 shares of TherMatrx at an exercise price of \$0.001 per share. All options were immediately exercisable upon

grant and were exercised in the fourth quarter of fiscal year 2002. The exercise of these options reduced our holdings in TherMatrx from 2,700,000 shares, or approximately 32%, to 2,520,700 shares, or approximately 30%. DESCRIPTION OF SECURITIES General We are authorized to issue 40,000,000 shares of common stock, \$0.001 par value, and 10,000,000 shares of undesignated preferred stock, \$0.001 par value per share. The following description of our capital stock is a summary. It is not complete and is subject to and qualified in its entirety by our Amended and Restated Certificate of Incorporation and Bylaws, a copy of each of which has been incorporated as an exhibit to the registration statement of which this prospectus forms a part. Our Amended and Restated Certificate of Incorporation and Bylaws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors, which may have the effect of delaying, deferring or preventing a future takeover or change in control of BSD unless such takeover or change in control is approved by our board of directors. Common Stock As of May 31, 2004, there were 19,913,651 shares of our common stock outstanding, which were held of record by 593 stockholders. Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of common stock do not have cumulative voting rights, and, therefore, holders of a majority of the shares voting for the election of directors can elect all of the directors. In such event, the holders of the remaining shares will not be able to elect any directors. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of common stock are entitled to receive such dividends as may be declared from time to time by our board of directors out of funds legally available therefore. We have never declared or paid cash dividends on our capital stock. We expect to retain future earnings, if any, for use in the operation and expansion of its business, and do not anticipate paying any cash dividends in the foreseeable future. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in all assets legally available for distribution after payment of all debts and other liabilities and subject to the prior rights of the holders of any preferred stock then outstanding. Holders of common stock have no preemptive or other subscription or conversion rights, and there are no redemption or sinking fund provisions applicable to the common stock. 41 Preferred Stock As of May 31, 2004, there were no shares of preferred stock outstanding. Our Amended and Restated Certificate of Incorporation authorizes 10,000,000 shares of undesignated preferred stock. Our board of directors will have the authority, without any further vote or action by our stockholders, to issue from time to time the preferred stock in one or more series and to fix the price, rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting a series or the designation of such series. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could decrease the amount of earnings and assets available for distribution to holders of common stock or adversely affect the rights and powers, including voting rights, of the holders of common stock, and may have the effect of delaying, deferring or preventing a change in control without further action by the stockholders. We have no current plans to issue any shares of preferred stock. Warrants and Options As of June 30, 2004, warrants to purchase an aggregate of 102,980 shares of our common stock at a weighted average exercise price per share of \$1.80 were issued and outstanding, and options to purchase an aggregate 1,089,550 shares of our common stock at a weighted average exercise price per share of \$0.49 were issued and outstanding. Antitakeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation and Bylaws and Delaware Law Certain provisions of our Amended and Restated Certificate of Incorporation and Bylaws could make the following more difficult: o acquisition of us by means of a tender offer; o acquisition of us by means of a proxy contest or otherwise; and o the removal of our incumbent officers and directors. These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection resulting from our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging such proposals because we believe that the negotiation of such proposals could result in an improvement of their terms. Stockholder Meetings. Our Amended and Restated Certificate of Incorporation provide that only the board of directors, the Chairman of the Board, the Chief Executive Officer or our President may call special meetings of stockholders. The provision may not be amended without the affirmative vote of holders of at least 66 2/3% of our outstanding voting stock. Elimination of Stockholder Action By Written Consent. Our charter documents eliminate the right of stockholders to act by written consent without a meeting. Elimination of Cumulative Voting. Our charter documents do not provide for cumulative voting in the

election of directors. 42 Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for the board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of us. The provisions of Delaware law and our Amended and Restated Certificate of Incorporation and Bylaws could have the effect of discouraging others from attempting unsolicited takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored unsolicited takeover attempts. Such provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions, which stockholders may otherwise deem to be in their best interests. LIMITATION OF LIABILITY AND INDEMNIFICATION Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law. Article 8 of our Amended and Restated Certificate of Incorporation provides for the indemnification of directors to the fullest extent permissible under Delaware law. Section 8 of our Bylaws provides for the indemnification of officers, directors and third parties acting on behalf of us if such person acted in good faith and in a manner reasonably believed to be in, and not opposed to, our best interest, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his or her conduct was unlawful. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. LEGAL MATTERS The validity under the Delaware General Corporation Law of the common stock to be sold by the selling stockholders has been passed on for us by Dorsey & Whitney LLP, Salt Lake City, Utah. EXPERTS Tanner + Co., independent certified public accountants, have audited our financial statements and schedule included in this prospectus for the year ended August 31, 2003, as set forth in their reports which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and schedule are incorporated by reference in reliance on Tanner + Co.'s reports, given on their authority as experts in accounting and auditing. WHERE YOU CAN FIND MORE INFORMATION We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov. 43 In addition, we maintain an Internet website at www.bsdmc.com. We do not intend that our website be a part of this prospectus. We have filed a registration statement on Form SB-2 with the SEC for the common stock offered by the selling stockholders under this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information that is not contained in this prospectus. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, you should refer to the exhibits attached to this registration statement for copies of the actual contract, agreement or document, PRO FORMA FINANCIAL INFORMATION As disclosed above, in July 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx, Inc. for \$40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of our TherMatrx shares, which represents approximately 25% of the shares of TherMartx. On July 16, 2004, we received an initial cash payment, after the withholding of escrow funds and the payment of other initial obligations, of approximately \$8,975,000 million in connection with the closing. We may also receive future contingent payments. Contingent payments to TherMatrx former shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. We will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial \$40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments to TherMatrx shareholders is \$250 million. The pro forma effect on the balance sheet as of May 31, 2004, assuming that the sale occurred on May 31, 2004, would result in an increase in cash of approximately \$8,975,000 to reflect the cash received by BSD upon closing of the sale, a decrease in accrued expenses of \$136,467 to reflect the removal of accrued losses in TherMatrx based on the equity method of accounting,

and a decrease in the accumulated deficit of approximately \$9,111,000 to reflect the gain on the sale of BSD's interest in TherMatrx and the removal of the accrued losses in TherMatrx based on the equity method of accounting. Pro forma statements of operations would not reflect any changes from historical statements of operations because no income or loss was recognized based on the equity method of accounting for the investment in TherMatrx. 44 BSD MEDICAL CORPORATION Financial Statements August 31, 2003 and 2002 BSD MEDICAL CORPORATION Index to Financial Statements Independent Auditor's Report F-1 Balance Sheet F-2 Statement of Operations F-3 Statement of Stockholders' Equity F-4 Statement of Cash Flows F-5 Notes to Financial Statements F-6 REPORT OF INDEPENDENT REGISTERD PUBLIC ACCOUNTING FIRM To the Board of Directors and Stockholders of BSD Medical Corporation We have audited the balance sheet of BSD Medical Corporation (the Company) as of August 31, 2003, and the related statements of operations, stockholders' equity, and cash flows for the years ended August 31, 2003 and 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion. In our opinion, the financial statements referred to above present fairly, in all material respects, the financi
(unaudited) 2003
Equity
financial statements. F-2 BSD MEDICAL CORPORATION Statement of Operations
Nine Months Ended May 31, Years Ended August 31, ———————————————————————————————————
Operating (loss) income (595,663) 17,456 (573,123) (712,553)

Other income (expense): Gain on transfer of equity interest in
affiliate to related parties 717,000 Interest income 4,816 2,838 5,198 Interest expense (477) 4,339 2,664 2,838 722,198
Net (loss) income before income taxes (591,324) 20,120 (570,285)
9,645 Income tax benefit (provision)
(591,324) \$ 20,120 \$ (570,285) \$ 9,645 Income (loss) per common
share - basic and diluted \$ (.03) \$ - \$ (0.03) \$ Weighted average
shares - basic 19,246,000 17,793,000 17,805,000 17,699,000
Weighted average shares - diluted 19,246,000 17,793,000 17,805,000 17,932,000
See accompanying notes to
financial statements. F-3 BSD MEDICAL CORPORATION Statement of Stockholders' Equity Years Ended August 31, 2003 and 2002 and Nine Months Ended May 31, 2004 (unaudited)
Common Stock
Additional Deferred Treasury Stock Paid-in Compen- Accumulated Shares Amount Capital sation Deficit Shares Amount Total
Balance, September 1, 2001
17,602,619 \$ 17,603 \$ 20,969,196 \$ (25,097) \$ (19,925,467) 24,331 \$ (234) \$ 1,036,001 Common stock issued for: Cash 109,633 110 34,492 34,602 Services 27,264 27 23,973 24,000 Options 16,812 17 (17) Amortization of deferred compensation 8,636 8,636 Deferred compensation 9,813 (9,813) Net
income 9,645 9,645
Balance August 31, 2002 17,756,328 17,757 21,037,457 (26,274) (19,915,822) 24,331 (234) 1,112,884 Common stock issued for: Cash 20,000 20 1,980 2,000 Services 38,106 38 23,962 24,000 Warrants 25,199 25 (25) -
Amortization of deferred compensation 6,358 6,358 Deferred compensation 7,500 (7,500) Net loss (570,285) (570,285)
Balance August 31, 2003 17,839,633 17,840 21,070,874 (27,416) (20,486,107) 24,331 (234) 574,957 Common stock
issued for: Cash, net of offering costs of \$165,653 (unaudited) 2,059,600 2,059 2,097,848 Services (unaudited)
15,999 16 11,984 12,000 Options (unaudited) 22,750 23 8,552 8,575 Deferred compensation (unaudited) -
- 8,250 (8,250) Amortization of deferred compensation (unaudited) 7,858 7,858 Net loss (unaudited) (591,324) (591,324) (591,324)
Balance May 31, 2004 (unaudited) 19,937,982 \$ 19,938\$ 23,197,508\$ (27,808) \$ (21,077,431) 24,331 \$ (234) \$ 2,111,973
See accompanying notes to financial statements F-4 BSD MEDICAL CORPORATION Statement of Cash Flows
Nine Months Ended May 31,
Years Ended August 31, 2004 2003 (unaudited) (unaudited) 2003
2002 Cash flows from operating activities: Net (loss) income \$
(591,324) \$ 20,120 \$ (570,285) \$ 9,645 Adjustments to reconcile net (loss) income to net cash (used in) provided by
operating activities operating expense Provision for doubtful accounts 14,569 - 284,393 42,403 Provision for
inventory write-off 90,000 30,000 Depreciation and amortization 33,597 36,454 48,678 48,965 Deferred gain on
sale of building - (15,275) (15,275) (61,416) Amortization of deferred compensation 7,858 6,358 6,358 8,636 Stock
compensation expense 12,000 24,000 24,000 Compensation expense resulting from options granted to
purchase TherMatrx shares 717,000 Gain on issuance of options of TherMatrx shares as settlement of
compensation (717,000) Decrease (increase) in: Restricted certificate of deposit 15,313 Receivables 160,962
57,661 9,614 55,173 Inventories 24,877 (120,391) (85,743) (109,095) Other current assets (14,682) (10,595) (24,901)
16,767 Increase (decrease) in: Accounts payable (160,973) 96,966 217,447 (51,121) Accrued expenses (224,324)
(216,300) (133,066) 40,043 Deferred revenue (26,296) (65,271) (78,518) (49,513)
(186,273) (227,298) 19,800
Purchase of property and equipment (11,038) (59,765) (60,599) (22,532) Purchase of patent license (18,000)



- Continued and The computation of diluted earnings per common share is Significant based on the weighted average number of shares Accounting outstanding during the year, plus the common stock Policies equivalents that would arise from the exercise of stock Continued options and warrants outstanding, using the treasury stock method and the average market price per share during the year. Common stock equivalents are not included in the diluted loss per share calculation when their effect is anti-dilutive. Options to purchase 1,275,303 shares and 1,258,901 shares of common stock at prices ranging from \$.10 to \$1.76 per share were outstanding at August 31, 2003 and 2002, respectively. Options outstanding during the fiscal year ended August 31, 2003 were not included in the calculation of diluted earnings per share because their effect was anti-dilutive. The shares used in the computation of the Company's basic and diluted income (loss) per share are reconciled as follows: May 31, August 31, 2004 2003 (unaudited) basic 19,246,000 17,793,000 17,805,000 17,699,000 Dilutive effect of stock options - - - 233,000 ------ Weighted average number of shares outstanding, assuming dilution 19,246,000 17,793,000 17,805,000 17,932,000 ------------ F-8 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 1. Organization Stock-Based Compensation and The Company accounts for stock options granted to Significant employees under the recognition and measurement Accounting principles of APB Opinion No. 25, Accounting for Stock Policies Issued to Employees, and related Interpretations, and Continued has adopted the disclosure-only provisions of Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation". Accordingly, no compensation cost has been recognized in the financial statements, as all options granted under those plans had an exercise price equal to or greater than the market value of the underlying common stock on the date of grant. Had the Company's options been determined based on the fair value method, the results of operations would have been reduced to the pro forma amounts indicated below: Nine Months Ended May 31, Years Ended August 31, ------ 2004 2003 (unaudited) (unaudited) 2003 2002 -----Net income (loss) - as reported \$ (591,324) \$ 20,120 \$(570,285) \$ 9,645 Deduct total stock based employee compensation expense determined under fair value based method for all awards, net of forma \$ (616,324) \$ (42,993) (694,055) (116,580) ------- Basic and diluted loss per share- as reported \$ (.03) \$ - \$ (.03) \$ - ------ Basic and diluted loss per share- pro forma \$ (.03) \$ (.01) \$ (.04) \$ - ----- The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions: May 31, August 31. ----- 2004 2003 (unaudited) (unaudited) 2003 2002 ------ Expected dividend yield \$ - \$ - \$ - Expected stock price volatility 83% 137% 122% 143% Risk-free interest rate 5.5% 4.2% 4.3% 4.3% Expected life of options 3 years 5 years 5 years ----- F-9 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------1. Organization Stock-Based Compensation - Continued and The weighted average fair value of options granted Significant during the years ended August 31, 2003 and 2002 were Accounting \$.57 and \$.73, respectively. The unaudited weighted Policies average fair value of options granted during the nine Continued months ended May 31, 2004 and 2003, were \$1.01 and \$.64, respectively. Revenue Recognition The Company recognizes revenue from the sale of cancer treatment systems, the sale of parts and accessories related to the cancer treatment systems, the sale of software license rights, providing manufacturing services, providing training, and service support contracts. Product sales were \$1,956,270 and \$1,866,192 for the years ended August 31, 2003 and 2002, respectively. Service revenue was \$277,912 and \$806,280 for the years ended August 31, 2003 and 2002, respectively. Revenue from the sale of cancer treatment systems is recognized when a purchase order has been received, the system has been shipped, the selling price is fixed or determinable, and collection is reasonably assured. Most system sales are F.O.B. shipping point, therefore shipment is deemed to have occurred when the product is delivered to the transportation carrier. Most system sales do not include installation. If installation is included as part of the contract, revenue is not recognized until installation has occurred, or until any remaining installation obligation is deemed to be perfunctory. Some sales of cancer treatment systems may include training as part of the sale. In such cases, the portion of the revenue related to the training, calculated based on the amount charged for training on a stand-alone basis, is deferred and recognized

when the training has been provided. The sales of our cancer treatment systems do not require specific customer acceptance provisions and do not include the right of return except in cases where the product does not function as guaranteed by the Company. We provide a reserve allowance for estimated returns. To date, returns have not been significant. ----- F-10 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------1. Organization Revenue Recognition - Continued and Revenue from the sale of software license rights is Significant recognized when a valid purchase order has been Accounting received, the software license has been delivered to the Policies customer, the selling price is fixed or determinable, Continued and collection is reasonably assured. Delivery is deemed to have occurred if diskettes have been shipped, or if the software has been delivered electronically by email. To date, the sale of software license rights has not been material. Revenue from manufacturing services is recorded when an agreement with the customer exists for such services, the services have been provided, and collection is reasonably assured. Revenue from training services is recorded when an agreement with the customer exists for such training, the training services have been provided, and collection is reasonably assured. Revenue from service support contracts is recognized on a straight-line basis over the term of the contract, which approximates recognizing it as it is earned. The Company's revenue recognition policy is the same for sales to both related parties and non-related parties. The Company provides the same products and services under the same terms for non-related parties as with related parties. Sales to distributors are recognized in the same manner as sales to end-user customers. Deferred revenue and customer deposits payable include amounts from service contracts as well as cash received for the sales of products, which have not been shipped. Research and Development Costs Research and development costs are expensed as incurred. ----- F-11 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 1. Organization Concentration of Credit Risk and Financial instruments that potentially subject the Significant Company to concentration of credit risk consists Accounting primarily of trade receivables. In the normal course of Policies business, the Company provides credit terms to its Continued customers. Accordingly, the Company performs ongoing credit evaluations of its customers and maintains allowances for possible losses. During the year ended August 31, 2003, the Company wrote off a receivable of approximately \$346,000. This receivable was recorded as a sale in fiscal year 2002 and resulted in a significant write-off in the fourth quarter of 2003. The Company has cash in bank and short-term investments that, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk on cash and short-term investments. Use of Estimates in the Preparation of Financial Statements The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. 2. Detail of Details of certain balance sheet accounts as of August Certain 31, 2003, are as follows: Balance Sheet Accounts Receivables: Trade receivables \$ 471,093 Less allowance for doubtful accounts (67,371) ------\$ 403,722 ----- Inventories: Parts and supplies \$ 385,825 Work-in-process 556,648 Reserve for obsolete inventory (140,000) ------ \$ 802,473 ------F-12 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------2. Detail of Accrued expenses: \$ 272,132 Certain Customer deposits 136,467 Balance Accrued loss in equity affiliate 96,254 Sheet Accrued vacation 67,232 Accounts Accrued payroll and taxes 42,385 Continued Other accrued expenses ------\$ 614,470 -------3. Property Property and equipment as of August 31, 2003 consists of and the following: Equipment Equipment \$ 680,630 Furniture and fixtures 297,741 ----- 978,371 Less accumulated depreciation (837,077) -----\$ 141,294 ------ \$ 1. Deferred During the year ended August 31, 1998, the Company Gain entered into a sale-leaseback transaction on its and building. The sale-leaseback resulted in a gain of Operating \$325,513 of which \$307,000 was deferred and is being Lease credited to income as rent expense adjustments over the term of the lease. The lease required monthly payments of \$6,533 through November 2002. During the year ended August 31, 2003, the Company renewed its lease for five years, which includes payments of approximately \$82,000 per year, adjusted annually for increases in the cost of living based on the Consumer Price Index for Urban

ORPORATION Notes to Financial Statements Continued 4. Deferred Future minimum payments at August 1, 2003, are as Gain follows: and Operating Years Ending August 31, Amount Lease Continued 2004 \$ 82,320 2008 82,320 2008 82,320 2008 20,580 \$ \$49,860 ————————————————————————————————————	onsumers F-13 BSD MEDICAL	
1, 2003, are as Gain follows: and Operating Years Ending August 31, Amount Lease ———————————————————————————————————		
1, 2003, are as Gain follows: and Operating Years Ending August 31, Amount Lease ———————————————————————————————————	4. Deferred Future minimum payments at A	ugust
49,860 ————————————————————————————————————		
mounted to approximately \$67,000 and \$17,000, net of sale-leaseback gain. 5. Deferred The Company has entered nto certain service contracts Revenue for which it has received payment in advance. The Company is recognizing ness service revenues over the life of the service agreements as follows: Years Ending August 31, amount 2004 \$ 43,220 2005 40,900 84,120 Less current portion (43,220) 84,120 Less current portion (
nese service revenues over the life of the service agreements as follows: Years Ending August 31, Amount ———————————————————————————————————	49,860 Annual rent expense on this operating lease for the years ended August 31, 2003 and 20	002
nese service revenues over the life of the service agreements as follows: Years Ending August 31, Amount 2004 \$43,220 2005 40,900		
2004 \$ 43,220 2005 40,900 ——————————————————————————————————		ing
Long-term deferred revenue \$ 40,900 ——————————————————————————————————		
F-14 BSD MEDICAL CORPORATION Notes to inancial Statements Continued ————————————————————————————————————	· ·	220)
inancial Statements Continued ————————————————————————————————————		
ncome tax benefit (expense) differs from the amount Taxes computed at federal statutory rates as follows: Years inded August 31,		
inded August 31,		
t statutory rate \$ 198,000 \$ (3,000) Expiration of net operating loss carryforwards (19,000) - Change in valuation llowance (179,000) 3,000		
Illowance (179,000) 3,000		
liabilities) are comprised of the following: Net operating loss carryforwards \$ 1,843,000 General business and AMT redit carryforwards 170,000 Accrued expenses and deposits 128,000 Deferred revenue 29,000 Inventory reserve 8,000 Allowance for bad debts and reserves 17,000 Depreciation (21,000) Deferred compensation expense (9,000)		
redit carryforwards 170,000 Accrued expenses and deposits 128,000 Deferred revenue 29,000 Inventory reserve 8,000 Allowance for bad debts and reserves 17,000 Depreciation (21,000) Deferred compensation expense (9,000)		
8,000 Allowance for bad debts and reserves 17,000 Depreciation (21,000) Deferred compensation expense (9,000)		
F-15 BSD MEDICAL CORPORATION Notes to inancial Statements Continued ————————————————————————————————————	*	
F-15 BSD MEDICAL CORPORATION Notes to inancial Statements Continued ————————————————————————————————————		000)
august 31, 2003, the Company has net operating losses Taxes (NOL) as follows: Continued Expiration Date NOL		tes to
2005 \$ 1,270,000 2007 190,000 2008 99,000 2009 671,000 2010 170,000 2012 838,000 016 153,000 2018 1,052,000 2019 731,000	inancial Statements Continued 6. Income A	A t
2016 153,000 2018 1,052,000 2019 731,000	ugust 31, 2003, the Company has net operating losses Taxes (NOL) as follows: Continued Expiration Date No	OL
company has Research and Experimentation Tax Credits (RETC) and Alternative Minimum Tax Credits (AMTC) as follows: Expiration Date RETC AMTC		8,000
collows: Expiration Date RETC AMTC	016 153,000 2018 1,052,000 2019 731,000 \$ 5,174,000 At August 31, 2003, th	ie
xpiration date 72,000 57,000		
company has experienced a greater than 50 percent change of ownership. Consequently, use of the Company's arryovers against future taxable income in any one year may be limited and those carryovers may expire unutilized ue to limitations imposed by the change of ownership rules.	<u>*</u>	
arryovers against future taxable income in any one year may be limited and those carryovers may expire unutilized ue to limitations imposed by the change of ownership rules. F-16 BSD MEDICAL CORPORATION Notes to inancial Statements Continued		
ue to limitations imposed by the change of ownership rules.		
F-16 BSD MEDICAL CORPORATION Notes to financial Statements Continued	• • • • • • • • • • • • • • • • • • • •	lized
inancial Statements Continued		
Options Options and The Company's 1987 Employee Stock Option Plan authorizes Warrants the granting of incentive ptions to certain key employees of the Company and nonqualified stock options to certain key employees, on-employee directors, or individuals who provide services to the Company. The Plan, as amended, provides for the ranting of options for an aggregate of 950,000 shares. The options vest according to a set schedule over a five-year eriod and expire upon the employee's termination or after ten years from the date of grant. The Company's 1998 employee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		
ptions to certain key employees of the Company and nonqualified stock options to certain key employees, on-employee directors, or individuals who provide services to the Company. The Plan, as amended, provides for the ranting of options for an aggregate of 950,000 shares. The options vest according to a set schedule over a five-year eriod and expire upon the employee's termination or after ten years from the date of grant. The Company's 1998 imployee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		
on-employee directors, or individuals who provide services to the Company. The Plan, as amended, provides for the ranting of options for an aggregate of 950,000 shares. The options vest according to a set schedule over a five-year eriod and expire upon the employee's termination or after ten years from the date of grant. The Company's 1998 imployee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		zenuve
ranting of options for an aggregate of 950,000 shares. The options vest according to a set schedule over a five-year eriod and expire upon the employee's termination or after ten years from the date of grant. The Company's 1998 imployee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate of 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		for the
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Employee Stock Option Plan authorizes the granting of incentive stock options to certain key employees and on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		
on-employees who provide services to the Company. The Plan provides for the granting of options for an aggregate f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		70
f 2,000,000 shares. The options vest subject to management's discretion. The Company's 1998 Director Stock Plan uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		regate
uthorizes an annual compensation of \$12,000 to each non-employee director. The annual compensation may be atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		-
atisfied by issuing common stock, with the number of shares issued calculated by dividing the unpaid compensation y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		
y a daily average of the preceding twenty day closing price of the Company's common stock. The Plan also grants		
1 /	ach non-employee outside director 25,000 options each year at an exercise price of 85% of the fair market value	
ne common stock at the date the option is granted. The Plan allows for an aggregate of 1,000,000 shares to be	e common stock at the date the option is granted. The Plan allows for an aggregate of 1,000,000 shares to be	
ranted. The options vest according to a set schedule over a five-year period and expire upon the director's	anted. The options vest according to a set schedule over a five-year period and expire upon the director's	
ermination, or after ten years from the date of grant. For certain options issued under this plan, the Company has		
ecorded as deferred compensation the excess of the market value of common stock at the date of grant over the		3
xercise price F-17 BSD MEDICAL	tercise price F-17 BSD MEDICAL	

CORPORATION Notes to Financial Statements Continued -----7. Stock A schedule of the options and warrants are as follows: Options and Warrants Continued Price Per Options Warrants Share ------Outstanding at September 1, 2001 1,306,434 87,133 \$.10 to 3.00 Granted 75,000 - .73 Exercised (114,312) (12,133) .10 to .37 Forfeitures (8,221) (75,000) .10 to 3.00 ------ Outstanding at August 31, 2002 1,258,901 - .10 to 1.76 Granted 75,000 - .56 Exercised (58,598) - .10 to .65 Forfeitures - -------Outstanding at August 31, 2003 1,275,303 - \$.10 to 1.76 ----- The following table summarizes information about stock options and warrants outstanding at August 31, 2003: Options and Warrants Options and Warrants Outstanding Exercisable ------ Weighted Average Remaining Weighted Weighted Range of Contractual Average Average Exercise Number Life Exercise Number Exercise Prices Outstanding (Years) Price Exercisable Price -----\$.10-.25 430,703 2.41 \$.13 415,703 \$.12 .37-1.11 794,600 7.65 .61 427,780 .58 1.76 50,000 7.82 1.76 50,000 1.76 ------\$.10-1.76 1,275,303 5.23 \$.49 893,483 \$.43 ------ 8. Foreign During the years ended August 31, 2003 and 2002 the Customer Company had sales of \$1,391,443 and \$1,844,500 and Major (including \$63,500 in royalty revenues), respectively, Customer to TherMatrx, an unconsolidated affiliate of which it owns approximately 30%. During the years ended August 31, 2003 and 2002 the Company had sales to a European entity controlled by a significant stockholder and member of the Board of Directors of the Company of approximately \$518,000 and \$74,000, respectively. The Company also had a sale to an unrelated entity of approximately \$344,000 or approximately 12.9% of total sales for the year ended August 31, 2002. ------ F-18 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ----- 9. Related Party At August 31, 2003, accrued expenses include Transactions approximately \$272,132, due to an entity controlled by a Not otherwise significant stockholder and member of the Board of disclosed Directors and an unconsolidated affiliate. These amounts represent deposits to purchase product from the Company and will be recognized as revenue when all performance and delivery obligations have been met. At August 31, 2003, accounts receivable includes approximately \$38,225, due from an entity controlled by a significant stockholder and member of the Board of Directors. Accounts receivable also include \$304,653 due from TherMatrx at August 31, 2003. Unaudited Related Party Transactions During the periods ended May 31, 2004 and 2003 the Company had sales to an unconsolidated affiliate and an entity controlled by a significant stockholder of \$981,241 and \$1,410,319, respectively. These related party transactions represent 63.66% and 71.13% of total revenue, respectively. At May 31, 2004, accounts receivable include \$224,600 due from an unconsolidated affiliate and an entity controlled by a significant stockholder. 10. Supplemental Actual amounts paid for interest and income taxes are as Cash Flow follows: Information Years Ended August 31, ------ 2003 2002 ------ Interest expense \$ - \$ ------ Income taxes \$ - \$ - ----- During the year ended August 31, 2002, the Company exchanged a restricted CD to a bank for accounts receivable of \$73,604. The receivable exchanged was allowed for by \$57,403 that was offset by \$15,000 of accrued commissions payable related to the receivable. ------ F-19 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 10. Supplemental Unaudited Supplemental Cash Flow Information for the Cash Flow periods ended May 31, 2004 and 2003: Information Continued o The Company paid \$477 for interest and no cash for income taxes during the period ended May 31, 2004 and no cash for interest and income taxes for the period ended May 31, 2003. o The Company issued 75,000 options to purchase common stock for the periods ended May 31, 2004 and 2003, which resulted in an increase to deferred compensation of \$8,250 and \$7,500, respectively. 11. Significant The Company has an approximate 30% interest in an Unconsolidated unconsolidated affiliate (TherMatrx) at August 31, 2003. Affiliate During the year ended August 31, 2002 the Company compensated certain employees and directors by issuing options to purchase 179,300 shares of TherMatrx, or approximately 2% of the Company's interest in TherMatrx at \$.001 per share. This resulted in compensation expense of \$717,000, which is included in general and administrative expenses in the statement of operations for the year ended August 31, 2002. The Company estimated the fair value of the options to be \$4.00 per option. This fair value was determined based on a December 2001 private offering of TherMatrx shares in which

525,321 shares of common stock were sold for \$4.00 per share to existing TherMatrx stockholders who elected to purchase shares in the offering. For accounting purposes, because of the lack of other contemporaneous transaction data indicating the value of these shares in July 2002, the Company recorded the value of each option at \$4.00, thus resulting in \$717,000 of compensation expense. Because the TherMatrx shares used to settle the compensation obligation had a book value of \$0, such issuance of TherMatrx shares upon exercise of the options resulted in a gain of \$717,000, which is reflected as gain on transfer of equity interest in affiliate in the statement of operations. All of the options had been exercised as of August 31, 2002.

------ F-20 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 11. Significant Summarized financial information for the significant Unconsolidated unconsolidated affiliate of the Company, at September Affiliate 30, 2003 and 2002 (the affiliate's fiscal year runs from Continued October 1, through September Gross profit \$ 9,589,803 \$ 4,484,253 Net income (loss) \$ 1,520,190 \$ (1,875,003) Year-end financial position Current assets \$ 6,313,746 \$ 4,337,756 Non-current assets \$ 2,335,232 \$ 2,549,626 Current liabilities \$ 1,913,453 \$ 1,672,047 Non-current liabilities \$ 474,748 \$ 474,748 12. Commitments The Company has an employment agreement with the and President of the Company. The agreement provides that Contingencies the President's salary will be based upon a reasonable mutual agreement. Additionally, in the case of non-voluntary termination, the acting president will receive severance pay for a six-month period, which includes an extension of all employee rights, privileges, and benefits, including medical insurance. The six-month severance pay would be the salary at the highest rate paid to the president prior to such a non-voluntary termination. The agreement also requires the Company to pay the acting president for any accrued unused vacation and bonuses. The Company has an exclusive worldwide license for a unique temperature probe. The license has no determinable life. The Company pays royalties based upon its sales of this probe. Royalties accrued as of August 31, 2003 and 2002, were \$1,000. Royalty expense amounted to approximately \$5,000 and \$11,000 for the years ended August 31, 2003 and 2002, respectively.

----- F-21 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 13. Fair Value of None of the Company's financial instruments are held for Financial trading purposes. The Company estimates that the fair Instruments value of all financial instruments at August 31, 2003 and 2002 does not differ materially from the aggregate carrying values of its financial instruments recorded in the accompanying balance sheet. The estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. Considerable judgment is necessarily required in interpreting market data to develop the estimates of fair value, and, accordingly, the estimates are not necessarily indicative of the amounts that the Company could realize in a current market exchange. 14. Recent In April 2002, the FASB issued SFAS No. 145, Rescission Accounting of SFAS Nos. 4, 44, and 64, Amendment of SFAS 13, and Pronounce-Technical Corrections as of April 2002 (SFAS 145). This ments standard rescinds SFAS No. 4, Reporting Gains and Losses from extinguishment of Debt, and an amendment of that Statement, SFAS No. 64, Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements and excludes extraordinary item treatment for gains and losses associated with the extinguishment of debt that do not meet the APB Opinion No. 30, Reporting the Results of Operations -- Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions (APB 30) criteria. Any gain or loss on extinguishment of debt that was classified as an extraordinary item in prior periods presented that does not meet the criteria in APB 30 for classification as an extraordinary item shall be reclassified. SFAS 145 also amends SFAS 13, Accounting for Leases as well as other existing authoritative pronouncements to make various technical corrections, clarify meanings, or describe their applicability under changed conditions. Certain provisions of SFAS are effective for transactions occurring after May 15, 2002 while others are effective for fiscal years beginning after May 15, 2002. The adoption of SFAS No. 145 by the Company did not have a material impact on the Company's financial position or operations. ----- F-22 BSD MEDICAL CORPORATION Notes to Financial Statements Continued

MEDICAL CORPORATION Notes to Financial Statements Continued

------ 14. Recent In January 2003, the FASB issued Interpretation No. 46, Accounting "Consolidation of Variable Interest Entities" (FIN No. Pronounce- 46), which addresses consolidation by business ments enterprises of variable interest entities. FIN No. 46 Continued clarifies the application of Accounting Research Bulletin No. 51, "Consolidated Financial Statements", to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN No. 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. It applies in the first fiscal year or interim period beginning after June 15, 2003, to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. The Company does not expect to identify any variable interest entities that must be consolidated. In the event a variable interest entity is identified, the Company does not expect the requirements of FIN No. 46 to have a material impact on its financial condition or results of operations. In November 2002, the FASB issued Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" (FIN No. 45). FIN No. 45 requires certain guarantees to be recorded at fair value, which is different from current practice to record a liability only when a loss is probable and reasonably estimable, as those terms are defined in FASB Statement No. 5, "Accounting for Contingencies". FIN No. 45 also requires the Company to make significant new disclosures about guarantees. The disclosure requirements of FIN No. 45 are effective for the Company in the first quarter of fiscal year 2003. FIN No. 45's initial recognition and initial measurement provisions are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The adoption of FIN No. 45 did not have a material impact on the Company's financial position, results of operations or cash flows. ------F-24 BSD MEDICAL CORPORATION Notes to Financial Statements Continued

Management anticipates that the adoption of SFAS No. 150 may have a material impact on the Company's consolidated financial statements if in the future the Company issues mandatorily redeemable preferred stock. Such mandatorily redeemable preferred stock, previously included as "mezzanine capital", would be included as a liability in accordance with SFAS 150, ------ F-25 BSD MEDICAL CORPORATION Notes to Financial Statements Continued ------ 15. Subsequent On November 28, 2003, the Company completed the sale of Event an aggregate of 1,820,000 shares of common stock to three institutional investors. The shares of common stock were sold for cash consideration of \$1.10 per share, or a total of \$2,002,000, pursuant to the terms of the Securities Purchase Agreement entered into by and among the investors and the Company as of November 28, 2003. These shares were issued in a private placement transaction pursuant to Section 4(2) and Regulation D under the Securities Act of 1933, as amended. As provided in the Securities Purchase Agreement, the Company also agreed to cause a shelf registration statement covering the resale of these shares to be filed no later than 60 days after the closing of the private placement. The Company estimates that the net proceeds from the transaction, after paying a commission to the placement agent, T.R. Winston & Company, LLC, and legal other expenses related to the transaction, will be approximately \$1,840,000. The Company has also agreed to issue to the placement agent a three-year warrant to purchase up to 91,000 shares at an exercise price per share of \$1.80 as provided in the Securities Purchase Agreement. On December 10, 2003 the Company sold 239,600 shares of common stock at \$1.10 per share or a total of \$263,560. The Company issued to the placement agent a three-year warrant to purchase up to 11,980 shares at an exercise price of \$1.80. On July 15, 2004, American Medical Systems Holdings, Inc., or AMS, acquired TherMatrx., Inc. for \$40 million in cash plus future payments contingent upon the combined entity's future sales of TherMatrx's DOT systems. The sale includes all of the Company's TherMatrx shares. The Company received an initial cash payment, after the withholding of escrow funds and the payment of other initial obligations, of approximately \$8,975,000 in connection with the closing. The Company may also receive future contingent payments. Contingent payments to TherMatrx shareholders will be four times quarterly sales of TherMatrx's DOT systems during the six quarters beginning July 5, 2004 and ending December 31, 2005. The Company will receive quarterly contingent payments when the accumulated value of four times quarterly sales has exceeded the initial \$40 million payment to TherMatrx shareholders. The contingent payments are also subject to certain set-off rights in favor of AMS. The aggregate maximum amount of the initial payment and any contingent payments is \$250 million. ------ F-26 BSD MEDICAL CORPORATION 2,162,580 SHARES OF COMMON STOCK ------ PROSPECTUS ----- July ___, 2004 PART II INFORMATION NOT REQUIRED IN PROSPECTUS ITEM 24. Indemnification of Directors and Officers. Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law. Article 8 of our Amended and Restated Certificate of Incorporation provides for the indemnification of directors to the fullest extent permissible under Delaware law. Section 8 of our Bylaws provides for the indemnification of officers, directors and third parties acting on behalf of us if such person acted in good faith and in a manner reasonably believed to be in, and not opposed to, our best interest, and, with respect to any criminal action or proceeding, the indemnified party had no reason to believe his or her conduct was unlawful. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. ITEM 25. Other Expenses of Issuance and Distribution. The following table sets forth the various costs and expenses to be paid by us with respect to the sale and distribution of the securities being registered. All of the amounts shown are estimates except for the SEC registration bear all costs, expenses and fees in connection with the registration of the shares. The selling stockholders will bear all commissions and discounts, if any, attributable to the sales of the shares. ITEM 26. Recent Sales of Unregistered

Securities. The following is information as to all securities we have sold within the past three years that were not registered under the Securities Act of 1933, as amended: On November 28, 2003, we issued a total of 1,820,000

shares of our common stock, for gross proceeds of \$2,002,000, to four accredited investors in a transaction exempt from registration pursuant to Section 4(2) of the Securities Act and Rule 506 thereunder. II-1 On December 10, 2003, we issued a total of 239,600 shares of our common stock, for gross proceeds of \$263,560, to three accredited investors in a transaction exempt from registration pursuant to Section 4(2) of the Securities Act and Rule 506 thereunder. On December 10, 2003, we issued warrants to purchase 102,980 shares of our common stock to a broker dealer in connection with the sale of common stock to investors in a transaction exempt from registration pursuant to Section 4(2) of the Securities Act and Rule 506 thereunder. ITEM 27. Exhibits Exhibit Number Description ------3.1 Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of the BSD Medical Corporation Form 10-K, filed December 1, 2003. 3.2 Bylaws. Incorporated by reference to Exhibit 3.2 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986. 4.1 Specimen Common Stock Certificate. Incorporated by reference to Exhibit 4 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986. 4.2 Securities Purchase Agreement dated December 10, 2003 among BSD Medical Corporation and the purchasers identified therein. Incorporated by reference to Exhibit 4.2 of the BSD Medical Corporation Form 10-K, filed December 1, 2003. 4.2 Amendment No. 1 to Securities Purchase Agreement dated December 10, 2003 among BSD Medical Corporation and the purchasers identified therein. Incorporated by reference to Exhibit 99.1 of the BSD Medical Corporation Form 8-K, filed December 22, 2003. 4.3 Warrant to Purchase 42,980 Shares of Common Stock dated December 10, 2003 issued by BSD Medical Corporation to T.R. Winston & Company, LLC. Incorporated by reference to Exhibit 99.2 of the BSD Medical Corporation Form 8-K, filed December 22, 2003. 4.4 Warrant to Purchase 60,000 Shares of Common Stock dated December 10, 2003 issued by BSD Medical Corporation to The Runnel Family Trust Dated 1/11/2000. Incorporated by reference to Exhibit 99.3 of the BSD Medical Corporation Form 8-K, filed December 22, 2003. 5.1 Opinion of Dorsey & Whitney LLP 10.1 Transfer of Trade Secrets Agreement dated December 7, 1979, among BSD Medical Corporation, Vitek, Incorporated and Ronald R. Bowman. Incorporated by reference to Exhibit 10.6 of the BSD Medical Corporation Registration Statement on Form S-1, filed October 16, 1986. 10.2 Second Addendum to Exclusive Transfer of Trade Secrets Agreement dated April 2, 1987, Incorporated by reference to Exhibit 10 of the BSD Medical Corporation Form 10-K, filed April 8, 1988. II-2 10.3 BSD Medical Corporation 1998 Director Stock Plan. Incorporated by reference to Exhibit A of the BSD Medical Corporation Schedule 14A, filed July 27, 1998. 10.4 BSD Medical Corporation 1998 Stock Incentive Plan. Incorporated by reference to Exhibit B of the BSD Medical Corporation Schedule 14B, filed July 27, 1998. 10.5 Lease Agreement dated December 5, 1997, between BSD Medical Corporation and Alcoh Development, Inc., Alan S. Cohen, Orlene H. Cohen, and Reelman Investments, L.C. 10.6 Lease Extension Agreement and Contract to Purchase dated November 1, 2002 between BSD Medical Corporation and Alcoh Development, Inc., Alan S. Cohen, Orlene H. Cohen, and Reelman Investments, L.C. 10.7 Employment Agreement dated August 10, 1999 between BSD Medical Corporation and Hyrum A. Mead. 10.8 Employment Agreement dated November 2, 1988 between BSD Medical Corporation and Paul F. Turner. 10.9 Agreement dated May 27, 1994 between BSD Medical Corporation and Medizin Technik GmbH. 10.10 Agency Agreement dated May 20, 2002 between BSD Medical Corporation and Nucletron B.V. 10.11 Agreement and Plan of Merger dated June 15, 2004 by and among American Medical Systems, Inc., Leio Acquisition Corp., TherMatrx, Inc., TherMatrx Investment Holdings, LLC and BSD Medical Corporation. 21 Subsidiary List. Incorporated by reference to Exhibit 21 of the BSD Medical Corporation Form 10-K, filed December 1, 2003. 23.1 Consent of Independent Public Accountants, Tanner + Co. 23.2 Consent of Dorsey & Whitney LLP (included in Exhibit 5.1), 24.1 Power of Attorney (included in signature page). ITEM 28. Undertakings. The undersigned Registrant hereby undertakes: (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement: (i) To include any prospectus required by Section 10(a)(3) of the Securities Act; II-3 (ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment hereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering price may be reflected in the form of prospectus filed with the SEC under Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and (iii) To include any material information with respect to the plan of distribution not previously

disclosed in this registration statement or any material change to such information in this registration statement. (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. (3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of BSD Medical Corporation pursuant to the foregoing provisions, or otherwise, BSD Medical Corporation has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by BSD Medical Corporation of expenses incurred or paid by a director, officer or controlling person of BSD Medical Corporation in the successful defense of any action, suit, or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, BSD Medical Corporation will, unless in the opinion of its counsel the question has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue. II-4 SIGNATURES Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form SB-2 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Salt Lake City, Utah, on the July 23, 2004. BSD MEDICAL CORPORATION By: /s/ HYRUM A. MEAD ------ Hyrum A. Mead President POWER OF ATTORNEY KNOW ALL PERSONS BY THESE PRESENTS, that the undersigned officers and directors of BSD Medical Corporation, a Delaware corporation, do hereby constitute and appoint Paul F. Turner and Hyrum A. Mead and each of them, their lawful attorneys-in-fact and agents with full power and authority to do any and all acts and things and to execute any and all instruments which said attorneys and agents, and any one of them, determine may be necessary or advisable or required to enable said corporation to comply with the Securities Act and any rules or regulations or requirements of the Securities and Exchange Commission in connection with this Registration Statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this Registration Statement, to any and all amendments, both pre-effective and post-effective, and supplements to this Registration Statement, and to any and all instruments or documents filed as part of or in conjunction with this Registration Statement or amendments or supplements thereof, and each of the undersigned hereby ratifies and confirms all that said attorneys and agents, or any one of them, shall do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts. IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated. Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated. Signature Title Date ------/s/ PAUL F. TURNER* Chairman of the Board, Senior Vice July 23, 2004 ----- President and Chief Technology Officer Paul F. Turner /s/ HYRUM A MEAD* President (principal executive July 23, 2004 ----- officer) and Director Hyrum A. Mead /s/ DENNIS BRADLEY* Controller (principal financial and July 23, 2004 ----- accounting officer) Dennis Bradley /s/ GERHARD W. SENNEWALD* Director July 23, 2004 ----- Gerhard W. Sennewald /s/ MICHAEL NOBEL* Director July 23, 2004 ----- Michael Nobel /s/ J. GORDON SHORT* Director July 23, 2004 ----- J. Gordon Short *By: /s/HYRUM A MEAD July 23, 2004 ------ Hyrum A. Mead Attorney in Fact II-5 INDEX OF EXHIBITS Exhibit Number Description ----- 3.1 Amended and Restated Certificate of Incorporation. 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