

KEMET CORP
Form 424B3
May 25, 2011

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[Table of Contents](#)

The information in this prospectus supplement is not complete and may be changed. This prospectus supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MAY 24, 2011

**Filed pursuant to Rule 424(b)(3)
Registration No. 333-172628**

**PROSPECTUS SUPPLEMENT
(To Prospectus dated March 4, 2011)**

KEMET Corporation

7,000,000 Shares

Common Stock

All of the shares of our common stock offered hereby are being offered by a selling securityholder. We will not receive any of the proceeds from sales of the shares offered hereby, but we will incur expenses in connection with the offering.

The shares offered hereby are subject to issuance upon exercise of a currently outstanding and exercisable warrant held by the selling securityholder, a portion of which will be sold to and exercised by the underwriter in connection with its sale of the underlying shares. We provide more information about how the shares will be sold in the sections entitled "Underwriting" beginning on page S-24 and "Selling Securityholder" on page S-18 of this prospectus supplement.

Our common stock is traded on the NYSE under the symbol "KEM." On May 23, 2011 the last reported sale price of our common stock on the NYSE was \$15.95 per share.

Investing in our common stock involves risks. See "Risk Factors" on page S-13 of this prospectus supplement.

	Per Share	Total
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to the selling securityholder	\$	\$

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 base prospectus. Any representation to the contrary is a criminal offense.

If all of the shares are not sold at the public offering price, the underwriter may change the offering price and may offer shares from time to time for sale in negotiated transactions or otherwise, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or otherwise.

The underwriter expects to deliver the shares of common stock to the purchasers on or about May , 2011.

Deutsche Bank Securities

The date of this prospectus supplement is May , 2011.

Table of Contents

TABLE OF CONTENTS

	Page
PROSPECTUS SUPPLEMENT	
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	<u>S-ii</u>
<u>BASIS OF PRESENTATION</u>	<u>S-ii</u>
<u>PROSPECTUS SUPPLEMENT SUMMARY</u>	<u>S-1</u>
<u>RISK FACTORS</u>	<u>S-13</u>
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>S-14</u>
<u>CAPITALIZATION</u>	<u>S-16</u>
<u>SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA</u>	<u>S-17</u>
<u>SELLING SECURITYHOLDER</u>	<u>S-18</u>
<u>MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS</u>	<u>S-19</u>
<u>UNDERWRITING</u>	<u>S-24</u>
<u>LEGAL MATTERS</u>	<u>S-29</u>
<u>EXPERTS</u>	<u>S-29</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>S-29</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>S-30</u>
PROSPECTUS	
<u>ABOUT THIS PROSPECTUS</u>	<u>i</u>
<u>BASIS OF PRESENTATION</u>	<u>i</u>
<u>OUR COMPANY</u>	<u>1</u>
<u>RISK FACTORS</u>	<u>2</u>
<u>FORWARD-LOOKING STATEMENTS</u>	<u>10</u>
<u>USE OF PROCEEDS</u>	<u>12</u>
<u>SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA</u>	<u>13</u>
<u>SELLING SECURITYHOLDER</u>	<u>14</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>15</u>
<u>PLAN OF DISTRIBUTION</u>	<u>20</u>
<u>LEGAL MATTERS</u>	<u>22</u>
<u>EXPERTS</u>	<u>22</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>23</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>23</u>

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus form part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the "SEC," using a "shelf" registration process. This document contains two parts. The first part consists of this prospectus supplement, which provides you with specific information about the shares of our common stock that the selling securityholder is selling in this offering and about the offering itself. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. If the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information contained in this prospectus supplement. Before purchasing any shares of common stock, you should carefully read both this prospectus supplement and the accompanying prospectus, together with additional information described in this prospectus supplement and in the accompanying prospectus under the captions "Where You Can Find More Information."

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement or the accompanying prospectus will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus supplement or the accompanying prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We have prepared the information contained in this prospectus supplement and the accompanying prospectus, any free writing prospectus and the documents incorporated by reference herein and therein that have been filed by us with the SEC. Neither we, the selling securityholder nor the underwriter has authorized anyone to provide you with any other information and neither we, the selling securityholder nor the underwriter takes any responsibility for other information others may give you.

The information contained in this prospectus supplement and the accompanying prospectus, any free writing prospectus or in any document incorporated by reference herein and therein is accurate only as of its date, regardless of the time of delivery of this prospectus supplement or any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since the dates of such respective documents.

This prospectus supplement is not an offer to sell or solicitation of an offer to buy these shares of common stock in any circumstances under which or jurisdiction in which the offer or solicitation is unlawful.

BASIS OF PRESENTATION

Our fiscal year ends on March 31 of each year. Fiscal years are identified in this prospectus supplement and the accompanying prospectus according to the calendar year in which they end. For example, references to "fiscal year 2011" or similar references refer to the fiscal year ended March 31, 2011.

On November 5, 2010, we filed with the Secretary of State of Delaware a Certificate of Amendment to our Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio equal to one-for-three (the "Reverse Stock Split"). All equity, share and per share data in this prospectus supplement gives effect to the Reverse Stock Split, unless otherwise indicated.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary does not contain all of the information that you should consider before investing in our common stock. You should read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein carefully, including the matters discussed under the caption "Risk Factors" and the detailed information and financial statements, in each case, included or incorporated by reference in this prospectus supplement and the accompanying prospectus.

Unless the context otherwise indicates, the terms "Company," "we," "us" and "our" and similar terms refer to KEMET Corporation and its direct and indirect subsidiaries on a consolidated basis. References to our "common stock" refer to the common stock of KEMET Corporation.

Our Company

We are a leading global manufacturer of a wide variety of capacitors. Our product offerings include tantalum, multilayer ceramic, solid and electrolytic aluminum and film and paper capacitors. Capacitors are fundamental components of most electronic circuits and are found in communication systems, data processing equipment, personal computers, cellular phones, automotive electronic systems, defense and aerospace systems, consumer electronics, power management systems and many other electronic devices and systems. Capacitors are typically used to filter out interference, smooth the output of power supplies, block the flow of direct current while allowing alternating current to pass and for many other purposes. We manufacture a broad line of capacitors in many different sizes and configurations using a variety of raw materials. Our product line consists of over 250,000 distinct part configurations distinguished by various attributes, such as dielectric (or insulating) material, configuration, encapsulation, capacitance level and tolerance, performance characteristics and packaging. Most of our customers have multiple capacitance requirements, often within each of their products. Our broad product offering allows us to meet the majority of those needs independent of application and end use. In fiscal years 2009, 2010 and 2011 we shipped approximately 32 billion, 31 billion and 35 billion capacitors, respectively. We believe the medium-to-long term demand for the various types of capacitors we offer will continue to grow on a regional and global basis due to a variety of factors, including increasing demand for and complexity of electronic products, growing demand for technology in emerging markets and the ongoing development of new solutions for energy generation and conservation.

We operate 22 production facilities in Europe, Mexico, China, the United States and Indonesia and employ nearly 11,000 employees worldwide. Our customer base includes most of the world's major electronics original equipment manufacturers ("OEMs") (including Alcatel-Lucent USA Inc., Apple Inc., Bosch Group, Cisco Systems, Inc., Continental AG, Dell Inc., Hewlett-Packard Company, International Business Machines Corporation, Intel Corporation, Motorola, Inc., Nokia Corporation and TRW Automotive Holdings), electronics manufacturing services providers ("EMSs") (including Celestica Inc., Elcoteq SE, Flextronics International Ltd., Jabil Circuit, Inc. and Sanmina-SCI Corporation) and electronics distributors (including TTI, Inc., Arrow Electronics, Inc. and Avnet, Inc.). For fiscal years 2010 and 2011, our consolidated sales were \$736.3 million and \$1,018.5 million, respectively.

In connection with a credit facility (as subsequently amended and restated, the "Platinum Credit Facility") we entered into in May 2009 with K Financing, LLC ("K Financing"), we issued a warrant (the "Platinum Warrant") to K Financing, which was subsequently transferred to its affiliate K Equity, LLC ("K Equity"). K Financing and K Equity are each affiliates of Platinum Equity Capital Partners II, L.P. Giving effect to the Reverse Stock Split, the Platinum Warrant entitled K Equity to purchase up to 26,848,484 shares of our common stock, subject to certain adjustments. On December 20, 2010, K Equity sold a portion of the Platinum Warrant equal to 10,893,608 shares, which was exercised on a net exercise basis and the resulting 10,000,000 shares of which were sold by

Table of Contents

underwriters in an offering. The Platinum Warrant is currently immediately exercisable for the remaining 15,954,876 shares at an exercise price of \$1.04999 per share, which as of May 20, 2011 represents 30.0% of our common equity on a post exercise basis. In connection with the issuance of the Platinum Warrant, we entered into an Investor Rights Agreement (the "Investor Rights Agreement") with K Financing, which subsequently transferred its rights thereunder to K Equity. The Investor Rights Agreement provides K Equity with registration rights, along with certain preemptive, information and board observation rights. Following the offering that is the subject of this prospectus supplement, K Equity will have the right to make two demand registrations under the Investor Rights Agreement.

Our Industry

Capacitors are electronic components consisting of conducting materials separated by a dielectric, or insulating material, which allows a capacitor to act as a filtering or an energy storage/delivery device. We manufacture a full line of capacitors, including tantalum, multilayer ceramic, film, paper, and aluminum (both wet electrolytic and solid polymer). We manufacture these types of capacitors in many different sizes and configurations. These configurations include surface-mount capacitors, which are attached directly to the circuit board without lead wires, leaded capacitors, which are attached to the circuit board using lead wires, and chassis-mount and other pin-through-hole board-mount capacitors, which utilize attachment methods such as screw terminal and snap-in.

The choice of capacitor dielectric is driven by the engineering specifications and the application of the component product into which the capacitor is incorporated. Product design engineers in the electronics industry typically select capacitors on the basis of capacitance levels, voltage requirements, size and cost. Tantalum and ceramic capacitors are commonly used in conjunction with integrated circuits, and the same circuit may, and frequently does, contain both ceramic and tantalum capacitors. Generally, ceramic capacitors are more cost-effective at lower capacitance values, tantalum capacitors are more cost-effective at higher capacitance values, and solid aluminum capacitors can be more effective in applications requiring intermediate capacitance and very low equivalent series resistance. Although film, paper and electrolytic capacitors can also be used to support integrated circuits, a significant area of usage is the field of power electronics to provide energy for applications such as motor start, power factor correction, pulse power, electromagnetic interference filtering and safety.

Capacitors account for the largest market within the passive component product grouping. According to a December 2010 report by Paumanok Publications, Inc. ("Paumanok"), a marketing research firm concentrating on the passive components industry, the global capacitor market in fiscal year 2010 consisted of \$15.1 billion in revenues and 1.3 trillion units. Although this represents a significant downturn in revenue and unit sales volume as compared to the high water mark set in fiscal year 2008 of \$18.0 billion and 1.4 trillion units, according to the Paumanok report the global capacitor market is expected to improve substantially and achieve revenue and unit sales volume of \$18.5 billion and 1.5 trillion units in fiscal year 2011. This would represent revenue and unit volume increases of 23% and 15%, respectively, from fiscal year 2010 to fiscal year 2011. According to Paumanok, the tantalum, ceramic, aluminum and paper and plastic film capacitor markets were approximately \$1.8 billion, \$7.4 billion, \$3.3 billion and \$2.3 billion, respectively, in fiscal year 2010, and they are expected to grow to an estimated \$2.5 billion, \$9.1 billion, \$3.7 billion and \$2.6 billion, respectively, in fiscal year 2011.

Because capacitors are a fundamental component of electronic circuits, demand for capacitors tends to reflect the general demand for electronic products, as well as integrated circuits, which, though

Table of Contents

cyclical, continues to grow. We believe that growth in the electronics market and the resulting growth in demand for capacitors will be driven primarily by a number of recent trends which include:

the development of new products and applications, such as global positioning devices, alternative and renewable energy systems, hybrid transportation systems, electronic controls for engines and industrial machinery, smart phones and mobile personal computers;

the increase in the electronic content of existing products, such as home appliances, medical equipment and automobiles;

consumer desire for mobility and connectivity; and

the enhanced functionality, complexity and convergence of electronic devices that use state-of-the-art microprocessors.

Business Segments

We are organized into three business groups: the Tantalum Business Group, the Ceramic Business Group and the Film and Electrolytic Business Group. Each business group is responsible for the operations of certain manufacturing sites as well as all related research and development efforts. The sales and marketing functions are shared by each of the business groups, the cost of which are allocated to the business groups based on their respective budgeted net sales.

Tantalum Business Group

Our Tantalum Business Group is a leading manufacturer of solid tantalum and aluminum capacitors. Over the past fifty years, we have made significant investments in our tantalum capacitor business and, based on net sales, we believe that we are the largest tantalum capacitor manufacturer in the world. We believe we have one of the broadest lines of tantalum product offerings and are one of the leaders in the growing market for high-frequency surface mount tantalum and aluminum polymer capacitors. For fiscal years 2010 and 2011, our Tantalum Business Group had consolidated net sales of \$343.8 million and \$486.6 million, respectively.

Our Tantalum Business Group's broad product portfolio, industry leading process and materials technology, global manufacturing base and on-time delivery capabilities allow us to serve a wide range of customers in a diverse group of end markets, including computing, telecommunications, consumer, medical, military, automotive and general industries. This business group operates five manufacturing sites in Portugal, Mexico and China and maintains a product innovation center in the United States. Our Tantalum Business Group employs over 4,700 employees worldwide.

Ceramic Business Group

Our Ceramic Business Group offers an extensive line of multilayer ceramic capacitors in a variety of sizes and configurations. We are one of the two leading ceramic capacitor manufacturers in the United States and among the ten largest manufacturers worldwide. For fiscal years 2010 and 2011, our Ceramic Business Group had consolidated net sales of \$171.2 million and \$210.5 million, respectively.

Our Ceramic Business Group's high temperature and capacitance-stable product lines provide us with what we believe to be a significant advantage over many of our competitors, especially in high reliability markets, such as medical, industrial, defense and aerospace. Our other significant end markets include computing, telecommunications, automotive and general industries. This business group operates two manufacturing sites in Mexico and a finishing plant in China and maintains a product innovation center in the United States. Our Ceramic Business Group employs over 2,500 employees worldwide.

Table of Contents

Film and Electrolytic Business Group

Our Film and Electrolytic Business Group produces film, paper and wet aluminum electrolytic capacitors. We entered this market through the acquisitions of Evox Rifa Group Oyj ("Evox Rifa") and Arcotronics Italia S.p.A. ("Arcotronics") in fiscal year 2008. Film capacitors are preferred where high reliability is a determining factor, while wet aluminum electrolytic capacitors are preferred when high capacitance at a reasonable cost is required. We are one of the world's largest suppliers of film and one of the leaders in wet aluminum electrolytic capacitors for high-value custom applications. For fiscal years 2010 and 2011, our Film and Electrolytic Business Group had consolidated net sales of \$221.4 million and \$321.4 million, respectively.

Our Film and Electrolytic Business Group primarily serves the industrial, automotive, consumer and telecom markets. We believe that our Film and Electrolytic Business Group's product portfolio, technology and experience position us to significantly benefit from the continued growth in alternative energy solutions. We operate 15 film and electrolytic manufacturing sites throughout Europe, Asia and Mexico and operate a product innovation center in Sweden. In June 2011, we expect to begin the production of power film capacitors in the United States to support alternative energy products and emerging green technologies, such as hybrid electric drive vehicles. In fiscal year 2013, we expect to begin production of electrolytic capacitors to further support alternative energy products and emerging green technologies. Our Film and Electrolytic Business Group employs over 2,900 employees worldwide.

In September 2009, we announced plans to reduce operating costs by consolidating the manufacturing of certain products and by implementing other lean initiatives. Manufacturing consolidation plans include the movement of certain standard, high-volume products to lower cost manufacturing locations. We anticipate the plans will be completed in the second half of fiscal year 2014; however, the length of time required to complete the restructuring activities is dependent upon a number of factors, including the ability to continue to manufacture products required to meet customer demand while at the same time relocating certain production lines and the progress of discussions with union and government representatives in certain European locations concerning the optimization of product mix and related headcount requirements in such manufacturing locations. In April 2010, we reported that we reached an agreement with three labor unions in Italy and with the regional government in Emilia Romagna, Italy to proceed with our planned restructuring process. In addition, in July 2010, we relocated our Amsterdam Hub facility from the Netherlands to the Czech Republic as part of our cost reduction measures. This relocation will allow shipping lane optimization and customer consolidation (bi-weekly or weekly) for all import shipments. Our European manufacturing plants will continue to ship direct to 'local' customers (which are customers located in the same country as the plant). During the remainder of this restructuring effort, we expect to spend between \$28 million and \$33 million, primarily in our Film and Electrolytic Business Group. We expect our restructuring plan to result in a reduction in our operating cost structure in Europe of approximately \$3 million in fiscal year 2012 compared to fiscal year 2011. We anticipate that benefits from the restructuring efforts will continue to grow during fiscal years 2013 and 2014. During fiscal year 2014 we expect to realize the full potential of the restructuring plan, achieving total annualized operational cost reductions of approximately \$24 million versus fiscal year 2011.

Our Competitive Strengths

We believe that we benefit from the following competitive strengths:

Strong Customer Relationships. We have a large and diverse customer base. We believe that our persistent emphasis on quality control and history of performance establishes loyalty with OEMs, EMSs and distributors. Our customer base includes most of the world's major electronics OEMs (including Alcatel-Lucent USA, Inc., Apple Inc., Bosch Group, Cisco Systems, Inc., Continental AG, Dell Inc.,

Table of Contents

Hewlett-Packard Company, International Business Machines Corporation, Intel Corporation, Motorola, Inc., Nokia Corporation and TRW Automotive Holdings), EMSs (including Celestica Inc., Elcoteq SE, Flextronics International Ltd., Jabil Circuit, Inc. and Sanmina-SCI Corporation) and distributors (including TTI, Inc., Arrow Electronics, Inc. and Avnet, Inc.). Our strong, extensive and efficient worldwide distribution network is one of our differentiating factors. We believe our ability to provide innovative and flexible service offerings, superior customer support and focus on speed-to-market result in a more rewarding customer experience, earning us a high degree of customer loyalty.

Breadth of Our Diversified Product Offering and Markets. We believe that we have the most complete line of primary capacitor types, across a full spectrum of dielectric materials including tantalum, ceramic, solid and electrolytic aluminum, film and paper. As a result, we believe we can satisfy virtually all of our customers' capacitance needs, thereby strengthening our position as their supplier of choice. We sell our products into a wide range of different end markets, including computing, industrial, telecommunications, transportation, consumer, defense and healthcare markets across all geographic regions. No single end market segment accounted for more than 30% and only one customer, TTI, Inc., accounted for more than 10% of our net sales in fiscal year 2011. Our largest customer is a distributor, and no single end use customer accounted for more than 5% of our net sales in fiscal year 2011. We believe that well-balanced product, geographic and customer diversification help us mitigate some of the negative financial impact through economic cycles.

Leading Market Positions and Operating Scale. Based on net sales, we believe that we are the largest manufacturer of tantalum capacitors in the world and one of the largest manufacturers of direct current film capacitors in the world and have a significant market position in the specialty ceramics and custom wet aluminum electrolytic markets. We believe that our leading market positions and operating scale allow us to realize production efficiencies, leverage economies of scale and capitalize on growth opportunities in the global capacitor market.

Strong Presence in Specialty Products. We engage in design collaboration with our customers in order to meet their specific needs and provide them with customized products satisfying their engineering specifications. During fiscal years 2010 and 2011, specialty products accounted for 30% and 37% of our revenue, respectively. By allocating an increasing portion of our management resources and research and development investment to specialty products, we have established ourselves as one of the leading innovators in this fast-growing, emerging segment of the market, which includes healthcare, renewable energy, telecom infrastructure and oil and gas. For example, in August 2009, we were selected as one of thirty companies to receive a grant from the Department of Energy. Our \$15.1 million award will enable us to produce film and electrolytic capacitors within the United States to support alternative energy products and emerging green technologies, such as hybrid electric drive vehicles. Producing these parts in the United States will allow us to compete effectively in the alternative energy market in North America and South America.

Low-Cost Production. We believe we have some of the lowest-cost production facilities in the industry. Many of our key customers have relocated their production facilities to Asia, particularly China. We believe our manufacturing facilities in China have low production costs and are in close proximity to the large and growing Chinese market; in addition, we have the ability to increase capacity and change product mix to meet our customers' needs. We believe our operations in Mexico, which are our primary production facilities supporting our North American and, to a larger extent, European customers, are among the most cost-efficient in the world.

Our Brand. Founded by Union Carbide Corporation in 1919 as KEMET Laboratories, we believe that we have a reputation as a high-quality, efficient and affordable partner that sets our customers' needs as the top priority. This has allowed us to successfully attract loyal clientele and enabled us to expand our operations and market share over the past few years. We believe our commitment to

Table of Contents

addressing the needs of the industry in which we operate has differentiated us from our competitors and established us as the "Easy-To-Buy-From" company.

Our People. We believe that we have successfully developed a unique corporate culture based on innovation, customer focus and commitment. We have a strong, highly-experienced and committed team in each of our markets. Many of our professionals have developed unparalleled experience in building leadership positions in new markets, as well as successfully integrating acquisitions. Our 16-member management team has an average of over 12 years of experience with us and an average of over 25 years of experience in the manufacturing industry.

Business Strategy

Our strategy is to use our position as a leading, high-quality manufacturer of capacitors to capitalize on the increasingly demanding requirements of our customers. Key elements of our strategy include:

One KEMET Campaign. We continue to focus on improving our business capabilities through various initiatives that all fall under our One KEMET campaign. The One KEMET campaign aims to ensure that we as a company are focused on the same goals and working with the same processes and systems to ensure a consistent quality and level of service. This effort was launched to ensure that as we continue to grow we not only remain grounded in our core principles but that we use those principles, operating procedures and systems as the foundation from which to expand. These initiatives include our global Oracle software implementation which is on schedule, our Lean and Six Sigma culture evolution and our global customer accounts management system which is now in place and growing.

Develop Our Significant Customer Relationships and Industry Presence. We intend to continue to be responsive to our customers' needs and requirements and to make order entry and fulfillment easier, faster, more flexible and more reliable for our customers, by focusing on building products around customers' needs, by giving decision making authority to customer-facing personnel and by providing purpose-built systems and processes, such as our Easy-To-Buy-From order entry system.

Continue to Pursue Low-Cost Production Strategy. We are actively pursuing measures that will allow us to maintain our position as a low-cost producer of capacitors with facilities close to our customers. We have shifted and will continue to shift production to low-cost locations in order to reduce material and labor costs. Additionally, we are focused on developing more cost-efficient manufacturing equipment and processes, designing manufacturing plants for more efficient production and reducing work-in-process ("WIP") inventory by building products from start to finish in one factory. Furthermore, we are implementing the Lean and Six Sigma methodology to drive towards zero product defects so that quality remains a given in the minds of our customers.

Leverage Our Technological Competence and Expand Our Leadership in Specialty Products. We continue to leverage our technological competence to introduce new products in a timely and cost-efficient manner and generate an increasing portion of our sales from new and customized solutions to meet our customers' varied and evolving capacitor needs as well as to improve financial performance. We believe that by continuing to build on our strength in the higher growth and higher margin specialty segments of the capacitor market, we will be well-positioned to achieve our long-term growth objectives while also improving our profitability. During fiscal year 2011, we introduced 14,947 new products of which 129 were first to market, and specialty products accounted for 37% of our revenue over this period.

Further Expand Our Broad Capacitance Capabilities. We define ourselves as "The Capacitance Company" and strive to be the supplier of choice for all our customers' capacitance needs across the

Table of Contents

full spectrum of dielectric materials including tantalum, ceramic, solid and electrolytic aluminum, film and paper. While we believe we have the most complete line of capacitor technologies across these primary capacitor types, we intend to continue to research and pursue additional capacitance technologies and solutions in order to maximize the breadth of our product offerings.

Selectively Target Complementary Acquisitions. We expect to continue to evaluate and pursue strategic acquisition opportunities, some of which may be significant in size, which would enable us to enhance our competitive position and expand our market presence. Our strategy is to acquire complementary capacitor and other related businesses that would allow us to leverage our business model, potentially including those involved in other passive components that are synergistic with our customers' technologies and our current product offerings.

Promote the KEMET Brand Globally. We are focused on promoting the KEMET brand globally by highlighting the high-quality and high reliability of our products and our superior customer service. We will continue to market our products to new and existing customers around the world in order to expand our business. We continue to be recognized by our customers as a leading global supplier. For example, in calendar year 2010, we received the "Supplier Excellence Award" from TTI, Inc., an electronics distributor.

Global Sales & Marketing Strategy. Our motto "Think Global Act Local" describes our approach to sales and marketing. Each of our three sales regions (North America and South America ("Americas"), Europe, Middle East and Africa ("EMEA") and Asia and Pacific Rim ("APAC")) has account managers, field application engineers and strategic marketing managers in the region. In addition, we also have local customer and quality-control support in each region. This organizational structure allows us to respond to the needs of our customers on a timely basis and in their native language. The regions are managed locally and report to a senior manager who is on the KEMET Leadership Team. Furthermore, this organizational structure ensures the efficient communication of our global goals and strategies and allows us to serve the language, cultural and other region-specific needs of our customers.

Summary Risk Factors

We are subject to a number of risks, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations, cash flows and prospects. You should carefully consider these risks, including those highlighted in the section entitled "Risk Factors" in the accompanying prospectus before investing in our common stock. Risks relating to our business include, among others:

adverse economic conditions could impact our ability to realize operating plans if the demand for our products declines, and such conditions could adversely affect our liquidity and ability to continue to operate;

an increase in the cost or decrease in the availability of our principal raw materials could adversely affect profitability;

changes in the competitive environment, including an inability to expand our manufacturing to meet demand or the expansion of production by our competitors, could harm our business;

we may experience difficulties, delays or unexpected costs in completing our restructuring plan;

we must continue to develop innovative products to maintain relationships with our customers and to offset potential price erosion in older products; and

we must consistently reduce the total costs of our products to remain competitive.

Table of Contents

Corporate Information

Our corporate headquarters are located at 2835 Kemet Way, Simpsonville, South Carolina 29681. Our telephone number is (864) 963-6300. Our website is located at <http://www.kemet.com>. None of the information that appears on or is linked to or from our website is incorporated by reference into or is otherwise made a part of this prospectus supplement. Our common stock is traded on the NYSE under the symbol "KEM."

S-8

Table of Contents

THE OFFERING

Issuer	KEMET Corporation
Selling securityholder	K Equity, LLC
Common stock offered by the selling securityholder	7,000,000 shares
Common stock outstanding after the offering	44,146,787 shares
Common stock outstanding on a diluted basis prior to and after the offering	52,421,848 shares
Use of proceeds	We will not receive any proceeds from the sale of shares in this offering. See "Use of Proceeds" in the accompanying prospectus.
Dividend policy	We do not intend to pay dividends on our common stock in the foreseeable future.
NYSE ticker symbol	"KEM"
Risk Factors	You should carefully read and consider the information set forth under "Risk Factors" and all other information set forth in this prospectus supplement and the accompanying prospectus and in the information incorporated by reference herein and therein before investing in our common stock.

The number of shares to be outstanding after consummation of this offering is based on 37,146,787 shares of common stock outstanding as of May 20, 2011 and excludes each of the following:

8,461,592 shares that will remain subject to the Platinum Warrant following the net exercise by the underwriter of the portion of the Platinum Warrant that it will acquire from the selling securityholder in connection with this offering; and

1,564,547 shares subject to outstanding stock options at a weighted average exercise price of \$14.62 per share and 259,795 additional shares of common stock reserved for issuance under our equity incentive plans as of May 20, 2011.

In addition, the number of shares of common stock to be outstanding on a diluted basis, both prior to and after the offering, includes 370,496 shares of stock options that would be "in-the-money," as well as the Platinum Warrant, each of which is calculated on a net exercise basis at a price per share of our common stock of \$15.95 (which was the closing price of the common stock on the NYSE on May 23, 2011).

The underwriter will exercise the portion of the Platinum Warrant acquired by it in connection with this offering on a net exercise basis. Pursuant to the net exercise feature of the Platinum Warrant, the holder of the warrant is able to pay the exercise price by having us withhold from the shares of our common stock that would otherwise be delivered to the holder a number of shares equal in value to the aggregate exercise price of the portion of the warrant being exercised. The number of shares required to be forfeited in connection with a net exercise is based on the closing bid price of our common stock on the NYSE on the trading day prior to exercise, which will be the last trading day prior to the closing date of this offering. The portion of the Platinum Warrant to be acquired by the underwriter will be exercisable for an amount of shares such that, following the net exercise thereof,

Table of Contents

the underwriter will acquire 7,000,000 shares of our common stock for offer and sale to the public as set forth in this prospectus supplement.

All net exercise amounts in this prospectus supplement assume a closing bid price on the trading day prior to exercise of \$15.95, which was the closing bid price of the common stock on the NYSE on May 23, 2011. The actual closing bid price on the last trading day prior to the closing date may be greater or less than the \$15.95 that has been assumed for indicative purposes in this prospectus supplement, which would result in a change in the amount of shares remaining subject to the Platinum Warrant following the completion of this offering. See "Selling Securityholder" and "Underwriting" in this prospectus supplement for additional information on the net exercise of the Platinum Warrant by the underwriter in connection with this offering.

Table of Contents**SUMMARY HISTORICAL AND OTHER FINANCIAL DATA**

The following table presents our summary historical and other financial data, which is condensed and may not contain all of the information that you should consider before you invest in our common stock. Our summary consolidated financial data as of and for the year ended March 31, 2009 have been derived from our audited consolidated financial statements, which were audited by KPMG LLP, an independent registered public accounting firm. Our summary consolidated financial data as of and for the years ended March 31, 2010 and March 31, 2011 have been derived from our audited consolidated financial statements, which were audited by Ernst & Young LLP, an independent registered public accounting firm. Our historical results are not necessarily indicative of our operating results to be expected in the future.

You should read the following information in conjunction with the information contained in "Selected Historical Consolidated Financial Data" in this prospectus supplement and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K and our consolidated financial statements, including the related notes, incorporated into this prospectus supplement.

	Fiscal Year Ended March 31,		
	2009	2010	2011
	(in thousands, except per share data)		
Income Statement Data:			
Net sales	\$ 804,385	\$ 736,335	\$ 1,018,488
Operating costs and expenses:			
Cost of sales	736,551	611,638	752,846
Selling, general and administrative expenses	93,505	86,085	104,607
Research and development	28,956	22,064	25,864
Restructuring charges	30,874	9,198	7,171
Goodwill impairment	174,327		
Write down of long-lived assets	67,624	656	
Net (gain) loss on sales and disposals of assets	(25,505)	(1,003)	(1,261)
Curtailment gains on benefit plans	(30,835)		
Total operating costs and expenses	1,075,497	728,638	889,227
Operating income (loss)	(271,112)	7,697	129,261
Other (income) expense:			
Interest income	(618)	(188)	(218)
Interest expense and amortization of debt discount	29,789	26,008	30,175
Increase in value of warrant		81,088	
Other (income) expense, net	(14,084)	4,121	(4,692)
(Gain) loss on early extinguishment of debt	2,212	(38,921)	38,248
Income (loss) before income taxes	(288,411)	(64,411)	65,748
Income tax expense (benefit)	(3,202)	5,036	2,704
Net income (loss)	\$ (285,209)	\$ (69,447)	\$ 63,044
Net income (loss) per share(1)			
Basic	\$ (10.62)	\$ (2.57)	\$ 2.11
Diluted(2)	(10.62)	(2.57)	1.22
Selected Business Segment Data:			
Net sales:			
Tantalum	\$ 366,675	\$ 343,797	\$ 486,595
Ceramic	175,916	171,153	210,509

S-11

Table of Contents

	Fiscal Year Ended March 31,		
	2009	2010	2011
	(in thousands, except per share data)		
Film & Electrolytic	261,794	221,385	321,384
Total net sales	\$ 804,385	\$ 736,335	\$ 1,018,488
Operating income (loss):			
Tantalum	\$ 13,318	\$ 28,424	\$ 88,546
Ceramic	(98,694)	24,374	38,791
Film & Electrolytic	(185,736)	(45,101)	2,014
Total operating income (loss):	\$ (271,112)	\$ 7,697	\$ 129,261

Consolidated Balance Sheet

Data:			
Cash and cash equivalents	\$ 39,204	\$ 79,199	\$ 152,051
Total assets	714,151	740,961	884,309
Total debt, net of discount	306,746	249,509	273,316
Total stockholders' equity	240,039	284,272	359,753
Other Financial Data:			
Depreciation and amortization(3)	\$ 58,125	\$ 52,644	\$ 52,932
Capital expenditures	30,541	12,921	34,989

- (1) Net income (loss) per share gives effect to the Reverse Stock Split.
- (2) Securities exercisable for common stock were not included in the computation of diluted loss per share in certain periods because the impact would have been anti-dilutive.
- (3) Excludes debt issuance costs.

Table of Contents

RISK FACTORS

Our business is subject to significant risks. You should carefully consider the risks and uncertainties described in this prospectus supplement and the section entitled "Risk Factors" in the accompanying prospectus and the documents incorporated by reference herein and therein which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future (see "Incorporation of Certain Information by Reference"). The risks and uncertainties described in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein are not the only ones facing us. Additional risks and uncertainties that we do not presently know about or that we currently believe are not material may also adversely affect our business. If any of the risks and uncertainties described in this prospectus supplement and the accompanying prospectus or the documents incorporated by reference herein or therein actually occur, our business, financial condition and results of operations could be adversely affected in a material way. This could cause the trading price of our common stock to decline, perhaps significantly, and you may lose part or all of your investment.

S-13

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain or incorporate by reference documents containing certain statements that are, or may be deemed to be, "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Actual outcomes and results may differ materially from those expressed in, or implied by, our forward-looking statements. Words such as "expects," "anticipates," "believes," "estimates" and other similar expressions or future or conditional verbs such as "will," "should," "would" and "could" are intended to identify such forward-looking statements. Readers should not rely solely on the forward-looking statements and should consider all uncertainties and risks throughout this prospectus supplement and the accompanying prospectus, including those set forth under "Risk Factors." The statements are representative only as of the date they are made, and we undertake no obligation to update any forward-looking statement.

All forward-looking statements, by their nature, are subject to risks and uncertainties. Our actual future results may differ materially from those set forth in our forward-looking statements. We face risks that are inherent in the businesses and the market places in which we operate. While management believes these forward-looking statements are accurate and reasonable, uncertainties, risks and factors, including those described below and under "Risk Factors," could cause actual results to differ materially from those reflected in the forward-looking statements.

Factors that may cause the actual outcome and results to differ materially from those expressed in, or implied by, these forward-looking statements include, but are not necessarily limited to the following:

adverse economic conditions could impact our ability to realize operating plans if the demand for our products declines, and such conditions could adversely affect our liquidity and ability to continue to operate;

adverse economic conditions could cause the write down of long-lived assets;

an increase in the cost or a decrease in the availability of our principal raw materials;

changes in the competitive environment;

uncertainty of the timing of customer product qualifications in heavily regulated industries;

economic, political or regulatory changes in the countries in which we operate;

difficulties, delays or unexpected costs in completing the restructuring plan;

inability to attract, train and retain effective employees and management;

inability to develop innovative products to maintain customer relationships and offset potential price erosion in older products;

exposure to claims alleging product defects;

the impact of laws and regulations that apply to our business, including those relating to environmental matters;

Edgar Filing: KEMET CORP - Form 424B3

volatility of financial and credit markets affecting our access to capital;

needing to reduce the total costs of our products to remain competitive;

potential limitation on the use of net operating losses to offset possible future taxable income;

restrictions in our debt agreements that limit our flexibility in operating our business;

S-14

Table of Contents

additional exercise of the warrant by K Equity, which could potentially result in the existence of a significant stockholder who could seek to influence our corporate decisions; and

recent events in Japan could negatively impact our sales and supply chain.

Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and also could cause actual results to differ materially from those included, contemplated or implied by the forward-looking statements made, or incorporated by reference, in this prospectus supplement and the accompanying prospectus, and the reader should not consider the above list of factors to be a complete set of all potential risks or uncertainties.

S-15

Table of Contents**CAPITALIZATION**

The following table sets forth our consolidated cash and cash equivalents and capitalization as of March 31, 2011.

You should read the following information in conjunction with the information contained in "Selected Historical Consolidated Financial Data" and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K and our consolidated financial statements, including the related notes, incorporated into this prospectus supplement.

	As of March 31, 2011 (dollars in thousands)
Cash and cash equivalents(1)	\$ 152,051
Long-term debt (including current portion):	
2.25% Convertible Senior Notes due 2026(2)	\$ 39,012
10.50% Senior Notes due 2018(3)	227,208
Other debt(4)	7,096
Total long-term debt (including current portion)	273,316
Stockholders' equity:	
Common stock, par value \$0.01, authorized 300,000,000 shares; issued 39,508,380 shares(5)	395
Additional paid-in capital(5)	479,322
Retained deficit	(87,745)
Accumulated other comprehensive income	22,555
Treasury stock, at cost (2,370,077 shares)	(54,774)
Total stockholders' equity	359,753
Total capitalization	\$ 633,069

-
- (1) We expect to use approximately \$200 thousand of our cash and cash equivalents to fund fees and expenses incurred by us in connection with this offering.
- (2) Excludes the effect of approximately \$1.6 million of debt discount.
- (3) Excludes the effect of approximately \$2.8 million of original issue discount.
- (4) Relates to other indebtedness of certain of our foreign subsidiaries.
- (5) We expect that as a result of this offering, common stock will increase by \$70 thousand and that additional paid-in capital will decrease by \$70 thousand to reflect the increase in the number of shares issued and outstanding.

Table of Contents**SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA**

Our selected historical consolidated financial data as of and for the years ended March 31, 2007, 2008, 2009, 2010 and 2011 have been derived from our audited consolidated financial statements. Our historical results are not necessarily indicative of our operating results to be expected in the future. The following financial data is qualified by reference to and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K and the financial statements and related notes incorporated into this prospectus supplement.

	Fiscal Years Ended March 31,				
	2007	2008	2009	2010	2011
	(in thousands, except per share data)				
Income Statement Data:					
Net sales	\$ 658,714	\$ 850,120	\$ 804,385	\$ 736,335	\$ 1,018,488
Operating costs and expenses:					
Cost of sales	517,443	696,806	736,551	611,638	752,846
Selling, general and administrative expenses	89,450	97,639	93,505	86,085	104,607
Research and development	33,385	35,699	28,956	22,064	25,864
Restructuring charges	12,572	25,341	30,874	9,198	7,171
Goodwill impairment			174,327		
Write down of long-lived assets		4,218	67,624	656	
Net (gain) loss on sales and disposals of assets	(1,214)	(702)	(25,505)	(1,003)	(1,261)
Curtailment gains on benefit plans			(30,835)		
Total operating costs and expenses	651,636	859,001	1,075,497	728,638	889,227
Operating income (loss)	7,078	(8,881)	(271,112)	7,697	129,261
Other (income) expense:					
Interest income	(6,283)	(6,061)	(618)	(188)	(218)
Interest expense and amortization of debt discount	9,865	21,696	29,789	26,008	30,175
Increase in value of warrant				81,088	
Other (income) expense, net	(1,273)	(4,412)	(14,084)	4,121	(4,692)
(Gain) loss on early extinguishment of debt			2,212	(38,921)	38,248
Income (loss) before income taxes	4,769	(20,104)	(288,411)	(64,411)	65,748
Income tax expense (benefit)	563	5,111	(3,202)	5,036	2,704
Net income (loss)	\$ 4,206	\$ (25,215)	\$ (285,209)	\$ (69,447)	\$ 63,044
Net income (loss) per share(1)					
Basic	\$ 0.15	\$ (0.91)	\$ (10.62)	\$ (2.57)	\$ 2.11
Diluted(2)	0.15	(0.91)	(10.62)	(2.57)	1.22
Balance Sheet Data:					
Cash and cash equivalents	\$ 212,202	\$ 81,383	\$ 39,204	\$ 79,199	\$ 152,051
Total assets	942,373	1,250,999	714,151	740,961	884,309
Total debt, net of discounts	215,931	377,741	306,746	249,509	273,316
Total stockholders' equity(3)	577,419	576,831	240,039	284,272	359,753

(1) Net income (loss) per share gives effect to the Reverse Stock Split.

Edgar Filing: KEMET CORP - Form 424B3

- (2) Securities exercisable for common stock were not included in the computation of diluted loss per share in certain periods because the impact would have been anti-dilutive.
- (3) We did not pay dividends during any of these periods.

S-17

Table of Contents**SELLING SECURITYHOLDER****Beneficial Ownership**

This prospectus supplement relates to the sale of up to 7,000,000 shares of our common stock which are subject to the Platinum Warrant. K Financing received the Platinum Warrant in connection with the entry into the Platinum Credit Facility among us, K Financing and certain of our subsidiaries. The Platinum Warrant was subsequently transferred to K Equity. On December 20, 2010, K Equity sold a portion of the Platinum Warrant equal to 10,893,608 shares, which was exercised on a net exercise basis, and the resulting 10,000,000 shares of which were sold by underwriters in an offering. The Platinum Warrant is currently immediately exercisable for the remaining 15,954,876 shares at an exercise price of \$1.04999 per share. Pursuant to its terms, the Platinum Warrant may be exercised on a net exercise basis or for cash. The underwriter will exercise the portion of the Platinum Warrant it acquires in connection with this offering on a net exercise basis.

The following table sets forth information with respect to the beneficial ownership of our common stock held as of May 23, 2011 by the selling securityholder, the number of shares being offered hereby and information with respect to shares to be beneficially owned by the selling securityholder following net exercise of the portion of the Platinum Warrant to be acquired by the underwriter, assuming all the shares covered by this prospectus supplement are sold by the underwriter. The calculations set forth below assume a closing bid price on the trading day prior to exercise of \$15.95, which was the closing bid price of the common stock on the NYSE on May 23, 2011. The actual closing bid price on the last trading day prior to the closing date may be greater or lesser than the \$15.95 that has been assumed for indicative purposes in this prospectus supplement, which would result in a change in the amount of shares remaining subject to the Platinum Warrant following the completion of this offering. The percentage ownership before the offering is based on 37,146,787 shares of our common stock outstanding as of May 20, 2011 and the percentage ownership after the offering is based on 44,146,787 shares of our common stock outstanding immediately after the completion of the offering. The numbers set forth below concerning the number and percentage of shares owned after the offering are subject to change. See "Prospectus Supplement Summary The Offering."

Name	Shares Beneficially Owned Prior to the Offering		Shares Offered Hereby	Shares Beneficially Owned After the Offering(1)	
	Number	Percentage		Number	Percentage
K Equity, LLC(2)	15,954,876	30.0%	7,000,000	8,461,592	16.1%

(1) Reflects 493,284 shares forfeited pursuant to the net exercise provisions of the Platinum Warrant.

(2) K Holdings, LLC ("K Holdings") is the sole member of K Equity; Platinum Equity Capital Partners II, L.P. ("PECP II") is the controlling member of K Holdings; Platinum Equity Partners II, LLC ("Platinum Partners") is the general partner of PECP II; Platinum Equity Investment Holdings II, LLC ("Platinum Investment") is the senior managing member of Platinum Partners; Platinum Equity, LLC ("Platinum Equity") is the sole member of Platinum Investment; and Tom Gores, a natural person, is the ultimate beneficial owner and Chairman of Platinum Equity. Each of the foregoing may be deemed to have shared power to direct the voting and disposition of the Platinum Warrant (as well as the shares of common stock underlying the Platinum Warrant) held by K Equity. Each of the foregoing disclaims beneficial ownership of the Platinum Warrant (as well as the shares of common stock underlying the Platinum Warrant) except to the extent of their respective pecuniary interest therein. The principal place of business and principal office of each of the foregoing is 360 North Crescent Drive, South Building, Beverly Hills, California 90210.

Table of Contents

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS

The following is a general discussion of certain material U.S. federal income and estate tax considerations to holders of our common stock. This discussion is a summary and does not consider all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular investment circumstances or to certain types of holders subject to special tax rules, including partnerships and other entities treated as partnerships for U.S. federal income tax purposes, banks, financial institutions or other financial services entities, broker-dealers, insurance companies, tax-exempt organizations, regulated investment companies, real estate investment trusts, retirement plans, individual retirement accounts or other tax-deferred accounts, persons who use or are required to use mark-to-market accounting, persons that hold shares of our common stock as part of a "straddle," a "hedge" or a "conversion transaction," investors in partnerships and other pass-through entities, U.S. Holders (as defined below) with a functional currency other than the U.S. dollar, non-U.S. Holders engaged in a U.S. trade or business that use a functional currency other than the U.S. dollar, persons to whom the constructive sale or constructive ownership rules apply, certain former citizens or permanent residents of the U.S., individuals who reside in, and entities created or organized under the laws of, any territory or possession of the U.S. and persons subject to the alternative minimum tax. This discussion also contains only a limited discussion of U.S. estate tax considerations and does not address any non-U.S. tax considerations or any U.S. federal gift, state or local tax considerations. This discussion assumes that holders hold their shares as "capital assets" within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended (the "Code") (generally, for investment). This discussion is based on the Code and applicable U.S. Treasury Regulations, rulings, administrative pronouncements and decisions as of the date hereof, all of which are subject to change or differing interpretations at any time with possible retroactive effect.

This summary is not binding on the Internal Revenue Service (the "IRS"). We have not sought any ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS would not assert, or that a court would not sustain, a position contrary to such statements and conclusions.

EACH HOLDER SHOULD CONSULT ITS TAX ADVISOR REGARDING THE SPECIFIC U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSIDERATIONS OF OWNING AND DISPOSING OF OUR COMMON STOCK.

U.S. Holder and Non-U.S. Holder Defined

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of shares of our common stock (other than a partnership) that is:

a citizen or individual resident of the United States,

a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized, or treated as created or organized, in or under the laws of the United States, any State thereof or the District of Columbia,

an estate the income of which is subject to U.S. federal income taxation regardless of its source, or

a trust (1) if a court within the United States is able to exercise primary supervision over the trust's administration and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Table of Contents

For purposes of this discussion, a "Non-U.S. Holder" is a beneficial owner of our common shares that is neither a U.S. Holder under the definition above nor a partnership or other entity or arrangement treated as a partnership for U.S. federal income tax purposes.

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner and the activities of the partnership. In this event, the partner and partnership are urged to consult their tax advisors.

Consequences to U.S. Holders

Dividends

As discussed under the section entitled "Dividend Policy" above, we do not currently anticipate paying any dividends for the foreseeable future. In the event that we do make a distribution of cash or property with respect to our common stock, any such distribution will be taxable as a dividend for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). A U.S. Holder generally will be subject to U.S. federal income tax on any dividends received in respect of our common stock at a maximum federal income tax rate of 15% if the U.S. Holder is an individual and certain holding period and other requirements are satisfied, and a maximum federal income tax rate of 35% otherwise (subject to any applicable dividends received deduction in the case of a corporate U.S. Holder). If the amount of a distribution exceeds our current and accumulated earnings and profits, such excess will be allocated ratably among each share of common stock with respect to which the distribution is paid and treated first as a tax-free return of capital to the extent of the U.S. Holder's adjusted tax basis in each such share, and thereafter as capital gain from a sale or other disposition of each such share of common stock that is taxed to a U.S. Holder as described below.

Under current law, the 15% maximum federal income tax rate on certain dividends received by individual U.S. Holders and the 35% maximum federal income tax rate on other dividends received by individual U.S. Holders are scheduled to expire effective for taxable years beginning after December 31, 2012, and dividends received by individuals in subsequent taxable years are scheduled to be taxed at a maximum federal income tax rate of 39.6%.

Gain on Disposition of Common Stock

A U.S. Holder that sells or otherwise disposes of our common stock in a taxable transaction will recognize capital gain or loss equal to the amount of cash plus the fair market value of property received in exchange for the common stock minus the U.S. Holder's adjusted tax basis in the common stock. Any capital gain or loss recognized by the U.S. Holder will be long-term capital gain or loss if the U.S. Holder has held our common stock for more than one year at the time of the sale or other disposition and short-term capital gain or loss otherwise. Long-term capital gains recognized by non-corporate taxpayers are taxable under current law at a maximum federal income tax rate of 15%. Long-term capital gains recognized by corporations and short-term capital gains recognized by corporations or individuals are taxable under current law at a maximum federal income tax rate of 35%. A U.S. Holder's ability to deduct a capital loss is subject to certain limitations.

Under current law, for taxable years beginning after December 31, 2012, the maximum federal income tax rate applicable to long-term capital gains is scheduled to increase to 20% for non-corporate taxpayers and the maximum federal income tax rate applicable to short-term capital gains is scheduled to increase to 39.6% for non-corporate taxpayers.

Table of Contents

New Legislation

Recently enacted legislation requires certain U.S. Holders who are individuals, estates or trusts to pay a 3.8% tax on net investment income, including on dividends and capital gains, for taxable years beginning after December 31, 2012. U.S. Holders are urged to consult their tax advisors regarding the effect, if any, of new U.S. federal income tax legislation on their ownership and disposition of our common stock.

Consequences to Non-U.S. Holders

Dividends

A Non-U.S. Holder generally will be subject to U.S. federal income tax on any dividends received in respect of our common stock at a 30% rate (or such lower rate as prescribed by an applicable income tax treaty as discussed below) unless the dividend is effectively connected with the conduct of a U.S. trade or business. As discussed below, this tax is generally collected through withholding on the dividend payment to the Non-U.S. Holder.

If a Non-U.S. Holder receives a dividend that is effectively connected with the conduct of a U.S. trade or business, then the dividend payment will not be subject to withholding (provided that the certification requirements described below are satisfied). However, the dividends received by the Non-U.S. Holder will be subject to taxes at rates applicable to U.S. Holders. A Non-U.S. Holder that is a corporation may also be subject to a 30% federal branch profits tax (or such lower rate as prescribed by an applicable income tax treaty as discussed below) on after-tax profits effectively connected with a U.S. trade or business to the extent that such after-tax profits are not reinvested and maintained in a U.S. business.

If the amount of a distribution exceeds our current and accumulated earnings and profits, such excess will be allocated ratably among each share of common stock with respect to which the distribution is paid and treated first as a tax-free return of capital to the extent of the Non-U.S. Holder's adjusted tax basis in each such share, and thereafter as capital gain from a sale or other disposition of each such share of common stock that is taxed to the Non-U.S. Holder as described below.

Under current law, the 15% maximum federal income tax rate on certain dividends received by individual Non-U.S. Holders that are effectively connected with the conduct of a U.S. trade or business and the 35% maximum federal income tax rate on other dividends received by individual Non-U.S. Holders and effectively connected with the conduct of a U.S. trade or business are scheduled to expire effective for taxable years beginning after December 31, 2012, and dividends received in subsequent taxable years by individual Non-U.S. Holders and effectively connected with the conduct of a U.S. trade or business are scheduled to be taxed at a maximum federal income tax rate of 39.6%.

Gain on Disposition of Common Stock

A Non-U.S. Holder that sells or otherwise disposes of our common stock in a taxable transaction generally will not be subject to U.S. federal income taxation unless:

gain resulting from the disposition is effectively connected with the conduct of a U.S. trade or business;

the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition, if certain other conditions are met; or

we are or have been a U.S. real property holding corporation, orUSRPHC, as defined in Section 897 of the Code, at any time within the five-year period preceding the disposition or the Non-U.S. Holder's holding period, whichever is shorter, and either the Non-U.S. Holder owned

Table of Contents

more than 5% of our common stock at any time within that period or our common stock has ceased to be traded on an established securities market prior to the beginning of the calendar year in which the disposition occurs.

In general, a corporation is a USRPHC if the fair market value of its "U.S. real property interests" equals or exceeds 50% of the sum of the fair market value of its worldwide (domestic and foreign) real property interests and its other assets used or held for use in a trade or business. We believe that we are not a USRPHC on the date hereof and currently do not anticipate becoming a USRPHC.

If a Non-U.S. Holder's gain is effectively connected with a U.S. trade or business or is subject to tax under the USRPHC rules, the Non-U.S. Holder generally will be taxable in the same manner as a U.S. Holder, although in the former case, a Non-U.S. Holder that is a corporation may also be subject to a 30% (or applicable treaty rate) branch profits tax on after-tax profits effectively connected with a U.S. trade or business to the extent that such after-tax profits are not reinvested and maintained in the U.S. business. A Non-U.S. Holder's ability to use any capital loss to offset other income or gain subject to U.S. federal income taxation is subject to certain limitations.

Under certain circumstances, an individual Non-U.S. Holder who is present in the United States for 183 days or more in the individual's taxable year in which the sale or other disposition of our common stock occurs may be subject to a 30 percent tax on the gross amount of the gain on such sale or disposition unless such gain is already subject to tax as effectively connected with the conduct of a U.S. trade or business. In this case, the Non-U.S. Holder's ability to use other losses to offset the gain on our common stock will be limited.

Income Tax Treaties

If a Non-U.S. Holder is eligible for treaty benefits under an income tax treaty entered into by the United States, the Non-U.S. Holder may be able to reduce or eliminate certain of the U.S. federal income taxes discussed above, such as the tax on dividends and the branch profits tax, and the Non-U.S. Holder may be able to treat gain, even if effectively connected with a U.S. trade or business, as not subject to U.S. federal income taxation unless the U.S. trade or business is conducted through a permanent establishment located in the United States. Non-U.S. Holders are urged to consult their tax advisors regarding possible relief under an applicable income tax treaty.

New Legislation Affecting Taxation of Common Stock Held by or Through Foreign Entities

Recently enacted legislation generally will impose a withholding tax of 30% on dividend income from our common stock and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a foreign financial institution (as specially defined for this purpose), unless such institution enters into an agreement with the U.S. government to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which would include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). Absent an applicable exception, this legislation also generally will impose a withholding tax of 30% on dividend income from our common stock and the gross proceeds of a disposition of our common stock paid after December 31, 2012 to a foreign entity that is not a foreign financial institution unless such entity provides the withholding agent with a certification identifying the substantial U.S. owners of the entity, which generally includes any U.S. person who directly or indirectly owns more than 10% of the entity. Under certain circumstances, a Non-U.S. Holder of our common stock might be eligible for a refund or credit of such taxes, and a Non-U.S. Holder might be required to file a U.S. federal income tax return to claim such refund or credit. Investors should consult with their own tax advisors regarding the implications of this legislation on their investment in our common stock.

Table of Contents

Withholding and Information Reporting

A U.S. Holder or Non-U.S. Holder may be subject to backup withholding (currently at a rate of 28% but scheduled to increase to 31% in 2013) on the proceeds from a sale or other taxable disposition of our common stock and on the gross amount of any dividend or other distribution on our common stock unless the U.S. Holder or Non-U.S. Holder is exempt from backup withholding and, when required, demonstrates that status, or provides a correct taxpayer identification number on a form acceptable under U.S. Treasury Regulations (generally an IRS Form W-9, W-8BEN or W-8ECI) and otherwise complies with the applicable requirements of the backup withholding rules.

In addition, a Non-U.S. Holder will generally be subject to withholding at a rate of 30% of the gross amount of any dividend or other distribution on our common stock unless the Non-U.S. Holder qualifies for a reduced rate of withholding or an exemption from withholding under an applicable tax treaty or the dividend or other distribution is effectively connected with a U.S. trade or business (in which case the dividend or other distribution will be exempt from such withholding but the Non-U.S. Holder will nonetheless be liable for any applicable U.S. federal income tax as described above). Such a Non-U.S. Holder would be required to demonstrate its qualification for a reduced rate of withholding or an exemption from withholding on a form acceptable under applicable U.S. Treasury Regulations (generally an IRS Form W-8BEN or W-8ECI).

We may also be required to comply with information reporting requirements under the Code with respect to the amount of any dividend or other distribution on our common stock and a broker may be required to comply with information reporting requirements with respect to the proceeds from a sale or other taxable disposition of our common stock.

Any amount withheld under the withholding rules of the Code (including backup withholding rules) is not an additional tax, but rather is credited against the holder's U.S. federal income tax liability. Holders should consult their tax advisors to ensure compliance with the procedural requirements to reduce or avoid withholding (including backup withholding) or, if applicable, to file a claim for a refund of withheld amounts in excess of the holder's U.S. federal income tax liability.

Federal Estate Tax

Individual Non-U.S. Holders and entities the property of which is potentially includible in such an individual's gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interest or powers), should note that, absent an applicable treaty benefit, common stock will be treated as U.S. situs property subject to U.S. federal estate tax, under current law, with respect to a decedent who dies after December 31, 2010.

THE UNITED STATES FEDERAL INCOME TAX DISCUSSION SET FORTH ABOVE IS FOR GENERAL INFORMATION PURPOSES ONLY, DOES NOT PURPORT TO BE A COMPLETE DESCRIPTION OF THE POTENTIAL TAX CONSIDERATIONS RELATING TO OUR SHARES OF COMMON STOCK AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE SPECIFIC TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE SHARES OF COMMON STOCK.

Table of Contents

UNDERWRITING

Subject to the terms and conditions of the underwriting agreement by and among us, the selling securityholder and Deutsche Bank Securities Inc., the underwriter has agreed to purchase from the selling securityholder, K Equity, a portion of the Platinum Warrant that allows it to purchase shares of our common stock. Upon acquiring the warrant, the underwriter will exercise the warrant in full on a net exercise basis, and we will issue all of the common shares underlying the warrant to the underwriter. For a description of the effect of a net exercise of the warrant, see the section entitled "Selling Securityholder" in this prospectus supplement and the accompanying prospectus. The purchase price of the warrant will be \$ _____, or \$ _____ per offered share.

The selling securityholder has agreed to sell to the underwriter, and the underwriter has agreed to purchase, on a net exercise basis, a portion of the warrant such that, following the net exercise thereof, the underwriter will acquire 7,000,000 shares of our common stock.

The underwriting agreement provides that the obligation of the underwriter to purchase this portion of the warrant is subject to certain conditions precedent. Pursuant to the underwriting agreement, the underwriter will purchase the full portion of the warrant represented by the shares offered pursuant to this prospectus supplement.

The underwriter proposes to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus supplement and to dealers at a price that represents a concession not in excess of \$ _____ per share under the public offering price. Sales of shares of our common stock outside the United States may be made by affiliates of the underwriter. The underwriter may allow, and these dealers may re-allow, a concession of not more than \$ _____ per share to other dealers. If all the shares are not sold at the public offering price, the underwriter may change the offering price and may offer shares from time to time for sale in negotiated transactions or otherwise, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or otherwise.

The underwriting discounts per share are equal to the public offering price per share of common stock underlying the warrant, less the amount paid by the underwriter to the selling securityholder per share of common stock underlying the warrant. The underwriting discounts are _____ % of the initial public offering price. The selling securityholder has agreed to pay the underwriter the following discounts:

	Fee per share	Total fees
Discounts paid by the selling securityholder	\$ _____	\$ _____

In connection with the offering, the underwriter may purchase and sell shares of our common stock in the open market. These transactions may include short sales, purchases to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriter of a greater number of shares than it is required to purchase in the offering. The underwriter must close out any short position by purchasing shares in the open market. A short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the shares in the open market prior to the completion of the offering. Stabilizing transactions consist of various bids for or purchases of our common stock made by the underwriter in the open market prior to the completion of the offering.

Purchases to cover a short position and stabilizing transactions may have the effect of preventing or slowing a decline in the market price of our common stock. Additionally, these purchases, along with the imposition of any penalty bid, may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that might

Table of Contents

otherwise exist in the open market. These transactions may be effected on the NYSE, in the over-the-counter market or otherwise.

Pursuant to the underwriting agreement we have entered into with the selling securityholder and the underwriter, we remain responsible for certain expenses in connection with the offering of our shares pursuant to this prospectus supplement. We estimate that our share of the total expenses of this offering, which do not include discounts paid by the selling securityholder, will be approximately \$.

We and the selling securityholder have agreed to indemnify the underwriter against some specified types of liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriter may be required to make in respect of any of these liabilities.

We and the selling securityholder have entered into lock-up agreements with the underwriter. Under these agreements, which are subject to certain limited exceptions as described below, we and the selling securityholder may not, directly or indirectly, offer, sell, short sell, enter into hedging transactions or otherwise dispose of any shares or our common stock or other securities convertible into, exchangeable or exercisable for shares of our common stock or derivative of our common stock without the prior written consent of the underwriter for a period of 45 days for the Company and for a period of 90 days for the selling securityholder, in each case from the date of this prospectus supplement. In addition, the selling securityholder may not request the registration for the offer or sale of any of the foregoing without the prior written consent of the underwriter during the period. This consent may be given at any time and without public notice. The lock-up period may be extended in the event that we release earnings or material news or a material event relating to us occurs, or in the event of an announcement by us that we will release earnings results. Such extensions may be waived by the underwriter. In the case of the Company, the foregoing restrictions do not apply to any issuances, grants or awards under the Company's new or existing option, incentive or other equity-based compensation plans, or the issuance of shares upon exercise of the Platinum Warrant. In the case of the selling securityholder, the foregoing restrictions do not apply to the exercise of the Platinum Warrant or the transfer to an affiliate of the selling securityholder of the Platinum Warrant or the shares received upon exercise of the warrant.

Our common stock is listed on the NYSE under the symbol "KEM."

The underwriter has advised us that it does not intend to confirm sales to any account over which it exercises discretionary authority.

A prospectus in electronic format is being made available on an Internet web site maintained by the underwriter. Other than the prospectus in electronic format, the information on the underwriter's web site and any information contained in any other web site maintained by the underwriter is not part of the prospectus or the registration statement of which the prospectus forms a part.

In accordance with the current guidelines of FINRA, the maximum amount of underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the aggregate amount of the securities offered pursuant to the base prospectus and this prospectus supplement.

Affiliations

The underwriter and its affiliates have in the past provided, are currently providing and may in the future from time to time provide, investment banking and other services to us or our subsidiaries and to the selling securityholder or its affiliates, for which they have received, and may in the future receive, customary fees and payment of expenses.

Table of Contents

In addition, the underwriter acted as one of the underwriters in the sale by the selling securityholder of 10 million shares in December 2010.

Notice to Prospective Investors in European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), with effect from, and including, the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), an offer to the public of our securities which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus, may not be made in that Relevant Member State, except that, with effect from, and including, the Relevant Implementation Date, an offer to the public in that Relevant Member State of our securities may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to legal entities which are qualified investors as defined under the Prospectus Directive;
- (b) to fewer than 100, or, if the Relevant Member State has implemented the relevant provisions of Directive 2010/73/EU, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriter for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of our securities referred to in (a) to (c) above shall result in a requirement for the publication by us or any underwriter or agent of a prospectus pursuant to Article 3 of the Prospectus Directive.

Each purchaser of the securities described in this prospectus supplement and the accompanying prospectus located within a Relevant Member State will be deemed to have represented, acknowledged and agreed that it is a "qualified investor" within the meaning of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and such securities offered so as to enable an investor to decide to purchase or subscribe for any such securities, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State.

Notice to Prospective Investors in the United Kingdom

The underwriter has represented and agreed that:

- (a) it and each of its affiliates has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (the "FSMA") received by it in connection with the issue or sale of the securities in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- (b) it and each of its affiliates has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Table of Contents

This communication is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth companies, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The securities are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in Switzerland

This prospectus supplement and the accompanying prospectus does not constitute an "issue prospectus" pursuant to Article 652a or Article 1156 of the Swiss Code of Obligations ("CO") and the securities will not be listed on the SIX Swiss Exchange. Therefore, this prospectus supplement and the accompanying prospectus may not comply with the disclosure standards of the CO and/or the listing rules (including any prospectus schemes) of the SIX Swiss Exchange. Accordingly, the securities may not be offered to the public in or from Switzerland, but only to a selected and limited circle of investors, which do not subscribe to the securities with a view to distribution.

Notice to Prospective Investors in Australia

No prospectus, disclosure document, offering material or advertisement in relation to our securities offered pursuant to this prospectus supplement and the accompanying prospectus has been lodged with the Australian Securities and Investments Commission or the Australian Stock Exchange Limited. Accordingly, a person may not (a) make, offer or invite applications for the issue, sale or purchase of our securities within, to or from Australia (including an offer or invitation which is received by a person in Australia) or (b) distribute or publish this prospectus supplement and the accompanying prospectus, or any disclosure document, offering material or advertisement relating to our securities in Australia, unless (i) the minimum aggregate consideration payable by each offeree is the U.S. dollar equivalent of at least A\$500,000 (disregarding moneys lent by the offeror or its associates) or the offer otherwise does not require disclosure to investors in accordance with Part 6D.2 of the Corporations Act 2001 (CWLTH) of Australia; and (ii) such action complies with all applicable laws and regulations.

Notice to Prospective Investors in Hong Kong

The securities offered pursuant to this prospectus supplement and the accompanying prospectus may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), and no advertisement, invitation or document relating to our securities may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to our securities that are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Notice to Prospective Investors in Japan

The securities offered pursuant to this prospectus supplement and the accompanying prospectus have not been and will not be registered under the Financial Instruments and Exchange Law of Japan

Table of Contents

(the "Financial Instruments and Exchange Law") and the underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Singapore

This prospectus supplement and the accompanying prospectus have not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed for or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of notes and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the securities under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer or (3) by operation of law.

Table of Contents

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Kirkland & Ellis LLP. Certain legal matters in connection with this offering will be passed upon for the underwriter by Cleary Gottlieb Steen & Hamilton LLP.

EXPERTS

The consolidated financial statements of KEMET Corporation as of March 31, 2011 and 2010 and for the two years ended March 31, 2011, and the effectiveness of KEMET Corporation's internal control over financial reporting as of March 31, 2011, appearing in KEMET Corporation's Annual Report on Form 10-K filed on May 20, 2011, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in its reports thereon included therein, and incorporated herein by reference. Such consolidated financial statements are, and audited consolidated financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such consolidated financial statements and the effectiveness of our internal control over financial reporting as of the respective dates (to the extent covered by consents filed with the SEC) given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of KEMET Corporation and its subsidiaries for the year ended March 31, 2009, have been incorporated by reference herein, in reliance upon the reports of KPMG LLP, independent registered public accounting firm, and Deloitte & Touche S.p.A. ("Deloitte"), independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firms as experts in accounting and auditing. The report of KPMG LLP covering the consolidated financial statements for the year ended March 31, 2009 contains (a) an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern and (b) an explanatory paragraph relating to the adoption of the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* an interpretation of FASB Statement No. 109.

The consolidated financial statements of Arcotronics Italia S.p.A. (which has since changed its legal name to Kemet Electronics S.p.A.) and its subsidiaries and for the year ended March 31, 2009 have been audited by Deloitte, as stated in its report incorporated herein by reference. The report of Deloitte on the aforementioned consolidated financial statements for the year ended March 31, 2009 contains an explanatory paragraph expressing substantial doubt about Arcotronics Italia S.p.A. and its subsidiaries' ability to continue as a going concern.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 with respect to the shares of common stock offered hereby. This prospectus supplement does not contain all the information set forth in the registration statement, parts of which are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and the common stock offered hereby, reference is made to the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus supplement relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC pursuant to the Exchange Act. The SEC maintains an Internet site at <http://www.sec.gov> that contains those reports, proxy and information statements and other information regarding us. You may also inspect and copy those reports, proxy and information statements and other information at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549.

Table of Contents

Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

You can access electronic copies of our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q and all amendments to those reports, free of charge, on our website at <http://www.kemet.com>. Access to those electronic filings is available as soon as reasonably practicable after they are filed with, or furnished to, the SEC. We make our website content available for information purposes only. It should not be relied upon for investment purposes, nor is it incorporated by reference into this prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus supplement and the accompanying prospectus, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus. We incorporate by reference the documents and reports listed below (other than portions of these documents that are either (1) described in paragraph (e) of Item 201 of Registration S-K or paragraphs (d)(1)-(3) and (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (2) furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K):

our Annual Report on Form 10-K for the year ended March 31, 2011, as filed with the SEC on May 20, 2011;

our Proxy Statement filed with the SEC on June 28, 2010 in connection with the solicitation of proxies for the Annual Meeting of Stockholders of KEMET Corporation held on July 28, 2010; and

the description of our common stock, par value \$0.01 per share, included under our Registration Statement on Form 8-A, filed pursuant to Section 12(b) of the Exchange Act, on November 12, 2010 (File No. 001-15491).

We also incorporate by reference the information contained in all other documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than portions of these documents that are either (1) described in paragraph (e) of Item 201 of Registration S-K or paragraphs (d)(1)-(3) and (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (2) furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K, unless otherwise indicated therein) after the date of this prospectus supplement and prior to the termination of the offering under this prospectus supplement. The information contained in any such document will be considered part of this prospectus supplement and the accompanying prospectus from the date the document is filed with the SEC.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement or the accompanying prospectus will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus supplement or the accompanying prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement or the accompanying prospectus.

We will provide you, without charge, a copy of any or all of the information incorporated by reference into this prospectus supplement or the accompanying prospectus, if requested in writing or by telephone. Any such request should be directed to:

KEMET Corporation
2835 Kemet Way
Simpsonville, South Carolina 29681
Attention: Investor Relations
(864) 963-6300

Table of Contents

PROSPECTUS

7,000,000 Shares

KEMET Corporation

Common Stock

The selling securityholder named herein may offer and sell from time to time up to 7,000,000 shares of our common stock covered by this prospectus. The selling securityholder will receive all of the proceeds from any sales of the shares offered hereby. We will not receive any of the proceeds, but we will incur expenses in connection with the offering.

Our registration of the shares of common stock covered by this prospectus does not mean that the selling securityholder will offer or sell any of the shares. The selling securityholder may sell the shares of common stock covered by this prospectus in a number of different ways and at varying prices. The shares covered by this prospectus currently are subject to issuance upon exercise of a currently outstanding and exercisable warrant held by the selling securityholder. If the selling securityholder offers the shares through a broker-dealer, in an underwritten offering or otherwise, the broker-dealer may purchase from the selling securityholder a portion of the warrant, and may exercise the purchased portion of the warrant, either on a net exercise basis or for cash, and sell to the public the shares acquired upon exercise. We provide more information about how the selling securityholder may sell the shares in the section entitled "Plan of Distribution" beginning on page 20.

Our common stock is traded on the NYSE under the symbol "KEM." On March 1, 2011 the last reported sale price of our common stock on the NYSE was \$13.59 per share.

Investing in our common stock involves risks. See "Risk Factors" on page 2.

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. Any representation to the contrary is a criminal offense.

The date of this prospectus is March 4, 2011.

Table of Contents

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	i
BASIS OF PRESENTATION	i
OUR COMPANY	1
RISK FACTORS	2
FORWARD-LOOKING STATEMENTS	10
USE OF PROCEEDS	12
SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA	13
SELLING SECURITYHOLDER	14
DESCRIPTION OF CAPITAL STOCK	15
PLAN OF DISTRIBUTION	20
LEGAL MATTERS	22
EXPERTS	22
WHERE YOU CAN FIND MORE INFORMATION	23
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	23

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the "SEC," using a "shelf" registration process. Specific information about the terms of an offering will be included in a prospectus supplement relating to each specific offering of shares. The prospectus supplement may also add, update or change information included in this prospectus. You should read both this prospectus and any applicable prospectus supplement, together with additional information described below under the caption "Where You Can Find More Information."

We have prepared the information contained in this prospectus, any applicable prospectus supplement, any free writing prospectus and the documents incorporated by reference herein and therein that have been filed by us with the SEC. Neither we, the selling securityholder, nor any underwriter has authorized anyone to provide you with any other information and neither we, the selling securityholder nor any underwriter takes any responsibility for other information others may give you.

The information contained in this prospectus, in any prospectus supplement, in any free writing prospectus or in any document incorporated by reference is accurate only as of its date, regardless of the time of delivery of this prospectus or any sale of common stock. Our business, financial condition, results of operations and prospects may have changed since the dates of such respective documents.

This prospectus is not an offer to sell or solicitation of an offer to buy these shares of common stock in any circumstances under which or jurisdiction in which the offer or solicitation is unlawful.

Unless the context otherwise indicates, the terms "KEMET," "Company," "we," "us," and "our" as used in this prospectus refer to KEMET Corporation and its subsidiaries. The phrase "this prospectus" refers to this prospectus and any applicable prospectus supplement, unless the context otherwise requires.

BASIS OF PRESENTATION

Our fiscal year ends on March 31 of each year. Fiscal years are identified in this prospectus according to the calendar year in which they end. For example, references to "fiscal year 2010" or similar references refer to the fiscal year ended March 31, 2010.

On November 5, 2010, we effected a reverse stock split of our common stock at a ratio equal to one-to-three. All share and per share data in this prospectus gives effect to the reverse stock split.

Table of Contents

OUR COMPANY

We are a leading global manufacturer of a wide variety of capacitors. Our product offerings include tantalum, multilayer ceramic, solid and electrolytic aluminum and film and paper capacitors. Capacitors are fundamental components of most electronic circuits and are found in communication systems, data processing equipment, personal computers, cellular phones, automotive electronic systems, defense and aerospace systems, consumer electronics, power management systems and many other electronic devices and systems. Capacitors are typically used to filter out interference, smooth the output of power supplies, block the flow of direct current while allowing alternating current to pass and for many other purposes. We manufacture a broad line of capacitors in many different sizes and configurations using a variety of raw materials. Our product line consists of over 250,000 distinct part configurations distinguished by various attributes, such as dielectric (or insulating) material, configuration, encapsulation, capacitance level and tolerance, performance characteristics and packaging. Most of our customers have multiple capacitance requirements, often within each of their products. Our broad offering allows us to meet the majority of those needs independent of application and end use. In fiscal year 2010, we shipped approximately 31 billion capacitors and in fiscal year 2009, we shipped approximately 32 billion capacitors. We believe the medium-to-long-term demand for the various types of capacitors offered by us will continue to grow on a regional and global basis due to a variety of factors, including increasing demand for and complexity of electronic products, growing demand for technology in emerging markets and the ongoing development of new solutions for energy generation and conservation.

We operate 21 production facilities in Europe, Mexico, China, the United States and Indonesia and employ over 10,000 employees worldwide. Our customer base includes most of the world's major electronics original equipment manufacturers (including Alcatel-Lucent USA Inc., Apple Inc., Cisco Systems, Inc., Dell Inc., Hewlett-Packard Company, International Business Machines Corporation, Intel Corporation, Motorola, Inc. and Nokia Corporation), electronic manufacturing service providers (including Celestica Inc., Elcoteq SE, Flextronics International LTD., Jabil Circuit, Inc. and Sanmina-SCI Corporation) and distributors (including TTI, Inc., Arrow Electronics, Inc. and Avnet, Inc.).

In connection with a credit facility (as subsequently amended and restated, the "Platinum Credit Facility") we entered into in May 2009 with K Financing, LLC ("K Financing"), we issued a warrant (which we sometimes refer to herein as the "Platinum Warrant") to K Financing, which was subsequently transferred to its affiliate K Equity, LLC ("K Equity"). K Financing and K Equity are each affiliates of Platinum Equity Capital Partners II, L.P. The Platinum Warrant entitles K Equity to purchase up to 26,848,484 shares of our common stock, subject to certain adjustments, which represented 49.9% of our common equity at the time of issuance on a post-exercise basis. On December 20, 2010, K Equity sold a portion of the Platinum Warrant equal to 10,893,608 shares which was exercised on a net exercise basis and the resulting 10,000,000 shares of which were sold by underwriters in an offering. The Platinum Warrant is currently immediately exercisable for the remaining 15,954,876 shares at an exercise price of \$1.04999 per share. In connection with the issuance of the Platinum Warrant, we entered into an Investor Rights Agreement (the "Investor Rights Agreement") with K Financing, which subsequently transferred its rights thereunder to K Equity. The Investor Rights Agreement provides K Equity with registration rights, along with certain preemptive, information and board observation rights.

Our corporate headquarters is located at 2835 Kemet Way, Simpsonville, South Carolina 29681. Our telephone number is (864) 963-6300. Our website is located at <http://www.kemet.com>. None of the information that appears on or is linked to or from our website is incorporated by reference into or is otherwise made a part of this prospectus. Our common stock trades on the NYSE under the symbol "KEM".

Table of Contents

RISK FACTORS

Our business is subject to significant risks. You should carefully consider the risks and uncertainties described in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein which may be amended, supplemented or superceded from time to time by other reports we file with the Securities and Exchange Commission in the future (see "Incorporation of Certain Information by Reference"). The risks and uncertainties described in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein are not the only ones facing us. Additional risks and uncertainties that we do not presently know about or that we currently believe are not material may also adversely affect our business. If any of the risks and uncertainties described in this prospectus, any applicable prospectus supplement or the documents incorporated by reference herein actually occur, our business, financial condition and results of operations could be adversely affected in a material way. This could cause the trading price of our common stock to decline, perhaps significantly, and you may lose part or all of your investment.

Risks Relating to Our Business

Adverse economic conditions could impact our ability to realize operating plans if the demand for our products declines, and such conditions could adversely affect our liquidity and ability to continue to operate.

While our operating plans provide for cash generated from operations to be sufficient to cover our future operating requirements, many factors, including reduced demand for our products, currency exchange rate fluctuations, increased raw material costs, and other adverse market conditions could cause a shortfall in net cash generated from operations. As an example, the electronics industry is a highly cyclical industry. The demand for capacitors tends to reflect the demand for products in the electronics market. Customers' requirements for our capacitors fluctuate as a result of changes in general economic activity and other factors that affect the demand for their products. During periods of increasing demand for their products, they typically seek to increase their inventory of our products to avoid production bottlenecks. When demand for their products peaks and begins to decline, they may rapidly decrease orders for our products while they use up accumulated inventory. Business cycles vary somewhat in different geographical regions, such as Asia, and within customer industries. We are also vulnerable to general economic events beyond our control and our sales and profits may suffer in periods of weak demand.

TTI, Inc., a distributor, accounted for over 10% of our net sales in fiscal years 2010, 2009 and 2008. If our relationship with TTI, Inc. were to terminate, we would need to determine alternative means of delivering our products to the end-customers served by TTI, Inc.

To provide financial flexibility, we may enter into negotiations to secure additional financing or sell non-core assets. However, there can be no assurances that we will be successful in either of these strategic initiatives.

Our ability to realize operating plans is also dependent upon meeting our payment obligations and complying with any applicable financial covenants under our debt agreements. If cash generated from operating, investing and financing activities is insufficient to pay for operating requirements and to cover interest payment obligations under debt instruments, planned operating and capital expenditures may need to be reduced.

Adverse economic conditions could cause further reevaluation and the write down of long-lived assets.

Long-lived assets and intangible assets subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset or group of assets may not be recoverable. In the event that the test shows that the carrying value of certain long-lived assets are impaired, we would be required to take an impairment charge to earnings

Table of Contents

under U.S. generally accepted accounting principles. However, such a charge would have no direct effect on our cash.

An increase in the cost or decrease in the availability of our principal raw materials could adversely affect profitability.

The principal raw materials used in the manufacture of our products are tantalum powder, palladium, aluminum and silver. These materials are considered commodities and are subject to price volatility. Due to market constraints, we no longer purchase tantalum powder under long-term contracts. Instead, we forecast our tantalum needs for the short-term (twelve weeks) and make purchases based upon those forecasts; we currently have purchase agreements outstanding for three to six months. While the financial impact of these decisions are short-term in nature given that we are not currently party to any long-term supply agreements, they could impact our financial performance from period to period given that we do not hedge any of our raw material exposure and we may be unable to pass on to a significant number of our customers any fluctuations in our raw material costs. Additionally, any delays in obtaining raw materials for our products could hinder our ability to manufacture our products, negatively impacting our competitive position and our relationships with our customers.

Presently, a limited number of suppliers process tantalum ore into capacitor-grade tantalum powder. If there are an insufficient number of tantalum processors relative to foreseeable demand, an increase in the price of tantalum may result. If we are unable to pass on such price increases to our customers, it could have an adverse affect on our profitability.

Palladium is a precious metal used in the manufacture of multilayer ceramic capacitors and is mined primarily in Russia and South Africa. We continue to pursue ways to reduce palladium usage in ceramic capacitors in order to minimize the price risk. The amount of palladium that we require has generally been available in sufficient quantities, however the price of palladium is driven by the market which has shown significant price fluctuations. For instance, in fiscal year 2009 the price of palladium fluctuated between \$177 and \$444 per troy ounce. Price increases and the possibility of our inability to pass such increases on to our customers could have an adverse effect on profitability.

Silver and aluminum have generally been available in sufficient quantities, and we believe there are a sufficient number of suppliers from which we can purchase our requirements. An increase in the price of silver and aluminum that we are unable to pass on to our customers, however, could have an adverse affect on our profitability.

Changes in the competitive environment could harm our business.

The capacitor business is highly competitive worldwide, with low transportation costs and few import barriers. Competition is based on factors such as product quality and reliability, availability, customer service, timely delivery and price. The industry has become increasingly consolidated and globalized in recent years, and our primary U.S. and non-U.S. competitors, some of which are larger than us, have significant financial resources. The greater financial resources of such competitors may enable them to commit larger amounts of capital in response to changing market conditions. If we are unable to expand our manufacturing to meet demand and our competitors expand production, we could lose customers and/or market share. Some competitors may also have the ability to use profits from other operations to subsidize losses sustained in their businesses with which we compete. Certain competitors may also develop product or service innovations that could put us at a disadvantage.

Table of Contents

Uncertainty of the timing of customer product qualifications in heavily regulated industries could affect the timing of product revenues and profitability arising from these industries.

Our capacitors are incorporated into products used in diverse industries. Certain of these industries, such as military, aerospace and medical, are heavily regulated, with long and sometimes unpredictable product approval and qualification processes. Due to such regulatory compliance issues, there can be no assurances as to the timing of product revenues and profitability arising from our product development and sales efforts in these industries.

We manufacture many capacitors in Europe, Mexico and Asia and economic, political or regulatory changes in any of these regions could adversely affect our profitability.

Our international operations are subject to a number of special risks, in addition to the same risks as our domestic business. These risks include currency exchange rate fluctuations, differing protections of intellectual property, trade barriers, labor unrest, exchange controls, regional economic uncertainty, differing (and possibly more stringent) labor regulation, risk of governmental expropriation, domestic and foreign customs and tariffs, current and changing regulatory regimes, differences in the availability and terms of financing, political instability and potential increases in taxes. These factors could impact our production capability or adversely affect our results of operations or financial condition.

We may experience difficulties, delays or unexpected costs in completing our restructuring plan.

In the second quarter of fiscal year 2010, we initiated a restructuring plan designed to improve the operating performance of our Film and Electrolytic business group. However, any anticipated benefits of this restructuring activity will not be realized until future periods. The plan is expected to take approximately two to three years to complete.

We may not realize, in full or in part, the anticipated benefits of the restructuring plan without encountering difficulties, which may include complications in the transfer of production knowledge, loss of key employees and/or customers, the disruption of ongoing business and possible inconsistencies in standards, controls and procedures. We are party to collective bargaining agreements in certain jurisdictions in which we operate which could potentially prevent or delay execution of parts of our restructuring plan.

Our inability to attract, train and retain effective employees and management could harm our business.

Our success depends upon the continued contributions of our executive officers and certain other employees, many of whom have many years of experience with us and would be extremely difficult to replace. We must also attract and retain experienced and highly skilled engineering, sales and marketing and managerial personnel. Competition for qualified personnel is intense in our industry, and we may not be successful in hiring and retaining these people. If we lost the services of our executive officers or our other highly qualified and experienced employees or cannot attract and retain other qualified personnel, our business could suffer through less effective management due to loss of accumulated knowledge of our business or through less successful products due to a reduced ability to design, manufacture and market our products.

We must continue to develop innovative products to maintain relationships with our customers and to offset potential price erosion in older products.

While most of the fundamental technologies used in the passive components industry have been available for a long time, the market is nonetheless typified by rapid changes in product designs and technological advances allowing for better performance, smaller size and/or lower cost. New applications are frequently found for existing technologies, and new technologies occasionally replace existing technologies for some applications or open up new business opportunities in other areas of

Table of Contents

application. We believe that successful innovation is critical for maintaining profitability in the face of potential erosion of selling prices for existing products and to ensure the flow of new products and robust manufacturing processes that will keep us at the forefront of our customers' product designs. Non-customized commodity products are especially vulnerable to price pressure, but customized products have also experienced price pressure in recent years. Developing and marketing new products requires start-up costs that may not be recouped if these products or production techniques are not successful. There are numerous risks inherent in product development, including the risks that we will be unable to anticipate the direction of technological change or that we will be unable to develop and market new products and applications in a timely fashion to satisfy customer demands. If this occurs, we could lose customers and experience adverse effects on our results of operations.

We may be exposed to claims alleging product defects.

Our business exposes us to claims alleging product defects or nonconformance with product specifications. We may be held liable for, or incur costs related to, such claims if any of our products, or products in which our products are incorporated, are found to have caused end market product application failures, product recalls, property damage or personal injury. Provisions in our agreements with our customers and distributors which are designed to limit our exposure to potential material product defect claims, including warranty, indemnification, waiver and limitation of liability provisions, may not be effective under the laws of some jurisdictions. If we cannot successfully defend ourselves against product defect claims, we may incur substantial liabilities. Regardless of the merits or eventual outcome, defect claims could entail substantial expense and require the time and attention of key management personnel.

Our commercial general liability insurance may not be adequate to cover all liabilities arising out of product defect claims and, at any time, insurance coverage may not be available on commercially reasonable terms or at all. If liability coverage is insufficient, a product defect claim could result in liability to us which could materially and adversely affect our results of operations or financial condition. Even if we have adequate insurance coverage, product defect claims or recalls could result in negative publicity or force us to devote significant time and attention to those matters.

Various laws and regulations that apply to our business, including those relating to environmental matters, could limit our ability to operate as we are currently and could result in additional costs.

We are subject to various laws and regulations of federal, state and local authorities in the countries in which we operate regarding a wide variety of matters, including environmental, employment, land use, anti-trust, and others that affect the day-to-day operations of our business. The liabilities and requirements associated with the laws and regulations that affect us may be costly and time-consuming. There can be no assurance that we have been or will be at all times in compliance with such applicable laws and regulations. Failure to comply may result in the assessment of administrative, civil and criminal penalties, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits and other enforcement measures that could have the effect of limiting our operations. If we are pursued for sanctions, costs or liabilities in respect of these matters, our operations and, as a result, our profitability could be materially and adversely affected.

We are subject to a variety of U.S. federal, state and local, as well as foreign, environmental laws and regulations relating, among other things, to wastewater discharge, air emissions, handling of hazardous materials, disposal of solid and hazardous wastes, and remediation of soil and groundwater contamination. We use a number of chemicals or similar substances, and generate wastes, that are considered hazardous. We are required to hold environmental permits to conduct many of our operations. Violations of environmental laws and regulations could result in substantial fines, penalties, and other sanctions. Changes in environmental laws or regulations (or in their enforcement) affecting or limiting, for example, our chemical uses, certain of our manufacturing processes, or our disposal

Table of Contents

practices, could restrict our ability to operate as we are currently operating or impose additional costs. In addition, we may experience releases of certain chemicals or discover existing contamination, which could cause us to incur material cleanup costs or other damages.

Volatility of financial and credit markets could affect our access to capital.

The continued uncertainty in the global financial and credit markets could impact our ability to implement new financial arrangements or to modify our existing financial arrangements. An inability to obtain new financing or to further modify existing financing could adversely impact the execution of our restructuring plans and delay the realization of the expected cost reductions. Our ability to generate adequate liquidity will depend on our ability to execute our operating plans and to manage costs in light of developing economic conditions. An unanticipated decrease in sales, or other factors that would cause the actual outcome of our plans to differ from expectations, could create a shortfall in cash available to fund our liquidity needs. Being unable to access new capital, experiencing a shortfall in cash from operations to fund our liquidity needs and the failure to implement an initiative to offset the shortfall in cash, such as, for example, a sale of non-core assets, would likely have a material adverse effect on our business.

We must consistently reduce the total costs of our products to remain competitive.

Our industry is intensely competitive and prices for existing commodity products tend to decrease steadily over their life cycle. There is substantial and continuing pressure from customers to reduce the total cost of using our parts. To remain competitive, we must achieve continuous cost reductions through process and product improvements.

We must also be in a position to minimize our customers' shipping and inventory financing costs and to meet their other goals for rationalization of supply and production. Our growth and the profit margins of our products will suffer if our competitors are more successful in reducing the total cost to customers of their products than we are. We must also continue to introduce new products that offer performance advantages over our existing products and can thereby achieve premium prices, offsetting the price declines in our more mature products.

Our use of net operating losses to offset possible future taxable income could be limited by ownership changes.

In addition to the general limitations on the carryback and carryforward of net operating losses under Section 172 of the Internal Revenue Code (the "Code"), Section 382 of the Code imposes further limitations on the utilization of net operating losses by a corporation following ownership changes which result in more than a 50 percentage point change in ownership of a corporation within a three year period. Therefore, the future utilization of our net operating losses may be subject to limitation for federal income tax purposes related to regular and alternative minimum tax.

The issuance of the Platinum Warrant to K Financing, as described above, may be deemed to have been an "ownership change" for purposes of Section 382 of the Code. If such an ownership change is deemed to have occurred, the amount of our taxable income that can be offset by our net operating loss carryovers in taxable years after the ownership change will be severely limited. While we believe that the issuance of the Platinum Warrant did not result in an ownership change for purposes of Section 382 of the Code, there is no assurance that our view will be unchallenged. Moreover, the exercise of part or all of the Platinum Warrant, including the exercise in connection with the offering of shares pursuant to this prospectus, may be deemed to have given rise to an ownership change in the future. While we believe that the exercise of the Platinum Warrant in connection with the offering of shares pursuant to this prospectus will not give rise to an ownership change for purposes of Section 382 of the Code, there is no assurance that our view will be unchallenged.

Table of Contents

The application of Section 382 of the Code now or in the future could limit a substantial part of our future utilization of available net operating losses. Such limitation could require us to pay substantial additional federal and state taxes and interest. Such tax and interest liabilities may adversely affect our liquidity and financial position.

Risks Relating to Our Common Stock

The market price of our common stock may be highly volatile or may decline regardless of our operating performance.

The trading price of our common stock may fluctuate substantially. The price of our common stock may be higher or lower than the price you pay to purchase your shares, depending on many factors, some of which are beyond our control. Broad market and industry factors may adversely affect the market price of our common stock, regardless of our actual operating performance. The fluctuations could cause you to lose all or part of your investment in our shares of common stock. Factors that could cause fluctuation in the trading price of our common stock may include, but are not limited to, the following:

price and volume fluctuations in the overall stock market from time to time;

significant volatility in the market price and trading volume of companies similar to ours;

actual or anticipated variations in our earnings or operating results;

actual or anticipated changes in financial estimates by us or by any securities analysts who might cover our stock;

market conditions or trends in our industry and the economy as a whole;

announcements by us or our competitors of significant acquisitions, strategic partnerships or divestitures;

announcements of investigations or regulatory scrutiny of our operations or lawsuits filed against us;

capital commitments;

loss of a major customer or the loss of a particular product line with a major customer;

additions or departures of key personnel; and

sales of our common stock, including sales of large blocks of our common stock or sales by our directors and officers.

In addition, if the market for stocks of manufacturers of products similar to ours or the stock market in general experiences loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry or related industries even if these events do not directly affect us.

K Equity may obtain significant influence over all matters submitted to a stockholder vote, which may limit the ability of other shareholders to influence corporate activities and may adversely affect the market price of our common stock.

Edgar Filing: KEMET CORP - Form 424B3

As part of the consideration for entering into the Platinum Credit Facility, K Financing received the Platinum Warrant to purchase up to 26,848,484 shares of our common stock (subject to certain adjustments), representing 49.9% of our outstanding common stock at the time of issuance on a post-exercise basis. The Platinum Warrant was subsequently transferred to K Equity, an affiliate of

Table of Contents

K Financing. On December 20, 2010, K Equity sold a portion of the Platinum Warrant equal to 10,893,608 shares which was exercised on a net exercise basis and the resulting 10,000,000 shares of which were sold by underwriters in an offering, leaving a remainder of 15,954,876 shares subject to the Platinum Warrant. To the extent that K Equity exercises the remainder of the Platinum Warrant in whole or in part but does not sell all or a significant part of the shares it acquires upon exercise, K Equity may own up to 30.0% of our outstanding common stock. As a result, K Equity may have substantial influence over the outcome of votes on all matters requiring approval by our stockholders, including the election of directors, the adoption of amendments to our restated certificate of incorporation and by-laws and approval of significant corporate transactions. K Equity could also take actions that have the effect of delaying or preventing a change in control of us or discouraging others from making tender offers for our shares, which could prevent stockholders from receiving a premium for their shares. These actions may be taken even if other stockholders oppose them. Moreover, this concentration of stock ownership may make it difficult for stockholders to replace management. In addition, this significant concentration of stock ownership may adversely affect the trading price for our common stock because investors often perceive disadvantages in owning stock in companies with controlling stockholders. This concentration of control could be disadvantageous to other stockholders with interests different from those of our officers, directors and principal stockholders and the trading price of shares of our common stock could be adversely affected.

Future sales of our common stock, or the perception in the public markets that these sales may occur, could depress our stock price.

Future sales of substantial amounts of our common stock in the public market (including sales by the selling securityholder pursuant to this prospectus) or the perception that these sales could occur, could adversely affect the price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. In addition, future equity financings could also result in dilution to our stockholders and new securities could have rights, preferences and privileges that are senior to those of the shares offered hereby. K Equity, the selling securityholder, may sell all or any portion of the shares that it is entitled to acquire upon exercise of the Platinum Warrant in the public market through any means described in the section hereof entitled "Plan of Distribution." If this right is exercised and a large number of shares are sold (in an offering pursuant to this prospectus or otherwise), the market price of our common stock could be adversely affected. Moreover, as of December 31, 2010 approximately 1.6 million additional shares of our common stock were issuable upon the exercise of outstanding vested and unvested options. In the event that outstanding options are exercised, existing stockholders could suffer immediate and substantial dilution of their investment.

Our restated certificate of incorporation and by-laws contain provisions that could discourage another company from acquiring us and may prevent attempts by our stockholders to replace or remove our current management.

Some provisions of our restated certificate of incorporation and by-laws may have the effect of delaying, discouraging or preventing a merger or acquisition that our stockholders may consider favorable, including transactions in which stockholders may receive a premium for their shares. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace or remove our board of directors. These provisions include:

the removal of directors only by the affirmative vote of the holders of a majority of the shares of our capital stock entitled to vote at an election of directors;

any vacancy on our board of directors, however occurring, including a vacancy resulting from an enlargement of the board, may only be filled by vote of the directors then in office;

Table of Contents

inability of stockholders to call special meetings of stockholders or take action by written consent;

advance notice requirements for board nominations and proposing matters to be acted on by stockholders at stockholder meetings; and

authorization of the issuance of "blank check" preferred stock without the need for action by stockholders.

We currently do not intend to pay dividends on our common stock and as a result, the only opportunity to achieve a return on an investment in our common stock is if the price appreciates.

We currently do not expect to declare or pay dividends on our common stock in the foreseeable future. As a result, the only opportunity to achieve a return on an investment in our common stock will be if the market price of our common stock appreciates and the shares are sold at a profit. We cannot assure our investors that the market price for our common stock will ever exceed the price that the investors pay for their shares in an offering pursuant to this prospectus.

Table of Contents

FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates by reference documents containing certain statements that are, or may be deemed to be, "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Actual outcomes and results may differ materially from those expressed in, or implied by, our forward-looking statements. Words such as "expects," "anticipates," "believes," "estimates" and other similar expressions or future or conditional verbs such as "will," "should," "would" and "could" are intended to identify such forward-looking statements. Readers should not rely solely on the forward-looking statements and should consider all uncertainties and risks throughout this prospectus, including those set forth under "Risk Factors." The statements are representative only as of the date they are made, and we undertake no obligation to update any forward-looking statement.

All forward-looking statements, by their nature, are subject to risks and uncertainties. Our actual future results may differ materially from those set forth in our forward-looking statements. We face risks that are inherent in the businesses and the market places in which we operate. While management believes these forward-looking statements are accurate and reasonable, uncertainties, risks and factors, including those described below and under "Risk Factors," could cause actual results to differ materially from those reflected in the forward-looking statements.

Factors that may cause the actual outcome and results to differ materially from those expressed in, or implied by, these forward-looking statements include, but are not necessarily limited to the following:

adverse economic conditions could impact our ability to realize operating plans if the demand for our products declines, and such conditions could adversely affect our liquidity and ability to continue to operate;

adverse economic conditions could cause further reevaluation and the write down of long-lived assets;

an increase in the cost or a decrease in the availability of our principal raw materials;

changes in the competitive environment;

uncertainty of the timing of customer product qualifications in heavily regulated industries;

economic, political or regulatory changes in the countries in which we operate;

difficulties, delays or unexpected costs in completing the restructuring plan;

inability to attract, train and retain effective employees and management;

the inability to develop innovative products to maintain customer relationships and offset potential price erosion in older products;

exposure to claims alleging product defects;

the impact of laws and regulations that apply to our business, including those relating to environmental matters;

Edgar Filing: KEMET CORP - Form 424B3

volatility of financial and credit markets affecting our access to capital;

needing to reduce the total costs of our products to remain competitive;

potential limitation on the use of net operating losses to offset possible future taxable income; and

Table of Contents

exercise of the warrant by K Equity which could potentially result in the existence of a significant stockholder who could seek to influence our corporate decisions.

Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and also could cause actual results to differ materially from those included, contemplated or implied by the forward-looking statements made, or incorporated by reference, in this prospectus, and the reader should not consider the above list of factors to be a complete set of all potential risks or uncertainties.

Table of Contents

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares of common stock offered and sold pursuant to this prospectus. The shares offered pursuant to this prospectus are currently not outstanding but are subject to issuance upon exercise of a portion of the Platinum Warrant held by the selling securityholder.

If the Platinum Warrant is exercised on a net exercise basis, we will not receive any proceeds. Net exercise is described further below in "Selling Securityholder."

If the Platinum Warrant is exercised for cash, we will receive \$1.04999 per underlying share of common stock, which is the current exercise price for the Platinum Warrant. If cash exercise is elected, and assuming that the Platinum Warrant is exercised for all 7,000,000 shares of common stock covered by this prospectus, we would receive proceeds of \$7,349,930, which we would use for general corporate purposes.

We, and not the selling securityholder, will pay the costs, expenses and fees in connection with the registration and sale of the shares covered by this prospectus, but the selling securityholder will pay all discounts, commissions or brokers' fees or fees of similar securities industry professionals and transfer taxes, if any, attributable to sales of the shares.

Table of Contents**SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA**

Our selected historical consolidated financial data as of and for the years ended March 31, 2006, 2007, 2008, 2009 and 2010 have been derived from our audited consolidated financial statements. Our selected historical consolidated financial data as of and for the nine months ended December 31, 2010 and December 31, 2009 have been derived from our unaudited condensed consolidated financial statements. Our interim results are not necessarily indicative of our operating results for the entire year nor are our historical results necessarily indicative of our operating results to be expected in the future. The following financial data is qualified by reference to and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q and the financial statements and related notes incorporated by reference into this prospectus.

	Fiscal Years Ended March 31,					Nine Months Ended December 31,	
	2006	2007	2008	2009	2010	2009	2010
(in thousands, except per share data)							
Income Statement Data:							
Net sales	\$ 490,106	\$ 658,714	\$ 850,120	\$ 804,385	\$ 736,335	\$ 523,355	\$ 757,036
Operating costs and expenses:							
Cost of sales	399,264	517,443	696,806	736,551	611,638	442,082	553,888
Selling, general and administrative expenses	49,660	89,450	97,639	93,505	86,085	60,697	76,667
Research and development	25,976	33,385	35,699	28,956	22,064	15,985	19,202
Restructuring charges	28,319	12,572	25,341	30,874	9,198	2,589	5,197
Goodwill impairment				174,327			
Write down of long-lived assets			4,218	67,624	656	656	
Net (gain) loss on sales and disposals of assets	(2,917)	(1,214)	(702)	(25,505)	(1,003)	498	(1,406)
Curtailment gains on benefit plans				(30,835)			
Total operating costs and expenses	500,302	651,636	859,001	1,075,497	728,638	522,507	653,548
Operating income (loss)	(10,196)	7,078	(8,881)	(271,112)	7,697	848	103,488
Other (income) expense:							
Interest income	(5,640)	(6,283)	(6,061)	(618)	(188)	(147)	(133)
Interest expense and amortization of debt discount	6,628	9,865	21,696	29,789	26,008	19,744	22,548
Increase in value of warrant					81,088	81,088	
Other (income) expense, net	916	(1,273)	(4,412)	(14,084)	4,121	6,199	(1,647)
(Gain) loss on early extinguishment of debt				2,212	(38,921)	(38,921)	38,248
Income (loss) before income taxes	(12,100)	4,769	(20,104)	(288,411)	(64,411)	(67,115)	44,472
Income tax expense (benefit)	(12,475)	563	5,111	(3,202)	5,036	2,649	2,493
Net income (loss)	\$ 375	\$ 4,206	\$ (25,215)	\$ (285,209)	\$ (69,447)	\$ (69,764)	\$ 41,979

Edgar Filing: KEMET CORP - Form 424B3

Net income (loss) per share(1):														
Basic	\$	0.01	\$	0.15	\$	(0.91)	\$	(10.62)	\$	(2.57)	\$	(2.59)	\$	1.53
Diluted(2)		0.01		0.15		(0.91)		(10.62)		(2.57)		(2.59)		0.82
Balance Sheet Data(3):														
Cash and cash equivalents	\$	163,778	\$	212,202	\$	81,383	\$	39,204	\$	79,199	\$	64,974	\$	127,772
Total assets		748,318		942,373		1,250,999		714,151		740,961		743,696		833,864
Total debt, net of discounts		100,000		215,931		377,741		306,746		249,509		257,121		272,261
Total stockholders' equity		512,703		577,419		576,831		240,039		284,272		291,663		329,860

- (1) Net income (loss) per share gives effect to the reverse stock split of our common stock on November 5, 2010 at a ratio of one-to-three.
- (2) Securities exercisable for common stock were not included in the computation of diluted loss per share in certain periods because the impact would have been antidilutive.
- (3) We did not pay dividends during any of these periods.

Table of Contents**SELLING SECURITYHOLDER**

This prospectus relates to the possible resale of up to 7,000,000 shares of our common stock by K Equity. K Financing received the Platinum Warrant to purchase 26,848,484 shares of our common stock, subject to certain adjustments, in connection with the entry into the Platinum Credit Facility among us, K Financing and certain of our subsidiaries. The Platinum Warrant was subsequently transferred to K Equity. On December 20, 2010, K Equity sold a portion of the Platinum Warrant equal to 10,893,608 shares. The Platinum Warrant is currently immediately exercisable for the remaining 15,954,876 shares at an exercise price of \$1.04999 per share. Pursuant to its terms, the Platinum Warrant may be exercised on a net exercise basis or for cash.

The following table sets forth information with respect to the beneficial ownership of our common stock held as of March 1, 2011 by the selling securityholder, the number of shares being offered hereby and information with respect to shares to be beneficially owned by the selling securityholder assuming all the shares registered hereunder are sold and assuming that net exercise of the Platinum Warrant is elected. The percentage ownership before the offering is based on 37,135,087 shares of our common stock outstanding as of March 1, 2011 and the percentage ownership after the offering is based on 44,135,087 shares of our common stock outstanding immediately after the completion of the offering. The registration of the shares of common stock underlying the Platinum Warrant does not necessarily mean that the selling securityholder will sell all or any particular portion of the shares.

Name	Shares Beneficially Owned Prior to the Offering		Shares Offered Hereby Number	Shares Beneficially Owned After the Offering	
	Number	Percentage		Number	Percentage
K Equity, LLC(1)	15,954,876	30.0%	7,000,000	8,368,757	19.0%

(1)

This assumes the exercise of the Platinum Warrant on a net exercise basis, and reflects that, in order to allow for the sale of 7,000,000 shares of stock, based on the closing bid price for our common stock of \$13.59 on March 1, 2011, the shares available for further exercises under the Platinum Warrant would be reduced by 586,119 in connection with the net exercise. If cash exercise is elected, then, after such exercise, 8,954,876 shares of common stock would remain as exercisable under the Platinum Warrant, rather than 8,368,757 in the event of net exercise, and K Equity would beneficially own 20.3% of our common stock (assuming the sale by the selling securityholder of all shares registered under this registration statement). K Holdings, LLC ("K Holdings") is the sole member of K Equity; Platinum Equity Capital Partners II, L.P. ("PECP II") is the controlling member of K Holdings; Platinum Equity Partners II, LLC ("Platinum Partners") is the general partner of PECP II; Platinum Equity Investment Holdings II, LLC ("Platinum Investment") is the senior managing member of Platinum Partners; Platinum Equity, LLC ("Platinum Equity") is the sole member of Platinum Investment; and Tom Gores, a natural person, is the ultimate beneficial owner and Chairman of Platinum Equity. Each of the foregoing may be deemed to have shared power to direct the voting and disposition of the Platinum Warrant (as well as the shares of common stock underlying the Platinum Warrant) held by K Equity. Each of the foregoing disclaims beneficial ownership of the Platinum Warrant (as well as the shares of common stock underlying the Platinum Warrant) except to the extent of their respective pecuniary interest therein. The principal place of business and principal office of each of the foregoing is 360 North Crescent Drive, South Building, Beverly Hills, California 90210.

Material Relationships

Platinum Credit Facility. In May 2009, we entered into the Platinum Credit Facility with K Financing, an affiliate of Platinum Equity Capital Partners II, L.P. The Platinum Credit Facility consisted of a term loan of up to \$52.5 million, line of credit loans that could be borrowed from time to time (but not reborrowed after being repaid) of up to \$12.5 million and a working capital loan of up

Table of Contents

to \$12.5 million. In June 2009, we used a portion of the proceeds from the Platinum Credit Facility to consummate a tender offer for \$93.9 million in aggregate principal amount of our convertible notes (or 54% of the then-outstanding aggregate amount of the convertible notes). Upon consummation of that tender offer, we issued the Platinum Warrant to K Financing. All outstanding amounts under the Platinum Credit Facility have been repaid and the facility has been terminated.

Investor Rights Agreement. On June 30, 2009, in connection with the issuance of the Platinum Warrant, we entered into an Investor Rights Agreement (the "Investor Rights Agreement") with K Financing, which subsequently transferred its rights thereunder to K Equity. The Investor Rights Agreement provides K Equity with up to three demand registrations and the right to request that any registerable securities it holds be included in any registration statement we file for our own account or the account of any holder of our common stock. Pursuant to the agreement we agreed to pay registration-related fees and expenses. We also agreed to indemnify K Equity for certain losses in connection with such registrations. On December 14, 2010, the SEC declared effective a registration statement on Form S-3 for 10,000,000 of the Platinum Warrant shares, which registration statement was filed in response to K Equity's exercise of the first of its three demand registration rights. In addition to registration rights, the Investor Rights Agreement grants K Equity certain information rights and the right to appoint up to two representatives, depending on its ownership percentage of our common stock, to observe our board of directors and receive materials sent to our board of directors. The Investor Rights Agreement also provides K Equity with preemptive rights in connection with any proposed issuance or sale of our common stock or securities exercisable for or convertible into shares of our common stock.

Corporate Advisory Services Agreement. On June 30, 2009, in connection with our entry into the Platinum Credit Facility and the issuance of the Platinum Warrant to K Financing, we entered into a Corporate Advisory Services Agreement (the "Corporate Advisory Services Agreement") with Platinum Equity Advisors, LLC ("Platinum"), an affiliate of K Equity, effective June 30, 2009. The Corporate Advisory Services Agreement provides that Platinum will perform certain corporate advisory services in exchange for an advisory fee equal to \$1.5 million per calendar year and reimbursement of reasonable out-of-pocket costs and expenses incurred in connection with rendering the covered services. The term of the Corporate Advisory Services Agreement ends on June 30, 2013.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 300,000,000 shares of common stock, par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.10 per share, the rights and preferences of which may be established from time to time by our board of directors, and zero shares of non-voting common stock, par value \$0.01 per share. Our board of directors has determined to seek stockholder approval to reduce the number of authorized shares of common stock from 300,000,000 to 175,000,000 at our next annual meeting of stockholders. As of March 1, 2011, there were 37,135,087 outstanding shares of our common stock. There are currently no outstanding shares of preferred stock.

On November 5, 2010, we filed with the Secretary of State of Delaware a Certificate of Amendment to our Restated Certificate of Incorporation to effect a reverse stock split of our common stock at a ratio equal to one-to-three. The number of shares subject to the Platinum Warrant and its exercise price were proportionately adjusted. Our options and restricted stock units were similarly adjusted in accordance with their terms. Our number of authorized shares of common stock did not change.

Table of Contents

The following description of our capital stock is only a summary, does not purport to be complete and is subject to and qualified by the full text of our restated certificate of incorporation and our amended and restated bylaws and of the applicable provisions of Delaware law.

Common Stock

Holders of our common stock are entitled to one vote for each share on all matters voted upon by our stockholders, including the election of directors, and do not have cumulative voting rights. Our common stockholders are entitled to receive ratably any dividends that may be declared by our board of directors out of any assets or funds legally available for payment of dividends.

We currently do not expect to pay dividends on our common stock. Future declaration and payment of dividends, if any, will be at the discretion of our board of directors and will be dependent upon our results of operations, financial condition, cash requirements, future prospects and other factors. We can give no assurance that any dividends will be declared or paid in the future.

Holders of our common stock are entitled to share ratably in our net assets upon our dissolution or liquidation after payment or provision for all liabilities and any preferential liquidation rights of our preferred stock then-outstanding. Holders of our common stock do not have preemptive rights to purchase shares of our stock. Holders of our common stock do not have subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock will be subject to those of the holders of any shares of our preferred stock we may issue in the future.

Preferred Stock

Our board of directors may, from time to time, authorize the issuance of one or more classes or series of preferred stock without stockholder approval.

Our restated certificate of incorporation permits us to issue up to 10,000,000 shares of preferred stock from time to time. Subject to the provisions of our restated certificate of incorporation and limitations prescribed by law, our board of directors is authorized to issue preferred shares and to fix before issuance the number of preferred shares to be issued and the designation, relative powers, preferences, rights and qualifications, limitations or restrictions of the preferred shares, terms of redemption, conversion rights and liquidation preferences, in each case without any action or vote by our stockholders. In connection with our adoption of a stockholder rights plan in 1996, our board of directors designated 120,000 shares of our preferred stock as Junior Participating Preferred Stock, Series A (the "Series A Preferred Stock"). The rights plan and the associated rights to acquire the Series A Preferred Stock expired and were terminated in 2006 in accordance with the terms of the rights plan, and no shares of the Series A Preferred Stock were ever issued.

The issuance of preferred stock may adversely affect the rights of our common stockholders by, among other things:

restricting dividends on the common stock;

diluting the voting power of the common stock;

impairing the liquidation rights of the common stock; or

delaying or preventing a change in control without further action by the stockholders.

As a result of these or other factors, the issuance of preferred stock could have an adverse effect on the market price of our common stock.

Table of Contents

Anti-takeover Effects of Our Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Contractual Arrangements

Our restated certificate of incorporation and by-laws contain certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of the board of directors and which may have the effect of delaying, deferring or preventing a future takeover or change in control of the company unless such takeover or change in control is approved by the board of directors.

Classified Board of Directors

Our restated certificate of incorporation divides our board of directors into three classes of directors serving staggered three-year terms. The existence of a classified board will make it more difficult for a third party to gain control of our board of directors by preventing the third party from replacing a majority of the directors at any given meeting of stockholders.

Removal of Directors and Filling Vacancies in Directorships

Our restated certificate of incorporation and our amended and restated bylaws provide that directors may be removed for cause by the holders of a majority of shares entitled to vote. Our restated certificate of incorporation and our amended and restated bylaws provide that any vacancy on our board of directors or newly created directorship may be filled solely by the affirmative vote of a majority of the remaining directors then in office or by a sole remaining director, and that any director so elected will hold office for the remainder of the full term of the class of directors in which the vacancy occurred or the new directorship was created and until such director's successor has been elected and qualified. The limitations on the removal of directors and the filling of vacancies may deter a third party from seeking to remove incumbent directors and simultaneously gaining control of our board of directors by filling the vacancies created by such removal with its own nominees.

Stockholder Action and Meetings of Stockholders

Our restated certificate of incorporation provides that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting. Our restated certificate of incorporation and the by-laws provide that, except as otherwise required by law, special meetings of the stockholders can only be called by the affirmative vote of a majority of our board of directors, the chairman of the board or our chief executive officer. Stockholders are not permitted to call a special meeting or to require the board of directors to call a special meeting.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock will make it possible for our board of directors to issue preferred stock with super voting, special approval, dividend or other rights or preferences on a discriminatory basis that could impede the success of any attempt to acquire us. These and other provisions may have the effect of deferring, delaying or discouraging hostile takeovers or changes in control or management of our company.

Advance Notice Requirements for Stockholder Proposals

Our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has complied with the notice procedures provided in our amended and restated bylaws.

Table of Contents

To be timely, a stockholder's notice must be delivered to the corporate secretary at the principal executive offices not less than 90 days prior to the first anniversary of the prior year's annual meeting of stockholders, except that, if the date of the annual meeting is advanced more than 30 days prior to or delayed more than 60 days after such anniversary, notice must be so delivered not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the date on which public announcement of the date of the annual meeting is first made. Our amended and restated bylaws also specify requirements as to the form and substance of notice. These provisions may make it more difficult for stockholders to bring matters before an annual meeting of stockholders.

Although the by-laws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the by-laws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the company.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Stockholder Action by Written Consent

Pursuant to Section 228 of the General Corporation Law of the State of Delaware (the "DGCL"), any action required to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote if a consent or consents in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of our stock entitled to vote thereon were present and voted, unless our restated certificate of incorporation provides otherwise. Our restated certificate of incorporation provides that any action required or permitted to be taken by our stockholders may be effected at a duly called annual or special meeting of our stockholders and may not be effected by consent in writing by such stockholders.

Business Combinations with Interested Stockholders

In general, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business combination, such as a merger, with a person or group owning 15% or more of the corporation's voting stock for a period of three years following the date the person became an interested stockholder, unless (with certain exceptions) the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Our restated certificate of incorporation contains provisions that have the same effect as certain portions of Section 203 that relate to acquisition transactions. Our restated certificate of incorporation provides that in the case of certain mergers, sales of assets, issuances of securities, liquidations or dissolutions, or reclassifications or recapitalizations involving holders of stock representing 20% or more of the voting power of the then-outstanding shares of voting stock (other than certain existing holders of voting stock prior to our initial public offering in 1992), such transactions must be approved by 80% of the voting power of our then-outstanding voting stock entitled to vote generally in the election of the directors, unless such transactions are approved by a majority of the Disinterested Directors (as defined

Table of Contents

in our restated certificate of incorporation) or unless certain minimum price, form of consideration and procedural requirements are satisfied. Our restated certificate of incorporation provides that the affirmative vote of the holders of 80% of the voting power of our then-outstanding voting stock entitled to vote generally in the election of the directors is required to amend, alter, change, or repeal the provisions of our restated certificate of incorporation described above. These requirements of a supermajority vote to approve certain transactions and amendments to our restated certificate of incorporation could enable a minority of our stockholders to exercise veto powers over such transactions and amendments.

Under some circumstances, Section 203 of the DGCL makes it more difficult for a person who is an interested stockholder to effect various business combinations with us for a three-year period. We have not elected to be exempt from the restrictions imposed under Section 203 of the DGCL.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Table of Contents

PLAN OF DISTRIBUTION

We are registering 7,000,000 shares of our common stock for possible sale by the selling securityholder.

The selling securityholder may offer and sell all or a portion of the shares covered by this prospectus from time to time, in one or more or any combination of the following transactions:

on the NYSE, in the over-the-counter market or on any other national securities exchange on which our shares are listed or traded;

in privately negotiated transactions;

in underwritten transactions, including by selling the Platinum Warrant or a portion thereof to underwriters, who may then exercise the Platinum Warrant or a portion thereof and offer and sell the underlying shares to investors;

in a block trade in which a broker-dealer will attempt to sell the offered shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

through purchases by a broker-dealer as principal and resale by the broker-dealer for its account pursuant to this prospectus; and

through any other method permitted by applicable law.

The selling securityholder may sell the shares at prices then prevailing or related to the then current market price or at negotiated prices. The offering price of the shares from time to time will be determined by the selling securityholder and, at the time of the determination, may be higher or lower than the market price of our common stock on the NYSE or any other exchange or market.

The shares of common stock offered hereby currently are subject to issuance upon exercise of the Platinum Warrant. If the selling securityholder offers the shares through a broker-dealer, including in an underwritten offering or otherwise, the broker-dealer may agree to purchase from the selling securityholder a portion of the Platinum Warrant, and may exercise the purchased portion of the Platinum Warrant, either for cash or on a net exercise basis, and sell to the public the shares acquired upon exercise.

The shares may be offered to the public, from time to time, through broker-dealers acting as agent or principal, including through underwriting syndicates represented by one or more managing underwriters or directly by one or more of such firms in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the shares of common stock (or portion of the Platinum Warrant, as applicable) will be subject to the conditions set forth in the applicable underwriting agreement. Any public offering price and any discounts or concessions allowed or reallocated or paid by underwriters or dealers to other dealers may be changed from time to time.

In connection with an underwritten offering, underwriters or agents may receive compensation in the form of discounts, concessions or commissions from the selling securityholder or from purchasers of the offered shares for whom they may act as agents. In addition, underwriters may sell the shares to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. The selling securityholder and any underwriters, dealers or agents participating in a distribution of the shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any profit on the sale of the shares by the selling securityholder and any commissions received by broker-dealers may be deemed to be underwriting commissions under the Securities Act.

Table of Contents

We and the selling securityholder each may agree to indemnify an underwriter, broker-dealer or agent against certain liabilities related to the selling of the common stock, including liabilities arising under the Securities Act. Under the Investor Rights Agreement, we have agreed to indemnify the selling securityholder against certain liabilities related to the sale of the common stock, including liabilities arising under the Securities Act. Under the Investor Rights Agreement, we have also agreed to pay the costs, expenses and fees of registering the shares of common stock; however, the selling securityholder will pay any underwriting discounts or commissions relating to the sale of the shares of common stock in any underwritten offering.

Upon our notification by the selling securityholder that any material arrangement has been entered into with an underwriter or broker-dealer (or if we enter into such an agreement) for the sale of shares through a sale over the NYSE, a privately negotiated transaction, a block trade, a purchase of shares or a portion of the Platinum Warrant by an underwriter or broker-dealer or through another of the manners of offer and sale described above, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

the name of the selling securityholder;

the number of shares being offered;

the terms of the offering;

the names of the participating underwriters, broker-dealers or agents;

any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallocated or paid by any underwriters to dealers;

the public offering price; and

other material terms of the offering.

The selling securityholder is subject to the applicable provisions of the Securities Exchange Act of 1934, as amended, or Exchange Act, and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus by the selling securityholder. The anti-manipulation rules under the Exchange Act may apply to sales of shares in the market and to the activities of the selling securityholder and its affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the shares to engage in market-making activities for the particular securities being distributed for a period of up to five business days before the distribution. The restrictions may affect the marketability of the shares and the ability of any person or entity to engage in market-making activities for the shares.

To facilitate the offering of shares covered by this prospectus, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the shares of common stock. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than the selling securityholder sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

Table of Contents

In the ordinary course of their business activities, any underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Company.

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution.

Instead of selling the shares of common stock under this prospectus, the selling securityholder may sell the shares of common stock in compliance with the provisions of Rule 144 under the Securities Act, if available, or pursuant to other available exemptions from the registration requirements of the Securities Act.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Kirkland & Ellis LLP. Any underwriters or agents will be advised about other issues relating to the offering by counsel to be named in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of KEMET Corporation appearing in KEMET Corporation's Current Report on Form 8-K filed on October 26, 2010 for the year ended March 31, 2010, and the effectiveness of KEMET Corporation's internal control over financial reporting as of March 31, 2010 appearing in KEMET Corporation's Annual Report on Form 10-K, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the reports of Ernst & Young LLP pertaining to such financial statements and the effectiveness of our internal control over financial reporting as of the respective dates (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of KEMET Corporation and its subsidiaries as of March 31, 2009 and for each of the years in the two-year period ended March 31, 2009, have been incorporated by reference herein, in reliance upon the reports of KPMG LLP, independent registered public accounting firm, and Deloitte & Touche S.p.A. ("Deloitte"), independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firms as experts in accounting and auditing. The report of KPMG LLP covering the March 31, 2009 consolidated financial statements contains (a) an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern and (b) an explanatory paragraph relating to the adoption of the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* an interpretation of FASB Statement No. 109.

The consolidated financial statements of Arcotronics Italia S.p.A. and its subsidiaries as of March 31, 2009 and for the year ended March 31, 2009 and the period from October 12, 2007 (acquisition date) to March 31, 2008 have been audited by Deloitte, as stated in its report incorporated herein by reference. The report of Deloitte on the aforementioned consolidated financial statements as of March 31, 2009 and for the year ended March 31, 2009 and the period from October 12, 2007 (acquisition date) to March 31, 2008 contains an explanatory paragraph expressing substantial doubt about Arcotronics Italia S.p.A. and its subsidiaries' ability to continue as a going concern.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 with respect to the shares of common stock offered hereby. This prospectus does not contain all the information set forth in the registration statement, parts of which are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and the common stock offered hereby, reference is made to the registration statement. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC pursuant to the Exchange Act. The SEC maintains an Internet site at <http://www.sec.gov> that contains those reports, proxy and information statements and other information regarding us. You may also inspect and copy those reports, proxy and information statements and other information at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

You can access electronic copies of our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q and all amendments to those reports, free of charge, on our website at <http://www.kemet.com>. Access to those electronic filings is available as soon as reasonably practicable after they are filed with, or furnished to, the SEC. We make our website content available for information purposes only. It should not be relied upon for investment purposes, nor is it incorporated by reference into this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus. This prospectus incorporates by reference the documents and reports listed below (other than portions of these documents that are either (1) described in paragraph (e) of Item 201 of Registration S-K or paragraphs (d)(1)-(3) and (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (2) furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K):

our Annual Report on Form 10-K for the year ended March 31, 2010, as filed with the SEC on May 25, 2010, including the information incorporated by reference from our Proxy Statement filed with the SEC on June 28, 2010 in connection with the solicitation of proxies for the Annual Meeting of Stockholders of KEMET Corporation to be held on July 28, 2010 except for the financial statements that were superceded by our Current Report on Form 8-K dated October 26, 2010;

our Quarterly Reports on Form 10-Q for the quarters ended June 30, 2010, September 30, 2010 and December 31, 2010, as filed with the SEC on August 5, 2010, October 29, 2010 and February 8, 2011, respectively;

our Current Reports on Form 8-K, as filed with the SEC on the following dates: April 20, 2010, April 22, 2010, May 5, 2010, May 6, 2010, May 18, 2010, June 21, 2010, July 29, 2010, October 5, 2010, October 12, 2010, October 26, 2010, October 27, 2010, November 5, 2010, November 12, 2010, December 15, 2010, December 28, 2010 and February 3, 2011 (disclosing information under Item 8.01);

Edgar Filing: KEMET CORP - Form 424B3

Table of Contents

the description of our common stock, par value \$0.01 per share, included under our Registration Statement on Form 8-A, filed pursuant to Section 12(b) of the Exchange Act, on November 12, 2010 (File No. 001-15491).

We also incorporate by reference the information contained in all other documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than portions of these documents that are either (1) described in paragraph (e) of Item 201 of Regulation S-K or paragraphs (d)(1)-(3) and (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (2) furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K, unless otherwise indicated therein) after the date of the initial registration statement of which this prospectus forms a part and prior to the effectiveness of such registration statement, and after the date of this prospectus and prior to the termination of this offering. The information contained in any such document will be considered part of this prospectus from the date the document is filed with the SEC.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide you, without charge, a copy of any or all of the information incorporated by reference into this prospectus, if requested in writing or by telephone. Any such request should be directed to:

KEMET Corporation
2835 Kemet Way
Simpsonville, South Carolina 29681
Attention: Investor Relations
(864) 963-6300

Table of Contents

7,000,000 Shares

KEMET Corporation
Deutsche Bank Securities
Prospectus Supplement dated May , 2011
