

**CANESTA, INC.**  
**CORPORATE FACT SHEET**

WHO IS CANESTA?	Canesta is the inventor of a revolutionary, low-cost <i>electronic perception technology</i> that enables ordinary electronic devices to perceive and react to nearby objects or individuals in real time.		
WHY IS THIS SIGNIFICANT?	Machines are blind. Abilities humans take for granted are denied ordinary devices because they cannot see the world around them to react or interact with it. But given such capability, entire new capabilities & categories of devices are possible that were previously unthinkable, offering new levels of functionality and convenience to consumers, businesses, industry, and government.		
WHAT IS CANESTA'S BREAKTHROUGH?	Canesta has developed and patented new, low-cost, semiconductor-based methods for forming electronic images of nearby objects in <i>three dimensions</i> . Unlike the sensors in digital still and video cameras that see the world as flat images, Canesta technology can additionally compute the <i>distance</i> from the sensor of <i>every single pixel in the image</i> , in real time, in any lighting conditions.  What is remarkable about this breakthrough is that the technology has been implemented in single, low-cost CMOS chips that - along with the appropriate proprietary Canesta software - can bring electronic perception technology to a wide range of low cost consumer and industrial electronic products.		
WHAT ARE THE APPLICATIONS FOR CANESTA'S TECHNOLOGY?	While applications are limited only by one's imagination, Canesta's 3-D input technology enables fine-grained, 3-dimensional depth-perception in virtually any kind of consumer device such as PCs, TVs, game consoles, and mobile phones, as well as automotive, industrial, and other products. Such products can then react on sight to the actions or motions of individuals and objects in their field of view, gaining levels of functionality and ease of use that were simply not possible in an era when such devices were blind.		
WHERE DOES CANESTA'S TECHNOLOGY FIT IN THE 3-D TECHNOLOGY SPECTRUM?	Canesta is "the <i>other</i> side of 3-D." While many are familiar with the exploding use of 3-D in film creation and exhibition, and increasingly sophisticated 3-D representational techniques in mechanical and architectural Computer Aided Design, such uses are all 3-D <i>as output</i> - that is, attempts to render a 3-D world via 2-D media such as screens.  By contrast, Canesta is 3-D <i>as input</i> - the real-time, electronic perception of a nearby world in three dimensions, that can provide an accurate, continuous, computationally-friendly stream of 3-D data for interpretation by any device.		
WHAT ARE THE APPLICATIONS OF CANESTA'S TECHNOLOGY IN THE PC MARKET?	There are as many applications of 3-D natural Interfaces on the PC as there are applications for PCs. Some of these include: <ul style="list-style-type: none"> <li>• Hands-free gesture control (for new user experiences that are more convenient and "fun");</li> <li>• Robust and accurate facial recognition for user identification and security;</li> <li>• Background substitution for video conferencing and "virtual sets" (to enable every consumer to have video conferencing and content-creation capabilities that are currently only available to professionals with large budgets);</li> <li>• Avatar control for 3-D virtual communities (increasing ease-of-use and improving accessibility to a wider audience);</li> <li>• Augmented reality;</li> <li>• Immersive personalized advertising.</li> </ul>		
HOW DOES CANESTA'S TECHNOLOGY WORK?	Canesta's electronic perception technology forms 3-D, real time moving images in a single chip through patented methods which use light photons to "range" the image, similar to radar. The technology works from darkness to the brightest sunshine, and can effortlessly discriminate nearby objects from low- or no-contrast backgrounds.  The silicon sensor chip develops 3-D depth maps at a rate in excess of 60 frames per second, and then performs additional processing on these depth maps to resolve the images into application-specific information that can easily be processed by embedded processor(s) in the end-use device or machine.  Since Canesta's software <i>starts</i> with a three-dimensional view of the world, provided immediately by the hardware, it has a substantial advantage over classical image processing software that struggles to construct three-dimensional representations using complex mathematics, and images from multiple cameras or points of view. This dramatic reduction in complexity makes it possible to embed the processing software directly into the chips themselves so they may be used in the most cost-conscious applications.		
WHAT ARE CANESTA'S PRODUCTS?	Canesta provides electronic perception technology to PC manufacturers, multiple OEMs in various segments of the consumer electronics and entertainment markets, automotive & Tier 1 OEMs, and various other industrial markets, in the form of fully functioning sensor modules and developer's toolkits.		
WHO ARE CANESTA'S CUSTOMERS?	Numerous applications are under active development by Canesta's OEM customers and partners, including (but not limited to): Hitachi, Honda, Optex, Optronic, Quanta Computer, SMSC, and others which have yet to be announced.		
CANESTA MANAGEMENT	<ul style="list-style-type: none"> <li>• James Spare, president and CEO (Microsoft, General Instrument, INBOXTV)</li> <li>• Abbas Rafii, executive vp (MobiNetix/ PenWare, HP)</li> <li>• Cyrus Bamji, CTO (Cadence)</li> <li>• Patrick O'Connor, vp of engineering (Parthus, Aural, Analog Devices, National Semi)</li> </ul>		
OTHER CANESTA INFORMATION	<ul style="list-style-type: none"> <li>• Founded in April, 1999; ~50 employees</li> <li>• 40 Patents granted (optical, semiconductor, 3-D applications, many others); more filed</li> <li>• Investors: Carlyle Growth Partners, Honda Motors, Hotung Venture Group, Quanta Computer, SMSC, Venrock, Others</li> </ul>		
CANESTA CONTACT INFORMATION	<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; vertical-align: top;"> <b>Business:</b>            CANESTA, INC.            1156 Sonora Court            Sunnyvale, CA 94086            USA            Phone +1 (408) 636-7422            www.canesta.com         </td> <td style="width: 40%; vertical-align: top; text-align: right;"> <b>Press/Media:</b>            ROEDER-JOHNSON CORPORATION            (650) 802-1850            Abigail Johnson/Paul Michelson            http://email.roeder-johnson.com  <a href="http://www.roeder-johnson.com">www.roeder-johnson.com</a> </td> </tr> </table>	<b>Business:</b> CANESTA, INC. 1156 Sonora Court Sunnyvale, CA 94086 USA Phone +1 (408) 636-7422 www.canesta.com	<b>Press/Media:</b> ROEDER-JOHNSON CORPORATION (650) 802-1850 Abigail Johnson/Paul Michelson http://email.roeder-johnson.com <a href="http://www.roeder-johnson.com">www.roeder-johnson.com</a>
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