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Expanded Edition!

Intel to Invest $2.7 b. in Israeli 22-nm Fab

Intel has announced a $2.7 billion investment in a chip manufacturing facility at Kiryat Gat, Israel, to upgrade it to 22-nm manufacturing.

According to Reuters, the plant will begin production in December, and will be Intel's second to be migrated to the 22-nm chips. It will not be a new facility.

In October, Intel said would invest up to $8 billion in 22-nm manufacturing. The investment will be used to develop and fabricate Intel's first 22-nm processors, known as "Ivy Bridge," in 2011. The Ivy Bridge design will be what's known as a process shrink - an existing design manufactured on a finer manufacturing process, with a corresponding cut in power or increase in clock speed - of the upcoming "Sandy Bridge" chip, which was introduced at this year's Intel Developer Forum.

The manufacturing shift will be a key one for Intel, as it not only maintains its process lead over its competitors but also applies it to entering new markets. In reporting stellar fourth-quarter results, Intel said that it was moving to a "four-fab" strategy, where it would invest in four-leading edge fabs, rather than take a more conservative approach. Those leading-edge 22-nm fabs will also be used to fabricate Atom processors, in a bid to take on ARM.

Israel tested worm linked to Iran atom woes

The New York Times reported that Israel has tested a computer worm believed to have sabotaged Iran's nuclear centrifuges and slowed its ability to develop an atomic weapon,
In what the Times described as a joint Israeli-U.S. effort to undermine Iran's nuclear ambitions, it said the tests of the destructive Stuxnet worm had

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occurred over the past two years at the heavily guarded Dimona complex in the Negev desert.

The newspaper cited unidentified intelligence and military experts familiar with Dimona who said Israel had spun centrifuges virtually identical to those at Iran's Natanz facility, where Iranian scientists are struggling to enrich uranium.

"To check out the worm, you have to know the machines," an American expert on nuclear intelligence told the newspaper. "The reason the worm has been effective is that the Israelis tried it out."

Western leaders suspect Iran's nuclear program is a cover to build atomic weapons, but Tehran says it is aimed only at producing electricity.

Iran's centrifuges have been plagued by breakdowns since a rapid expansion of enrichment in 2007 and 2008, and security experts have speculated its nuclear program may have been targeted in a state-backed attack using Stuxnet.

In November, Iranian President Mahmoud Ahmadinejad said that malicious software had created "problems" in some of Iran's uranium enrichment centrifuges, although he said the problems had been resolved.

The Times said the worm was the most sophisticated cyber-weapon ever deployed and appeared to have been the biggest factor in setting back Iran's nuclear march. Its sources said it caused the centrifuges to spin wildly out of control and that a fifth of them had been wiped out.

It added it was not clear the attacks were over and that some experts believed the Stuxnet code contained the seeds for more versions and assaults.
The retiring chief of Israel's Mossad intelligence agency, Meir Dagan, said recently that Iran's nuclear program had been set back and that Tehran would not be able to build an atomic bomb until at least 2015. U.S. officials, including Secretary of State Hillary Clinton, have not disputed Dagan's view.

Neither Clinton nor Dagan mentioned Stuxnet or any other cyber-warfare possibly used against the Iranian program.

Israel has voiced alarm over a nuclear Iran and Israeli Prime Minister Benjamin Netanyahu has said only the threat of military action will prevent Iran from building a nuclear bomb.

Any delays in Iran's enrichment campaign could buy more time for efforts to find a diplomatic solution to its standoff with six world powers over the nature of its nuclear activities.
U.S. and Israeli officials refused to comment officially on the worm, the newspaper said.

VC executives see Internet as hottest sector

Venture capitalists see the Internet as the hottest sector in 2011. 50% of respondents in the VC Indicator Survey for the fourth quarter of 2010 by Deloitte Brightman Almagor Zohar predict that most merger and acquisition deals in the next six months will occur in this sector. The fourth quarter survey was the company's 35th VC Indicator survey.

Other hot sectors in 2011, after the Internet, are medical devices and software, with 47% and 38% of respondents predicting M&A deals in these sectors over the next six months, respectively. A majority of respondents believe that there will be M&A deals over the next months. Cleantech and telecommunications are seen as less attractive for M&A deals: 22% of respondents predict deals in cleantech and 19% predict deals in telecommunications.

46% of respondents said that one to three of their Israeli portfolio companies will move their R&D centers to India, China, or elsewhere in Asia, while 54% of respondents say that their portfolio companies will keep their R&D activity in Israel.

84% of respondents believe that at least ten Israeli high-tech companies will have an exit by June 2011, and 16% said that fewer than ten com-

panies would have exits over this time period.

Deloitte Israel Technology, Media & Telecommunications manager Tal Chen said, "The global M&A wave will probably strengthen and affect the Israeli high-tech industry. In a reality in which leading telecom and technology players have large cash reserves and available external sources of financing, Israeli high-tech companies should realize that these are times to 'buy or be bought', and we must hope that Israeli companies will be on the buying side, too."

IBM Haifa lab receives most US patents in Israel

IBM inventors received a record 5,896 US patents in 2010, marking the 18th consecutive year the company has topped the list of the world's most inventive companies. Samsung was second, with 4,551 US patents, and Microsoft was third with 3,094.

IBM's Haifa Research Lab in Israel received 45 patents in 2010 making it the leading recipient of US patents in Israel, ahead of SanDisk-Israel (Nasdaq:SNDK) and Teva Pharmaceutical Industries Ltd. (Nasdaq: TEVA; TASE: TEVA). IBM in Israel exceeded the combined total of patents received by Technion and Hebrew Universities.

According to IBM, 108 patents issued to the company in 2010 included at least one inventor from Israel.

Groupon acquires Israel's social buying Grouper for $8m.

Grouper is Israel's first social buying site allowing friends to join together to make group purchases at discounts.

Social shopping company Groupon Inc. has entered Israel by acquiring social shopping site Grouper Ltd. The company did not disclose the size of the deal, but sources estimate it at $8 million, in stages over three years based on Grouper's performance.

Grouper will operate under the Groupon label and use its platform. Grouper's founders will likely make several million dollars from the deal.

The acquisition of Grouper is part of Groupon's international expansion strategy. The company simultaneously acquired social shopping companies, SoSasta in India and Twangoo South Africa. Earlier, it acquired three companies in Asia.

Groupon president Rob Solomon said, "Social buying is only just getting started in India, Israel, and South Africa, and we see great potential in all these markets. Groupon is creating and changing marketing by local businesses all over the world."

Grouper is Israel's first social buying site, founded by three entrepreneurs in March 2010. Several competitors have followed, most notably Yemama, Baligam and Buy2

Social shopping sites enable customers to enjoy discounts by joining with friends to make group purchases.

Israeli start-ups raised $11.1b VC in past decade PricewaterhouseCooper Israel MoneyTree Report 2001-2010: start-ups in Israel raised $884 million in 2010.

Israeli start-ups raised $11.1 billion in venture capital over the past decade according to the Israel MoneyTree Report for 2001-2010 by PricewaterhouseCooper Israel. Over the same period PwC reported that US start-ups raised $247 billion.

PwC Israel reported that Israeli start-ups raised $884 million in venture capital in 2010, up 20% from 2009 but down 37% from 2008.

Per capita venture capital investment in Israel is among the highest in the world. PwC said, "The report highlights the contribution of the money flowing into Israel from the US and domestic ven-

ture capital industry and reflects the strength of Israeli high tech.

The report found a sharp fall in the number of funds active in Israel over the past decade while pointing out that the proportion of investments by foreign venture capital funds has grown. The figures also show that growing investment by Israeli venture capital funds in foreign companies over the decade. PwC Israel said that this is a worrying trend because it showed that Israeli funds cannot find enough investment opportunities in Israel.

Investments in start-ups fell over the decade compared with investments in later stage high tech companies. According to PwC Israel the desired weight of investment to ensure the growth of new companies is 20%-30% of a fund's total devoted to first-time investments.

PwC Israel high-tech practice partner Robi Suliman said, "The past decade was a crazy roller-coaster ride for the various high tech players. From the burst bubble at the beginning to credit crisis towards the end, Israeli high tech know-how had breathtaking ups and downs."

GM investment arm invests in start-up Powermat

The investment arm of General Motors has made its first investment in Israel. General Motors Ventures has invested $5 million in start-up company Powermat, which has developed a mat on which up to three electronic devices can be charged simultaneously, and wirelessly.

The capital raised by the company will help it to accelerate its technological development and to broaden its activity worldwide. According to IVC data, Powermat has raised $25 million to date, including the current round. Other investors in the company are Richards Stone and Ron Ferber. Powermat employs 60 people at its development center in Neve Ilan and in Detroit.
Ran Poliakine, its CEO, founded Powermat in 2007. According to Poliakine, the company's technology provides "power transmission that is safe, efficient, and that does not waste energy."

Powermat first exhibited its product in January 2009, at CES. At the beginning of 2010, Poliakine said that in 2009 the company sold about 750 thousand units in the US. It expected to reach sales of 5 million units in 30,000 stores by the end of 2010.

Powermat and General Motors announced at CES 2010, which officially opens today in Las Vegas, that they had signed a commercial agreement that would enable charging of personal electronic devices wirelessly in future General Motors vehicles, starting in 2012. The first car to feature the Israeli start-up's product will be the electrically powered Volt.

Gil Golan, director of General Motors' Advanced Technical Center Israel, who also heads General Motors Ventures in Israel, said, "The company believes in Israel as a center of technological innovation, and it is no coincidence that Israel was chosen along with the Silicon Valley center to lead the activity of General Motors Ventures." He said

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he estimated that a substantial share of the fund's activity would be directed towards investment in Israeli technology companies. "We are examining several additional companies, and I believe that some of them will mature to investment in the coming months," he added.

FIMI to raise Israel's largest private equity fund

FIMI managing director Ishai Davidi: I intend to raise $1 billion by the end of the year.
After raising $1.25 billion in four private equity funds in 15 years First Israel Mezzanine Investors Fund (FIMI) managing director Ishai Davidi is now planning to raise his largest-ever fund, which will also be the largest-ever private equity in Israel. "I intend to raise $1 billion by the end of the year for the new fund," he said in an exclusive interview with "Globes", discussing his plans for the FIMI V Fund.

"A $1 billion fund suits us. It will enable us to invest at the pace we know, and there could be opportunities in large companies," said Davidi about the planned fund, which will be twice as large is the previous fund raised less than three years ago.

As with FIMI's other funds, the composition of investors in the new fund will likely be divided more or less equally between Israelis and foreigners. Over the years, FIMI has invested $1 billion in 64 companies, and has already sold its holdings in 34 of them.

In 2010, FIMI invested $210 million, and it expects to make $250 million in new investments in 2011. FIMI's best-known investments over the years include Lipman Electronics Engineering Ltd., Tadiran Communications Ltd., Scope Metal Trading and Technical Services Ltd. (TASE: SCOP), Tana Industries Ltd. (Tami 4), and Tefron Ltd. (Bulletin Board: TFRFF; TASE:TFR).

As a private equity fund, FIMI invests in mature companies in two ways: either a buyout, usually with partners; or a financial investment through a unsecured mezzanine loan, including options to sell the shares in the company.

Davidi loves being involved in managing and improving companies, but he is not involved in the mezzanine deals. Nonetheless, most of FIMI's deals in the past year, such as in Tahal Group International BV, Priortech Ltd. (TASE:PRTC), and Raviv ACS Ltd. were mezzanine investments. Davidi says that this was no coincidence.

"It is no coincidence that we made mezzanine financial investments. I think that in some cases, market prices are high, which makes it difficult to acquire control of companies. We don't make deals by force, if the market skyrockets we'll wait for it to come back down," he says.

But if you turn into a company that merely grants loans, why don't you become a bank instead of a fund that turns around companies?

Davidi: "Mezzanine is not like a bank loan. When the returns on these investments arrive, you'll realize this. Mezzanine financing is the best and wisest tool for a company, and makes it possible to bridge differences between the parties over valuation in creative ways."

"In some sectors, prices on the Tel Aviv Stock Exchange (TASE) are a little high, and in some cases, they're very high. On the TASE today there are companies with multiples that do not look realistic to us, risk characteristics that we don't like, and bond raising that we don't care for. There are still opportunities in some companies, but the TASE in some sectors is not cheap."

"We're talking about the pricing of specific companies, and less about sectors."

Weizmann scientists discover chemical signal in tears

Emotional crying is a universal, uniquely human behavior. When we cry, we clearly send all sorts of emotional signals. In a paper published online today in Science Express, scientists at the Weizmann Institute have demonstrated that some of

these signals are chemically encoded in the tears themselves. Specifically, they found that merely sniffing a woman's tears – even when the crying woman is not present -- reduces sexual arousal in men.

Humans, like most animals, expel various compounds in body fluids that give off subtle messages to other members of the species. A number of studies in recent years, for instance, have found that substances in human sweat can carry a surprising range of emotional and other signals to those who smell them.

But tears are odorless. In fact, in a first experiment led by Shani Gelstein, Yaara Yeshurun and their colleagues in the lab of Prof. Noam Sobel in the Weizmann Institute's Neurobiology Department, the researchers first obtained emotional tears from female volunteers watching sad movies in a secluded room and then tested whether men could discriminate the smell of these tears from that of saline. The men could not.

In a second experiment, male volunteers sniffed either tears or a control saline solution, and then had these applied under their nostrils on a pad while they made various judgments regarding images of women's faces on a computer screen. The next day, the test was repeated -- the men who were previously exposed to tears getting saline and vice versa. The tests were double blinded, meaning neither the men nor the researchers performing the trials knew what was on the pads. The researchers found that sniffing tears did not influence the men's estimates of sadness or empathy expressed in the faces. To their surprise, however, sniffing tears negatively affected the sex appeal attributed to the faces.

To further explore the finding, male volunteers watched emotional movies after similarly sniffing tears or saline. Throughout the movies, participants were asked to provide self-ratings of mood as they were being monitored for such physiological measures of arousal as skin temperature, heart rate, etc. Self-ratings showed that the subjects' emotional responses to sad movies were no more negative when exposed to women's tears, and the men "smelling" tears showed no more empathy. They did, however, rate their sexual arousal a bit lower. The physiological measures, however, told a clearer story. These revealed a pronounced tear-induced drop in physiological measures of arousal, including a significant dip in testosterone – a hormone related to sexual arousal.

Finally, in a fourth trial, Sobel and his team repeated the previous experiment within an fMRI machine that allowed them to measure brain activity. The scans revealed a significant reduction in activity levels in brain areas associated with sexual arousal after the subjects had sniffed tears.

Get a new set of eyes from Israel

An Israeli company is using a new stem cell technology to save the sight of aging baby boomers by replacing diseased cells with new ones.

Are "granny glasses" a thing of the past? Israeli company CellCure Neurosciences has developed a new stem cell technology for the treatment of age-related eyesight deterioration, which would replace diseased cells with fresh new ones.

The innovative treatment, which is unprecedented in the medical field, would not just improve deteriorating eyesight; rather those who benefit from the treatment will feel as if they have a new set of eyes.

New cells halt disease

More than eight million people in the US and many millions more worldwide, suffer from age-related macular degeneration, the main cause of visual impairment in people over 50. The dry form of this disease, which CellCure plans to treat, affects the ability to see fine details. Thus, company CEO Charles Irving explains, "Those who are unfortunate enough to have this disease cannot read, drive, or see the faces of their grandchildren."

Age-related macular degeneration begins in the retina, when retinal pigment epithelial (RPE) cells begin to die. RPE cells are caretakers of the photoreceptors – the cells in the retina that enable the eye to see light and dark. Currently there is

no drug treatment for this disease, which typically progresses gradually over time.

In October, CellCure reached a breakthrough based on the work of Professor Rubinoff, director of the Human Embryonic Stem Cell Research Center at Hadassah University Hospital, and Dr. Eyal Banin, head of Hadassah's Macular Degeneration Unit.

The researchers found a method of converting human embryonic stem cells into RPE cells, which can be transplanted into the patient's eye. The transplants, performed on animal models with macular degenerative disease, showed that the new RPE cells could protect the cells in the retina from degenerating. Once the old cells were replaced, the progress of the disease halted, thereby rescuing the retina from the disease.

Cures for more diseases in the worksThe mission of CellCure is to take this technology, together with clinical grade embryonic stem cells, and to create a product: Clinical grade RPE cells which can be used in clinical trials and commercialized. Teva has signed a license option agreement with CellCure to take over the clinical studies of the product development, once the company receives FDA approval to begin clinical trials.

The company is also working to combat other age-related degenerative diseases, but treatment of this particular disease is less complex than the treatment of neurological disorders, for example, and therefore more easily applied.

"The simplicity of this particular application [of stem cell technology] makes it the number one leading clinical application of human embryonic stem cells," says Irving. "For this reason, many pharmaceutical companies have become interested in it."

So far, Teva has invested $2 million in the company, Hadasit Bioholdings invested $1 million, and BioTime, a US-based company, invested $4.1 million. CellCure is located in the Jerusalem BioPark at Hadassah Ein Kerem and supports about 10 scientists.

Raising fish in the desert

"There's plenty of fish in the sea," the old saying goes – but that's not as true as it once was. In fact, says Dotan Bar-Noy, CEO of Israel's GFA (Grow Fish Anywhere) Advanced Systems, there are fewer fish in the sea with each passing year. "Overfishing is a much bigger problem than people realize, and in a few years, many species of salt water fish are simply going to disappear if something isn't done."

Bar-Noy and 30 or so others – mostly engineers, marine biologists and other technical folk – have found a solution to the diminishing numbers of fish in the sea. Based on the work of Israeli scientist Dr. Yossi Tal and Hebrew University professor Jaap van Rijn – inventor of the system – GFA has developed an on-land environment where fish can be raised, without having to exchange water or treat it chemically.

"We call this a zero-discharge system," Bar-Noy tells ISRAEL21c. "We use biological filters and specially developed bacteria to treat the water the fish are growing in, without wasting anything. The system can be set up to raise salt-water fish anywhere in the world – even in the desert, thousands of miles from the ocean," he asserts.

Fish farms are nothing new. They've been around for years, enabling growers to set up controlled environments that can ensure a specific yield of fish, allowing them to guarantee delivery without worrying about dwindling supplies in the ocean, pollution, inclement weather, and other factors that are hard to control.

Still, while they enhance the conservation of fish in the sea, fish farms have problems of their own – mostly due to the need to circulate the water in the pools and tanks where the fish are raised. Most fish farms are located adjacent to a body of water, and their waste-laden water is channeled into the sea, and replaced with "fresh" sea water.

While fish raised in captivity don't produce an increased amount of waste, at sea it would be dissipated over a much wider area. The fish waste, with its nitrogen and other elements concentrated in a relatively small area, renders the water that it's dumped into uninhabitable for fish.

As the tanks are generally located near the shore, in relatively shallow water, the wastewater tends to linger there. With the movement of the currents, nearby jurisdictions are liable to find a considerable number of fish floating belly-up in their bays and harbors, having been poisoned by the high concentration of nitrogen and nutrients in the wastewater dumped from the tanks.

GFA's New York purification plant opened in 2009 and is already supplying 100 tons of sea fish a year to the US market.

This problem is so serious that in some areas fish farms are banned, despite their being perhaps the only technologically feasible solution available to combat overfishing, says Bar-Noy. Alternative purification systems are based on electrical treatment systems which are expensive to install and run, and are not all that effective, he notes. "Even when they work, the electrical purification systems are too expensive, and fish produced with those systems will cost far more than fish from the sea."

GFA is currently the only solution that eliminates the environmental problems associated with fish farming. Tanks are filled with water, then with fish – and added to the mix are microbes perfected by GFA to treat the nitrogen and organic waste byproducts of fish production, in the tank.

Water is only added to replace that which evaporates, and the fish can grow through their natural cycle and remain in the tank until they are ready for market. "It's the most efficient fish growing system possible," claims Bar-Noy, "There is no pollution, and there is no need to fish at sea. Just set up tanks with GFA technology anywhere in the world, and harvest the fish when you're ready to go to market."

Toward eliminating world hunger

Because the GFA system uses cheap and easy-to-produce bacteria to cleanse fish tanks, the costs for raising the fish are fully competitive with those for raising fish from the sea, or other farms, Bar-Noy points out. And tank-raised fish are uniformly tasty. "Fish from the sea are subject to the natural weather cycles of cold and heat, while farmed fish can be raised at a constant, ideal temperature. GFA fish have an even greater advantage, since the water they grow in is always fresh, making the fish taste better than fish from other sources."

The system has already been set up in several locations in Israel, and the company runs a purification facility in upstate New York, which has been operating since 2009. The facility, the largest using GFA technology, produced about 100 tons of fish last year – mostly salt-water fish like sea bream, bass, tilapia, and others.

GFA is currently working on the third generation of its purification system. While the company was formed in 2008, its technology was developed over a 20-year period. "While the ideas were there for awhile, the only viable purification techniques were based on electrical devices. It was only with the rise of biotechnology techniques that we were able to develop the bacteria that enable us to do the purification cheaply," Bar-Noy explains.

The resulting system allows for high-capacity fish production – as much as 100 kg of fish per cubic meter of water (220 pounds of fish per 35 cubic feet) – along with the ability to grow fish in any environment. Fish farms can be set up anywhere – including in large cities, where fish may be brought to market the same day they're harvested, thus enabling growers to eliminate transportation time and costs.

After raising funds from several angels, GFA recently raised NIS 18 million (about $126,000) from Dutch private equity fund Linnaeus Capital

Partners. The money will finance a number of projects, including expanding the New York facility and further refining the technology.

"As populations grow, more countries are looking to fish as sources of protein, but overfishing threatens to destroy that dream," says Bar-Noy. "With our system, fish can be grown anywhere – even in the desert – with minimal environmental impact. This is about more than just growing fish," he adds. "This could help feed millions."

Publishing giant Macmillan buys BioData

sraeli start-up BioData Ltd. has been acquired by Macmillan Publishers Ltd. Sources inform ''Globes'' that the deal totaled $5-10 million for more than half of BioData's shares, reflecting a company value of up to $20 million. BioData declined to comment on the figure.

Macmillan, which publishes "Nature" and "Scientific American" is seeking to expand into new fields. The acquisition of BioData is part of Macmillan's new venture, Digital Science, which is aimed at providing world-class software tools and services to scientists, managers and investors in order to make research more productive through the use of technology.

BioData CEO Jonathan Gross founded the company in 2007. His friends and family have financed the company to date. "We had sales from day one," he told "Globes".

BioData's primary market is Israel, and it has some international activity. Customers include thousands of laboratories, where hundreds of thousands of students use its software.

Macmillan is one of the world's largest publishing houses. In addition to its journals in the natural and social sciences, and popular science magazines, it publishes textbooks and literature, academic literature, and academic information sites.

Digital Science managing director Timo Hannay was formerly the director of Nature.com. He said, "Scientific research is at the beginning of a transformative digital age, and BioData is one of a breed of new companies that will be powering it."

When Digital Science was launched last month, Hannay said, "Research is becoming more and more digitally enabled and hence more productive, but the gap between the potential opportunity and the current state of the art is still wide. For example, we still have better tools for managing our personal music and photo collections than we have for managing, tracking and mining professional scientific information. At Digital Science we want to help change that."

Digital Science also announced commercial partnerships with SureChem Inc. of the US, and Symplectic. Digital Science actually learned about BioData during the negotiations with Symplectic Ltd. of the UK, which had earlier considered collaborating with BioData.

Gross said, "The negotiations with Digital Science were not always simple, because it's a large company, and we're a small Israeli start-up. Nonetheless, the atmosphere was pleasant. They spoke our language and, like us, they know what researchers need. It was much easier for us to explain our product to them than to venture capital funds, for example, which is also why BioData did not raise capital from them, although we considered it."

Elbit Systems wins $260m. Brazilian order

Elbit Systems Ltd. (Nasdaq: ESLT; TASE: ESLT) Brazilian subsidiary, Aeroeletronica Ltda. has won a $260 million Brazilian Army follow-on order for the supply of UT30 BR 30 mm unmanned turrets, as part of the army's Guarani Project. Elbit Systems won the contract in an open international tender in 2009.

Elbit Systems will install the unmanned turrets on several hundred Brazilian Army Iveco 6x6 armored personnel carriers.

Elbit Systems president and CEO Joseph Acker-

man said, “The award is a major milestone for AEL in our continuing process to enhance local Brazilian capabilities and technologies. Winning such a prestigious project attests to our leadership in the field of innovative land solutions, and we hope other customers will follow, both in Latin America and throughout the world.”

Just last week, Elbit System acquired two Brazilian defense electronic companies, companies, Ares Aeroespecial e Defesa SA and Periscopio Equipamentos Optronicos SA.

Technion one of three non-U.S. institutions wooed for N.Y. research center

‘This is an unusual compliment and shows our international standing,’ says Peretz Lavie, president of Technion-Israel Institute of Technology.

The Technion is just one of three non-American academic institutions to receive an offer from New York City to help it develop a “world-class science and technology research institution” in New York.

The academic institutions, which also include American Ivy League universities like Columbia and Cornell, have until mid-March to submit an initial proposal for the center, after which those who make it past the first round can participate in a formal bidding process.

“This is an unusual compliment and shows our international standing,” said Peretz Lavie, president of Technion-Israel Institute of Technology.

Lavie said the offer, which was officially made in a December 22 letter from New York City Mayor Michael Bloomberg, did not come as a surprise.

“Talks about the possibility of establishing a science and technology institution in New York began about a year ago,” said Lavie. “We were asked if we have experience in setting up new branches. We don’t have much of that kind of experience, but we have certainly accumulated wide-scale knowledge in developing curricula. We made a few suggestions, which were apparently readily accepted.”

Lavie said New York wants the research center to influence the city’s economy, prompting the Technion’s suggestion that it start off by teaching subjects like electrical engineering and computer science, and provide students with practical experience from the outset.

But for all the preliminary discussions, the Technion, which the letter describes as having an “outstanding reputation in the academic and research community,” has yet to decide whether it will submit a proposal, given the short time frame and the financial constraints faced by the Haifa-based university and other Israeli institutions of higher education. It is expected to make a decision within the coming days.

If it does participate, the Technion can expect “a significant commitment in the form of capital and city-controlled land,” Bloomberg said in the letter.

“As we learn more about your vision for Technion-Israel Institute of Technology’s presence in New York, we will work closely with you to ensure the optimal degree of support to achieve your ambitions and priorities,” he said.

Although the letter does not mention a specific sum, Technion administrators said New York City municipal officials told them the city plans to spend $100 million on the research institution and is searching for a suitable site within the five boroughs.

Technion representatives said they were trying to find out whether students who attend the new institution would get a degree from a U.S. institution or one from the Technion, if it is selected as New York City’s partner in the venture.

If the Technion does end up taking part in the final bidding process, it is likely to attempt to work with other universities to come up with its final proposal, which the rules allow.

*Iran has missiles that can reach Israel in 12 minutes, according to cables released by WikiLeaks.

Israel Defense Forces Chief of Staff Gabi Ashkenazi told a U.S. Congressional delegation in November 2009 that the Islamic Republic has over 300 missiles that can reach the Jewish state in up to 12 minutes, according to the cables released on Sunday.

He also reportedly told the lawmakers, led by Ike Skelton (D-Mo.),that he was preparing Israel's military for a major war against Hamas, saying that "I'm preparing the Israeli army for a major war, since it is easier to scale down to a smaller operation than to do the opposite."

Ashkenazi told the delegation that the threat from Hamas and Hezbollah is more acute than the Iranian threat, due to their proximity to Israel. Iran funds both Hamas and Hezbollah. He predicted that the next big war for Israel would be either in Gaza or Lebanon.

He also said that Hezbollah has over 40,000 rockets capable of reaching all of Israel, and that Hamas could hit Tel Aviv.

Hebrew U. ranked 21st in world for computer science 44th in world for economics and business

The Hebrew University of Jerusalem has been ranked 21st in the world in computer science from among the world's top 100 universities, it was announced in a recent publication of subject and field rankings by the Academic Ranking of World Universities issued by Shanghai Jiao Tong University in China.

In the subject of computer science, the Hebrew University ranked ahead of Yale University (31), Cambridge University (30), and Hong Kong University of Science and Technology (26).

In the subjects of economics and business, the Hebrew University came in at 44th place - ahead of Brown University (45), Georgetown University (51-77) and the London Business School (51-77).

In the field of social sciences, the Hebrew University ranked 46th, and was ranked among the top 75 universities in the field of mathematics and natural sciences.

Every year, Shanghai Jiao Tong University evaluates more than 2,000 universities in the world and ranks the top 500 among them. The rankings are based on a combined scale of academic criteria that include awards won by alumni and staff, articles published in leading scientific journals, and the number of highly cited researchers. The Chinese university's rankings have achieved respected international recognition.

Local concerns outsourcing to Palestinians

Within the pastel walls of a modest suburban office, Israeli high-tech workers have accomplished a feat that still eludes their political leaders: They have created a partnership with the Palestinians.

Israeli-Palestinian peace talks may be stalled, but that hasn't stopped a small but steady trickle of Israeli technology companies from seeking to work with people on the other side of the decades-old conflict.

Israeli CEOs say it's their way of bringing a little bit of peace to their troubled corner of the world. But the real reason they're hiring Palestinians, they acknowledge, is because it simply makes good business sense.

Israel's high-tech industry is among the country's crowning achievements. Israel has the most start-ups per capita in the world and has helped produce such game-changing innovations as instant messaging and Internet telephony. Many Israeli tech firms send work offshore to Eastern Europe, India or China.

In the past three years, however, some have turned to Palestinian engineers and programmers. They are cheaper, ambitious, work in the same time zone, and — surprisingly to many

Israelis — are remarkably similar to them.

“The cultural gap is much smaller than we would think,” said Gai Anbar, chief executive of Comply, an Israeli start-up in this central Israeli town that develops software for global pharmaceutical companies like Merck and Teva.

At a previous job, he worked with engineers in India and Eastern Europe, but found communication difficult. So in 2007, when he was looking to outsource work at his new start-up, he turned to Palestinian engineers. He said they speak like Israelis do — they are direct and uninhibited. Today, Comply employs four Palestinians.

Palestinian engineers have also warmed up to the idea. “I doubt you would find a company who says, ‘I am closed for business’” to Israelis, said Ala Alaeddin, chairman of the Palestinian Information Technology Association.

If there is hesitation, it’s in marketing Israeli products under a Palestinian name to tap into larger Arab markets off-limits to them. “We’re looking for a partnership ... not one side benefits from the other side,” Alaeddin said.

“We have a window of opportunity to demonstrate our skills,” said Murad Tahboub, CEO of Asal Technologies, a Palestinian outsourcing company that works with Comply and a handful of other Israeli-based companies. “The more people know about us ... the more comfortable they will be in doing business with us.”

This is easier said than done. Comply’s office in Hod Hasharon is only about 20 miles (30 kilometers) from Asal Technologies in the West Bank city of Ramallah — but they are worlds apart.

Israel’s military prevents most Palestinians and Israelis from visiting each others’ cities without special permits, citing security concerns.

Anbar says his company is proving skeptics wrong. One recent morning, Israeli project manager Gali Kahane chatted online in English with Palestinian programmer Mohammad Radad, sending him smiley emoticons while reviewing updates to the database software they are developing.

“At first it was a little bit strange” to work with Palestinians, but now it’s like working with any other Israeli developer, Kahane said. “We are very curious what they think about us,” but they never talk politics. “The only thing we talk about is when the bugs will be finished, and reaching our deadline together,” she said.

Anbar says working with Palestinians is “doing something good for the world we are living in,” but says the real reason he outsources to the West Bank is financial: He pays the outsourcing company about $4,000 a month per engineer, half the cost of outsourcing to an Israeli company.

While Indians or Chinese engineers cost even less, he said Palestinians are more loyal to his company than workers from distant countries — and have a dogged work ethic. Many gained experience working abroad, and stiff competition for coveted engineering jobs in the West Bank pushes those who have work to prove themselves, Tahboub said.

About 10 Israeli start-ups and international companies with centers in Israel have been outsourcing to the West Bank in the past three years, said Tova Scherr of Mercy Corps, an international aid group working to encourage these ventures. Scherr said visits by Israeli businessmen to Ramallah — with Israeli military permission — are becoming more common.

Networking giant Cisco says it was the first international corporation with research and development centers in Israel to begin outsourcing work to the West Bank. Israeli branches of Hewlett-Packard Co., Intel Corp. and Microsoft Corp. have followed Cisco’s example and begun to outsource to the Palestinian territories this year, according to Mercy Corps.

Arranging meetings is "sometimes like crossing the Red Sea," said Cisco spokesman Gai Hetzroni.

Last year's initial meeting of Palestinian and Israeli engineers was meant to take place in the West Bank city of Jericho, but an Israeli military closure forced the workers to drag their laptops into a nearby Bedouin tent they rented for the day. Hetzroni said it was an "extraordinary meeting" that convinced the firm to go forward with the partnership.

Word of the West Bank's potential is spreading: Tahboub of Asal Technologies said he received about 20 inquiries this year from Israeli companies.
"We are doing great work for our country," Tahboub said, referring to the yet-to-be-born Palestinian state. "I believe the (technology) sector will become one of the pillars of the Palestinian economy."

Seeing the Western Wall

The holiest site in Judaism is now open to virtual travelers, with the debut of an app allowing iPhone and iPad users to see Jerusalem's Western Wall 24/6 - every day but the Jewish Sabbath.

"We had to get with the times," said Joseph Loshinsky, president of the Western Wall Heritage Foundation, which oversaw the app's creation and which administers the Western Wall.

Loshinsky, who owns an iPhone and iPad, says he thought of the app as a way to help solve the problem of "thousands of years of people dreaming of Jerusalem but not being able to get there."

The app includes a compass orienting users toward the wall to offer prayers from afar, a video feed of the wall - up everyday except Saturday - and a tool for sending messages to be inserted into the wall, a tradition for Jews visiting Jerusalem's Old City.

The app, called iKotel - after the Hebrew term for the Western Wall - was rolled out Monday and is available for free in English, Hebrew and Russian from Apple's online stores.

The wall is the sole remnant of Jerusalem's ancient temple, destroyed 2,000 years ago.

Israel: Best Economy in the west

Israel's Gross National Product grew by 4.5% in the year 2010, according to CBS data and estimates – 0.5% more than had been expected. This compares with only 2.7% in the other 33 countries of the Organization for Economic Co-Operation and Development (OECD). Israel became an OECD member state this past September.

In 2009, despite the great worldwide economic crash, Israel's economy grew by 0.8% - and by 4.2% in 2008. The GNP per capita grew by 2.7% this year, compared with a drop of 1.1% the year before. In the OECD as a whole, this year's per capita GNP grew by 2.3%.

Israel is also doing better in the employment arena than the rest of the OECD, with a 6.7% unemployment rate, compared with 8.3% in the other countries.

Cabinet approves emergency plan to increase the production of Desalinated water

The Cabinet approved an emergency plan to increase the production of desalinated war in Israel by operating desalination facilities around the clock. This is in order to deal with the crisis in the water economy and ensure the orderly supply of water to residents of Israel, while maintaining existing sources of water. Increasing the quantity of desalinated water will lead to the production of approximately 420 million cubic meters in 2013, a larger quantity than that drawn annually from the Sea of Galilee.

It was decided that the Water Authority will work to reduce the effects of pollution and to rehabilitate the sources of water in Israel. It was also decided

to advance a plan to establish reservoirs of treated wastewater for use by a number of agricultural communities.

Prime Minister Netanyahu directed that a proposal to build an additional desalination facility in Ashdod, as well as additional steps to deal with the crisis in the water economy, be submitted for Cabinet approval in the coming weeks:

Israeli firm seeks to revamp video surveillance

Aviram Yaacov, computer systems coordinator at Ben Gurion University>s security department, uses BriefCam>s video synopsis programme at the university in the southern city of Beersheba January 16, 2011.

Just because a crime is caught on camera doesn>t mean the criminal will also be caught.

As the world becomes increasingly saturated with closed circuit television (CCTV) cameras, security experts say offenders can easily slip away simply because no one has the time to find the incriminating footage.

Israeli company BriefCam hopes to change that with a new computer program, called video synopsis, which automatically analyzes surveillance video and picks out the relevant action from countless hours of video

The program identifies moving objects -- their start time, end time, location -- isolates them, and then repacks them in a condensed video, said Hebrew University professor Shmuel Peleg who co-founded the company in 2007.

In the condensed video, all objects that passed in front of the camera are shifted in time and seen almost simultaneously. The user can click on any object and be taken directly to the original footage where the suspicious or desired event occurred.

«It>s a pilot so there is still room for improvement, but overall it is a great development in CCTV technology. There are lots of opportunities and possibilities,» he said.

Matt Fabian, security manager of a Stew Leonard>s, a small supermarket chain in the northeast United States that uses BriefCam>s system, also said it was like nothing he had seen before.

He said he can now watch all the overnight surveillance tapes in minutes without the risk of missing important events, as can often happen when trying to fast forward manually.

BriefCam CEO Dror Irani said the programme costs several hundred dollars per camera for high-end security teams, but the idea is to reach home users who will pay a few dollars a month in subscription fees.