

**San Francisco, CA, USA****Summary**

1. **Amount of investment required** – \$ 6000 thousand.
2. **Production** – custom application accelerator *Sparse System Accelerator (SSA)* intended to significantly accelerate the solution of large sparse linear systems required for complex computer simulations.
3. **Trade marks** – Sparse System Accelerator (**SSA**) – to be registered.

**Company profile**

**Date of establishment** – American-Russian company registered in August 2005 in the state of Delaware, the USA. The Russian team of developers and the American management team have worked together since 2004.

**Signs of public recognition** – none.

**Number of employees** – 15 persons, of whom 10 are contractors.

**Team**

**Daniel Considine** – President and Director.

- Previous management experience – CEO Wave Media; director of European operations, Mirror Software Corp; manager for CIS joint ventures, Leo Burnett.
- Experienced international manager: managed global, regional and local teams.
- 12+ years of responsibility for profits and losses in software, marketing services and IT companies.
- MBA in International Business, Pepperdine University; B.S. in Chemistry, Saint Olaf College (USA).

**Oleg Diyankov** – Vice President for Research and Development and Director.

- General Director of Neurok Techsoft, computational modeling for international companies.
- Director of Laboratory, Nuclear Center of the RF, 25+ years of experience.
- More than 80 publications on numerical methods of mathematical modeling.
- Doctorate, Institute of Mathematics and Mechanics of the Russian Academy of Sciences (Ekaterinburg).

**Vic Batson** – Vice President for Sales and Marketing.

- Previous management experience – senior vice president for a consumer robotics start-up company; global project manager at Hewlett-Packard and Novell.
- 20+ years sales experience in high-technology, marketing and alliance management.
- MBA in International Business, Pepperdine University; B.S. in Electrical Engineering, Vanderbilt University (USA).

**Product characteristics**

The key problem in solving applied computer simulations\* is the need to solve massive sparse data systems. The speed of solving these simulations is limited by computer calculations that can take several days. Companies spend millions of dollars each year on expensive hardware products and development of software solutions to accelerate applications.

\* These simulations are used in:

- analyzing movement of various liquids in porous substances (e.g. in oil and gas exploration and production);
- computation of structural changes in plastic and resilient materials (e.g. in automobile, aviation and vehicle construction);
- financial modeling;
- modeling for diffusion processes and heat transfer (e.g. in chemical technology);
- data indexing for search engines and information analysis systems.

We offer an innovative technical solution for solving this problem – a PC-installable **SSA** custom application accelerator that can increase the speed of solving massive sparse data matrices by 15–25 times.

The **SSA** consists of a custom-designed, printed-circuit board. All key algorithms for processing data are realized at the hardware level. Compute-intensive processes are off-loaded from the central processor, freeing it to perform other calculations.

At the heart of the product lies the patent-pending *Intelligent Memory Controller* which solves the critically important problem of “cache misses” in a computer’s cache memory.

Functional equivalents of the offered application accelerator permitting equal speeds of solving such problems are cluster computers and workstations costing not less than \$ 100 ths.

The competitive advantages of the product include:

- One **SSA** provides sparse data processing capabilities equivalent to complex cluster systems and workstations;
- The price of the accelerator (\$ 10 000) is affordable for target users;
- The **SSA** allows users to spend 4–5 times less money on high-performance computer calculations or to increase the number of problems solved by 10–20 times;
- Works with general-purpose computers;
- Can be integrated with customers' current applications;
- Possible to upgrade with additional functionality.

**Current state**

A prototype has been created and tested, patent applications covering the key technology have been filed in Russia, the US and Europe, preliminary market research has been completed, and contacts have been initiated with key suppliers, manufacturers and potential customers.

**Development strategy**

**Use of funds**

R&D	37%
Marketing	5%
Acquisition of current assets	58%

**Prospective outcome of investment**

We anticipate that the investment will be sufficient to allow the company to expand its staff, ramp sales, expand its core technology into additional markets, and turn cash-flow positive.

**Marketing & markets**

In 2006, the worldwide CAE market for software and services alone was estimated to be \$ 4.5 billion, growing at an 11% compound annual growth rate. The broader market for high-performance technical computing was \$ 9.2 billion in 2005, growing by 24% per year. We will initially position the SSA within the computer-aided engineering market, specifically targeting the finite element analysis submarket. Ongoing discussions with leading software developers within this market shows a promising interest in the company's technology. We also see a significant potential in the oil and gas exploration and production market.

**Interaction with investor**

The company proposes to sell shares of its stock, in a single round of financing, for an aggregate purchase price in \$ 6 000 ths. The company is open to discussing specific investment terms with interested investors. Management will make it a priority to generate an attractively-valued exit for its investors, either through acquisition by a market leader or a public offering of its stock.