

January 6, 2012

Volume 1, Issue 2

COGNIMEM™ Technologies, Inc.

A Novel Approach to Modern Computing....

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Our Distributors

- [APPLETec Ltd., Israel](#)
- [CoreEL, India](#)
- [Road Narrows, USA](#)



CogniMem's CogniBlox™ at SC 11:

CogniMem Technologies, Inc. debuts CogniBlox™ at SC11– a Premier International Supercomputing conference in Seattle.

The week of November 15, 2011 promised to be an exciting time for CTI at SC11. This was an unparalleled opportunity to meet and talk with the world's leading experts in high performance computing, networking, storage and analysis.

CogniMem Technologies took advantage of this truly one-of-a-kind opportunity to unveil its new CogniBlox™ module, a high performance stackable module that provides massively parallel pattern recognition and sorting capabilities; sure to be a disruptive technology. Among the audience were Governments, businesses, Universities, researchers and individuals from all over the world. Including CTI, there were more than 300 exhibitors at this conference.

CogniMem Technologies is paving the way for ultra-low power and highly scalable HPC (High Performance Computing) solutions where parallel processing will be imperative for solving large scale simulations and data modeling. "The super computing industry interest in our new technology was phenomenal" said Bill Nagel, Vice President of

Software Solutions for CogniMem Technologies, "the feedback we received was exceptional, and as a result we have already started shipping CogniBlox to new clients."

On display at the conference, was a CogniBlox modular system of 25 boards (100k neurons) taking less than 1/10th of a cubic foot of space using a miserly .8amps @ 24 volts (less than 20 watts!) capable of performing 13.1 Teraops of hardware based pattern recognition performance!



A: CogniBlox Stand alone.
B: Team CogniMem at SC11.

Visitors to the booth were universally excited about the possibilities in data mining, simulations, video analytics, hyper-spectral image analysis and more! Supercomputing will never be the same!

[Read full news release...](#)

Developer's Corner



“...This module is barely larger than the TQFP package of the CM1K itself and will give customers an expandable version of the CM1K....”

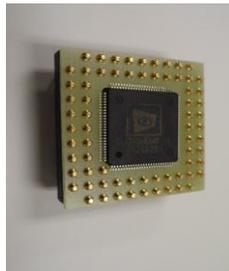


Stand-alone Picture of a CogniBlox™

“...NeuroPic...It tracks every human in the frame and marks them with red dots....”



CTI is proud to make available a prototyping module for the CM1K component named CM1K-PGA69. This module barely is larger than the TQFP package of the CM1K itself and will give customers an expandable version of the CM1K chip. This 69 pin grid array module will allow customers to use the CM1K in a .1" spaced prototyping motherboard for the ease of connectivity, system integration and debugging. It will also provide the capability of increasing the number of neurons in an embedded system.



CM1K chip on the PGA69 Socket

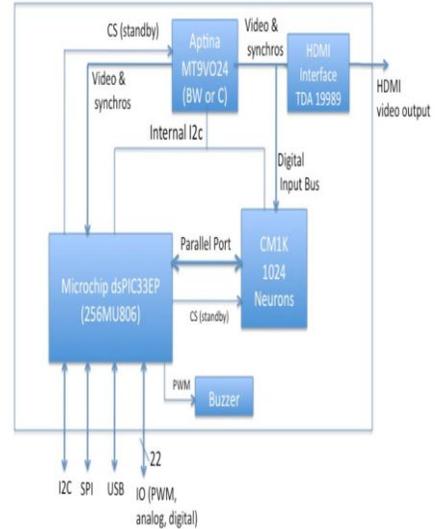
The module contains the necessary circuitry for operating with a single 3.3v power supply, internally generating the 1.2v for the CM1K core voltage. Units for purchase will be available in late January.

For more information on this product please contact us at info@cognimem.com.

Another exciting upcoming product is the NeuroPIC, it is a product from GLOBALSENSING TECHNOLOGIES (GST), one of our partners, and is capable of basic pattern recognition and face recognition. It is an ideal product for an indigenous design or for

evaluation purposes.

A [CM1K](#) chip, an Aptina sensor, and an embedded Microchip DSPIC33EP— a 16-bit digital signal controller and a microcontroller— are the major components of NeuroPIC.



Block Diagram for NeuroPIC

On CogniMem's web site there is a demonstration video prepared by GLOBALSENSING TECHNOLOGIES(GST), which shows object tracking using a NeuroPIC. For this demonstration GST has trained the CM1K for recognizing human beings and then tracking them until they are out of camera view. It tracks every human in the frame and marks them with red dots.

[Click here](#) to watch object-tracking video. Also, visit our [web site](#) for upcoming videos.



“... The time is near when eyes will control the screen, and perhaps a mouse will only be an entertainment for cats!”

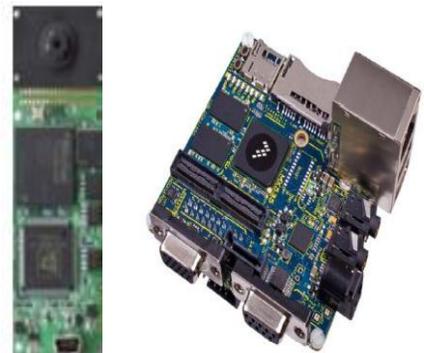
CES- Las Vegas.

Events like CES-2012 (Consumer Electronics Show-2012) are one of the best ways to anchor on the latest trends and emerging technologies in the field of consumer electronics. This event represents more than 2,000 corporate members involved in the design, development, manufacturing, distribution and integration of consumer electronics products. If you crave technology, then CES-2012 is one of the best places to start the year 2012.

for gaze tracking are fairly complicated, require a huge amount of processing power and are very expensive. On the other hand, CTI's team has developed a system to do this daunting task, handling the pattern matching performance easily with less than 100 neurons. This system consists of a [V1KU](#) (a CTI product) and a [Quick Start Board](#) (a Freescale product).

	Promotional Opps Check out options for advertising, sponsorships and on-site marketing to help generate traffic to your booth and boost your brand.	Show Planning Manual Go here for details, reminders, policies and procedures for your CES exhibiting experience.
Deadline Checklist Never miss a date with this detailed set of reminders. We'll even add them to your Outlook calendar.	Resources This is the spot to find forms, downloadable logos, export assistance information and details on the CEA Member Affinity Program.	Register Staff/Buyers Need to register your booth staff and top 10 buyers? Here's the place to go.

Page for the exhibitors



V1KU

Freescale QSB

Gaze tracking was made possible because of the CM1K, which is the brain of the V1KU module. The [CM1K](#) is first of its kind, truly parallel neural network chip. This chip takes only 300mW of power and runs at 27MHz with 3.3 V I/O operations and 1.2 V core supply. This system developed by CTI, does not just track the eyes, but it can also control the monitor.

CTI will also take advantage of this opportunity. In collaboration with freescale™, CTI is demoing “Gaze tracking”.

The time is near when eyes will control the screen, and perhaps a mouse will only be an entertainment for cats!

In this demo CTI will display the capability of recognizing and tracking the movement of the human eyes. This system is very robust and most importantly it is subject independent.

The systems which are available

