

Press Release

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FOR IMMEDIATE RELEASE

NEW NeuroMatrix® Software Development Kit

Moscow, Russia, October 11, 2004 - Research Center Module (RC Module) announces today a new version of a Software Development Kit for the NeuroMatrix® NM6403 RISC/DSP processor - **NM-SDK v.2.0**. The new version differs from the previous one by having an optimizing C++ compiler which supports C++ standard ISO/IEC 14882:1998. NM-SDK provides the essential tools chain for efficient, high-performance applications development. Now it is available on Win32 platforms and includes:

- C++ compiler
- Optimizing C++ compiler (**new!**)
- Assembler
- Linker
- Object files librarian
- Decoder of object and executable files
- Multitarget JIT debugger
- Instruction level simulator
- Accurate cycle simulator
- Set of system libraries

The Optimizing C++ compiler is a full-featured compiler that translates C/C++ programs into NM6403 assembly language source code. It is a new program in NM-SDK and can be used instead of the old C++ compiler. The Optimizing C++ compiler more closely adheres to the C++ standard, including templates, and uses the enhanced optimizing algorithms that allow to increase program execution speed and decrease code size. The Assembly language has an intuitive syntax and is close to high-level languages. It simplifies development and understanding of source code of math-intensive real-time algorithms.

NeuroMatrix® NM6403 DSP is a high performance microprocessor with a combination of VLIW and SIMD architectures based on the NeuroMatrix® Core (NMC), targeting video-image processing, radar and neural-network applications. It provides scalable performance, a programmable operand width of 1 to 64 bits. This flexibility allows designers to trade precision for performance to suit their applications. The NM6403 processor includes a 32/64-bit RISC processor and a 1- to 64-bit Vector coprocessor that supports vector operations with elements of variable bit lengths (**US patent # 6,539,368 B1**).

The **RC Module** (www.module.ru) is a leading Moscow-based fabless semiconductor company which designs high-end RISC/DSP processor architectures, embedded computers and application software for video image processing, DSP and artificial neural networks. RC Module also provides system and mixed-signal ASIC/SIP design services. The RC Module's NeuroMatrix® product family includes:

- NM6403 DSP (NMC core)
- BM1 PCI/CompactPCI Video Image Processing (VIP) Development Set
- TM-PCI-4 "TrafficMonitor" System for Desktop PC

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