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Press Release

New realtime microkernel Sphere SP 2.0

MUNICH – May 14, 2002 – Today *miray Software* introduced a new realtime microkernel, named *Sphere SP 2.0*. Compared to its predecessor, it has been completely redesigned and delivers high realtime performance for 32-bit processors. At a size of only 21 KB, *Sphere SP 2.0* is especially suitable for embedded systems. But due to its extreme scalability it's also well prepared for large systems.

The *Sphere* microkernel is already in use in the client/server OS *µOS*, also developed by *miray Software*. Now *miray Software* offers the new version 2.0 of this microkernel as a stand-alone-product for licensing.

Sphere SP 2.0 allows fast and easy creation of multi-threaded realtime applications. Its field of application covers small and simple applications as well as huge and complex systems. Through the extraordinary low use of resources of *Sphere SP 2.0* applications can already be realized with a minimum of 116 KB of RAM – incl. microkernel (!) – and a 386 processor.

The *Sphere SP 2.0* microkernel combines the five principles realtime, scalability, stability, small size and simplicity in a completely new way: It provides a small, very compact kernel API with only 22 function calls, that can be quick and easily employed. The kernel itself is with only 21 KB a real microkernel. *Sphere SP 2.0* executes system calls not only fast but also in realtime, i.e. within a firmly defined time interval. Nevertheless the system is fully scalable. Limitations are only defined by the used processor architecture.

An absolute innovation in *Sphere SP 2.0* is the IRQ handling mechanism, which is performed outside the privileged kernel mode. This has crucial advantages: On the one hand drivers can't endanger the system's stability and reliability. On the other hand writing drivers becomes much easier.

For optimal employment on different platforms *miray Software* additionally provides a broad spectrum of options. Subsequently *Sphere SP 2.0* can be adapted to the specific requirements in the best possible way. Besides others this includes FPU support, different memory managers and processor-dependent kernel optimizations. The ease-of-use of *Sphere SP 2.0* is also upgraded by the amount and quality of the available drivers and libraries. Furthermore *miray Software* offers the creation of customer specific drivers and libraries.

At the moment *Sphere SP 2.0* already supports various processors of different manufacturers, including Intel, AMD and VIA. The amount of supported processors will be increased by *miray* in the future.

Further information is to be found at <http://www.miray.de>.

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This press release is also available in **HTML** at <http://www.miray.de/home/presen.html> and as **PDF-File** at <http://www.miray.de/public/documents/pr20020514.pdf>.