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FOR IMMEDIATE RELEASE

HELION WORLD FIRST WITH MULTI-GIGABIT AES ENCRYPTION CORES

1st June 2001 - Cambridge based design-house Helion Technology Limited announces today the immediate availability of its new high-performance Rijndael hardware encryption cores; the first commercially available multi-Gigabit AES cores in the world; and the latest addition to its range of data encryption cores for use in ASIC and FPGA.

Rijndael is the data encryption algorithm due for approval this summer by the US National Institute of Standards and Technology (NIST), as the new Advanced Encryption Standard (AES). AES will then be the algorithm of choice for future secure data communications, effectively replacing the likes of DES in applications such as IPsec, the Secure Socket Layer (SSL) protocol and ATM cell encryption.

"We believe our cores to be the only high-speed commercial Rijndael hardware solutions currently available," says Graeme Durant, CEO at Helion, "It is an emerging standard, and we felt it was vital to be able to offer it as part of our growing data encryption core portfolio".

The Helion cores implement AES as described in the latest NIST Federal Information Processing Standard (FIPS) proposal document. They offer a fixed 128-bit block-size, and variable key-size (128, 192 and 256-bits), and come in both ASIC and Xilinx FPGA optimised versions, with tiered performance variants on offer. The fast ASIC version is capable of encrypting data at well over 2Gbps; a pipelined variant will run at over 25Gbps.

"We have worked very hard to optimise the performance of these cores," says Durant, "As data rates get higher, there is more and more pressure on a system's encryption capabilities, and that's where our solution can deliver".

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Helion is an accredited Xilinx 'Xperts' design consultancy, and as such takes its FPGA cores very seriously; they are developed separately for the purpose, rather than being based on existing ASIC cores. The Xilinx specific cores it offers are designed from the ground up to be highly efficient and are optimised to extract the very best from the technology. In that way, users can enjoy near-ASIC performance levels from FPGA implementations. The Xilinx versions can therefore encrypt data at rates well in excess of 10Gbps.

More detailed information on these cores along with datasheets plus information on available design services is available at the Helion website at **www.heliontech.com**

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Helion – Background

Cambridge based Helion Technology was formed in 1992 to offer high quality ASIC and FPGA design services to a broad range of end clients. Having gained significant expertise in the data security industry, Helion is now rolling out its proven data encryption solutions to a wider audience beyond its own design services customers. In addition to its ASIC capabilities, the FPGA side of the business focuses on high-performance Xilinx FPGA design work. In recognition of its capabilities, Helion are proud to have been one of the very first companies in the UK to become an accredited Xilinx Xpert partner. For more detailed information on Helion and its products and services, please visit the Helion website at **www.heliontech.com**.