Preface

These are the proceedings of CHES 2001, the third Workshop on Cryptographic Hardware and Embedded Systems. The first two CHES Workshops were held in Massachusetts, and this was the first Workshop to be held in Europe. There was a large number of submissions this year, and in response the technical program was extended to 2 1/2 days.

As is evident by the papers in these proceedings, many excellent submissions were made. Selecting the papers for this year’s CHES was not an easy task, and we regret that we had to reject several very interesting papers due to the lack of time. There were 66 submitted contributions this year, of which 31, or 47%, were selected for presentation. If we look at the number of submitted papers at CHES ’99 (42 papers) and CHES 2001 (51 papers), we observe a steady increase. We interpret this as a continuing need for a workshop series which combines theory and practice for integrating strong security features into modern communications and computer applications. In addition to the submitted contributions, Ross Anderson from Cambridge University, UK, and Adi Shamir from The Weizmann Institute, Israel, gave invited talks.

As in previous years, the focus of the workshop is on all aspects of cryptographic hardware and embedded system design. Of special interest were contributions that describe new methods for efficient hardware implementations and high-speed software for embedded systems, e.g., smart cards, microprocessors, DSPs, etc. CHES also continues to be an important forum for new theoretical and practical findings in the important and growing field of side-channel attacks.

We hope to continue to make the CHES workshop series a forum of intellectual exchange in creating secure, reliable, and robust security solutions of tomorrow. CHES Workshops will continue to deal with hardware and software implementations of security functions and systems, including security for embedded wireless ad-hoc networks.

We thank everyone whose involvement made the CHES Workshop such a successful event, in particular we would like to thank André Weimerskirch from WPI, and Delphine Abecassis and Cécile Osta from Novamedia for their efforts.

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