

The Dorado: A High-Performance Personal Computer

Three Papers

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ABSTRACT

This report reproduces three papers on the Dorado personal computer. Each has been, or will be, published in a journal or proceedings.

A Processor for a High-Performance Personal Computer, by Butler W. Lampson and Kenneth A. Pier. Appeared in Proc. 7th Symposium on Computer Architecture, SigArch/IEEE, La Baule, May 1980, 146-160.

An Instruction Fetch Unit for a High-Performance Personal Computer, by Butler W. Lampson, Gene A. McDaniel, and Severo M. Ornstein. Submitted for publication.

The Memory System of a High-Performance Personal Computer, by Douglas W. Clark, Butler W. Lampson, and Kenneth A. Pier. A revised version will appear in IEEE Transactions on Computers.

The first paper describes the Dorado's micro-programmed processor, and also gives an overview of its history and physical construction. The second discusses the instruction unit, which prepares program instructions for execution, and the third deals with the cache map and main storage of the Dorado's memory system.

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PALO ALTO RESEARCH CENTER

3333 Coyote Hill Road / Palo Alto / California 94304

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Please note that the pages are numbered continuously for all three papers, including the page for each paper, but excluding the title page for the entire report. Pages have been set out with the assumption that an even page and the next odd page will form a double-page spread. All the title pages are odd numbered, and the next (even) page is the first text page which should appear on the reverse of the title page. A blank page should appear on the reverse of the title page for the entire report. Page 20, at the end of the first paper, is a blank page so that the title page of the second paper will fall on an odd page.