

**A METHOD AND APPARATUS FOR DATA ORDERING
OF I/O TRANSFERS IN BI-MODAL ENDIAN POWERPC SYSTEMS**

ABSTRACT

To present a consistent image of storage facilities to components in Bi-modal Endian PowerPC system environments, provision is made for transferring data between system components in the appropriate Endian format. Endian conversion function can be incorporated into the memory controller (501) subsystem by adding byte-lane swapping logic on the inbound and outbound I/O data paths (718). With this structure, inbound data from the processor (710) and memory (714) bus will be converted to true Little Endian order before being sent to I/O devices. Likewise, true Little Endian data from I/O devices targeted for the processor (710) or memory (714) is modified to reflect the PowerPC Little Endian byte ordering convention.

Fig. 5

This Sheet Has Been Replaced

