Certificate of Volatility for the Memory Channel II Subsystem

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This is a statement regarding the volatility of user data stored in various types of memory devices in the Memory Channel II subsystem.

The Memory Channel II subsystem uses both volatile (RAM, SRAM, and FPGA) and non-volatile (FLASH and NVRAM) memory devices. While FLASH and NVRAM do not store user data, the FLASH memory on the CCMAB MCII PCI Adapter Module could, with great difficulty, be written to by the user.

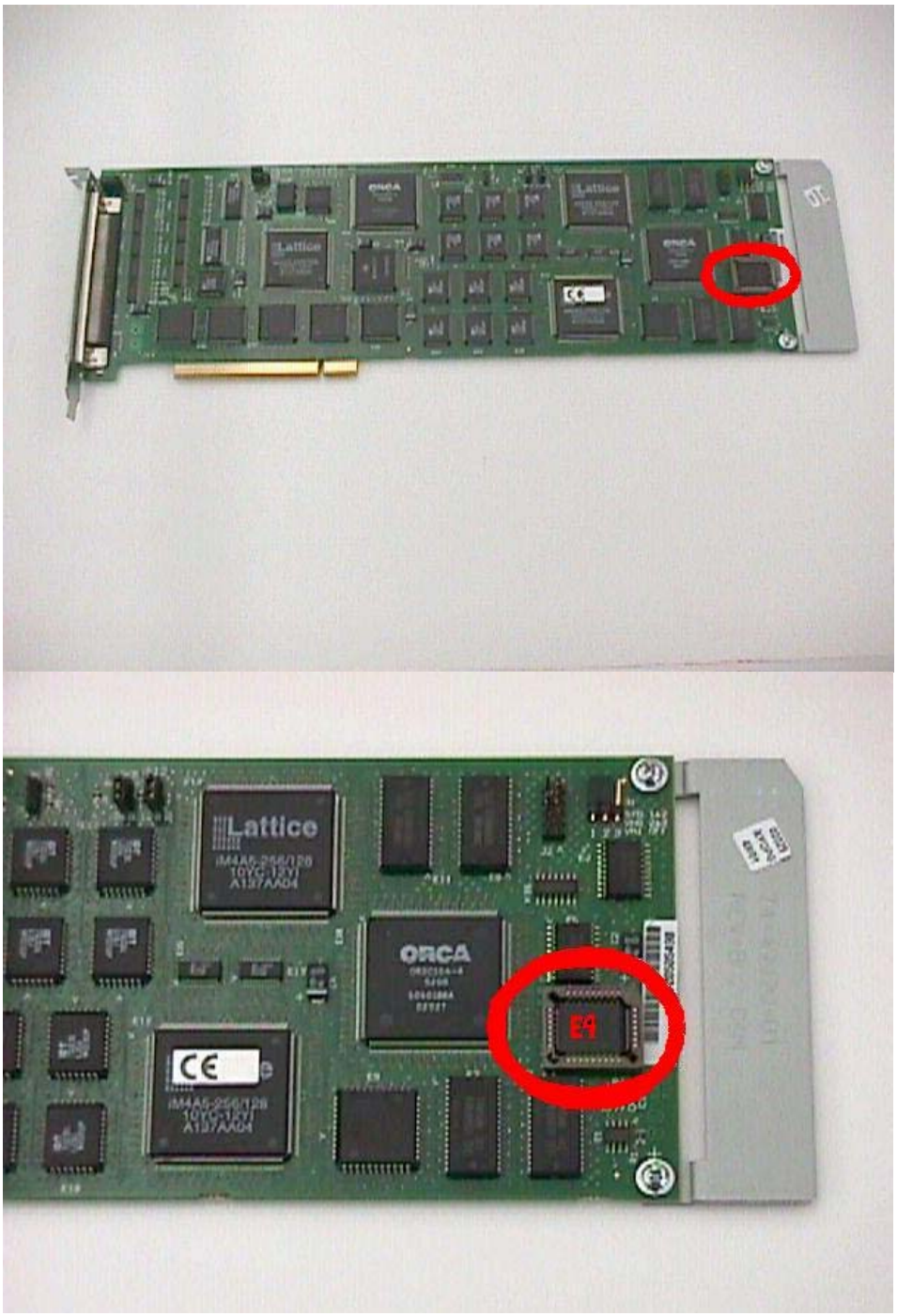
Removal of power from the subsystem will erase RAM, SRAM, and FPGA memory devices. This is the case for the MCII Hub (CCMHB-xx 54-24968-01 -02), the MCII Line Card (CCMLB 54-24966-01 -02), and the MCII Fiber Optic Converter (CCMFB 54-24970-01 and 54-30764-02). Removal of power on any of these 3 modules will eliminate any customer data they may contain in transit between MCII subsystem modules. However, a customer could access the FLASH component on the MCII Adapter module (CCMAB-xB) and write a small amount of data that would be retained. (As previously mentioned, this can be done only with great difficulty and requires an in-depth knowledge of the subsystem and the platform it is installed into).

The NVRAM on all of the subsystem modules is not accessible to the user and never contains user data at any point. These components are all pre-programmed prior to the manufacture of the modules and provide programmable logic for the individual module's operation.

The FLASH memory component is pre-programmed and contains manufacturing data, revision fields, and the coding necessary to program the volatile FPGA components on power up. The FLASH component exists only on the CCMAB-xB module (54-24962-01, 54-30758-01, -02). It is a 28 pin PLCC "J" lead package and is installed as a socketed part, (i.e., not soldered to the module on which it resides). Its component identifier on the module is E4, and the component type is AMD 29F040. It plugs into the only socket on the module identified as X4. This component, (identified as E4 on the CCMAB), should be removed and destroyed to ensure that no customer data exists on it (see photos on the next page).

To ensure the destruction of any data that may have been written to the CCMAB-xB module, HP recommends that the component itself be removed from the module and destroyed. The following illustrations identify the E4 chip to be removed and destroyed, and its location.

CCMAB-xB MCII PCI Adapter module (54-24962-01, 54-30758-01, -02) with E4 chip circled.



The E4 Component is easily removed with any PLCC component extractor.

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