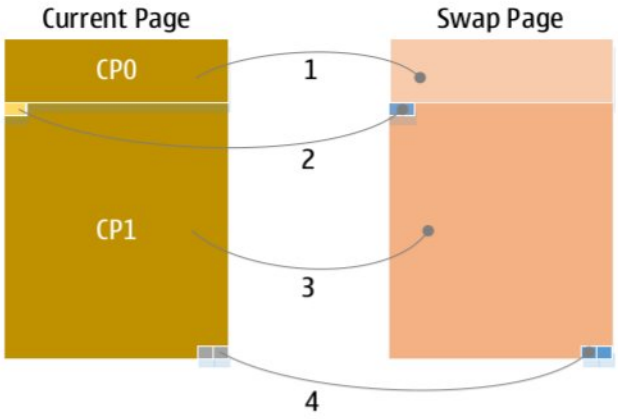
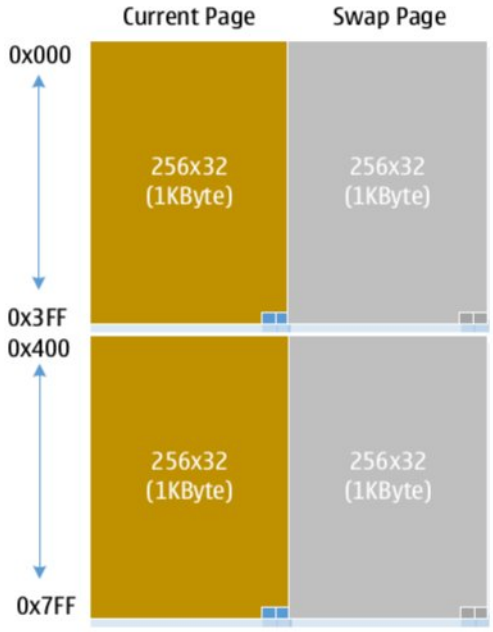


When the emulated E2PROM is configured as greater than 1K, the E2PCTL control algorithm still operates within the E2PROM partition with the Page as the minimum unit. For example, if the user configures a 2K E2PROM partition, the E2PCTL requires 4 pages (4K) of space to operate. Two pages are always required for implementing each block of emulated E2PROM memory that the user configures as E2PROM.



It should be noted that the 2K byte E2PROM space configured by the user is not continuous, because the last 2 bytes of each page will be used to save page status information.

E2PCTL Continuous Programming Mode

Since the E2PCTL update will cause page swapping, the new Swap Page will be erased during the swap. Page erasure is not only time consuming, but it also increases affects FLASH life. Therefore the E2PCTL controller includes a Continuous Write Mode. In the Continuous Write Mode, the user can continuously update the E2PROM area. The page update and exchange operation is only performed at the end of the continuous address. For applications that need to continuously update a whole block of data, the continuous mode is a more effective and efficient. Continuous Programming Mode is set by enabling the SWM bit in the ECCR control register. After this mode is enabled, the subsequent write operations will directly write data to the Swap Page at the corresponding address of the Current Page. In SWM mode, the write operation will not perform the CP0/1 area data copy operation. Before writing the last byte, the software disables the continuous mode through SWM and then performs the write. After that, the E2PCTL will perform the complete CP0/1 copy operation and update the page status information.