FortéMedia

FM801 Sw Application Notes 002: FM801 Device Enable/Disable

SCOPE:

This application note intends to help the motherboard vendors or system integrators to understand FM801 hardware registers structure in order to enable or disable FM801 device in the BIOS setup.

DESCRIPTIONS:

1. **Disable FM801 Device**
   In order to disable FM801, please follow the following steps in order to totally disable and shutdown FM801 & AC97:

   1. Write to FM801 Func-0 PCI Configuration Register 98h-99h to 0000h.
   2. Write to FM801 Func-0 PCI Configuration Register 9Ah-9Bh to 0000h.
   3. Write to FM801 Func-1 PCI Configuration Register 9Ah-9Bh to 0000h.
   4. Write to FM801 Func-0 PCI Configuration Register E0h-E1h to 0003h.
   5. Write to FM801 Func-1 PCI Configuration Register E0h-E1h to 0003h.

   After programming the above registers, FM801 will be disabled and shutdown internally, it will not respond to any PCI I/O read or write commands (except PCI Configuration Cycle) either. Moreover, AC97 is shutdown by FM801 in order to save more power. As a result, FM801 will not be seen by Windows OS and asked for the device driver.

2. **Enable FM801 Device**
   By default, FM801 is enabled and can be configured by BIOS or Windows OS after power on reset.

   If FM801 is disabled by BIOS which follows the steps list above, please follow the following steps in order to enable FM801 & AC97:

   1. Write to FM801 Func-0 PCI Configuration Register 98h-99h to 1319h.
   2. Write to FM801 Func-0 PCI Configuration Register 9Ah-9Bh to 0801h.
   3. Write to FM801 Func-1 PCI Configuration Register 9Ah-9Bh to 0802h.
   4. Write to FM801 Func-0 PCI Configuration Register E0h-E1h to 0000h.
   5. Write to FM801 Func-1 PCI Configuration Register E0h-E1h to 0000h.

REFERENCES:

Please refer to FM801 Data sheet "ROME PCI Audio Device Configuration registers" and "ROME PCI Game Port Device Configuration registers" sections.