**ES\_HW02\_109598085**

**吳承岳**

**Part 1：Tell us what kind of config you find in make menuconfig**

由於我對GPU Driver比較有興趣

所以我看了Device Drivers-> Graphics support之中的各項config

例如這一項<M>Intel 8xx/9xx/G3x/G4x/HD Graphics的說明寫到:

"Intel Graphics Media Accelerator" or "HD Graphics" integrated graphics, including 830M, 845G, 852GM, 855GM, 865G, 915G, 945G, 965G, G35, G41, G43, G45 chipsets and Celeron, Pentium, Core i3, Core i5, Core i7 as well as Atom CPUs with integrated graphics.

可以看得出Linux對intel的整合式顯示晶片(俗稱內顯)的支援度相當得好，可見下了很多苦工，從很早期到最近的Celeron到i7的內顯，幾乎都有支援，相較之下，AMD的說明就沒有寫到底支援那些內顯晶片，我只找到

Device Drivers->Graphics support->AMD GPU (DRM\_AMDGPU [=m])

->Display Engine Configuration裡面的這項[\*] AMD DC - Enable new display engine說明:

This adds required support for Vega and Raven ASICs.

表示有支援新的Vega與Raven架構晶片。

而Nvidia的config就沒有在這裡寫支援哪些晶片，可能跟Nvidia本身的封閉政策有關，有耳聞Linux的創始者Linus Torvalds似乎對此不太開心。

我也看到了[\*] Laptop Hybrid Graphics - GPU switching support

說明寫到:

Many laptops released in 2008/9/10 have two GPUs with a multiplexer to switch between them. This adds support for dynamic switching when X isn't running and delayed switching until the next logoff. This feature is called hybrid graphics, ATI PowerXpress, and Nvidia HybridPower.

近年來的筆電很多都搭載2個GPU晶片，一個通常是CPU的內顯，而另一個通常是Nvidia或是AMD的獨顯，而Nvidia跟AMD在Windows平台提供的驅動程式控制軟體都有提供讓使用者手動調整要讓哪個程式在哪個GPU上執行的功能，而這個Config表示在Linux上面也可以有一樣的功能。

**Part 2 : Compiled result**

 