

NuEdu-SDK-M451 環境安裝

- 安裝uVision5
- 安裝Nu-Link Driver
- 使用Keil uVersion開發工具軟體

安裝uVision5

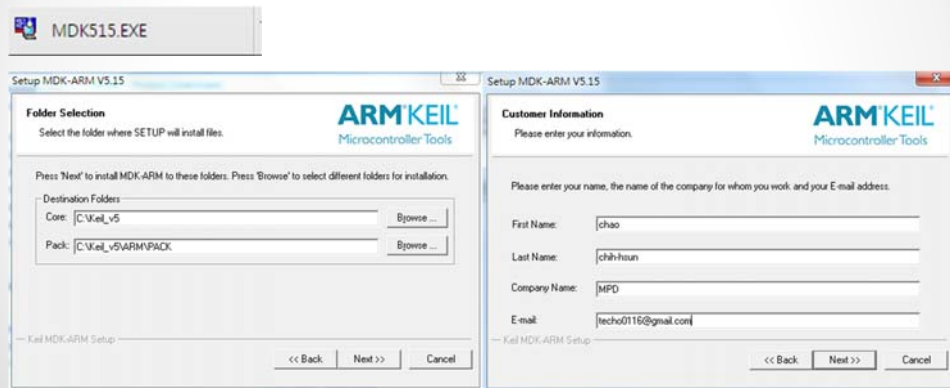
下載uvision5方式

- 官網<http://www2.keil.com/mdk5/install/>
- MDK515.EXE

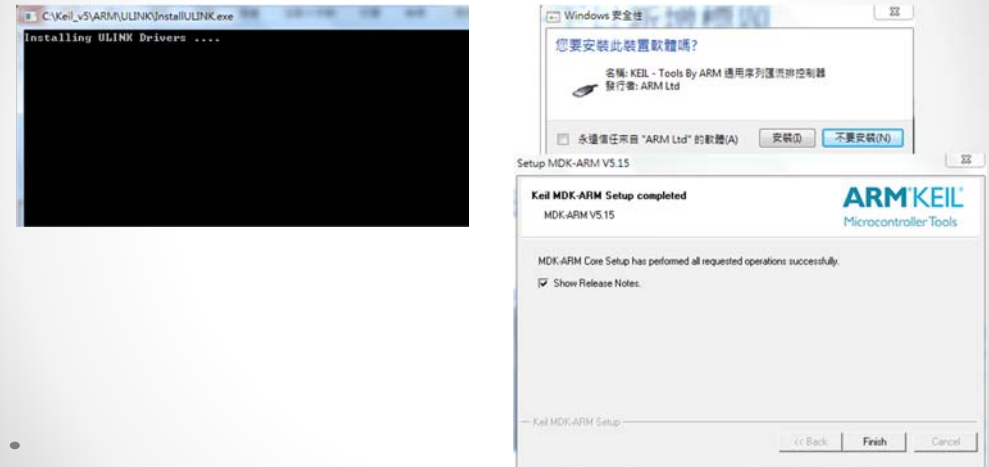
The screenshot shows the 'MDK Version 5 - Installation' page. It features a navigation bar with 'Products', 'Download', 'Events', 'Support', and 'Videos'. Below the navigation bar, the page title is 'MDK Version 5 - Installation'. The main content area explains that the MDK-5 installation process has changed from a single monolithic installer to a set of installers. It lists two installers: 'MDK-ARM Core Installer' (which installs the µVision IDE, Compiler, Linker, Debugger, and Simulator, and the ARM:CMSIS and Keil:MDK-Middleware packs) and 'PackInstaller' (which installs Software Packs including Device Family Packs and Example Projects). A 'Download' section is visible at the bottom, with a button for 'Download MDK Core Version 5'. A small inset image shows a screenshot of the µVision IDE interface.

The screenshot shows the 'MDK-ARM' contact form. The form title is 'MDK-ARM' and the version is 'MDK-ARM Version 5.15'. Below the title, it says 'Version 5.15' and 'Problems were detected with the information submitted. Please correct these issues and re-submit the form.' There are two red error messages: 'Your mailing address may not be blank.' and 'The name of your city may not be blank.' The form fields include: 'First Name: 部', 'Last Name: 廷南', 'E-mail: 0202022006@yahoo.com.tw', 'Company: nSYSU', 'Address: 高雄是中山大學MPD', 'City: 打狗', 'State/Province: Select Your State or ...', 'Zip/Postal Code: 804', 'Country: Taiwan (R.O.C.)', and 'Phone: 0938090823'. There is a checkbox for 'Send me e-mail when there is a new update.' and a 'NOTICE' section at the bottom.

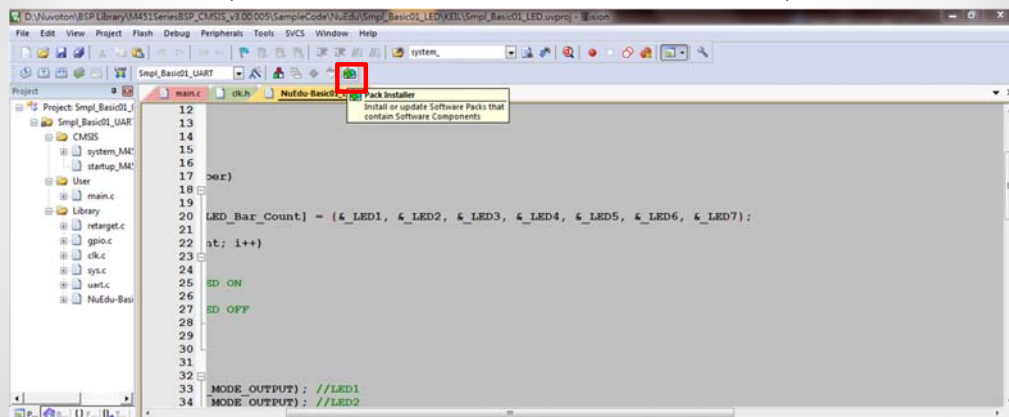
執行安裝檔



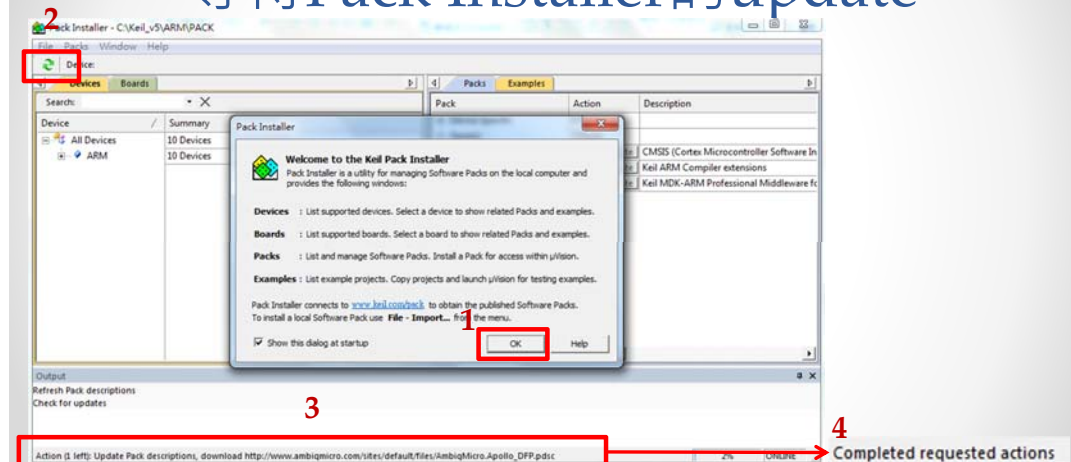
安裝USB驅動



開啟Pack Installer (通常安裝完會自動開)

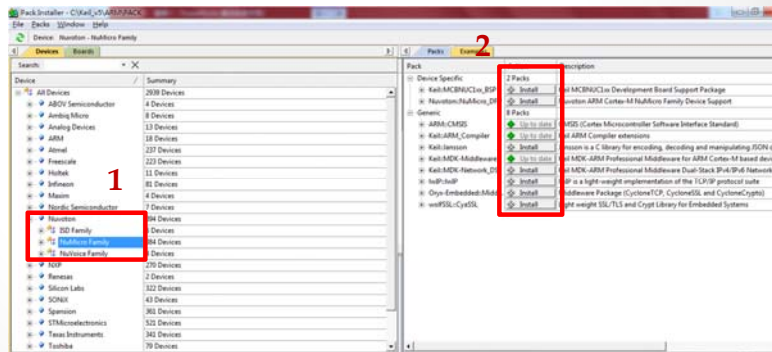


等待Pack Installer的update

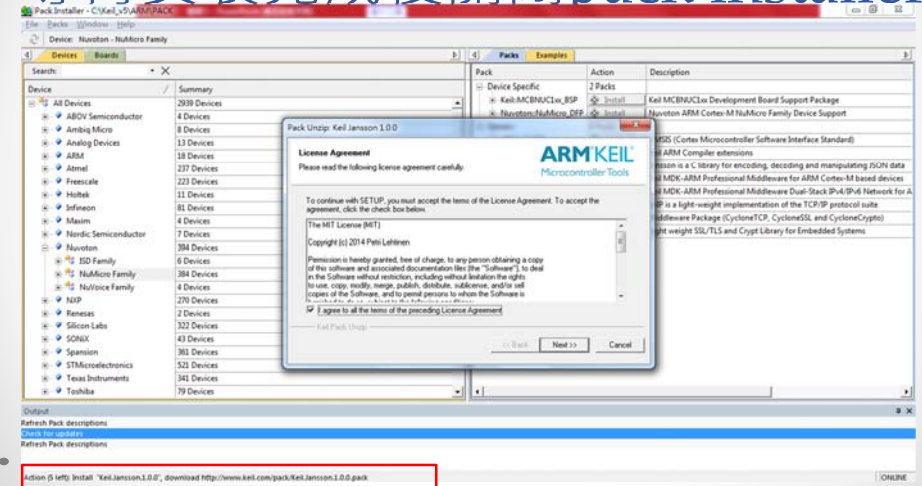


安裝NuMicro Family的pack

1. 點開Nuvoton選取NuMicro Family
2. 安裝右方所有的pack



等待安裝完成後關閉pack installer



安裝Nu-Link Driver

...

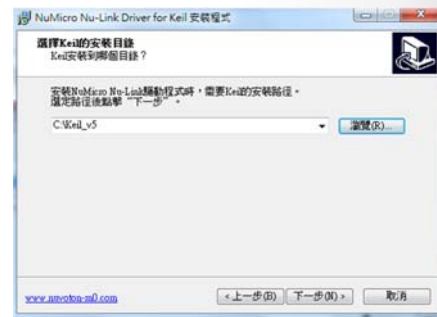
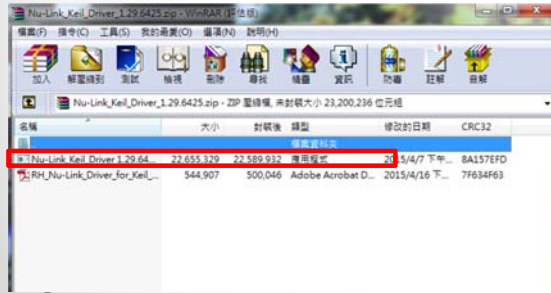
- https://www.nuvoton.com/hq/support/tool-and-software/software/?_locale=zh_TW

- Nu-Link Driver

File name	Description	Version	Date
Nu-Link Driver for Keil RVMDK V1.29.6425.zip	This driver is to support Nu-Link to work under Keil RVMDK Development Environment for all NuMicro Family Devices.	V1.29.6425	2015-04-20
Revision History			

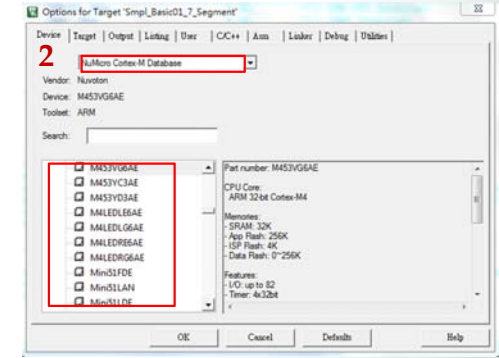
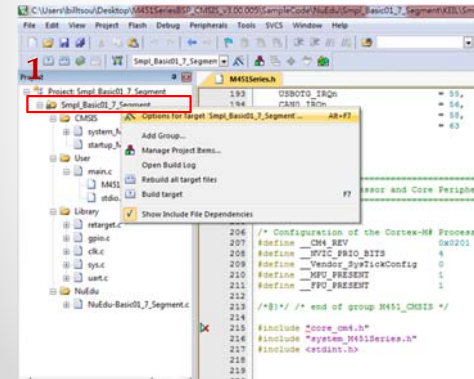
安裝Nu-Link_Keil_Driver

- 1.執行Nu-Link_Keil_Driver 1.29.64...
- 2.選取uVersion5安裝的資料夾位置
- 3.安裝所有跳出的驅動



檢查裝置套件是否有抓到

- 1.對Smpl_Basic01_7_Segment按右鍵
- 2.選擇Option for Target Smpl_Basic01_7_Segment



使用Keil uVersion開發工具軟體

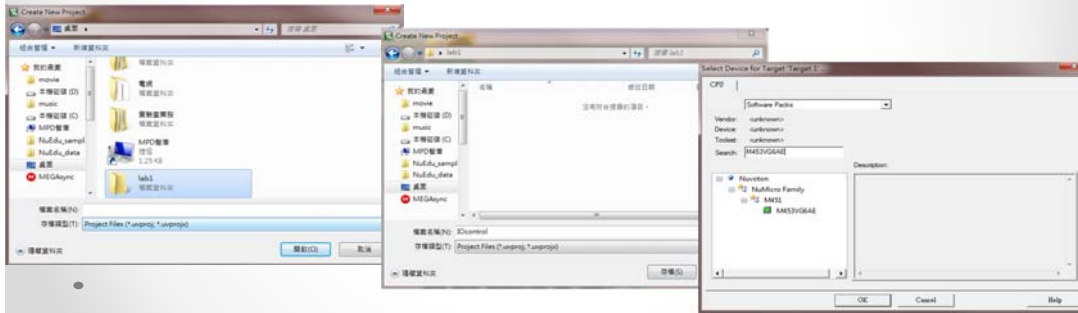
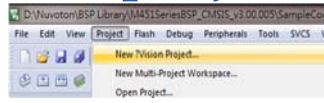
...

Step1.執行程式



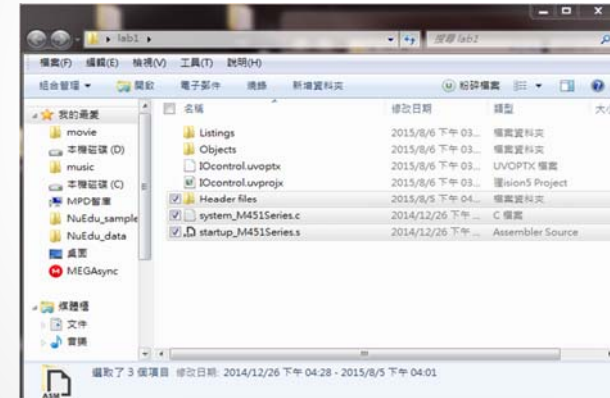
Step2. 建立project:

- New uVision project
- 先在桌面新增一個資料夾lab1
- 進入資料夾後打上專案名稱
- Search : M453VG6AE



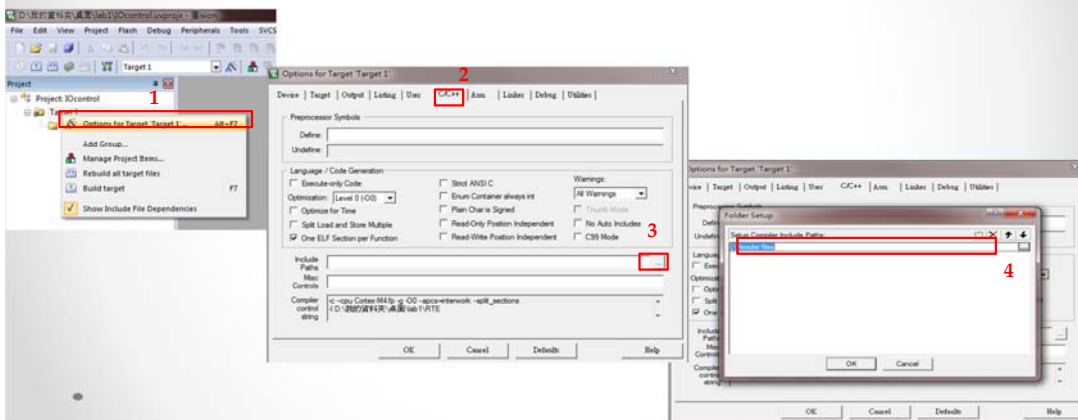
Step3. 加入header file與startup file

- 將Header files資料夾, system_M451Series.c, startup_M451Series.s放入lab1資料夾



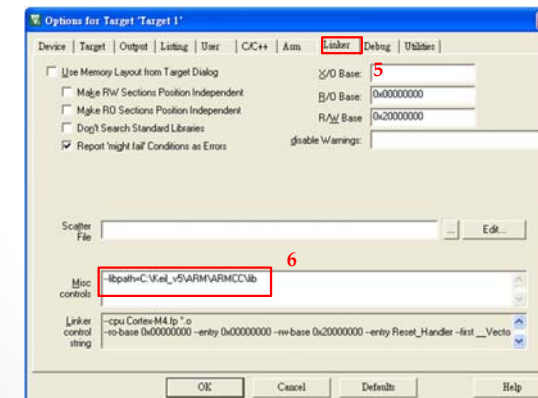
引用header files

- 引用header files



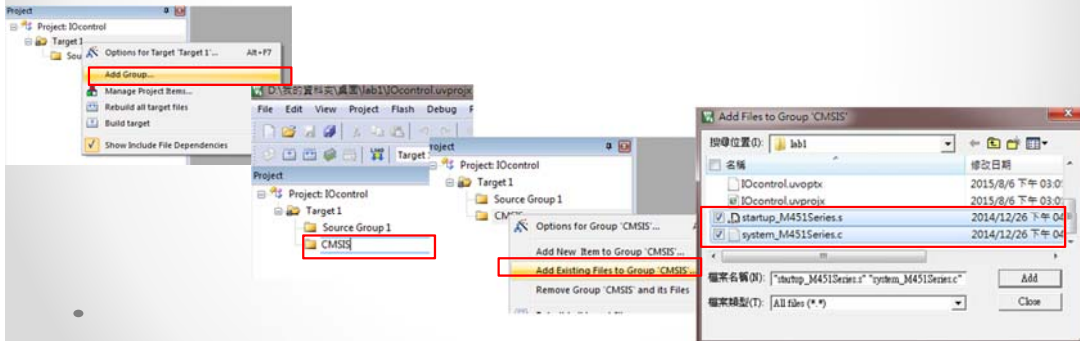
引用Arm library

- --libpath=C:\Keil_v5\ARM\ARMCC\lib



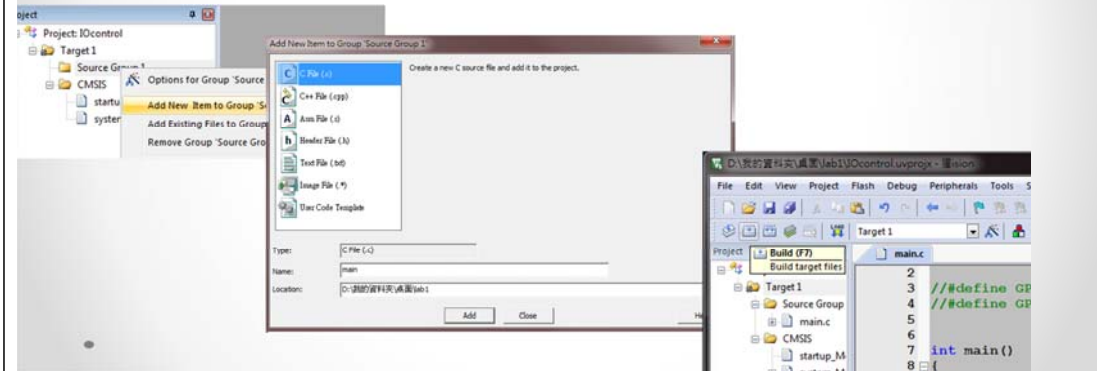
引用startup, system files

- Target右鍵新增group
- 改名成CMSIS
- Add existing file:startup,system

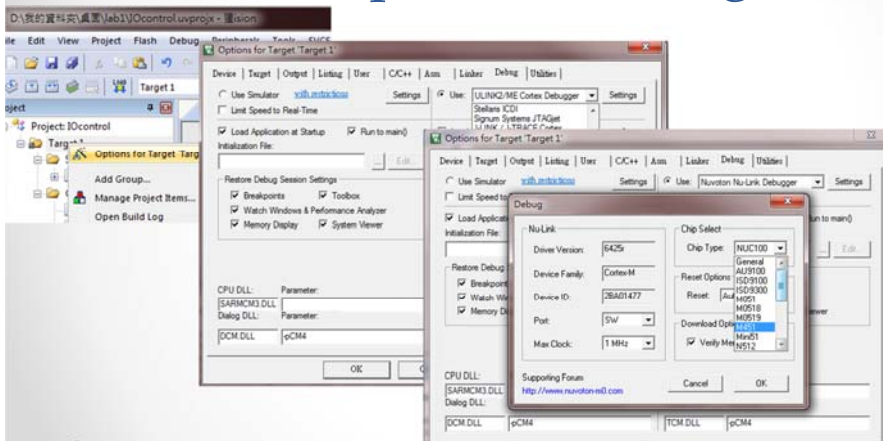


Step4.編寫程式與Build

- 新增main
- Build



Step5.選擇Debugger



Step6.Download至板子

