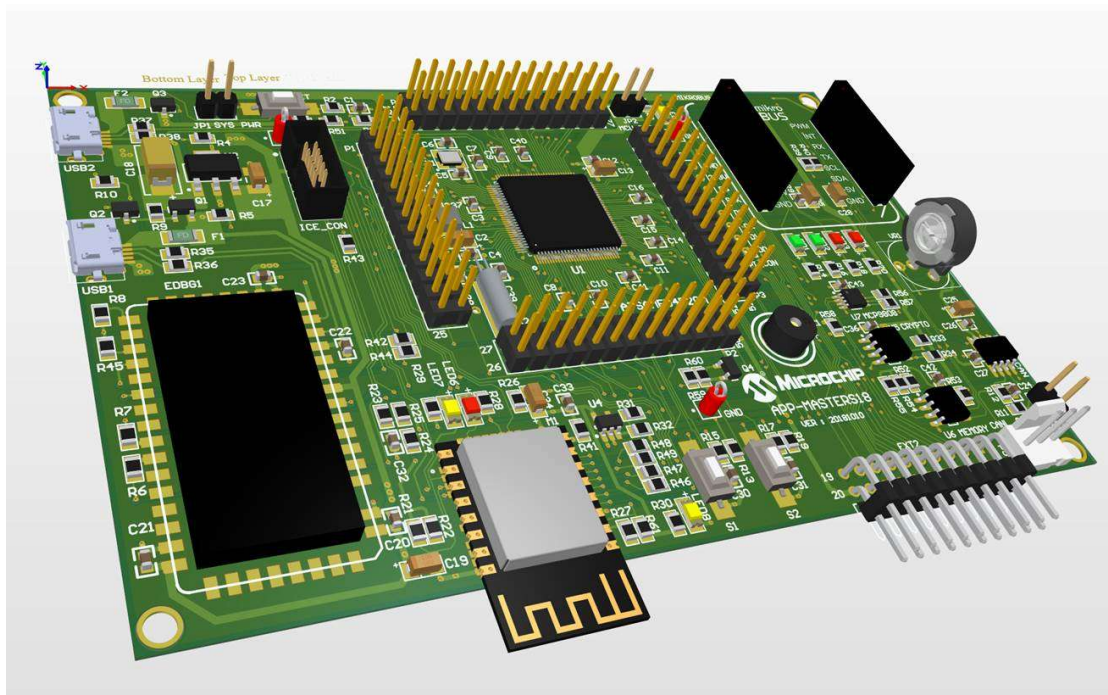


APP-MASTERS18 簡介

APP-MASTERS18 是特別為了 2018 年 Microchip Taipei & Kaohsiung MASTERS 所設計製作的實驗板，有以下的完整功能並可以使用 Microchip 既有的豐富開發資源。只有報名並參加 **MASTERS 1028 Taipei & Kaohsiung** 才能獲得這一片特別設計的實驗板。有了他，不論是何種 IoT，Wearable，Industrial，Connectivity 等效能及功耗都必須斤斤計較的應用都可以用它來做一個有效合理的早期評估。

- 使用與 Microchip ATSAME54 Xplained Pro(ATSAME54-XPRO) 一樣的 MCU 以及相容的接腳配置
 - CPU : ATSAME54P20A
 - Max. CPU Speed : 120 Mhz
 - Program Memory : 1024 KB
 - SRAM : 256KB
 - SPI * 8
 - I2C * 8
 - ADC – 32 channel input with 12-bits resolution
 - 16-bit Digital Timer * 13
 - Hardware Touch Peripherals
 -
- 共享 Microchip START 上為 ATSAME54-Xplained-Pro 所寫的 57 個範例程式
- 將 ATSAME54-XPRO 的 Extension Connector 做更適切的分配
 - EXT1 connector 連接至 On Board 的 ATWINC1510 來 Enable Internet connection
 - EXT2 connector 保留來做連接其它 Microchip 產出的 Explained Pro Extension kit (ATIO1-XPRO, ATOLED1-XPRO)
 - EXT3 connector 連接至一個與 Mikroelektronika Clicker 相容的 HOST 介面。可以用來連接既有的數百款不同的 Clicker Board.
- 更多的 On Board I/O，方便客戶做更多的練習.
 - General LED * 4 (Green * 2, RED * 4)
 - WiFi LED * 2
 - Power LED * 1 (MCU and WiFi)
 - Reset 按鍵 * 1
 - General purpose 按鍵 * 1
 - 10K VR * 1
 - Buzzer * 1
- 豐富的 On-Board 周邊，讓程式訓練更扎實

- MCP9808 溫度 Sensor
- ATECC508A/608A crypto IC
- AT24MAC402 – 包含 EUI-48 MAC™ Address 的 EEPROM，也可以換成一般的 I²C EEPROM.
- ATA6561 – 相容於 CAN FD 的 CAN Transceiver。可利用 3-pin 的 Molex connector 對外連接
- 靈活的電源選項
 - 電路可支援 VDDCORE 工作於 LDO mode 或是 Buck mode
 - JP1 可用來量測總體供應電流 (EDBG Module 不計算在內)
 - JP2 可用來量測 ATSAME54 CPU 的耗電
- 更多的外接介面資源
 - 具備與 Microchip Taiwan 設計的 APP-1632 相容之 100-Pin Connector (P1 ~ P4)
 - 可以使用 APP-1632 上的豐富資源
 - ◆ UART
 - ◆ LCD display module
 - ◆ VR * 2
 - ◆ LED * 8
 - ◆ 按鍵 * 4







BROWSE EXISTING EXAMPLES

Atmel START examples are a great starting point for embedded programmers. Example projects will work "out of the box" but are also easily to modify using Atmel START.

Example projects are tailored for each compatible board and device, resulting in high quality production ready code with a small memory footprint. Read the available user guides to get more information about each example.

Looking for older examples? [Atmel Software Framework 3](#) contains previous releases of non-configurable examples.

Search:	<input type="text" value="Filter..."/>	Category:	<input type="text" value="All"/>	Board:	<input type="text" value="SAM E54 Xplained Pro"/>
Name	Categories	Description	Board(s) supported	User guide	
SmartEEPROM Example		This example shows how to use SmartEEPROM on SAM D5x/E5x devices.It helps to store the data in persistent memory (internal flash memory) without using any software EEPROM emulation scheme. Main Drivers and middleware used in the example are STDIO\Redirect	SAM E54 Xplained Pro	User guide	
ADC DMA Sequencing Example		This applications demo shows how to reconfigure the ADC using DMA while the CPU is in sleep	SAM E54 Xplained Pro	User guide	
AES Demo		This example demonstrate AES modes. Main Drivers and middleware used in the example are AES, STDIO and USART.	SAM E54 Xplained Pro SAM V71 Xplained Ultra	User guide	
AP Mode WINC1500		AP Mode for WINC1500.	SAM D21 Xplained Pro SAM E54 Xplained Pro SAM G55 Xplained Pro SAM G53 Xplained Pro SAM L21 Xplained Pro SAM L22 Xplained Pro	User guide	