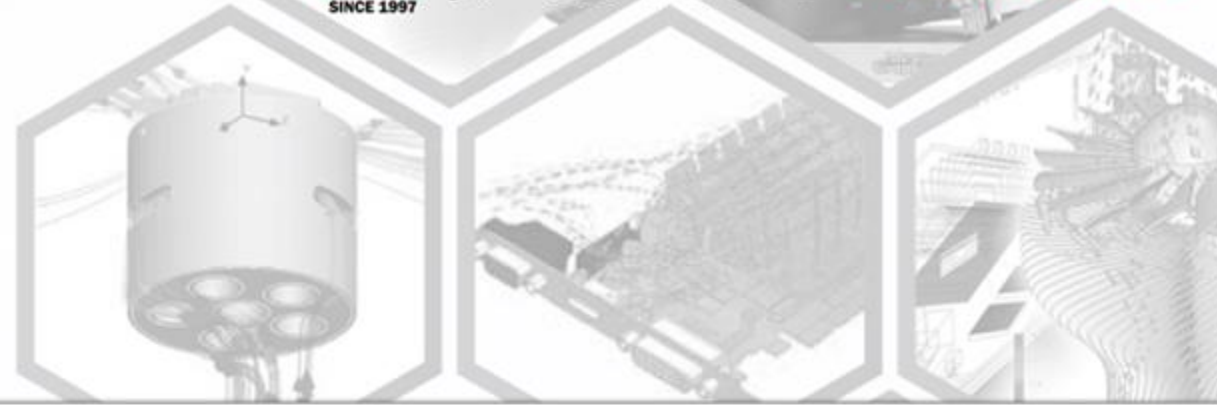




勢流科技

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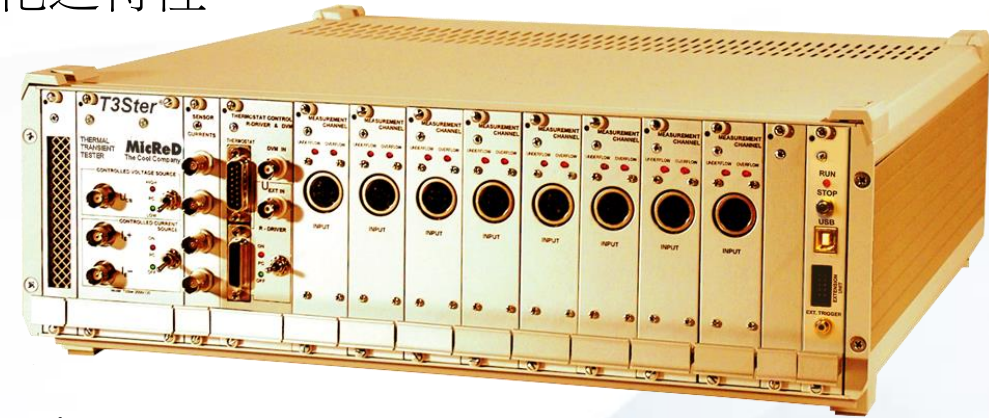


# Simcenter MicReD Hardware - Control Software Release Highlight -



# Simcenter MicReD T3STER Introduction

- T3STER – **T**hermal **T**ransient **T**ester
- **JESD51-1**電性量測法(Electrical test method, ETM)
  - 利用半導體封裝本身的電壓值隨環境溫度改變而有規律變化之特性。
  - 量測電壓變化後可準確計算出溫度差。
  - 真正求得晶片之接面溫度(Junction temperature)變化。
- 符合國際JEDEC 量測規範
  - 量測原理採**JESD51-1**規範之電性量測法
  - 透過 JEDEC **JESD 51-14**規範之異質熱介質暫態量測法(Transient Dual Interface Method, TDIM) ，測得封裝整體熱阻。



# New Feature of Control Software

## - T3STER

- As an enhancement, the Gate Voltage Switching Delay function enables adding extra delay to the default gate voltage switching time, that is, the time between the gate drive source and the heating current source receiving the trigger signal. This extra delay in the gate voltage switching time helps protecting the DUT and the measurement system (by preventing possible voltage peaks), and potentially improving the electric transient length, as well.
- 新增功能：閘極電壓切換延遲

更新前的軟體控制，閘極電壓切換與加熱電流關閉將會同時接收到訊號，使Gate切換時間僅在幾微秒，此短至的切換可能會造成較大的突波，可能將會造成元件或硬體損壞。

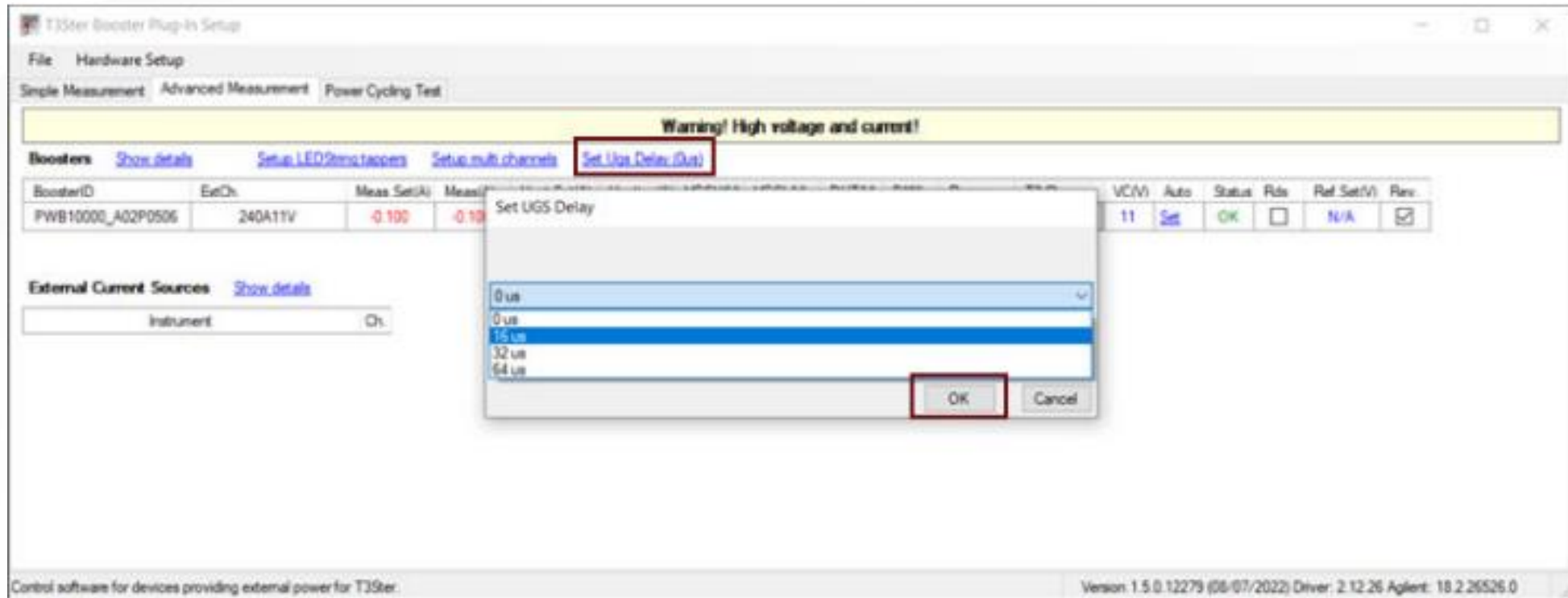
更新後，閘極電壓切換延遲功能可以為預設添加額外的延遲切換時間，從而保護元件和測量系統，以及潛在的改善電瞬態長度。(可選擇數值：0 $\mu$ s、16 $\mu$ s、32 $\mu$ s、64 $\mu$ s，預設值為0 $\mu$ s。)



# New Feature of Control Software

## - T3STER

- 開啟Booster Plug in Setting，在Set UGS Delay中即可設定相關延遲時間，以下為使用240A Booster Plug in 示意圖。

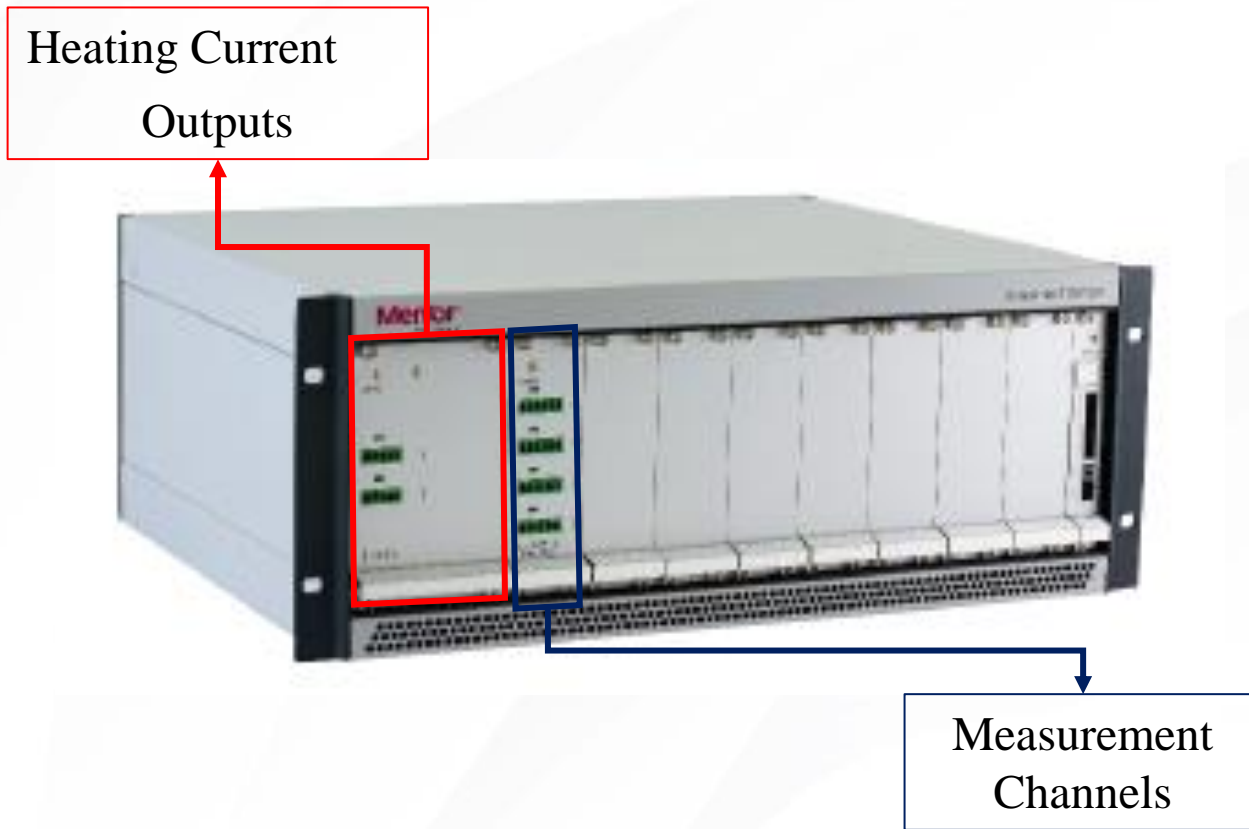


# Simcenter MicReD T3STER SI Introduction

➤ T3STER SI 為全新設計，不同以往 T3STER 的硬體架構和軟體操作。

➤ Key Benefits :

- 軟體操作簡單
- 更高的輸出功率及解析度
- 靈活配置輸出通道
- 使用瀏覽器 Chrome，並可連接網路，隨時控制系統
- **NEW Release –Control Software Release**



# New Feature of Control Software

## - T3STER SI

- **Support has been added for Source Timing Control. Using this feature, you can program the Control Software to power on and off the current and voltage sources – included in a configuration – one by one (in a specified order) when initiating a calibration or measurement process.**

**You can also specify a time interval for the Control Software to wait (sleep) after powering on (or off) each source in the configuration. The Control Software will power on/off the first source, sleep for the time interval defined for that specific source, then power on the next source in the configuration.**

- 新增對各項電源開關時序的控制。
  1. 在啟動校正或測量過程時打開和關閉電流和電壓源。(在配置中按指定順序依序進行)
  2. 指定控制軟體在打開或關閉配置中的每個電源後進行等待（睡眠）的時間間隔。
  3. 控制軟體將打開/關閉第一個電源，可設定該特定電源的時間間隔內內進行休眠，並打開配置中的下一個電源。



# New Feature of Control Software

## - T3STER SI

- As an enhancement, the Control Software issues a warning message in case the voltage is out of range at the end of the heating phase (used for power step calculation).
- 功能改善，如果在加熱階段結束時電壓超出範圍，控制頁面會跳出警告信息。

Measurement settings

Heating time [s]  
Setpoint: 30, Minimum: 0, Maximum: 4000

Cooling time [s]  
Setpoint: 30, Minimum: 0, Maximum: 4000

Delay time [s]  
Setpoint: 0, Minimum: 0, Maximum: 4000

Source timing control  
 On  Off

Reverse power off sequence  
 On  Off

Wait for instrument delay  
 On  Off

ID	Channel	Mode	Current	Range	Warning
MS401	S3Ch1 - Current source	On	0.2 A		
MS401	S4Ch4 - Current source	On	0.2 A	10 V	✗
LP220	S1Ch2 - Voltage source	On	0 V	0 A	✗
MS401	S3Ch1 - Meas. ch.		2 mV/K	20 V (±10 V)	✗
MS401	S4Ch4 - Meas. ch.		2 mV/K	20 V (±10 V)	✗

Default view dropdown menu:  
Default view  
Power on timing  
Power off timing



If you want to know more, welcome to discuss with us  
Thank You For Attending



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