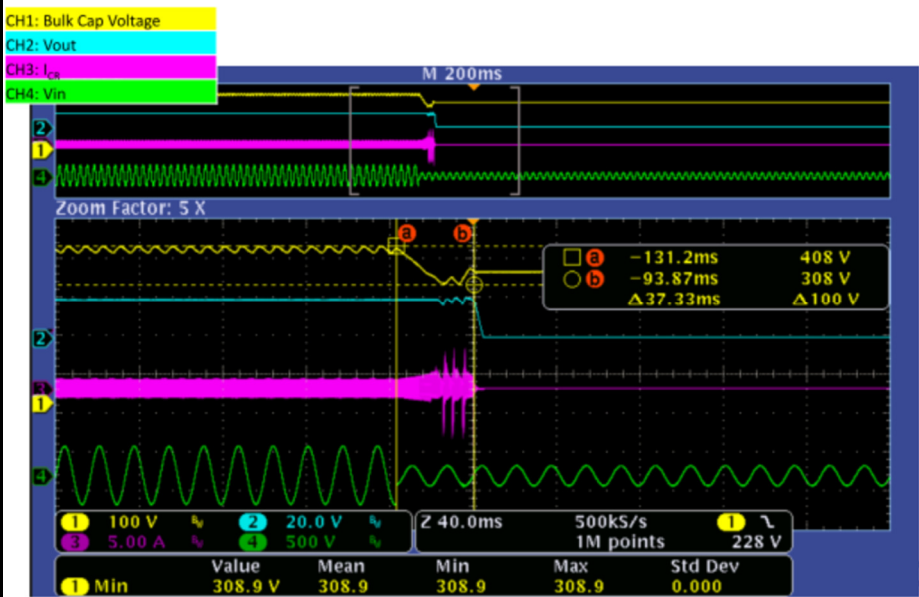


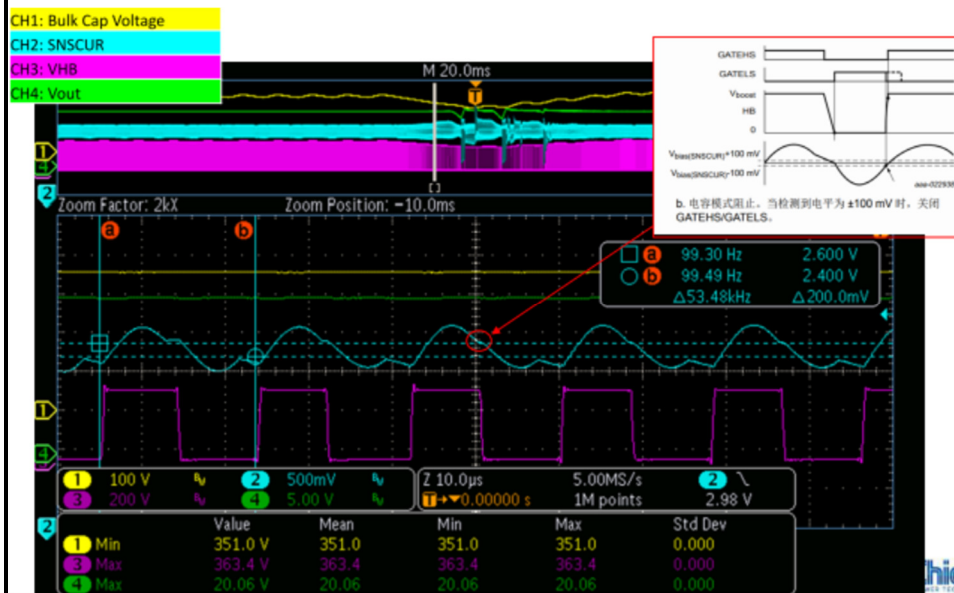
Eight Discipline Report (8D Report)

To:	8D report No.:
From: : Chicony Power Technology	RMA claim No.:
CC :	Chicony Power P/N: A24-150P1A
	Customer P/N:
Submit date: 6/18	Product description: 150W
Receive date: 6/18	Defect D/C or Lot No.:
Subject : 264Vac 切换 90Vac PSU 輸出電壓會掉電 (Regulation, FW 韌體)	
D1.) 問題解決成員:Use Team Approach 主持者 (Team Leader) : 內部成員 (Internal Team Members): 外部成員 (External Team Member):	
D2.)問題說明:Problem Description: (Note: Use who, what, when, where, why, how, how many to specify the Customer's problem.) 在滿載條件下，當輸入電壓由 264Vac 切至 90Vac 時，大電容電壓會掉至 308V，此時 LLC 輸出電流太大觸發 OCP 保護。	
	
D3.)內部或客戶的暫時解決辦法及實施日期:Implement and Verify Containment Action: (Note: Internal / external containment action effectiveness and date.) 1. 從客戶端取得樣機並做進一步分析 <div style="text-align: right; margin-top: 20px;">Date:2024/6/15</div>	

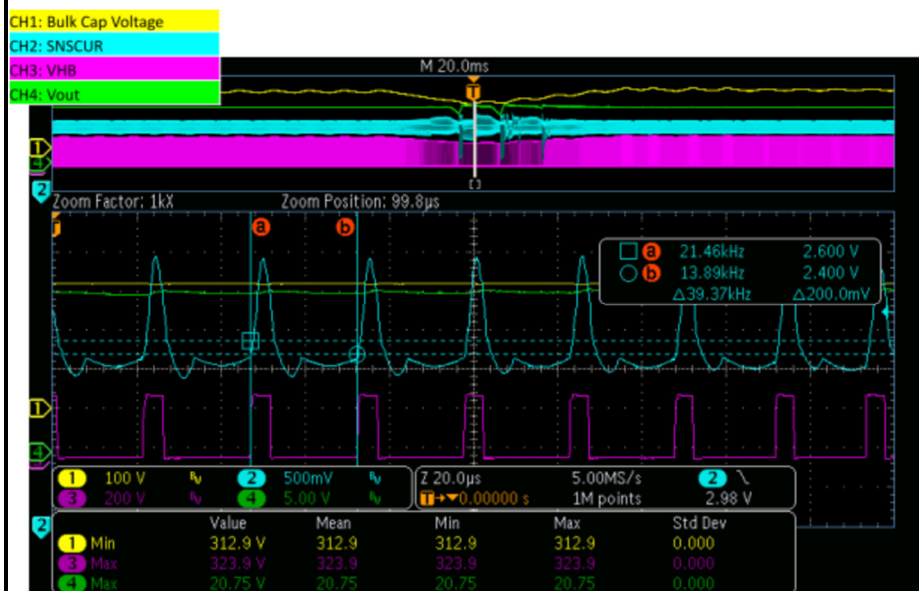
D4.)不良原因確認: Define and Verify Root Causes:

(Note: Identify and verify all suspect causes, which needs explain why the problem occurred.)

滿載條件下，當輸入電壓由264Vac切至90Vac時，大電容電壓掉至350V，此時LLC頻率降低進DCM，過程因觸發CMR開關強制停打且轉態，導致正負半周切換時序異常。



當大電容電壓掉至310V，此時LLC上下臂開關不對稱導致電流大小波，有機會觸發到LLC的OCP保護。



改善對策:

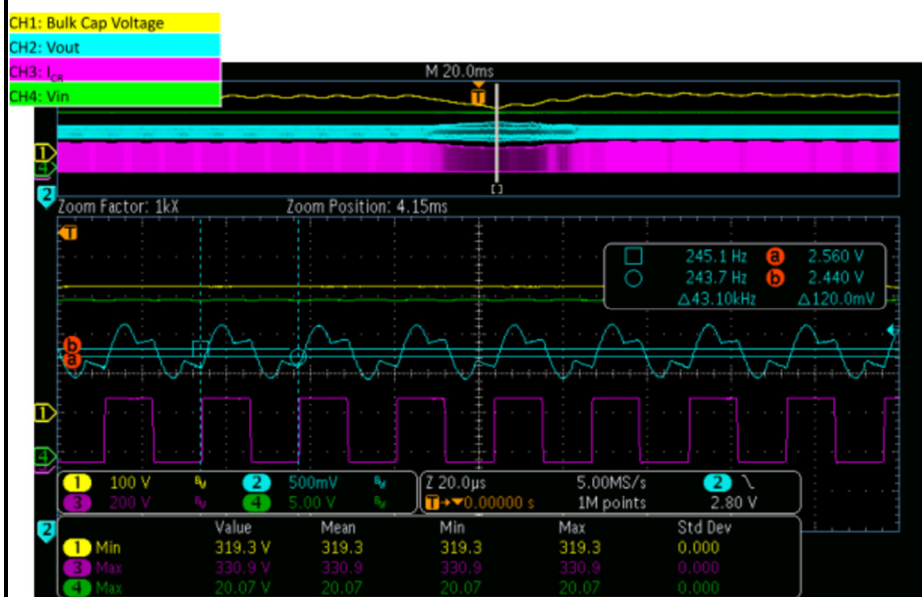
1. 將CMR Level由100mV改為60mV避免誤觸發。

2. AC電壓急遽變動下，調整回授電容容值以及調低 IC偵測輸入電壓取樣數以提升PFC響應速度

- a. 修改C9容值由4.7n改為3.3n
- b. IC取樣數由8個cycles改為2個cycles

改善對策驗證:

滿載條件下，當輸入電壓由264Vac切至90Vac時，大電容電壓掉至319V，此時LLC頻率降低進DCM，無電流大小波，動作正常。



D5.)改善措施:Corrective Action Verification:

(Note: Be make sure the corrective actions is effective in process as well as able to fix the customer complaint problem)

1. 將CMR Level由100mV改為60mV避免誤觸發。
2. AC電壓急遽變動下，調整回授電容容值以及調低 IC偵測輸入電壓取樣數以提升PFC響應速度
 - a. 修改C9容值由4.7n改為3.3n
 - b. IC取樣數由8個cycles改為2個cycles

Date:2024/6/18

D6.)改善措施實施日期:Implement Permanent Corrective Actions:

(Note: Be provide the phase-in date or lot# of corrective actions **implementation** in process)

Immediately



D7.)預防再發生措施:Prevent Recurrence:

(Note: Modified the management, operating systems, practices, and procedures to prevent recurrence for the problems as well as lessons learned cases.)

Same as D5

D8.)確認並感謝問題解決成員 :Check and Congratulate the Team:

(Note: Recognize the collective efforts of the team.)

Thanks to you all ! ! !

Signature	Arthur Wu
Team Leader:	
	Name – Title
Signature by Approver:	Mark Meng
	Name-Title