**UCD9090 Testing – Resequencing and Restart**

**Board no 3184719** Date: 30/05/2017

1. **Function: Re-Sequencing**

Trim--pot in 2.5VD

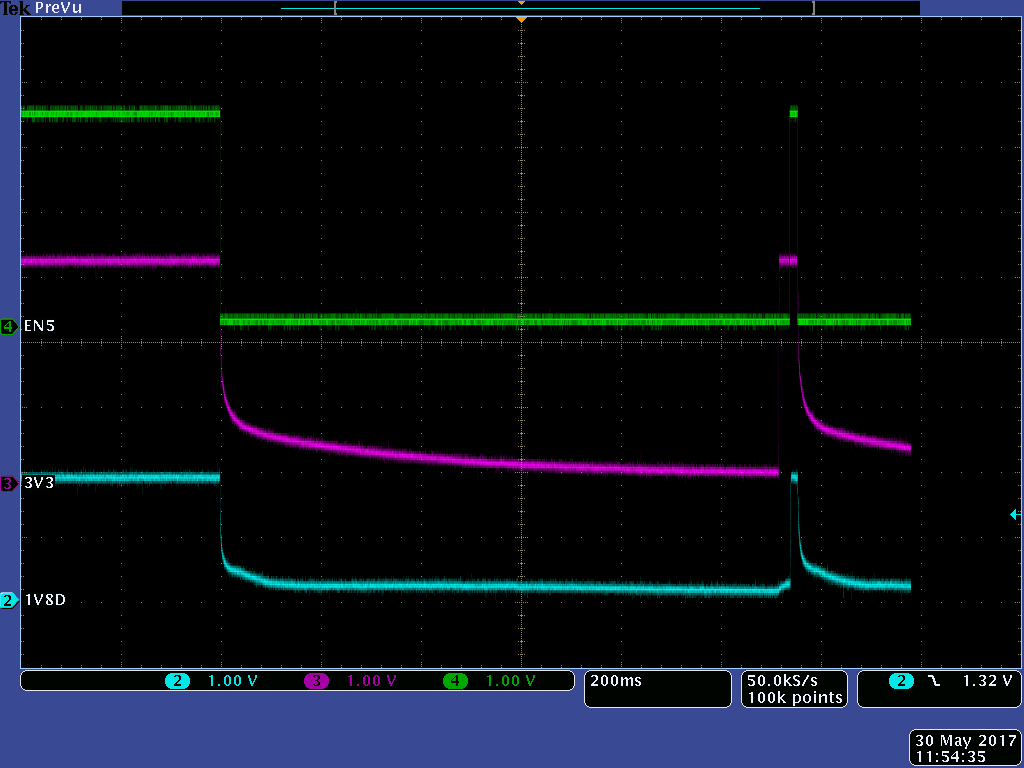
Over Voltage: 2.625V Under Voltage: 2.335V

Fault Salve shut down enabled.

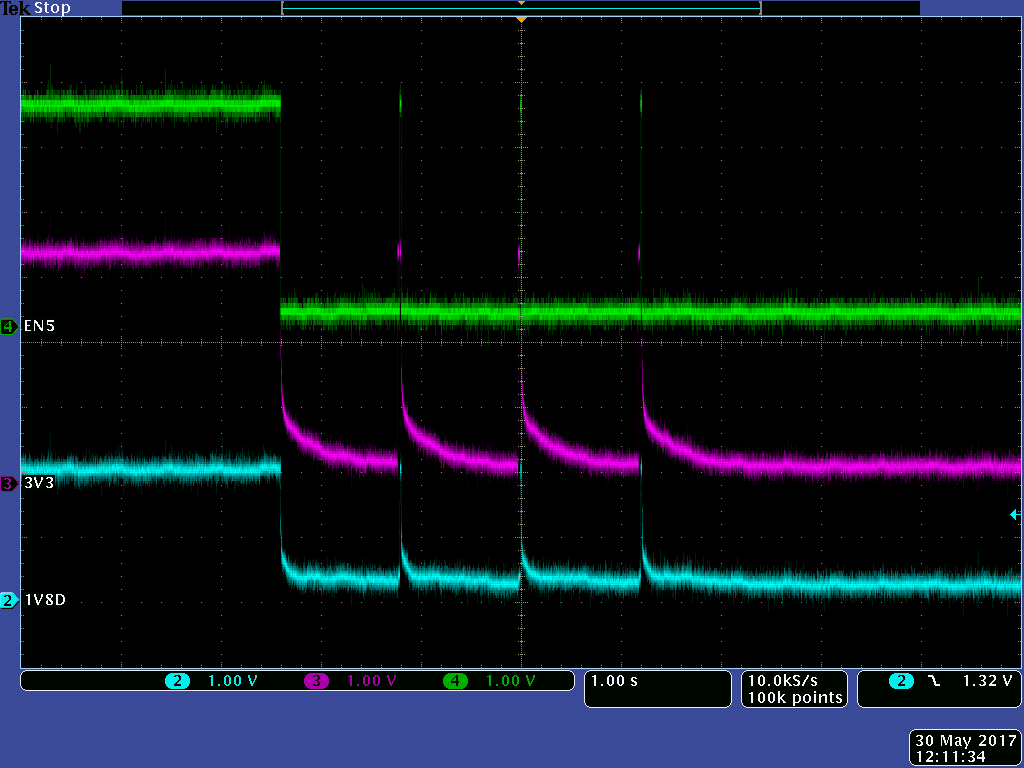
Fault response - shut down with turn-off delay.

**Observation:**

1) In Overvoltage fault, the fault is detected and board shuts down and perform one preset resequencing and if fault exists, it shuts down.

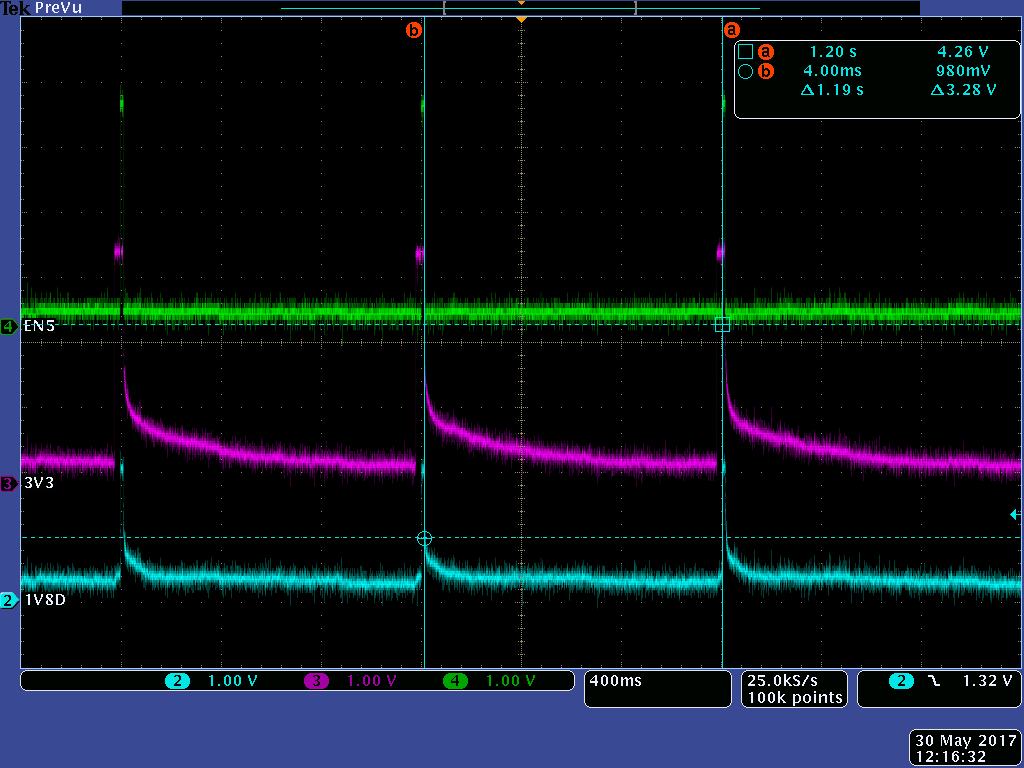


**Fig 1: Over voltage fault with number of re-sequencing = 1.**

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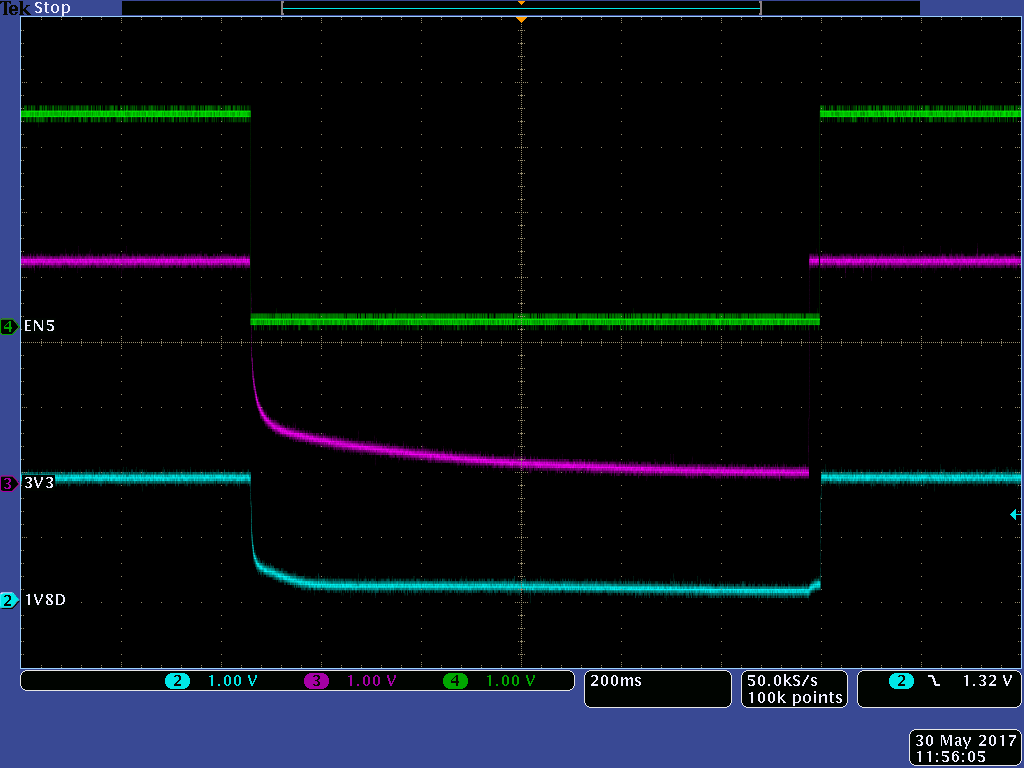
**Fig 2: Over voltage with number of re-sequencing = 3 and**

**time between re-sequencing = 50ms**

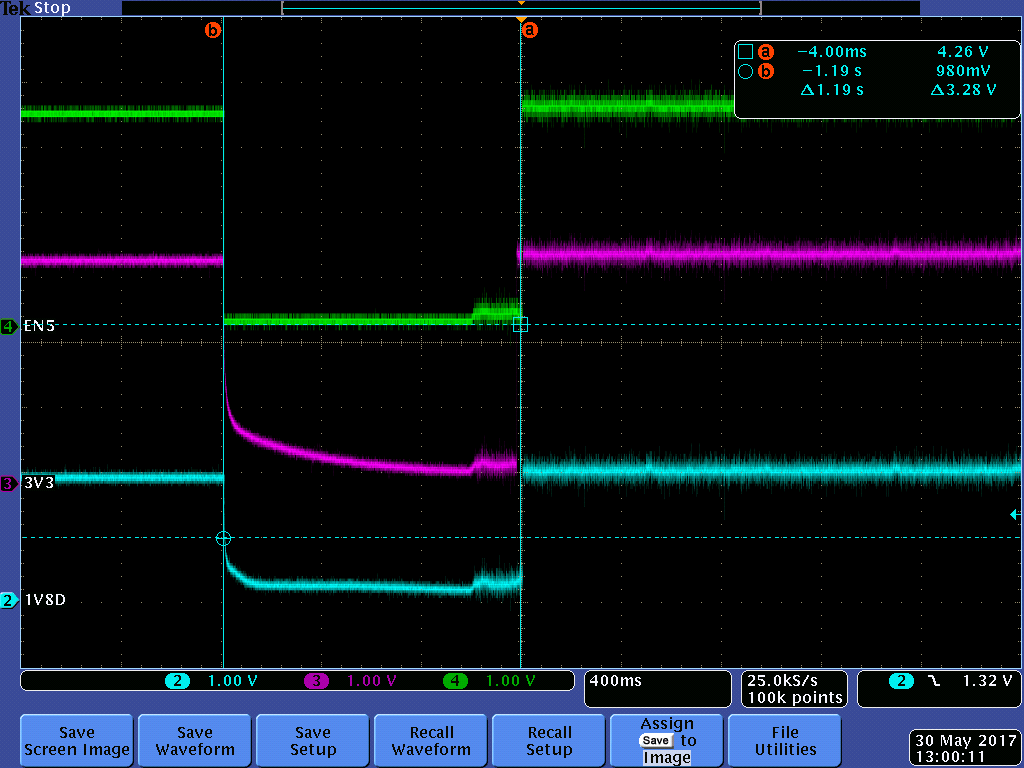
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**Fig 3: Time between re-sequencing during over voltage fault.**

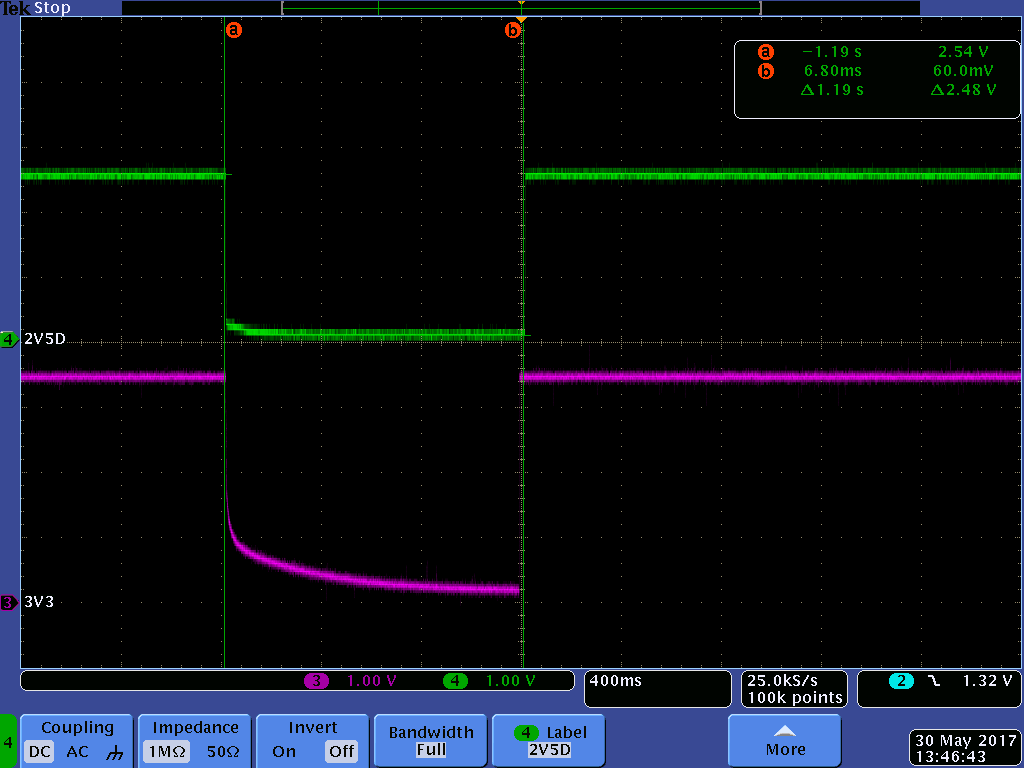
2) In Under voltage fault, the fault is detected, board shuts down and restarts. After this, this there is no complete shuts down or no preset number of resequencing happening. All rails are alive. Board got stuck, as the faulty rail is under fault and UCD not crossing the POWER GOOD level for this rail. So the Power up reset goes to CPLD is low and CPLD keeps all the other devices under reset.



**Fig 4: Under voltage fault with number of re-sequencing = 1.**



**Fig 5: Under voltage fault with number of re-sequencing = 3**



**Fig 6: Under voltage fault with number of re-sequencing = 3 and**

**Time ON max= 50ms**

1. **Function: Re-Start**

Trim-pot in 2.5VD

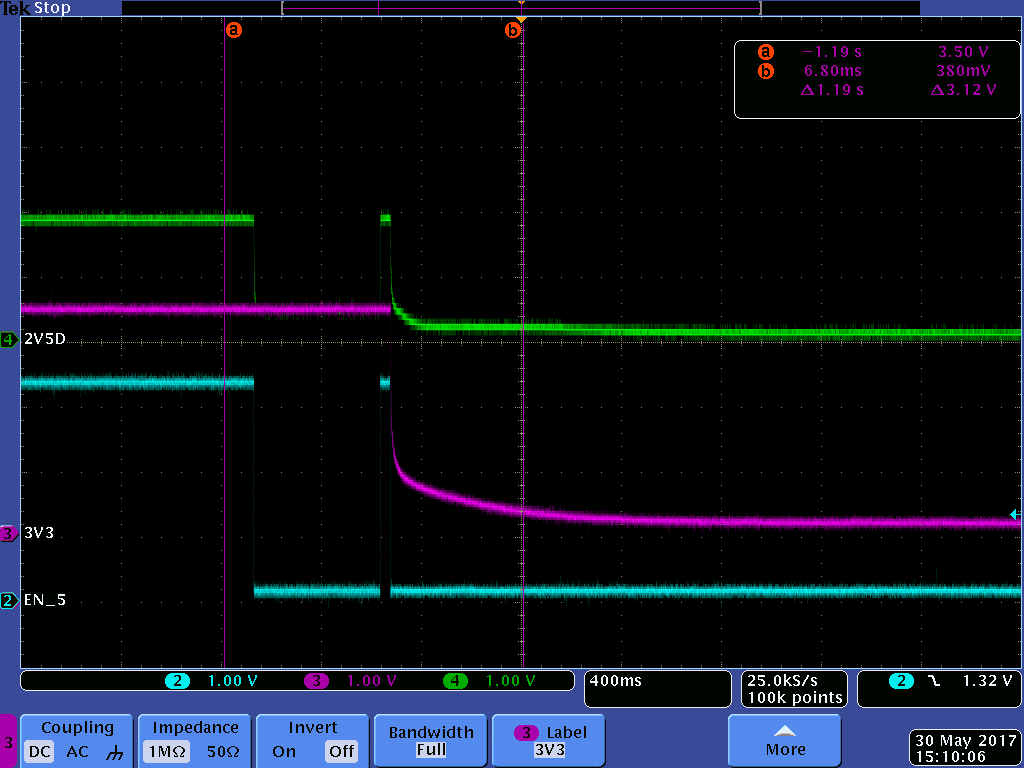
Overvoltage: 2.625V Under Voltage: 2.335V

Fault Salve shut down enabled.

Fault response - shut down with turn-off delay.

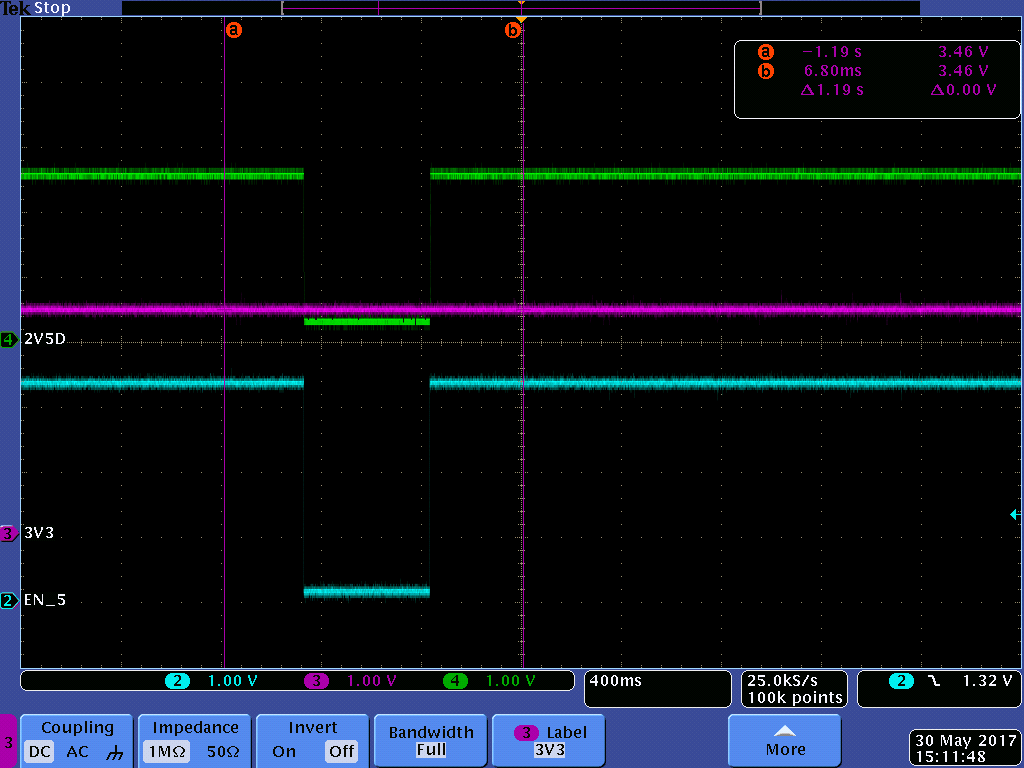
**Observation:**

1) In Overvoltage fault, the fault is detected and board shuts down after one restart.



**Fig 7: Over voltage fault with number of restarts = 7 and time between two restarts = 500ms.**

2) In Under voltage fault, the fault is detected and only fault rail restarts. All rails are alive. Board got stuck, as the faulty rail is under fault and UCD not crossing the POWER GOOD level for this rail. So the Power up reset goes to CPLD is low and CPLD keeps all the other devices under reset.

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**Fig 8: Under voltage fault with number of restarts = 1 and time between two restarts = 500ms.**