

## P/N\_171-0890-00\_CVR\_PT005019

### 1.0 Alternated components in M/B (670-1401-02)

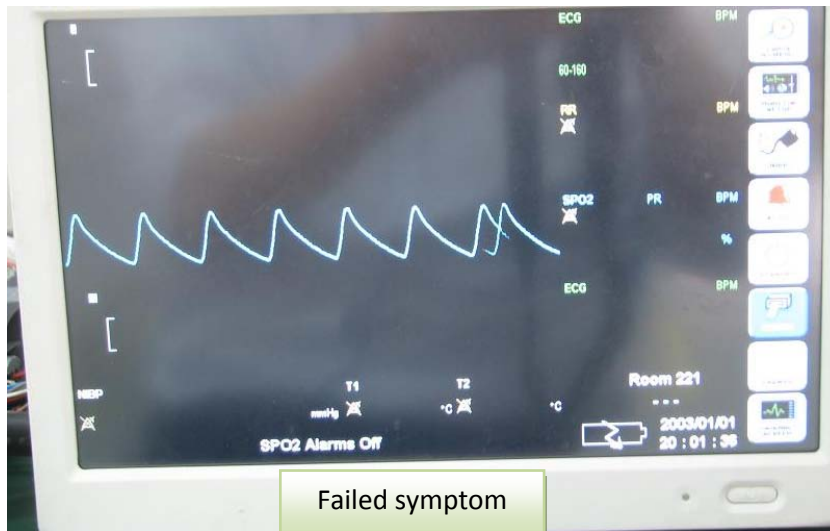
With regard to P/N\_171-0890-00 in M/B (670-1401-02):

Current item use is **TEXAS INSTRUMENTS: LPV324IPWR**

Components to be tested is **National semiconductor: LPV324MTX/NOPB**

### 2.0 Test result

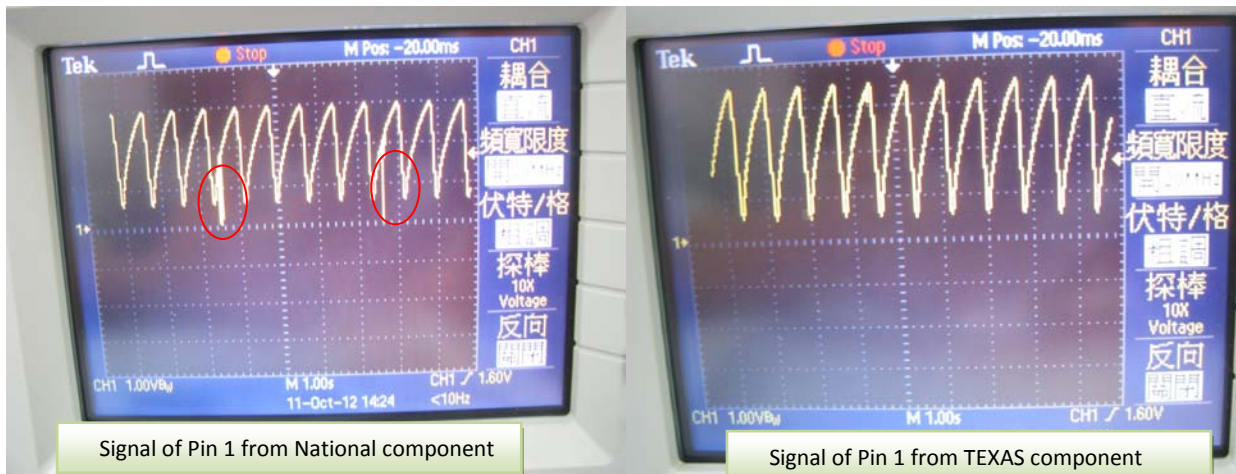
When we perform the system-level testing on Spacelabs Spo<sub>2</sub> mode, the screen only shows Spo<sub>2</sub> waveform but no numeric value of HR and Spo<sub>2</sub> percentage. Refer to the failed symptom below.



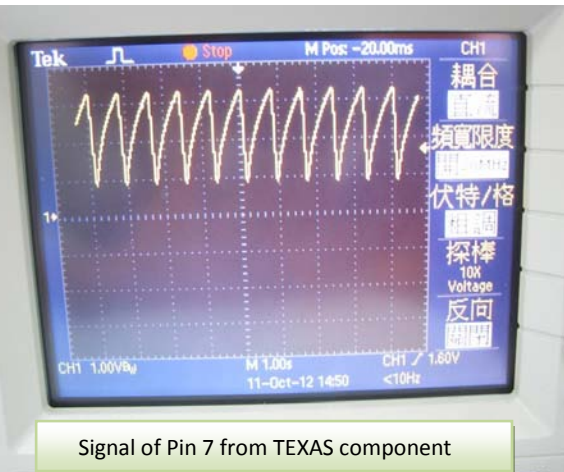
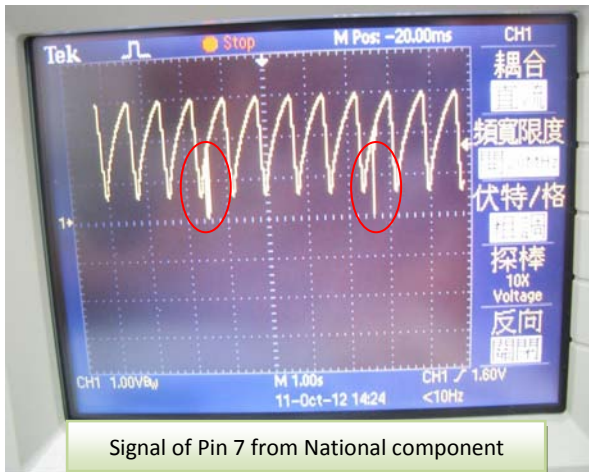
### 3.0 Preliminary analyse

When connect SMART SET Spo<sub>2</sub> simulator cable to monitor with different components.

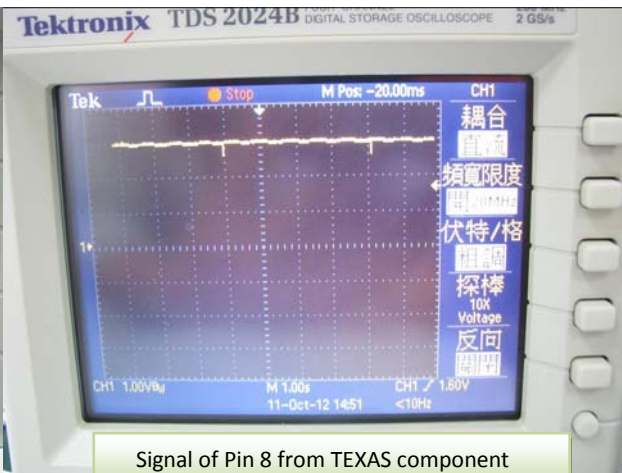
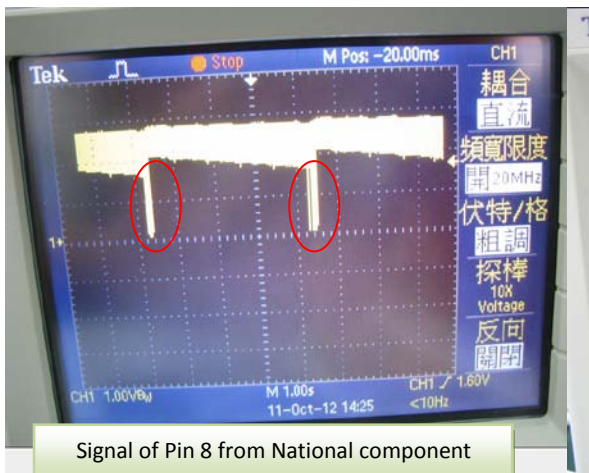
We measure the output of "pin1: Spo<sub>2</sub>RED"," pin7: Spo<sub>2</sub>IR"," pin8: Spo<sub>2</sub>REDDC"," pin14: Spo<sub>2</sub>IRDC" as below.



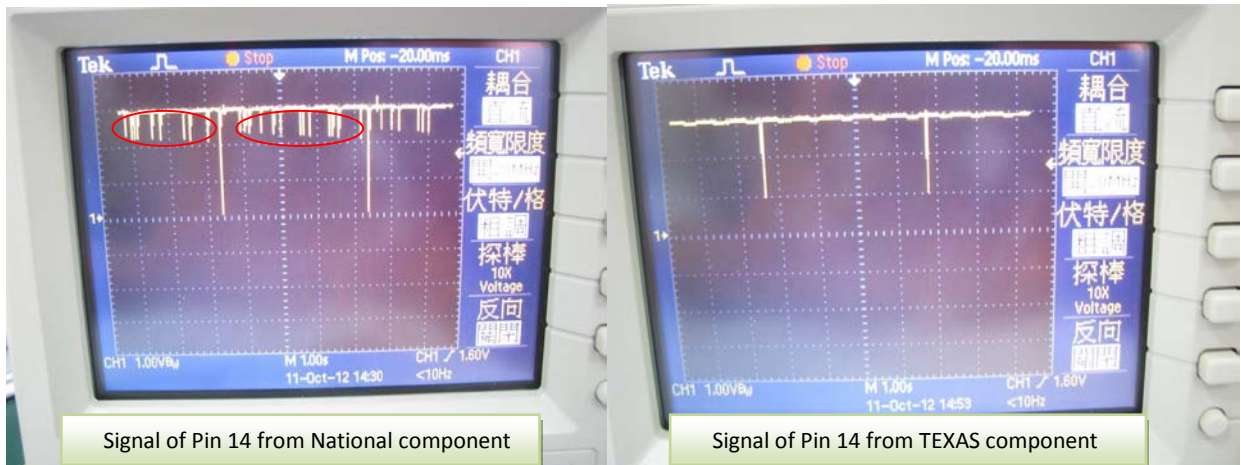
3.1 For pin 1: compared with TEXAS component, there obviously has the interference signal in National part.



3.2 For pin 7: compared with TEXAS component, there obviously has the interference signal in National part.



3.3 For pin 8: compared with TEXAS component, there obviously has the interference signal in National part.



3.4 For pin 14: compared with TEXAS component, there obviously has the interference signal in National part.

#### 4.0 Conclusion

This component is failed in system level validation. We suspect it is caused by IC from National.