



3870 North First Street
San Jose, CA 95134-1702
Customer Assistance Center: 1-408-428-7907

FIELD SERVICE BULLETIN

FSB #: 098-40621-91

DATE: June 8, 2016

Subject: Potential GPS Outages due to GPS Testing – Status, Outcome and Next Steps

Technical Support: Worldwide 1-408-428-7907 (1) or USA toll free 1-888-367-7966 (1)
Customer Relations: Worldwide 1-408-428-7907 (2) or USA toll free 1-888-367-7966 (2)

Summary

The Federal Aviation Administration (FAA) has issued an advisory warning that the Global Positioning System (GPS) could be unreliable during six different days this month, primarily in the Southwestern United States due to GPS testing. The dates of this testing are June 7, 9, 21, 23, 28, and 30th and is expected to take place between 9:30am and 3:30pm Pacific Time.

The interference testing will be centered on China Lake, California. The potential GPS interference will stretch hundreds of miles in each direction, reaching the furthest at higher altitudes.

Details of the FAA Advisory can be found at:

https://www.faasafety.gov/files/notices/2016/Jun/CHLK_16-08_GPS_Flight_Advisory.pdf

Recommended Actions:

The details of the interference testing are not publicly known. It is recommended that customer's deployment of Microsemi systems are installed such that the redundancy and fault tolerance of the system protects timing reliability in case of GPS reference loss. If the GPS interference causes a Microsemi product to reject the GPS signal as a reference source, the system will switch to an alternate input source or enter into holdover mode which is why Rubidium is a recommended and preferred configuration for telecom/mobile applications. If a Microsemi system is affected by the interference testing and the system does not correct (regain lock onto the GPS signal) after the testing period, then the customer should contact our Technical Support Staff for further assistance.

Microsemi systems use intelligent input selection algorithms, atomic oscillator technology, advanced packet timing distribution and network synchronization management and monitoring to discern between a valid timing reference and a faulty timing reference. However, with the proliferation of GPS (and other GNSS systems) as a primary reference source across 1000's of nodes and even 10,000's of nodes across a mobile network, this event is an example of the magnitude that GPS/GNSS vulnerabilities can cause without a secure back-up.

Microsemi recommends that customers contact their local Microsemi partner (or Microsemi directly) to discuss the latest technologies, products and services that can be used to make their networks more secure, fault tolerant and resilient in cases where a GPS/GNSS signal anomaly can occur as well as provide protection against complete GPS/GNSS outages.

Microsemi Actions:

Microsemi will continue to monitor the GPS signal using our technical staff and laboratory locations located in North America, Europe and South East Asia. If a new incident occurs and/or GPS signal anomaly of any kind is detected, we will inform our customers immediately and provide assistance and resolution.

For any questions regarding this Field Service Bulletin, please contact Technical Support at:

North and South America

Microsemi, Inc.
3870 North First Street
San Jose, CA 95134-1702
Toll-free in North America: 1-888-367-7966, Option 1
Telephone: 408-428-7907
Email: FTD.Support@microsemi.com
Internet: www.microsemi.com

Europe, Middle East, and Africa (EMEA)

Microsemi Global Services EMEA
Altlaufstrasse 42
85635 Hoehenkirchen-Siegersbrunn Germany
Telephone: +49 700 3288 6435
Fax: +49 8102 8961 533
Email: FTD.EMEASupport@microsemi.com

Asia Pacific

Suite A201, 2nd Floor, West Wing,
Wisma Consplant 2, No. 7,
Jalan SS16/1, 47500 Subang Jaya
Selangor, Malaysia
Toll-free in North America: 1-888-367-7966, Option 1
Telephone: 408-428-7907
Email: FTD.Support@microsemi.com

Revision History:

Revision	Date	Author(s)	Revision History
1.0	6/8/2016	Greg Wolff	Initial release