
Release Notes – Motion by Xplore Rugged Tablets with Sierra Wireless EM73xx Mobile Broadband Module – GPS Rollover Fix

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Introduction

This Package includes support for GPS week number roll over.

Description

- The Global Positioning System (GPS) contains a week number field which is a 10-bit binary number. This limits the range of the week number to 0 – 102, or 1024 total weeks.
- GPS week zero started Jan 6, 1980. The first 1024 weeks counter ran out and rolled over on August 21, 1999. **The GPS week counter will reset again in November 2019.**
- **Once the GPS week counter resets, the ability to get GPS position fix is unaffected.**
- The only impact is the time reported in some NMEA sentences (i.e. GPRMC). **If customer applications make use of these parameters, there may be some impact.**

Package Details

- GPS week number roll over Patch for Sierra Wireless EM73xx

Device Compatibility

This patch is intended for the Motion by Xplore Rugged Tablets with Sierra Wireless EM73xx Mobile Broadband Module only.

Installation Instructions

1. Download and unzip patch file EM73xx_GPS_Rollover_2019_EXE.ZIP
2. On system to be patched, execute EM73xx_GPS_Rollover_2019_EXE.EXE
3. Wait for successful response (example below)

```
FDT version: 1.0.1806.0
Awaiting suitable port or adapter ...
Switching to boot & hold mode ...
Disabling selective suspend ...
Awaiting download port ...
Switching to streaming mode ...
Downloading images ...
Writing image /
Flashing image -
Awaiting adapter ...
Checking update status ...
Enabling selective suspend ...
Firmware image download succeeded.
Final Firmware update succeeded.
```

Preexisting images information:

Current:

Firmware:

ImageId: 005.025_002

BuildId: 05.05.58.00_GENNA-UMTS

Configuration:

ImageId: 005.025_002

BuildId: 05.05.58.00_GENNA-UMTS

Final images information:

Current:

Firmware:

ImageId: 005.025_002

BuildId: 05.05.58.00_GENNA-UMTS

Configuration:

ImageId: 005.025_002

BuildId: 05.05.58.00_GENNA-UMTS

OEM PRI: 9902196 01.08

IMEI: 356196050620026

Total time elapsed: 67938 ms.

Time to switch to boot mode: 16813 ms.

Images downloaded:

Image ID: 001.099_000

Build ID: 00.00.00.00_GPS2019
write time: 46 ms
additional flash time: 32 ms

Time to reset to application mode: 49844 ms.

Press Enter to continue ...

Note: Firmware Download Tool may terminate unexpectedly multiple times during successful patch

Configuring mobile broadband device

Firmware Download Tool terminated unexpectedly

Release Date

Nov 2019