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# Release Notes – MC45 WM6.5 – GPS Rollover Fix Release

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## Introduction

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This Package includes support for GPS week number roll over.

## Description

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Updated to handle extended GPS Week number for correct date calculation due to GPS week number roll over.

- Each GNSS system has its date and time scale for computing satellite coordinates and time biases, based on system time: weeks and seconds within a week.
- GPS SVs transmit a 10-bit week number in the range 0-1023 that rolls over every 1024 weeks or roughly 19.6 years. To report the current time, GPS receivers normally compute extended GPS weeks or cumulative GPS weeks. Extended GPS weeks are computed from the start of GPS time, that is, 00:00:00 UTC on Sunday, January 6, 1980.
- The first GPS week number rollover from 1023 to 0 occurred at 00:00:00 GPS time on Sunday, August 22, 1999.
- This patch fixes the second GPS week rollover which occurs on November 3<sup>rd</sup>, 2019.

## Package Details

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MC45-BSP04.17.002\_GPS.Rollover.zip - GPS week number roll over Patch

## Device Compatibility

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This software release has been approved for use with the following Zebra devices.

Device	Operating System	BSP Version
MC45	WM 6.5	04.17.02

## Installation Requirements

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This SW is intended for the MC45 WM 6.5 devices only.

## Installation Instructions

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1. Copy the 3 files to Micro-SD card (in root), file list: pkgs.lst /partition.mbn /modem.smb
2. Perform the SD-download, (Press 1+9+power key and then press the camera key)
3. Device will reboot and flash modem image.
4. Once the done, Check the GPS Roll over fix.

## Release Date

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Oct 2019