Introduction

These release notes apply to the SiRFstarIII GSW3 GPS software releases noted below.

Software Version Description

The software versions covered by this document are the GSW3.5 P2.00 (Complete Version String GSW3.5.0_3.5.00.00-CxP2.00), and GSWLT3.5 P2.00 (Complete Version String GSW3.5.0_3.5.00.00-CxP2.00), where the Cx designator is the specific build variant.

GSW3.5 P2.00 and GSWLT3.5 P2.00 correct the GPS almanac week number found in version P1.00.

Software Availability

Each of the GSW3.5 P2.00 and GSWLT3.5 P2.00 software releases are available in a standard set of S-records with pre-defined configurations, and in the standard SDK library developer format only for specific devices. Both sets of releases are available for immediate download from the SiRF Customer Zone.
The following variants are supported.

GSW3.5

Software Variant	Description
C23	Dual UART (SSB, NMEA) with SBAS
C24	Single UART (SSB) with SBAS
C25	Single UART (NMEA) with SBAS
C33	Dual UART(SSB, NMEA) with SBAS, Extended Ephemeris
C34	Single UART (SSB) with SBAS, Extended Ephemeris
C35	Single UART (NMEA) with SBAS, Extended Ephemeris
SDK001	Compiled for ADS1.2, RVDS3.1

GSWLT3.5

Software Variant	Description
CL21	Single UART (SSB) with SBAS
CL31	Single UART (NMEA) with SBAS, Extended Ephemeris
CL32	Single SPI (SSB), with SBAS, Extended Ephemeris

*Note: A Software Development Kit is not available for GSC3eLPa, GSC3LTi, or GSC3LT products.

Products Affected

The products associated with a specified software release are shown below:

GSW3.5 P2.00	**GSWLT3.5 P2.00**
GSC3e/LP	GSC3LTif
GSC3f/LP	GSC3LTf
GSC3e/LPx	GSC3LT(non-ROM version)
GSC3f/LPx	GSC3LTf Evaluation Kits
GSC3e/LPa	
GSC3f/LP Evaluation Kits	
GSC3f/LPx Evaluation Kits	

Please note that all products require either external or internal flash support in order to migrate to the new software releases.

Description of Software Changes

The GSW3.5 P2.00 and GSWLT3.5 P2.00 software releases represent a significant improvement over the previously released production version GSW3.2.5 P3.00.

The GSW3.5 P2.00 and GSWLT3.5 P2.00 software releases also provide an upgrade to the previously released production version GSW3.2.6 P1.00.
 In addition to general improvements, the following major changes have been implemented in these new software versions:
Builds on the previous GSW3.2.5 P3.00 Clear Release
Provides Clear Release upgrade to GSW3.2.6 P1.00 for use with GSC3e/LPa
Improved cold, warm, and hot start TTFF
Improved acquisition sensitivity for cold , warm, and hot start conditions
Merged binary file compatibility with GSC3e/LPa
Adjusted UTC Leap Second Default value and logic
Common Navigation Library integration for higher quality experience.

GPS Performance Enhancements

Cold Start acquisition sensitivity has been improved to approximately -145 dBm (~25 dB-Hz*) from previous limit of -142 dBm (~28 dB-Hz*) [Note 1]
Warm Start acquisition sensitivity has been improved to approximately -145 dBm (~25 dB-Hz*)
Hot Start performance has been improved across a range of operating conditions. In general, the hot start TTFF for long receiver off times has been improved by up to 50%
Natural Hot Start acquisition sensitivity been improved to approximately -155 dBm (~15 dB-Hz*)
(*Note 1: Conversion between dBm and dB-Hz assumes 4 db of System Equivalent Noise Figure.)
A Test Report for this release is available upon request.
SiRF reserves the right to make changes without further notice to any of its products. Data that are provided in these Release Notes may vary in different applications and actual performance may vary over time.