



# SeeGull® EX WCDMA/GSM Product Release Notes

## SeeGull® EX WCDMA/GSM Product Release Notes

**Release 2.6**

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## 1.0 Current Release Notes

### SCANNER COMPONENT VERSIONS

File Name	Version
<b>Supported Digital boards</b>	700050-01
	700050-03
<b>Supported RF boards</b>	700049-02
	700049-03
	700049-10
	700049-11
	700049-29
EX DSP	00.00.05.69
EX Embedded SW	02.01.02.24
Boot Loader	03.12.00.00
Clock Card Embedded SW	12.9
Digital Logic	00.00.01.00
Logic Device ID	N/A
SeeGull API	2.3.4.11
eICD	2.1.4.0

### SUPPORTED OPTIONS

Option Code in Hex	Description
<b>GSM</b>	
0001 0001	GSM
0002 0001	BSIC
0004 0001	GSM BCCH C/I
0005 0001	GSM Normal BCCH
<b>WCDMA</b>	
0001 0004	3GPP WCDMA
0003 0004	3GPP WCDMA Pilot
0005 0004	3GPP WCDMA BCH decoding
0008 0004	3GPP WCDMA Extended Dynamic Range
<b>Misc.</b>	
0001 0000	GPS Navigation
0005 0000	Absolute Time Stamp
0003 0000	Spectrum Analysis

**SUPPORTED CONFIGURATIONS**

Part Number	RF board	Band Number	Band Supported	Protocol
06101	1	1	2100	WCDMA
		2	N/A	N/A
	2	3	1800	GSM
		4	900	GSM
06102	1	1	2100	WCDMA
		2	900	WCDMA
	2	3	1800	GSM
		4	900	GSM
06103	1	1	1900	WCDMA
		2	850	WCDMA
	2	3	1900	GSM
		4	850	GSM
06104	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	N/A	N/A
06105	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	850	GSM
06110	1	1	2100	WCDMA
		2	N/A	N/A
06111	1	1	2100	WCDMA
		2	900	WCDMA
06112	1	1	1900	WCDMA
		2	850	WCDMA
06113	1	1	AWS	WCDMA
		2	N/A	N/A
06116	1	1	N/A	N/A
		2	850	WCDMA
06117	1	1	N/A	N/A
		2	900	WCDMA
06118	1	1	1900	WCDMA
		2	N/A	N/A
06119	1	1	2100	WCDMA
		2	850	WCDMA
06162	1	1	2100 DL	WCDMA
		2	2100 UL	WCDMA
	2	3	1800	GSM
		4	900	GSM
06165	1	1	2100 DL	WCDMA
		2	2100 UL	WCDMA

The release details and history are provided in the following sections.

## FEATURES

- WCDMA algorithm enhancements
- Firmware support for the following band:
  - UL IMT-2000 (Operating Band I)

## KNOWN PROBLEMS IDENTIFIED IN THIS RELEASE

- None

## PROBLEMS RESOLVED IN THIS RELEASE

- [2432] Spectrum Analyzer 5kHz and 10kHz resolution bandwidth measurement mean error differs by about 3dB and 1.2dB respectively compared to all other resolution bandwidths supported.

## THE FOLLOWING MESSAGES ARE SUPPORTED IN THIS VERSION

### EX General Messages

- Error Message
- Inquiry Message
- Available Options Message
- Reset Message.

### EX Scan Messages

- RSSI Scan Message
- Top N Pilot Scan Message (WCDMA only)<sup>\*1</sup>
- BCH (L3) Message (WCDMA only)
- Immediate RSSI Scan Message
- Immediate Top N Pilot Scan Message (WCDMA only)<sup>\*1\*</sup>
- Immediate BCH N Pilot Scan Message (WCDMA only)
- Color Code – Control Channel Scan Message (GSM only)
- Immediate Color Code – Control Channel Scan Message (GSM only)
- Spectrum Analysis Scan Message
- Stop Scan Message

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\* **Immediate Top N and Top N scans ONLY supports the following data modes:**  
(Ec/Io, Aggregate Ec/Io, Time Offset, Delay Spread, Eps/Io, Ess/Io, Rake Finger Count, and SIR)

<sup>1</sup> **In Immediate Top N and Top N the correlation tap field ONLY supports high speed and high dynamic range scans. Priority and Time Offset modes are not supported.**



## SeeGull® EX WCDMA/GSM Product Release Notes

### **EX Information Messages**

- Get Product Information Message
- Channel to Frequency Message
- Frequency to Channel Message

### **EX Other Messages**

- Get GPS Position Message
- Get Temperature Message

### **NOTES**

- None

### **RELEASE HISTORY**

- Release Notes for previous releases can be found in the next section.

## 2.0 Previous Release Notes

### 2.1 SeeGull EX WCDMA/GSM Beta Pre-Release 2.6 (November 2009)

#### SCANNER COMPONENT VERSIONS

File Name	Version
<b>Supported Digital boards</b>	700050-01 700050-03
<b>Supported RF boards</b>	700049-02 700049-03 700049-10 700049-11
EX DSP	00.00.05.69
EX Embedded SW	02.01.02.19
Boot Loader	03.12.00.00
Clock Card Embedded SW	12.8
Digital Logic	00.00.01.00
Logic Device ID	N/A
SeeGull API	2.3.3.1
eICD	2.1.0.1

#### SUPPORTED OPTIONS

Option Code in Hex	Description
<b>GSM</b>	
0001 0001	GSM
0002 0001	BSIC
0004 0001	GSM BCCH C/I
0005 0001	GSM Normal BCCH
<b>WCDMA</b>	
0001 0004	3GPP WCDMA
0003 0004	3GPP WCDMA Pilot
0005 0004	3GPP WCDMA BCH decoding
0008 0004	3GPP WCDMA Extended Dynamic Range
<b>Misc.</b>	
0001 0000	GPS Navigation
0005 0000	Absolute Time Stamp
0003 0000	Spectrum Analysis

**SUPPORTED CONFIGURATIONS**

Part Number	RF board	Band Number	Band Supported	Protocol
06101	1	1	2100	WCDMA
		2	N/A	N/A
	2	3	1800	GSM
		4	900	GSM
06102	1	1	2100	WCDMA
		2	900	WCDMA
	2	3	1800	GSM
		4	900	GSM
06103	1	1	1900	WCDMA
		2	850	WCDMA
	2	3	1900	GSM
		4	850	GSM
06104	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	N/A	N/A
06105	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	850	GSM
06110	1	1	2100	WCDMA
		2	N/A	N/A
06111	1	1	2100	WCDMA
		2	900	WCDMA
06112	1	1	1900	WCDMA
		2	850	WCDMA
06113	1	1	AWS	WCDMA
		2	N/A	N/A
06116	1	1	N/A	N/A
		2	850	WCDMA
06117	1	1	N/A	N/A
		2	900	WCDMA
06118	1	1	1900	WCDMA
		2	N/A	N/A
06119	1	1	2100	WCDMA
		2	850	WCDMA

The release details and history are provided in the following sections.

## FEATURES

- WCDMA algorithm enhancements

## KNOWN PROBLEMS IDENTIFIED IN THIS RELEASE

- None

## PROBLEMS RESOLVED IN THIS RELEASE

- [2432] Spectrum Analyzer 5kHz and 10kHz resolution bandwidth measurement mean error differs by about 3dB and 1.2dB respectively compared to all other resolution bandwidths supported.

## THE FOLLOWING MESSAGES ARE SUPPORTED IN THIS VERSION

### EX General Messages

- Error Message
- Inquiry Message
- Available Options Message
- Reset Message.

### EX Scan Messages

- RSSI Scan Message
- Top N Pilot Scan Message (WCDMA only)<sup>†</sup>
- BCH (L3) Message (WCDMA only)
- Immediate RSSI Scan Message
- Immediate Top N Pilot Scan Message (WCDMA only)<sup>†\*</sup>
- Immediate BCH N Pilot Scan Message (WCDMA only)
- Color Code – Control Channel Scan Message (GSM only)
- Immediate Color Code – Control Channel Scan Message (GSM only)
- Spectrum Analysis Scan Message
- Stop Scan Message

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\* **Immediate Top N and Top N scans ONLY supports the following data modes:**  
(Ec/Io, Aggregate Ec/Io, Time Offset, Delay Spread, Eps/Io, Ess/Io, Rake Finger Count, and SIR)

<sup>†</sup> **In Immediate Top N and Top N the correlation tap field ONLY supports high speed and high dynamic range scans. Priority and Time Offset modes are not supported.**



## SeeGull® EX WCDMA/GSM Product Release Notes

### **EX Information Messages**

- Get Product Information Message
- Channel to Frequency Message
- Frequency to Channel Message

### **EX Other Messages**

- Get GPS Position Message
- Get Temperature Message

### **NOTES**

- None

## 2.2 SeeGull EX WCDMA/GSM Release 2.5.3 (December 2008)

### SCANNER COMPONENT VERSIONS

File Name	Version
<b>Supported Digital boards</b>	700050-01
	700050-03
<b>Supported RF boards</b>	700049-02
	700049-03
	700049-10
	700049-11
EX DSP	00.00.05.65
EX Embedded SW	02.01.00.22
Boot Loader	03.12.00.00
Clock Card Embedded SW	12.8
Digital Logic	00.00.01.00
Logic Device ID	N/A
SeeGull API	2.3.3.1
eICD	2.1.0.1

### SUPPORTED OPTIONS

Option Code in Hex	Description
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0001 0001	GSM
0002 0001	BSIC
0004 0001	GSM BCCH C/I
0005 0001	GSM Normal BCCH
<b>WCDMA</b>	
0001 0004	3GPP WCDMA
0003 0004	3GPP WCDMA Pilot
0005 0004	3GPP WCDMA BCH decoding
0008 0004	3GPP WCDMA Extended Dynamic Range
<b>Misc.</b>	
0001 0000	GPS Navigation
0005 0000	Absolute Time Stamp
0003 0000	Spectrum Analysis

**SUPPORTED CONFIGURATIONS OPTIONS**

Part Number	RF board	Band Number	Band Supported	Protocol
06101	1	1	2100	WCDMA
		2	N/A	N/A
	2	3	1800	GSM
		4	900	GSM
06102	1	1	2100	WCDMA
		2	900	WCDMA
	2	3	1800	GSM
		4	900	GSM
06103	1	1	1900	WCDMA
		2	850	WCDMA
	2	3	1900	GSM
		4	850	GSM
06104	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	N/A	N/A
06105	1	1	AWS	WCDMA
		2	N/A	N/A
	2	3	1900	GSM
		4	850	GSM
06110	1	1	2100	WCDMA
		2	N/A	N/A
06111	1	1	2100	WCDMA
		2	900	WCDMA
06112	1	1	1900	WCDMA
		2	850	WCDMA
06113	1	1	AWS	WCDMA
		2	N/A	N/A
06116	1	1	N/A	N/A
		2	850	WCDMA
06117	1	1	N/A	N/A
		2	900	WCDMA
06118	1	1	1900	WCDMA
		2	N/A	N/A

The release details and history are detailed in the following sections.

**FEATURES**

- Added time stamp for spectrum analysis.
- Top N Time stamp to 50 µsec.

## KNOWN PROBLEMS IDENTIFIED IN THIS RELEASE

- None

## PROBLEMS RESOLVED IN THIS RELEASE

Defect 1973	WCDMA Peak and Aggregate Ec/Io have the same values
Defect 2040	GPS Timestamp report incorrectly for WCDMA TopN or BCH TopN
Defect 2055	EX 2.5 Code (130) HW Not Configured
Defect 2056	Status message 46 need to modify for Release EX 2.5 and above.
Defect 2083	EX 2.5 A/D saturation for dual domestic 1900/800
Defect 2084	During GPS testing, the GPS/FPGA does not regain lock after the GPS interferer was removed after 30,000 TopN loops
Defect 2085	During GPS testing, when the GPS interferer was applied, DSP reported no pilot (136)
Defect 2086	Running GPS PN Delay test, the initial time offset was wrong for TopN
Defect 2088	While running GPS PN Delay test, TopN scan stops running, but embedded still responds to inquiry
Defect 2121	GPS second Reported by TopN is incorrect
Defect 2130	Missing additional channelization for WCDMA American Cellular for Ex 2.5 WCDMA/GSM
Defect 2179	DSP misuse the digital and RF board temperature
Defect 2187	Chip Window byte change for better backward compatibility

## THE FOLLOWING MESSAGES ARE SUPPORTED IN THIS VERSION

### EX General Messages

- Error Message
- Inquiry Message
- Available Options Message
- Reset Message.

### EX Scan Messages

- RSSI Scan Message
- Top N Pilot Scan Message (WCDMA only)<sup>†</sup>
- BCH (L3) Message (WCDMA only)
- Immediate RSSI Scan Message
- Immediate Top N Pilot Scan Message (WCDMA only)<sup>†\*</sup>

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\* **Immediate Top N and Top N scans ONLY supports the following data modes:**

(Ec/Io, Aggregate Ec/Io, Time Offset, Delay Spread, Eps/Io, Ess/Io, Rake Finger Count, and SIR)

<sup>†</sup> **In Immediate Top N and Top N the correlation tap field ONLY supports high speed and high dynamic range scans. Priority and Time Offset modes are not supported.**

- Immediate BCH N Pilot Scan Message (WCDMA only)
- Color Code – Control Channel Scan Message (GSM only)
- Immediate Color Code – Control Channel Scan Message (GSM only)
- Spectrum Analysis Scan Message
- Stop Scan Message

**EX Information Messages**

- Get Product Information Message
- Channel to Frequency Message
- Frequency to Channel Message

**EX Other Messages**

- Get GPS Position Message
- Get Temperature Message

**NOTES**

- None

**2.3 SeeGull EX WCDMA/GSM Release 2.5 (July 2008)**

**SCANNER COMPONENT VERSION**

<b>File Name</b>	<b>Version</b>
<b>Supported Digital boards</b>	700050-01
<b>Supported RF boards</b>	700049-02 700049-03 700049-10 700049-11
EX DSP	00.00.05.58
EX Embedded SW	02.00.00.00
Boot Loader	03.12.00.00
Clock Card Embedded SW	11.12
Digital Logic	00.00.01.00
Logic Device ID	N/A
eICD	2.0.1.1