



# ANTARIS™ SCKit

## GPS Software Customization Kit ANTARIS™ Positioning Engine

The ANTARIS™ SCKit lets you use all the capabilities of the ANTARIS™ GPS technology jointly developed by Atmel and u-blox. The integration of custom code on the integrated ARM7 saves cost and space. It allows you to optimize your system and speed up development time.



### Overview

The ANTARIS™ Software Customization Kit (SCKit) enables you to implement your own code on the ARM7 processor, which is integrated on the ATR0620 GPS baseband IC. Using the ANTARIS™ SCKit, the free resources of the GPS receiver, such as General purpose Digital I/Os, SPI interface or unused processing power, can be used for your custom application. The Application Link Layer (ALL) of the ANTARIS™ GPS software offers a powerful API (Application Programmer's Interface) for fast and safe integration of your application code.

The Development Platform connects to a serial port of your PC for convenient software development and rapid prototyping.

With the evaluation copy of the ARM developer suite you can immediately begin with your development work.

u-center AE (ANTARIS™ Edition) allows you to monitor the current status of the GPS receiver. A variety of visualization and configuration functions allow quick and easy testing of the receiver.

### Hardware

- ANTARIS™ Development Board
  - Frontend Board with ATR0600 RF front-end IC
  - Application Board with ATR0620 Baseband IC
  - Carrier Board with external interfaces
- Active GPS antenna with SMA connector
- DB9 serial cable
- 100-240 VAC power adapter
- SCKit CD containing Code examples (Sources)

### Software

- u-center AE (ANTARIS™ Edition) GPS Evaluation Software for Windows
- ARM Developer Suite (ADS, Evaluation copy)

### Documentation

- ANTARIS™ Software Development Manual, describing:
  - Development board
  - Software architecture, Application Link Layer
  - API interface
  - Examples of custom code integration
- u-center AE User's Guide

### Support

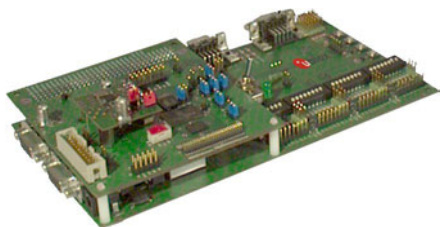
- Training
- Development support
- Access to SW-related u-blox web sites

*your position  
is our focus*



## Specifications

### Development Platform



### Receiver Performance Data

<b>Receiver Type</b>	16 channel, L1 frequency, C/A code	
<b>Max. Update Rate</b>	4 Hz	
<b>Accuracy</b>	Position	3 m CEP
	DGPS	2 m CEP <sup>1</sup>
<b>Start-up Times</b>	Hot start	3.5 sec
	Warm start	33 sec
	Cold start	41.5 sec
<b>Signal reacquisition</b>	< 1 s	
<b>Operational Limits</b>	COCOM restrictions apply	
<b>Serial Interfaces</b>	3 x RS-232	
<b>Power Supply</b>	9 – 18V	

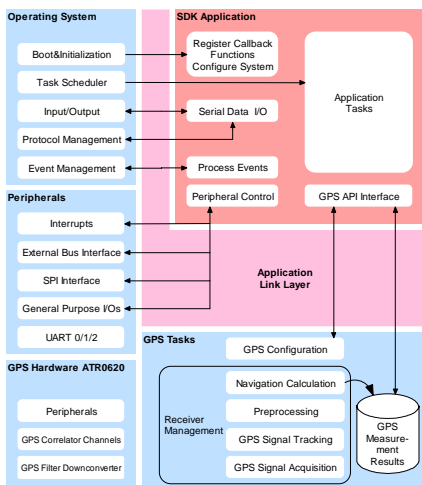
<sup>1</sup> Depending on accuracy of correction data

For more detailed information on the GPS performance check the *Software Development Manual*.

### ANTARIS™ GPS Software

The ANTARIS™ Operating System is the basis for a simple to use development environment. It offers an intermediate layer (Application Link Layer) which is the access point to the internal functions and resources of the receiver.

A powerful API (Application Programming Interface) is integrated in the ALL.



### Development Tool-Chain

The development tool-chain of the SCKit consists of the ARM Developer Suite (ATS) and a JTAG debugger (e.g. MultiICE). Please note that these tools must be purchased separately. In order to let you start developing code immediately, an evaluation copy of the ADS, limited to 30 days of use, is included in the SCKit.



### Support

As speed of integration is imperative, we also include introduction and a one-day training course by our specialists in order to provide a fast ramp-up in development work.

Our experienced application engineering team will assist you along the development process.

### Ordering Information

**ASK-LS-0-000-0** ANTARIS™ SCKit – Software Customization Kit

Parts of this product are patent protected.