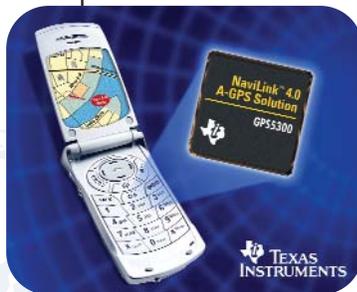


GPS5300 NavILink™ 4.0 single-chip A-GPS solution

Key features

- Single chip using TI's DRP™ technology and 90 nm manufacturing process
- The smallest A-GPS solution with a board area less than 50 mm²
- Lowest total bill-of-materials for a complete A-GPS system with only 11 external passives required
- Low power with integrated power management
- High A-GPS performance with weaker satellite signals, exceeding 3GPP and 3GPP2 requirements
- Optimized to interface with TI's 3G chipsets and OMAP™ processors to deliver a complete solution for handset OEMs
- Small module speeds time-to-market for A-GPS enabled phones



P R O D U C T B U L L E T I N

Overview

Global positioning system (GPS) applications are increasing in popularity in mobile phones worldwide for mobile navigation, mapping and safety services. Texas Instruments' (TI's) GPS5300 NavILink™ 4.0 single-chip solution for assisted global positioning system (A-GPS) applications is optimized for 3G mobile phones.

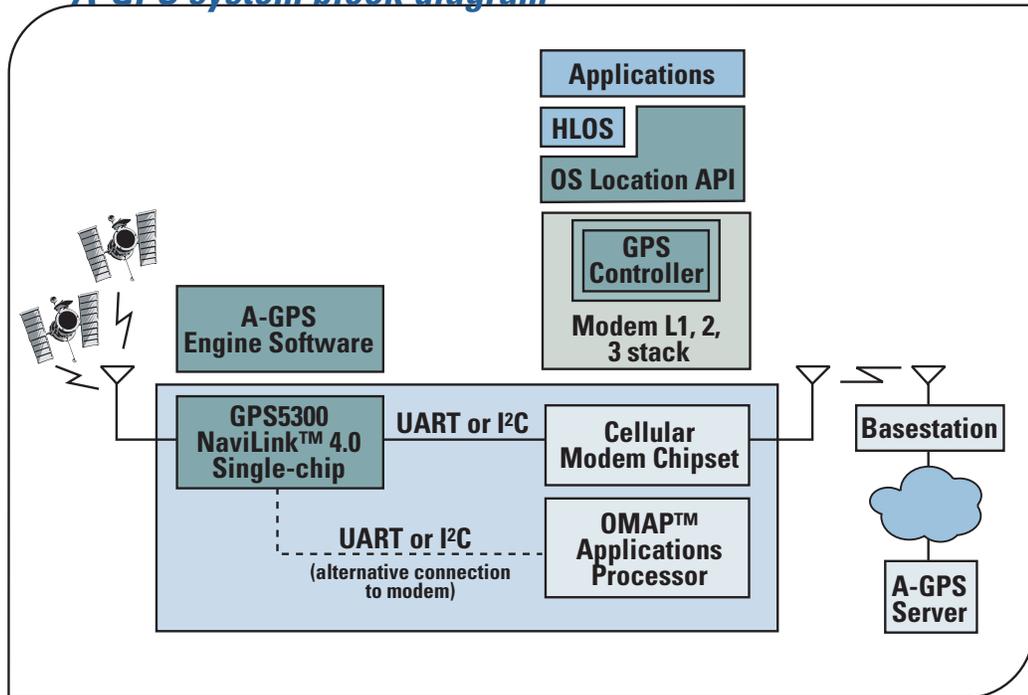
The NavILink single-chip solution is the industry's first A-GPS solution manufactured in 90nm process technology and extends TI's leadership in single-chip integrated solutions using TI's DRP™ technology. Through DRP technology, TI is able to provide the smallest size, lowest cost, low power and high performance discrete A-GPS solution to mobile phone manufacturers.

- **Smallest size:** The GPS5300 NavILink 4.0 solution integrates a complete A-GPS system into one chip significantly reducing the board layout area for a discrete A-GPS engine. The single-chip enables a board area for the complete system of less than 50 mm².
- **Lowest cost:** As a single chip the GPS5300 only requires 11 external passives, a significant reduction over existing solutions which require up to 30 external passives. This level of integration delivers a total bill of materials that is almost 50 percent less than competition today.
- **Low power:** The GPS5300 NavILink 4.0 solution has power management integrated on-chip, which simplifies design and further reduces the bill-of-materials. The single chip also allows direct connect to battery for easy incorporation into mobile phone designs.

- **High performance:** The GPS5300 NaviLink 4.0 solution enables a rapid time to first fix (TTFF) from weak satellite signals exceeding the A-GPS requirements for 3GPP and 3GPP2 operation.

The GPS5300 NaviLink 4.0 single-chip solution is sampling now and is expected to be in production in 2Q 2006. Additionally, TI is collaborating with Murata to deliver a small module to handset OEMs to speed time to market of NaviLink-based A-GPS mobile phones.

A-GPS system block diagram



Important Notice: The products and services of Texas Instruments Incorporated and its subsidiaries described herein are sold subject to TI's standard terms and conditions of sale. Customers are advised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer's applications or product designs, software performance, or infringement of patents. The publication of information regarding any other company's products or services does not constitute TI's approval, warranty or endorsement thereof.

A091905

Technology for Innovators, the black/red banner, NaviLink, OMAP and DRP are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products

Audio	www.ti.com/audio
Amplifiers	amplifier.ti.com
Data Converters	dataconverter.ti.com
DLP® Products	www.dlp.com
DSP	dsp.ti.com
Clocks and Timers	www.ti.com/clocks
Interface	interface.ti.com
Logic	logic.ti.com
Power Mgmt	power.ti.com
Microcontrollers	microcontroller.ti.com
RFID	www.ti-rfid.com
OMAP Mobile Processors	www.ti.com/omap
Wireless Connectivity	www.ti.com/wirelessconnectivity

Applications

Automotive and Transportation	www.ti.com/automotive
Communications and Telecom	www.ti.com/communications
Computers and Peripherals	www.ti.com/computers
Consumer Electronics	www.ti.com/consumer-apps
Energy and Lighting	www.ti.com/energy
Industrial	www.ti.com/industrial
Medical	www.ti.com/medical
Security	www.ti.com/security
Space, Avionics and Defense	www.ti.com/space-avionics-defense
Video and Imaging	www.ti.com/video

TI E2E Community Home Page

e2e.ti.com

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265
Copyright © 2012, Texas Instruments Incorporated