



1 General Description

The NJ1036A, NJ1436A and NJ1836A are a family of single package GPS receivers realized with the integration of the Nemerix ultra low power GPS chipset (NJ1006A GPS RF front end and the NJ1030A GPS base band) and a flash memory device into a single package. Based on the NJ1x36A devices a complete GPS receiver can be built just by adding the desired antenna and a few external passive components. Such GPS receiver is typically drawing 16mA while performing continuous navigation with a sensitivity better than -150dBm, without applying any reduced duty cycle power saving mode.

Different flash configurations are available: the NJ1836A includes 8Mbit of flash, the NJ1436A 4Mbit while the NJ1036A has no flash integrated.

The NJ1x36A inherit all features already available on the individual NJ1006A and NJ1030A devices. As a consequence the NJ1x36A can be used as a NMEA output receiver but also as a microcontroller running GPS enabled user applications, by using a more sophisticated memory architecture (flash and SRAM), different interfacing options and (if required by the application) a clock rate higher than the typical 16.367MHz. Active and passive GPS antennas are directly supported without the need of an external LNA.

A NJ1x36A based GPS receiver runs from a 1.8V power supply for the digital section and a 2.5V to 3.3V power

supply for the analog RF portion. If required, a phantom power of max 3.6V for an active antenna can be directly generated.

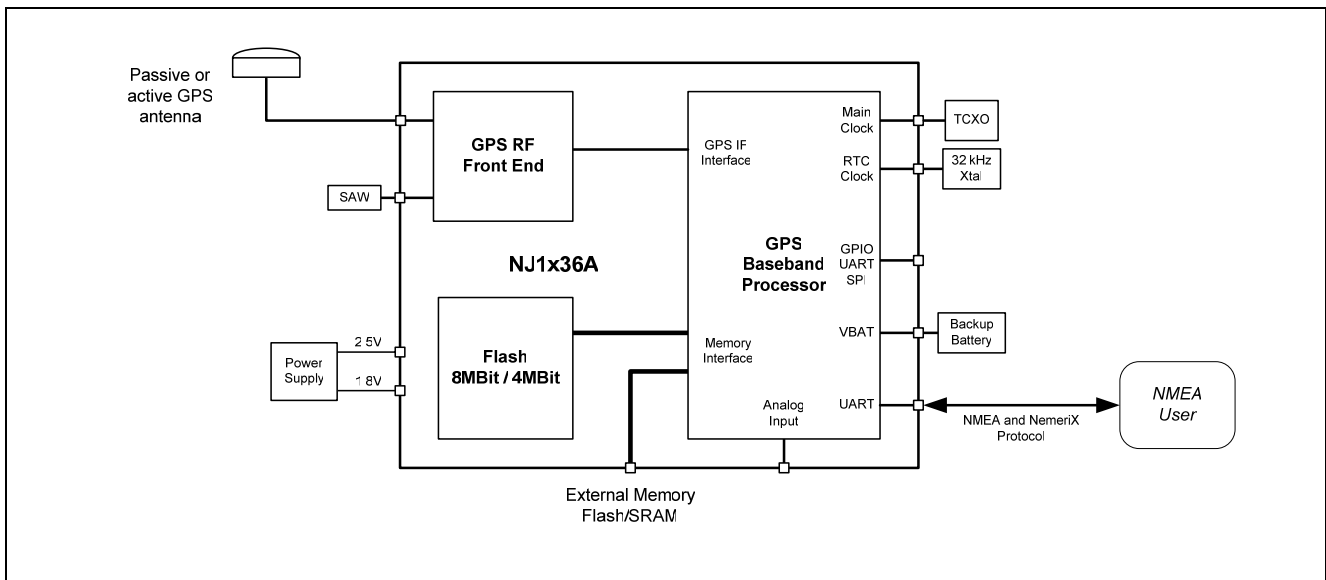
1.1 Features and benefits

- Single package GPS receiver
- 16mA current consumption in fully active navigation
- Better than -150 dBm sensitivity
- 6mm x 9mm μ BGA package ,187 pins
- Lead free RoHS compliant package
- Direct active or passive antenna support
- Antenna detector circuit
- WAAS and EGNOS support
- Expandable memory architecture: SRAM and Flash
- Supports GPS and cell-phone frequency plans
- GPIO/UARTs/SPIs and analog interfaces
- Possibility to support user applications

1.2 Applications

- Compact, battery operated GPS receivers
- PDAs and Portable Media Players (PMP)
- Asset tracking, fleet management
- Cordless (Bluetooth™) GPS receivers

Figure 1: Typical NJ1x36 based GPS receiver



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主要产品线:



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PCBA方式及专业产品大客户定制模式



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