HiAll^NC

Smart M2M connectivity for automotive

Freedom of speech for smart machines

Sagemcom

PRODUCT OVERVIEW

- Automotive grade
- Extended temperature range (operations from -40° to +85°C)
- Enhanced mechanical resistance (LGA)
- Ecall InBand modem (3GPP) and ERA-Glonass options
- GSM, GPRS Class 10, Quadband (850/900/1800/1900MHz)
- GPS and Glonass
- JVM and SDK to port easily your applications
- SIM chip (SMT) option

Sagemcom HiAll^NC is one of the most M2M innovative solution, reducing the time to market for new telematics applications. Relying on HiAllNC to comply with eCall requirements in all configurations, major stakeholders in the automotive industry are in a strong position to focus efforts on their own business applications, and provide efficiently telematics services: stolen vehicle tracking, user based insurance pricing applications, remote diagnostics and real time assistance... any kind of applications can be ported easily in Sagemcom HiAll^NC module, on the top of its integrated java machine and with a smart software development kit.

Thanks to its advanced design with all technologies inside, providing not only GPS location, but as well cellular communication with integrated SIM card, Sagemcom HiAll^NC module is the standalone solution complying with eCall regulation: with a reliable encoding and transmission of the minimum set of data (MSD) to the public safety answering points (PSAP), the rescue process can be operated efficiently.

Moreover, HiAll^NC provides full scalability from HiLo^NC-3GPS: with the same form factor, size, pin out and interfaces, major stakeholders in the automotive industry appreciate to design once their telematics unit, and provide two variants with 2G or 3G bearers, based on both Sagemcom modules.

Leveraging on its expertise in cellular technologies and device management, Sagemcom offers a wide range of high added value solutions. To provide the highest level of performance and services to its customers, Sagemcom has built a value proposition based on two pillars: slim or smart modules, and M2M-SCAPE services to remotely manage Sagemcom modules or cellular devices over the air.

Moreover, by choosing Sagemcom, you decide to select:
- **A technology validated and approved worldwide**
- **A top of the range technical support**
- **The highest standards of quality**

TECHNICAL FEATURES

ENVIRONMENT
- Size (L x W x H): 28,5 x 34 x3 mm
- Interface: SMT (LGA-116 pads)
- Scalability from HiLoNC-3GPS
- Operational temperature range: -40°C / +85 °C
- Temperature diagnostic system
- Full type approved: R&TTE, GCF, PTCRB, FCC, Rohs compliancy
- Power supply: from 3,2V to 4,5V (3,7v typ)
- Consumption in standby mode (call reception/ emission): < 1.25 mA
- Consumption data transfer mode (GPRS): GSM900 / GSM850 360 mA, DCS / PCS 245 mA
- Consumption tracking mode (GPS): 13 mA
- Antennas connection & detection
- Jamming detection
- FOTA (M2M-SCAPE services)
- Certifications: ISO 9001-2000 and ISO/ TS16949:2002, PPAP, 8D

RADIO LINK
- Output Power: Class 4 (2W) for 850 / 900 Mhz; Class 1 (1W) for 1800 / 1900 Mhz
- GPRS multislot Class: class 10 (3+2 & 4+1)
- GPRS baudrates: DL up to 85,6 kbps, UL up to 42,8 kbps
- GPRS Coding Scheme: CS1 to CS 4
- Mobile station Class B
- Quad Band: 850/900/1800/1900 MHz
- Enhanced sensitivity: from -106 to -110 dBm
- Memory: from 20Mb to 200 Mb for host applications*

DATA INTERFACES
- 2 UART and 6 GPIO
- Full hardware and software flow control
- AT commands set: GSM 07.05; 07.07; 07.10, proprietary AT commands
- Multiplexing 07.10 serial interface
- Data over CSD 9,6 kbps
- Complete internet connectivity embedded: TCP, FTP, UDP, SMTP, POP3...
- Reset input

RADIO INTERFACE
- Voice codecs: HR, EFR, FR, AMR
- Echo cancellation & noise reduction
- Analog and Digital audio (PCM) interface (VDA 2.0)

GSM FEATURES
- Automatic hang up for data call
- Internal phonebook
- CLIP / CLIR / COLP / COLR
- eCall InBand Modem (3GPP R9.4.0)
- ERA-Glonass option
- Call: wait / hold / conference / forward / barring
- Supports of: FDN, USSD, Sim Toolkit, AoC
- PDU and text mode SMS support
- MMS support (dedicated AT commands)
- Module reset/alarm based on RTC

LOCALIZATION
- SMS CB, Cell ID
- Network cells measurements
- GPS
- Glonass option

SECURITY
- Sim lock supported
- Device lock possibility
- Dedicated TAC for customization purpose
- Sim 3 V & 1.8 V supported
- SMT SIM option (MFF2)

DEVELOPMENT AND SUPPORT TOOLS
- Applications: software development kit to port java application in the module*
- Extensive documentations: hardware specifications, application note, AT command list, pedagogical documentations
- Online support with OTRS private account
- Development board
- Design, certification & production support
- Upgrade tools

* Depending on model

All rights reserved. The information and specifications included are subject to change without prior notice. Sagemcom Energy & Telecom tries to ensure that all information in this document is correct, but does not accept liability for error or omission. Non contractual document. All trademarks are registered by their respective owners. Simplified joint stock company - Capital 44.824.840 Euros - 518 250 337 RCS Nanterre. 11/2011

Sagemcom Energy & Telecom SAS
Headquarters : 250, route de l'Empereur
92848 Rueil-Malmaison Cedex - FRANCE
Tel : +33 (0)1 57 61 10 00 - Fax : +33 (0)1 57 61 10 01

www.sagemcom.com

SAGEMCOM