

EES3, EGS5/EGS5-X, EGS3, BGS3/BGS3-ATEX



Powerful
Processor
Large
Memory



SIM Access
Profile



Quad-Band



Tunneling
Mode



EDGE / GPRS
Class 12



Industrial
Interface



FOTA



USB



Java™



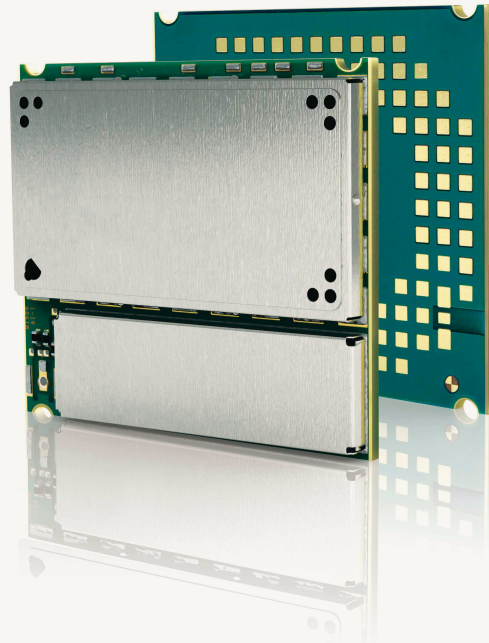
RIL Driver



TCP/IP



RLS Monitor
(Jamming
Detection)



EVOLUTION PLATFORM

Cinterion® EES3, EGS5/EGS5-X, EGS3, BGS3/BGS3-ATEX
Full Featured, Truly Industrial and Scalable Platform
with Leading Edge LGA Technology

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Cinterion's Evolution Platform is comprised of multiple Cinterion modules all offering scalability, compatibility and an easy path to future upgrades with added functionality as technology needs expand.

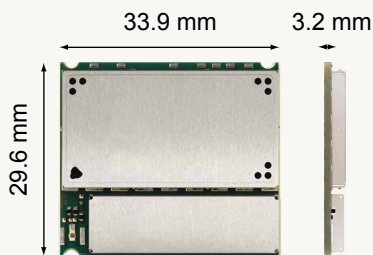
Evolution LGA solderable products include EES3, EGS5, EGS3 and BGS3 modules featuring efficient and reliable LGA surface mounting technology along with optimized size and performance.

Cinterion added two new modules to the second generation of its successful Evolution Platform as well as expanded features such as tunneling mode and a location API for the embedded Java variant. The new EGS5-X offers an extended memory (1.7 MB RAM, 8 MB Flash File System) and also enables integrated Firmware Over The Air Update (FOTA) to protect customer investment.

BGS3-ATEX adheres to the latest ATEX 95 standard and is designed for safe use in potentially hazardous environments where there is risk of an explosion such as in gas meters.

Cinterion brings its 15 years of industry-leading expertise to its next generation Evolution products, which are based on a new advanced processor design and the Company's field-proven and reliable M2M software stack. The latest chip technology enables high performance, improved efficiency and the benefit of long-term availability.

Evolution Platform



M2M Glossary

EDGE Class 12 – The highest symmetric data speed (236 kbps in uplink and downlink) for M2M applications requiring quick data transmissions.

GPRS Class 12 – High symmetric data speed (86 kbps in uplink and downlink) for M2M applications.

RLS Monitoring – Remote Link Stability Monitoring providing network performance information which enables for example effective customized jamming detection.

Tunneling mode – A smart way that allows the microcontroller to control any device that has a serial interface like GPS receiver or NFC device through the module and enable transparent communication.

Java™ – Java offers easy and fast application development, a broad choice of tools, high code reusability, easy maintenance, a proven security concept, on-device debugging as well as multi-threading programming and program execution.

ATEX – The ATEX directive consists of two EU directives describing what equipment and work environment is allowed in an environment with an explosive atmosphere.

Advanced Temperature Management – Protects the module in critical thermal environments to maintain reliability and functionality, allowing a long product life time.

Location API – Easy connection for external GPS to provide coordinates, landmarks or landmark stores.

Gemalto M2M Support includes:

- > Personal design-in consulting for hardware and software
- > Extensive RF test capabilities
- > GCF/PTCRB conform pretests to validate approval readiness
- > Regular training workshops



Local engineers, a competent helpdesk, a dedicated team of R&D specialists and an advanced development center are the hallmarks of our leading support offer.

Cinterion® EES3, EGS5/EGS5-X, EGS3, BGS3/BGS3-ATEX

GENERAL FEATURES

- > Control via AT commands (Hayes 3GPP TS 27.007 and 27.005)
- > Circuit Switched Data: Up to 14.4 kbps
- > SMS, PDU mode, cell broadcast
- > Fax: Group 3, class 1
- > SIM Application toolkit (release 99) letter class "b", "c" and "e"
- > TCP/IP stack access via AT commands and transparent TCP service
- > Internet services: TCP, UDP, HTTP, FTP, SMTP, POP3, Ping
- > Supply voltage range: 3.2 ... 4.5 V
- > Operational temperature range:
 - > -40 °C to +85 °C
 - > switch off: > +85 °C
- > Dimensions: 33.9 × 29.6 × 3.2 mm
- > Weight: 5.5 g

SPECIFICATION FOR EDGE DATA TRANSMISSION (EES3)

- > GPRS Class 12 & Class 10
 - DL: max. 236.8 kbps, UL: max. 236.8 kbps
 - DL: max. 236.8 kbps, UL: max. 236.8 kbps
- > Modulation and coding schemes MCS 1-9

SPECIFICATION FOR GPRS DATA TRANSMISSION

- > EDGE Class 12
 - DL: max. 86 kbps, UL: max. 86 kbps
 - DL: max. 86 kbps, UL: max. 43 kbps (BGS3/BGS3-ATEX)
- > Coding schemes CS 1-4

SPECIFICATION FOR VOICE

- > Triple-rate codec for HR, FR, and EFR
- > Adaptive multi-rate AMR
- > Hands-free operation, Echo cancellation & Noise reduction

JAVA™ FEATURES (EGS5/EGS5-X)

- > Java™ profile IMP-NG & CLDC 1.1 HI, GPS support
- > Multi-threading programming and program execution
- > Extended memory: 1,7 MB RAM and 8 MB Flash File System (EGS5-X)

SPECIAL FEATURES (EXTRACT)

- > Secure data transmission with HTTPS, SSL and PKI
- > Serial interface modem for Microsoft® Windows 7™/XP™/Vista™
- > RLS Monitoring (Jamming Detection)
- > Advanced Temperature Management
- > Informal Network scan (easy scan)
- > Firmware update via serial and USB interface
- > Integrated Firmware Update Over The Air (FOTA) (EGS5-X)
- > TLS for IP over AT
- > Tunneling mode for external serial devices
- > Real time clock with alarm functionality

INTERFACES

- > Antenna 50 Ω solder pad
- > Audio: 2 × analog, 1 × digital
- > 2 × Serial interfaces (ITU-T V.24 protocol)
- > SIM card interface: 3 V, 1.8 V
- > USB 2.0 full speed (EES3/EGS5/EGS5-X/EGS3)
- > I²C & SPI bus (EES3/EGS5/EGS5-X/EGS3)
- > ADC/DAC: 2/1 (EGS5/EGS5-X)
- > Dedicated Multiple GPIOs (EGS5/EGS5-X)

DRIVERS

- > RIL driver for Microsoft® Windows CE™ based devices (EES3/BGS3/BGS3-ATEX)
- > Multiplex Driver Microsoft® Windows and Linux

APPROVALS

- > Local approvals and network operator certifications (list available)
- > CE, R&TTE, GCF, UL, FCC, IC, PTCRB, RoHS

For more information, please visit

gemalto.com/m2m, www.facebook.com/gemalto, or Follow @gemaltom2m on twitter.

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security to be free