mHealth
Providing Secure Connectivity for mHealth, Wellness & Assisted Living Applications

M2M.GEMALTO.COM/mHealth
Mobile technology is revolutionizing virtually every aspect of our lives improving the way we communicate, work, drive and even our healthcare. Innovative mHealth – or mobile health – solutions are leveraging Machine-to-Machine (M2M) technology to cost effectively improve diagnosis and treatment of conditions including diabetes, heart disease, sleep apnea, Alzheimer’s and more. According to Research and Markets, a leading industry analyst firm, the mHealth industry will grow at a tremendous rate of 61% to reach $26 billion globally by the end of 2017.

Gemalto M2M technology is at the forefront of the mHealth movement, providing customers with a unique combination of end-to-end Cinterion® M2M solutions to meet all M2M technology needs. Cinterion technology includes a range of advanced M2M Wireless Modules enabling reliable communications, plug-in and solderable Machine Identification Modules (MIMs)™ for encryption and secure connectivity to mobile networks, flexible subscription management and security services, and the advanced SensorLogic Application Enablement Platform to connect mHealth applications to healthcare computer systems. The industry’s premier full spectrum offering provides a single source of M2M technology and expertise for mHealth developers and helps reduce design complexity while speeding time to market for compelling new applications.
Modules & MIMs Provide Flexible Features

Covering GSM, CDMA and LTE technologies, Gemalto M2M offers Modules & MIMs in a variety of form factors and features that allow developers to select the right solution and features to support any mHealth scenario. For instance, eCall-enabled Cinterion modules allow mHealth devices to automatically call "911" or "112" for immediate dispatch of emergency services when critical thresholds are reached. Tiny yet powerful 3G embedded Java products integrate easily with existing medical devices such as blood pressure devices and weight scales. And advanced 4G dual-mode M2M modules allow OEMs to develop a single device design to operate anywhere in the world, regardless of the underlying network technology. Gemalto’s M2M intelligent evolution portfolio strategy allows easy migration to next generation networks without expensive design revisions.

SensorLogic Makes Sense

Integrating medical data from mHealth applications into healthcare provider IT systems has been a tremendous challenge to date. Gemalto’s M2M cloud-based SensorLogic Application Enablement Platform has greatly improved methods for connecting mHealth intelligence. The solution is used by mHealth integrators, network operators, Healthcare IT teams, medical equipment manufacturers, software vendors and anyone who wants to deliver managed mHealth services. SensorLogic collects and normalizes data from mHealth devices and leverages a Java-based virtual engine to transform it into actionable intelligence that is integrated into backend systems and used by approved caregivers to make providers. The platform is device agnostic allowing mHealth implementers to build flexible and scalable applications regardless of the hardware and at a fraction of the cost of alternatives.
Embedded Java™ Simplifies and Speeds mHealth Development

By offering embedded Java across its entire Cinterion portfolio, Gemalto M2M simplifies solution design and speeds M2M application development, which in turn, accelerates the growing mHealth industry. Embedded Java facilitates easy end-to-end interworking of patients, medical devices and data with care providers and back-end IT systems. Java on Modules and MIMs also eliminates the need for dedicated processors and memory chips, simplifying design complexity while reducing the expense of additional components. Simply put, Gemalto’s M2M intelligent Java strategy simplifies, speeds and elevates mHealth solution design helping drive the industry to the next level.

Improving Chronic Care Management & Critical Care Support

Chronic diseases such as diabetes, heart disease and sleep apnea top the list of health threats worldwide. The cost of managing care accounts for an estimated two-thirds of worldwide healthcare spending – a figure the mHealth industry aims to reduce. With Gemalto M2M-enabled mHealth devices, physicians can remotely monitor a patient’s health status and manage chronic conditions in real time – no matter if the patient is at home, on the bus or anywhere. And with the latest eCall enabled Gemalto technology, mHealth devices can automatically contact the nearest public service answering point when emergency medical services are necessary. Gemalto customer Philips Respironics uses Cinterion technology to enable secure connectivity for its System One sleep therapy system. The solution sends data back and forth between a continuous positive air pressure (CPAP) device and medical staff allowing physicians to remotely adjust prescription airflow pressure, when needed.
Caretakers of elderly people and those with special needs face a maelstrom of worries every day from managing medication and doctors appointments to keeping track of people with a tendency to wander off or get lost. Cinterion technology extends the reach of assisted living homecare systems to any location where cellular coverage is available. For instance, Cinterion-enabled pill boxes can send text messages to patients when a dose is due, alert physicians if medication is missed and order new prescriptions to avoid gaps in treatment. Homecare hubs such as Aerotel’s Connect-CELL collects and consolidates data from a variety of medical devices and sends it over wireless networks to a patient’s physician. And iLOC Technologies’ innovative TRiLOC™ GPS Personal Locator Device uses a Cinterion solution to help locate people with Autism Spectrum Disorder (ASD), dementia and Alzheimer’s disease. The solution helps minimize the need for constant physical supervision and increasing independence for people with special needs.

Cinterion technology is helping to transform modern healthcare providing secure solutions and services for the challenges facing the industry. mHealth is improving the quality of care provided to patients, reducing costs through fewer doctors’ appointments, shorter hospital stays, improving preventative care and the future well-being of patients. And it is expanding productivity for medical staff and doctors allowing them to treat more patients while improving communication and quality of medical services.

Award-Winning Expertise

Gemalto M2M has been honored with many prestigious awards for industry-leading mHealth applications including:

- GSMA’s Best Embedded End-to-End Service Award (2010)
- Oracle’s Duke’s Choice Java Innovation Award (2010)
- Two Mobile Health Expo Awards for Best Mobile Healthcare Device (2010)
- Connected World’s Value Chain Awards (2011, 2012)

Gemalto M2M is an active member of the Continua Alliance, a coalition of the finest healthcare, technology and service provider companies around the world working together to further global interoperable personal health solutions and standards. In addition, Gemalto M2M is a regular contributor to the GSMA mHealth Working Group, which aims to catalyze the expansion of the global mHealth sector and a member of ETSI M2M Technical Committee.
About Gemalto

Gemalto (Euronext NL0000400653 GTO) is the world leader in digital security with 2012 annual revenues of €2.2 billion and more than 10,000 employees operating out of 83 offices and 13 Research & Development centers, located in 43 countries.

We are at the heart of the rapidly evolving digital society. Billions of people worldwide increasingly want the freedom to communicate, travel, shop, bank, entertain and work – anytime, everywhere – in ways that are enjoyable and safe. Gemalto delivers on their expanding needs for personal mobile services, payment security, authenticated cloud access, identity and privacy protection, eHealthcare and eGovernment efficiency, convenient ticketing and dependable machine-to-machine (M2M) applications.

Gemalto develops secure embedded software and secure products which we design and personalize. Our platforms and services manage these secure products, the confidential data they contain and the trusted end-user services they enable. Our innovations offer more ways for our clients to enhance the convenience and security of people’s digital lives.

Gemalto thrives with the growing number of people using its solutions to interact with the digital and wireless world.

For more information, please visit

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