

Intel® XMM™ 6255M

3G modem for M2M/IoT applications



World's smallest standalone 3G modem gets even smaller.

At nearly 20% smaller than its predecessor, the Intel® XMM™ 6255M offers 3G connectivity in a 2G form factor. It is ideal for Internet of Things (IoT) and machine-to-machine (M2M) applications requiring widespread 3G network coverage and robust signal retention in difficult environments.

XMM™ 6255M's reduced footprint comes from its System in Package (SiP) design improvements that combine the baseband processor and memory dies in a single package. This gives XMM™ 6255M an ultra-tiny PCB footprint that enables smaller form factor devices and reduced design complexity.

The modem features Intel's SMARTi™ UE2p transceiver, based on the unique Intel® Power Transceiver technology, the industry's first design to combine transmit and receive functionality with a fully integrated power amplifier and power management – all on a single chip.

This design approach helps enhance signal transmission in low signal zones, such as a manufacturing floor, parking garage or home basement. It also helps protect the radio from overheating, voltage peaks and damage under tough usage conditions, which is important for safety monitors and other critical IoT/M2M applications.

XMM™ 6255M gives OEM's a simplified, least-cost path to integrating 3G connectivity into non-traditional mobile products.

Product Features



Fast Connectivity for Very Small Devices

- Single-mode, dual-band HSPA for both low-speed and multi-megabit connectivity
- Smallest standalone 3G modem at 245mm²
- Leverages wide operator acceptance of the XMM™ 6255 platform, enabling fast time to market
- Ready support for small volume antennas



Highly Integrated Design for Cost & Performance

- Single-chip integration of baseband, PA & PMU
- 1Gbit NAND and 512 Mbit LP DDR1 memory in one SiP package
- Baseband-to-memory connections on chip substrate; no PCB routing needed
- Scalable to include GNSS & 2G

Intel® XMM™ 6255M Technical Specifications

Baseband	Intel® X-GOLD™ 625M
Transceiver	Intel® SMARTi™ UE2p
Standards & Performance	3GPP Release 7 HSPA 7.2/5.7 Mbps
Node	65nm CMOS
PCB Area	245mm ²
RF Bands	1/8 or 2/5
Power Management	PA DCDC converter Direct-to-battery power DXCO support

For more information on Intel® Wireless products, visit:

<http://www.intel.com/mobilecommunications>



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