

# Breakthrough Technology Brings Uninterrupted Broadband Speed to 3G Handsets

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ART shortlisted as 'Top Innovator' in GSMA's Mobile Innovation Global Award Competition

Interference cancellation solves 3G/HSPA handset data transfer performance issues

Mobile World Congress, Barcelona – 16 February, 2009 – Advanced Receiver Technologies (ART) will launch its pioneering patented interference cancellation technology at the Mobile World Congress 2009. The technology, which has been shortlisted for an award as part of the GSMA's Mobile Innovation Global Award Competition – EMEA Tournament, improves voice call connectivity and offers uninterrupted high speed broadband to 3G mobile users without changes to the network. It addresses the problem of inter and intra cell interference which reduces 3G network capacity by 50 per cent and restricts the data transfer rate at cell edge by 70 per cent degrading data transfer performance for 3G mobile users.

As consumers drive the demand for premium rich content services, the serious issue of achieving consistent high data throughput across the network's entire coverage area has not been adequately addressed until now. This solution from ART will allow network operators to double capacity, improve voice call connectivity and offer continuous high speed broadband services to 3G mobile users by embedding Single Antenna Interference Cancellation-Joint Detection (SAIC-JD) into the baseband chip within the handset.

Without the need for any additional network investment, the SAIC-JD will allow twice as many users to connect in the same 3G coverage area whilst maintaining broadband connectivity throughout the entire cell – including the cell edge, which is an industry first.

Actual 3G high speed data transfer is often constrained to a tight band near the cellular tower even though more than 60 percent of all 3G connections take place outside this zone. ART's interference cancellation technology expands high speed wireless access from a tight band around the cell tower to the entire 3G/HSPA network and triples data speeds at cell edge.

This allows 3G data users to benefit from enhanced voice quality and a reduction in dropped calls no matter where they are in the cell. 3G network operators benefit by being able to support twice the number of users at dramatically higher and more consistent data rates if their customer's mobile phones incorporate ART's receiver technology.

The Single Antenna Interference-Joint Detection Receiver (SAIC-JD) can be incorporated into any baseband chip for 3G handsets or USB dongles. Existing 3G mobile phones design can be upgraded to SAIC-JD enabled baseband chips with virtually no mechanical changes.

Russell McKown, Chief Technology Officer of Advance Receiver Technologies commented: "Single Antenna Interference Cancellation is a challenging technical problem, but ART has used recent breakthroughs in design flow and receiver conception to come up with a fully viable implementation that has little impact on manufacturing cost or handset power consumption. We've been in development for the last 6 years and

are now ready to showcase our technology at Mobile World Congress.”

He concluded, “Our technology offers a cost effective, credible solution to operators and handset manufacturers that want to address the issues of consistent high performance data transfer for 3G handsets.”

We are thrilled with the number of high-quality entries we’ve received for the EMEA leg of the 2009 Mobile Innovation Global Award Competition,” said Bill Gajda, Chief Commercial Officer of the GSMA. “This competition will play a major role in redefining how new mobile products and services are brought to market, and provides a great opportunity for innovators to pitch new technologies to senior executives within the mobile operator and venture capitalist communities.”

Advanced Receiver Technologies is in the Innovation Zone at Mobile World Congress, Hall 7, Stand IZ3 from February 16th – 19th 2009.

#### About Advanced Receiver Technologies

With development started in 2004 and formal incorporation in 2006, Advanced Receiver Technologies (ART) is an engineering design house with a unique ability to embed interference cancellation capability directly into 3G/HSPA – and forthcoming 4G handsets at low cost. Leveraging expertise and insights from US government security and military applications, the ART team has developed multiple patents, protecting innovations which dramatically improve wireless signal strength. The ART team is made up of experts from industry leaders such as AT&T, Lucent, Ericsson and Motorola. ART is a privately held company supported by angel investment and located in Dallas, Texas with a European office in Paris, France. Extensive technical information on Interference cancellation technology and the ART SAIC-JD concept can be found at [www.receiveitec.com](http://www.receiveitec.com)

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