



## ICERA ANNOUNCES LIVANTO® ICE8040 SOFT MODEM CHIPSET FOR HIGH PERFORMANCE MOBILE BROADBAND DEVICES

**Bristol, UK, 2 May 2008.** Icera Inc., the leader in software defined wireless modem chipsets, today announced customer sampling of its second generation Livanto® soft modem chipset, the ICE8040, which delivers the highest performance High Speed Packet Access (HSPA) solution for the fast growing mobile broadband devices market. Icera is the first company to deliver an extremely small, fully software based, cellular modem for datacards, USB sticks, laptops, mobile internet devices and smartphones, which is already market proven in commercial products and fully approved for leading cellular carrier networks.

The Livanto® ICE8040 chipset supports Icera's Adaptive Wireless™ Advanced soft modem, a multimode, 3GPP Release 6 cellular modem solution, concurrently supporting Category 8 HSDPA at up to 7.2Mbps and Category 6 HSUPA at up to 5.76Mbps with the highest performance 3GPP Type 3 advanced receiver with dual-antenna receive diversity. It also provides full 2G/3G support including GSM, GPRS, EDGE and WCDMA and compressed mode handover between 2G and 3G networks. The chipset also includes a multi-band RF CMOS transceiver and PMIC device.

Overall Livanto® ICE8040 chipset power consumption is extremely low to meet the long battery life demanded in handset devices, with complete system standby power in 3G idle mode under 1mA. Full voice support is offered, including all 2G and 3G voice codecs, plus acoustic echo cancellation and noise suppression capabilities.

Stan Boland, President and CEO of Icera said: "The advanced capabilities of our second generation Livanto® chipset make it ideal for both cellular data and phone applications. Livanto® combined with Adaptive Wireless™ delivers a fully software defined cellular modem solution, which gives customers a unique level of flexibility to accelerate time to market and to achieve the highest possible performance. With our new ICE8040 chipset we are able to deliver all the major components required by our customers for a full software defined HSPA solution."

### **Livanto® ICE8040 Soft Baseband**

Manufactured in an advanced 65nm CMOS process, the Livanto® ICE8040 soft baseband device, which supports Icera's Adaptive Wireless™ soft modem, is based on Icera's custom developed DXP® (Deep Execution Processor). DXP® runs at over 1GHz with extremely low power consumption and is able to run all the code required to deliver a complete multimode HSPA cellular modem in software, including dual antenna receive diversity advanced receiver, high speed symbol rate processing and error correction plus dual mode protocol stack and voice software. The ICE8040 device includes a high speed and full speed USB 2.0 OTG interface as well as an advanced MIPI-HSI applications processor interface. An analog I/Q interface and a MIPI-3GDig RF digital interface are both supported to connect with the RF transceiver. The flexible memory interface supports SDRAM, mobile DDR, NOR Flash and NAND Flash memories and includes on-chip secure boot-ROM and advanced security features.

The ICE8040 is available in a 10.5x10.5mm thin BGA package and in a 12x12mm Package-on-Package (POP) format allowing Jedec-standard POP memories and multi-chip memories to be soldered directly on top to reduce board area significantly.

### **Livanto® ICE8215 CMOS RF transceiver**

The ICE8215 is the world's smallest single chip, multimode HEDGE (HSDPA, HSUPA, WCDMA, EDGE, GPRS, GSM) 130nm CMOS RF transceiver.

- ICE8215 supports quad-band 2G (GSM, GPRS, EDGE) and tri-band 3G UMTS (WCDMA, HSDPA, HSUPA) with all the major frequency band combinations.
- Plus a second multi-band 3G UMTS receive path to support Rx-Diversity

The RF transceiver integrates all 2G and 3G transmit matching components saving valuable board space. The device incorporates low noise, wide-band direct up-/down- conversion architectures and a patented CMOS frequency synthesizer design. Innovative CMOS RF design techniques allow the highest level of integration and performance with a reduction in cost, power consumption, and RF system PCB area.

### **Livanto® ICE8145 CMOS Power Management IC**

The ICE8145 PMIC delivers all the power management functions and ancillary mixed signal features required to the complete Livanto® software defined modem. The device includes two DC/DC converters to power the ICE8040 wireless soft baseband and the other digital devices, 11 LDO regulators to power all other modem devices, a USB 2.0 Full speed/ High speed Physical interface, a full featured Audio Codec and level shifters for SIM card interfacing. Interfaces are provided for I2C power control, for PCM audio data, and a ULPI interface for USB 2.0 data. Power on reset, LED output and temperature monitoring are all supported.

**About Icera**

Icera is a fabless semiconductor company, pioneering high performance, low power, software defined wireless modem chipsets for the fast growing mobile broadband device market. Icera technology delivers the highest performance modem solutions for USB dongles, datacards, modules for laptops and mobile internet devices and mobile phones. Founded in 2002, Icera is headquartered in the UK, with design locations in Bristol and Cambridge, UK, Sophia Antipolis, France, Richardson, Texas and Waterloo, Canada with sales offices in Europe, Japan, Taiwan, Korea and USA. For more information, visit the Icera web site at <http://www.icerasemi.com>.

**For further information, please contact:**

Sally Doherty

Icera

Tel: +44 1454 284859

Email: [sally@icerasemi.com](mailto:sally@icerasemi.com)