

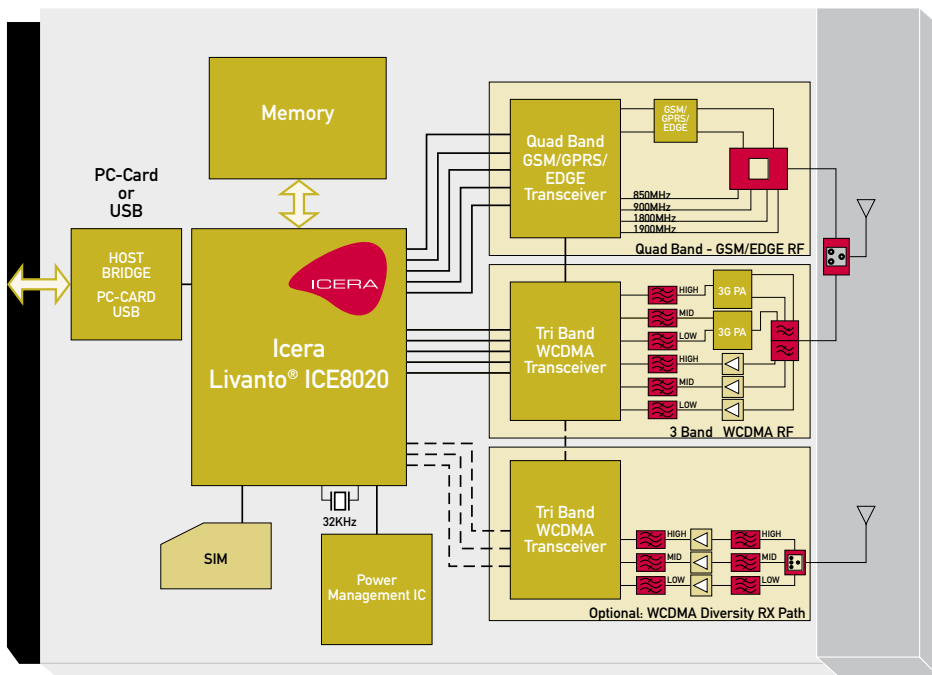


Adaptive Wireless™ Platforms

HSDPA Datacard Platform

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KEY HIGHLIGHTS

- Peak download rates of 7.2Mbps Category 7/8 HSDPA
- HSUPA ready
- World's first Type 3 advanced receiver technology combining simultaneous Receive Diversity and MMSE Equalization
- GSM, GPRS, EDGE, WCDMA, HSxPA multimode support
- Multi-band: quad band EDGE plus select 3 from 7 UMTS frequency bands
- Flexible reference design for multiple form factors including PCMCIA and Compact Flash
- Low power
- Lowest manufactured cost

OVERVIEW

The Icera Adaptive Wireless™ HSDPA Datacard Platform delivers high performance HSDPA at the lowest power combined with the industry's lowest manufactured cost. Featuring the full range of multimode support from GSM, GPRS, EDGE, WCDMA to HSDPA and beyond to HSUPA, Icera's platform solution is future proof.

Based on Icera's Livanto® wireless soft modem and Adaptive Wireless™ software, the platform provides complete flexibility. The same hardware with a different release of Adaptive Wireless™ software can scale to support CAT 5 and 6, 3.6Mbps HSDPA to CAT 7 and 8, 7.2Mbps HSDPA. In addition, Icera's Datacard Platform is unique in offering

a seamless upgrade to HSUPA without hardware changes. Adaptive Wireless™ Datacard Platform-based products are HSUPA ready from day one.

With quad-band EDGE and multi-band UMTS the platform supports the complete range of operator frequency band requirements and fully supports global roaming.

Flexibility with class leading power consumption; form factor support from PCMCIA to Compact Flash; the industry's lowest bill of materials: this is why the leading HSDPA datacard products are based on Icera's Adaptive Wireless™ HSDPA Datacard Platform.



LIVANTO® WIRELESS SOFT MODEM



The Icera Livanto® wireless soft modem is the architecture of the future in wireless technology. Unlike conventional ASIC baseband devices that require a new chip to be created each time the standard evolves, Livanto® is future proof.

Powered by DXP®, a new low power processor developed by Icera, Livanto® runs the complete wireless physical layer in software. This means standards evolutions are tracked through software upgrades - on the same device. The hardware platform does not need to change.

ADAPTIVE WIRELESS™ HSDPA PERFORMANCE

Livanto® with Adaptive Wireless™ software allows a new performance level to be achieved in HSDPA. In cellular wireless, as the terminal moves across the cell the wireless signal experiences substantial interference: noise from other basestations and terminals, multipath effects from the signal bouncing off buildings and trees and reduction in signal strength over long distances or through going indoors. These different channel conditions place a range of demands on the signal processing that decodes and receives the signal inside the mobile device.

In a conventional solution this signal processing is built in hardware and fixed choices and compromises are made. With Adaptive Wireless™, Icera has created a completely new receiver and decoder that is delivered as software.

This new approach has a dramatic effect on performance in HSDPA. Not only is Icera first to support Type 3 advanced receiver technology combining rake, and simultaneous MMSE equalization and diversity processing to boost performance but Adaptive Wireless™ technology constantly chooses the best algorithms for particular channel conditions to deliver a dramatic performance advantage.

Consumers see files download in under half the time of other

HSDPA solutions. Web browsing is noticeably faster. Network operators and carriers achieve this dramatic user experience advantage with more than a doubling in sector capacity and a consequent halving in per-megabyte delivery cost.

FUTURE PROOF HARDWARE

By delivering the physical layer as software, Icera provides a common hardware platform that can be configured to support a range of performance levels. End products can be set at 3.6Mbps HSDPA or at 7.2Mbps. As new features are added to the 3GPP standard these can be quickly incorporated and derivative products developed.

As network operators invest for HSDPA, there are already plans to upgrade networks to HSUPA for higher uplink speeds, reduced latency and improved user experience. With a simple software upgrade, end products based on Icera's platform can incorporate this new high value feature and be first to market with a new solution. The Icera Adaptive Wireless™ HSDPA Datacard Platform is already HSUPA ready.

LOW POWER CONSUMPTION

Datacards must deliver high data rates but must also operate at low power levels. The specific form factor chosen places hard constraints on maximum power while thermal considerations in the laptop demand even lower power levels.

Livanto® is manufactured using the most advanced silicon process technology to reduce power. Being a soft modem technology, further power optimization is achieved.

The Adaptive Wireless™ HSDPA Datacard Platform includes an advanced set of software algorithms to control the total power consumption of each operating mode. Internal voltage is dynamically scaled to match specific operating modes and processing load. Parts of the platform can be turned on and off as required. Combined with careful circuit design and component selection this results in a power saving of over 30% compared to competing solutions.

PRODUCTION READY

Icera has worked with major operators and cellular infrastructure vendors to define and fully test the Adaptive Wireless™ HSDPA Datacard Platform.

With the industry's lowest manufactured cost and backed by industry leaders, the proven Icera platform is becoming recognized as the high performance HSDPA platform.

PC150 TEST SOLUTION

The Icera PC150 PCMCIA is available to handset, datacard and laptop manufacturers as a complete form factor test solution to provide the latest technology features for design, development and testing and to demonstrate Icera's Adaptive Wireless™ performance advantage.



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