



**For Immediate Release**

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**CSR ADOPTS CIRANOVA HELIX AND PYCELLS FOR MIXED-SIGNAL SOC DESIGN**  
Multiyear Program Supports Very Large-Scale Integration  
of RF, Analog and Mixed-Signal Content in Sub-65nm Wireless Connectivity IC's

SANTA CLARA, Calif., April 6, 2010. Ciranova announced today it has signed a multiyear contract with CSR plc (LSE: CSR), a leading supplier of connectivity, location and audio platforms, for analog physical design automation and process design kit (PDK) technology. Ciranova's Helix device-level placement system and parameterized cells (PyCells) have been designed into CSR's sub-65nm system-on-chip (SoC) design flow for use on Bluetooth, Wi-Fi, GPS and other RF, analog and mixed-signal IP development and process migration.

"For years it has been customary for analog and RF designers to assume that the schematic is the 'master' description and think of layout as a subsequent process which is merely instantiation of the schematic; judging 'goodness' of layout by how the performance post layout differs from that simulated using schematic alone," said James Collier, Chief Technical Officer of CSR. "This assumption has always been false, and as process geometries shrink to 40nm and below it is becoming increasingly and obviously untenable: layout is the master - it is what we actually make. At CSR we have learnt to recognize and embrace this truth; my aim is for design to go direct to 'post layout' performance optimization. Helix is a useful step in this direction and allows us to move our designs more rapidly between process nodes and between design centers, while still working within our existing custom [IC] design environment."

Ciranova technology automates the physical creation and manipulation of "custom" IC devices and circuits in the presence of extremely complex process design rules. Designers use Helix to guide the floorplanning and device-level placement of even large designs using simple high-level

constraints; while the tool manages the complexity of design rules, well geometries, abutment, interdigitation and other detailed tasks.

“CSR is at the absolute forefront of designing complex analog and mixed-signal IP and integrating it into advanced SoC’s,” said Eric Filseth, CEO of Ciranova. “We’re delighted to have CSR as a customer and driver for our technology.”

#### About Ciranova

Ciranova is electronic design automation (EDA) company focused on large productivity improvements in RF, analog and mixed-signal IC physical design. Complementary to existing design flows, Ciranova technology dramatically reduces the time and effort needed to develop device-level layout at both the circuit and PDK levels. Ciranova supports the Si2 OpenAccess database.

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