*** PRESS RELEASE ***

Chipcon launches the industry’s first 2.4 GHz IEEE 802.15.4 compliant and ZigBee™ ready RF Transceiver.

Oslo, Norway, 17 November 2003

Chipcon AS, a leading provider of high performance, low power, low data rate RF-ICs announces the release of the CC2420, the industry’s first 2.4 GHz IEEE 802.15.4 compliant RF Transceiver. Once again, Chipcon confirms its leading position by being the very first company to officially launch a commercially available RF-IC that complies with the IEEE 802.15.4 standard and even exceeds its requirements. The CC2420 includes a number of extra features that users will find very valuable. The CC2420 is also the first RF-IC product that can be qualified for use in 2.4 GHz ZigBee™ products and it will be demonstrated at the ZigBee Alliance Open House in San Jose, California, on November 19.

The CC2420 is especially targeted for use in home and building automation, industrial monitoring and control systems and wireless sensor networks. "Chipcon believes IEEE 802.15.4 has the potential to significantly impact the marketplace, as there is now one global standard focusing on low data rate, low power and low cost applications," says John Helge Fjellheim, Vice President of Component Sales. “We also believe that the ZigBee™ technology will be well accepted as, finally, there is one technology enabling interoperability between cost-effective, low-power, low-data-rate, standard-based wireless networking solutions." According to Fjellheim, the CC2420 can also be used as a general 2.4 GHz direct sequence spread spectrum device for a number of proprietary solutions not using IEEE 802.15.4 or ZigBee™.

The CC2420 is based on Chipcon’s SmartRF®03 technology in 0.18 µm CMOS. The CC2420 is a highly integrated solution that requires few external components, is very robust and has low power consumption. The CC2420 surpasses the IEEE 802.15.4 standard in terms of selectivity and sensitivity figures and ensures a long communication range as well as effective and reliable communication. In accordance with the standard, the CC2420 supports 250 kbps data rate.

The CC2420 offers a very high level of security by providing extensive hardware support for AES-128 based data encryption and data authentication. In addition, the CC2420 supports packet radio, data buffering (128 byte RX + 128 byte TX), burst transmissions, clear channel assessment, link quality indication and timing information. Reducing the load on the host microcontroller, these functions allow CC2420 to interface with low-cost microcontrollers.

"Chipcon is proud to launch the CC2420 direct sequence spread spectrum device less than two months after the launch of the leading CC2400 frequency hopping device. Together, these two devices have put Chipcon in a leading position in the 2.4 GHz frequency band," says Sverre Dale Moen, Vice President of Strategic Sales.
Chipcon has developed the CC2420 in cooperation with Ember Corporation (www.ember.com), a leading provider of embedded wireless networking solutions. Ember can sell the CC2420 RF Transceiver to customers that are using the product in a system bundled with Ember’s Embedded Wireless Networking software (marketed as EM2420). Chipcon will distribute the CC2420 RF Transceiver worldwide through its existing network of distributors and representatives.

The CC2420 is offered in a 7 x 7 mm QFN 48 package. Samples are available now and volume shipments will start in January 2004. Pricing of the CC2420 in volume quantities is in the range of USD 3.

As all other Chipcon RF-ICs, the CC2420 is supported by comprehensive development tools for efficient and easy evaluation of the chip’s performance and, in a short time, designers can develop their own RF application based on this reference design. Development kits are available now. Chipcon will also provide its customers of CC2420 with IEEE 802.15.4 MAC layer software.

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About Chipcon AS: (www.chipcon.com)

Chipcon is a leading semiconductor design and manufacturing company. Chipcon’s standard RF-ICs provide low cost, low power and high performance RF solutions for a large number of wireless applications. Chipcon’s single-chip high-performance RF transceivers and transmitters target low-power wireless applications in the 300 to 1000 MHz and 2.4 GHz frequency bands and are distributed worldwide.

About IEEE802.15.4: (www.ieee802.org/15/pub/TG4.html)

The IEEE 802.15.4 standard is aimed at low data rate radio communication solutions with multi-month to multi-year battery life and very low complexity. It is intended to operate in an unlicensed, international frequency band. Potential applications are sensors, interactive toys, smart badges, remote controls, and home/building-automation systems.

About Zigbee: (www.zigbee.com)

The ZigBee Alliance (www.zigbee.org) is an association of companies working together to enable reliable, cost-effective, low-power, wirelessly networked, monitoring and control products based on an open global standard. The ZigBee Alliance is a rapidly growing, non-profit industry consortium of leading semiconductor manufacturers, technology providers, OEMs and end-users worldwide. Membership is open to all.

The ZigBee Alliance, in collaboration with the IEEE, is defining the network, security, and application layers above the IEEE 802.15.4 PHY and MAC layers. This cooperation will result in an easy-to-use, standards-based wireless network platform optimized for wireless monitoring and control applications.