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**CC3000** SWRS127 – OCTOBER 2012

# SimpleLink™ Wi-Fi® CC3000 Module from Texas Instruments

#### FEATURES

- Wireless Network Processor
  - IEEE 802.11 b/g
  - Embedded IPv4 TCP/IP Stack
- Best-in-class Radio Performance:
  - Tx Power: +18dBm at 11Mbps, CCK
  - Rx Sensitivity: -86dBm, 8% PER, 11Mbps
- Works with low MIPS, Low Cost Microcontrollers with Compact Memory Footprint:
  - 2KBytes Flash
  - 250Bytes RAM
- FCC, IC and CE Certified with Chip Antenna
- HW Design Files and Design Guide Available
  from TI
- Integrated Crystal and Power Management

- Small Form Factor
   16.3mm x 13.5mm x 2mm
- Operating Temperature Range: -20°C to 70°C
- Based in TI's 7th Generation of Proven Wi-Fi Solutions
- Complete Platform Solution Including User and Porting Guides, API Guide, Sample Applications, and Support Community

#### APPLICATIONS

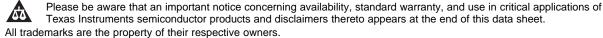
- Home Automation
- Home Security
- Connected Appliances
- Smart Energy
- M2M Communication

### DESCRIPTION

The CC3000 is a self-contained wireless network processor that simplifies the process of implementing Internet connectivity. SimpleLink<sup>™</sup> Wi-Fi minimizes host microcontroller (MCU) software requirements making it the ideal solution for embedded applications using any low-cost and low-power MCU.

The CC3000 is provided as a module by TI to reduce development time, lower manufacturing costs, save board space, ease certification and minimize RF expertise required. Additionally, it is provided as a complete platform solution including software drivers, sample applications, API guide, user documentation and a world-class support community.

More information on TI's wireless platform solutions for Wi-Fi can be found on TI's Wireless Connectivity Wiki (www.ti.com/connectivitywiki).





8-May-2013

## PACKAGING INFORMATION

Orderable Device	Status	Package Type F	Package	Pins	Package	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Top-Side Markings	Samples
	(1)	E	Drawing		Qty	(2)		(3)		(4)	
CC3000MOD	ACTIVE			46	84	TBD	Call TI	Call TI	-20 to 70		Samples
CC3000MODR	ACTIVE			46	1200	TBD	Call TI	Call TI	-20 to 70		Samples
XCC3000MOD	PREVIEW			46		TBD	Call TI	Call TI	-20 to 70		

<sup>(1)</sup> The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

**PREVIEW:** Device has been announced but is not in production. Samples may or may not be available.

**OBSOLETE:** TI has discontinued the production of the device.

(2) Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.

**TBD:** The Pb-Free/Green conversion plan has not been defined.

**Pb-Free (RoHS):** TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

**Pb-Free (RoHS Exempt):** This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

<sup>(3)</sup> MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

<sup>(4)</sup> Multiple Top-Side Markings will be inside parentheses. Only one Top-Side Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Top-Side Marking for that device.

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TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.

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