# NanoStack™ 2.0 Library for Texas Instruments CC430

Sensinode's NanoStack™ 2.0 Library for CC430 is an innovative software solution, allowing you to easily develop your own IP-based (Internet Protocol) wireless mesh networks for Sub-1GHz frequencies, using the TI SoC (System-on-Chip) CC430. NanoStack™ 2.0 is specifically designed for cost-effective deployments where device size and price is of prime concern. As NanoStack™ 2.0 for CC430 supports the complete CC430 frequency band, it is an ideal platform for worldwide Low-Power RF (LPRF) networks.

By linking Sensinode's NanoStack™ 2.0 Library together with your own embedded application code, you have the most sophisticated single chip solution for wireless, low-power networking. With NanoStack™ 2.0 Library you have total control over your code, enabling simple maintenance of your application software in your product development cycle.

Sensinode NanoStack™ 2.0 Library for CC430 is the most advanced binary library for Sub-1GHz LPRF developers. Combining small memory footprint, low-cost and low-power, Sensinode's NanoStack™ 2.0 Library for CC430 makes extremely affordable wireless deployments a reality.

CC430 SoC RF Platform

Your Application

Application

Socket API

NS 2.0 Library

UDP + ICMP

IPv6 LoWPAN

802.15.4e MAC

802.15.4g PHY
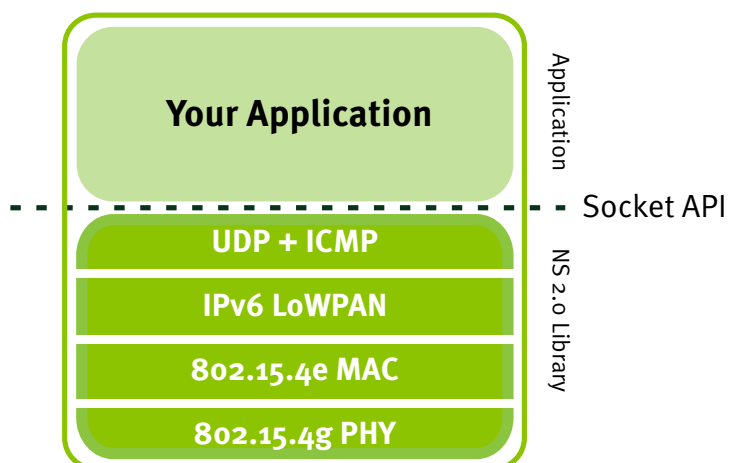
Key Features

- Hardware Platform:
  - Embedded device SoC: CC430F5137 or CC430F6137 RF MCU
  - Access Point: NanoRouter 2.0
- Development tools: IAR Workbench ver. 8.10 (or later) for MSP430
- Network layer protocol: 6LowPAN (subset)
  - ICMP (HC v.11, RPL and ND v.13 drafts)
  - Max packet size: 127 bytes
- Transport layer protocol: UDP
- RPL based routing (modified)
- Security: AES-CCM*
- Socket-API: BSD style socket API for application
- Concurrent sockets: max 20

Related Sensinode Products

- NanoRouter 2.0