

Wireless Sip Modem Jorjin Module CC3000-WG1300-00

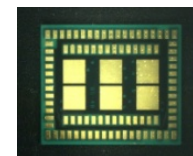
JORJIN Wireless Sip Modem/ TI Solutions

Wireless
Modem
Solution



WG1300 ,WIFI(802.11bg +WPA personal ,SPI interface) CC3000

- Wireless LAN optimized for easy use with microcontroller applications (IEEE802.11b/g)
- Embedded wireless security subsystem
 - WEP
 - WPA Personal
 - WPA2 Personal
- Embedded network stack
- SPI external host I/F



WG1400 ,WIFI(802.11abgn +WPA Enterprise ,SDIO interface, WIFI Direct)

'11 H2

'12Q1

'12 Q2

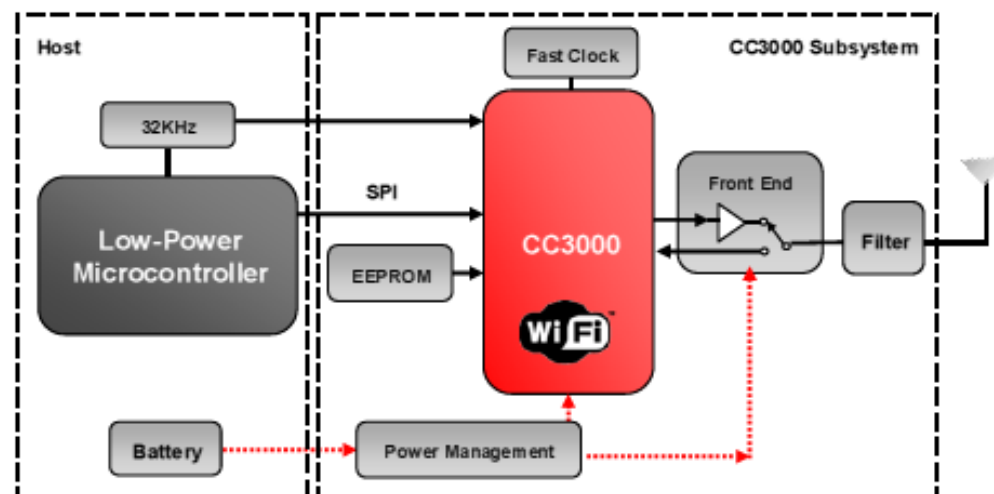
'12Q3

'12 Q4

'13 Q1

Wireless Sip Modem Solution – WG1300

CC3000 Software Split & supported host



Supported host

TI MCUs:

- TI MSP430FR5739
- TI Stellaris LM3S9B96

Non-TI MCUs planned:

- ST STM32L152VBT6
- Energy Micro EFM32
- Freescale MCF52259
- Renesas R5F100Lx

SW on Host

- SPI driver
- Host API – manage, configure and receive events

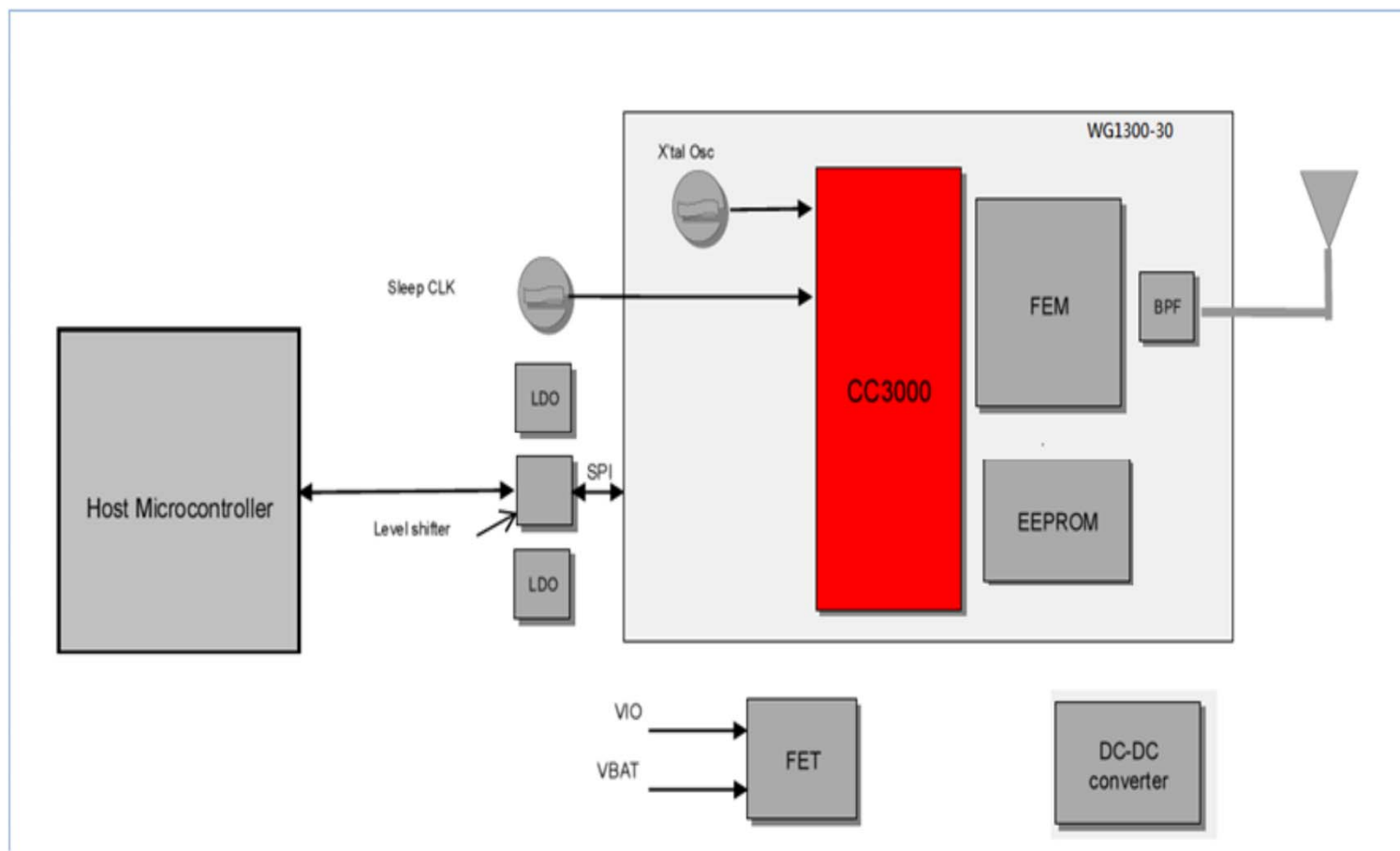
SW on CC3000

- TCP/IP stack
- WLAN driver
- Embedded security supplicant (WPA/WPA2-Personal)
- Production-line test
- DHCP client, NAT client, Config app

WG1300 WIFI Modem Serials

- WG1300 Serials
 - LC Module (WG1300-30)
 - Size 10*8*1.3 for v2.0 – 2012/May/10
 - Low Cost Module (final version) , that not include level shifter & LDO.
 - BM Module(WG1300-00)
 - Size 16.3*13.5 -- 2012/March/B
 - Include Crystal (26M),Level shifter ,EEPORM etc.
- WG1300 EM Board
 - BM Module w/EM 2012/March/B
- WG1300 w/TI promotion kit 2012/April /E

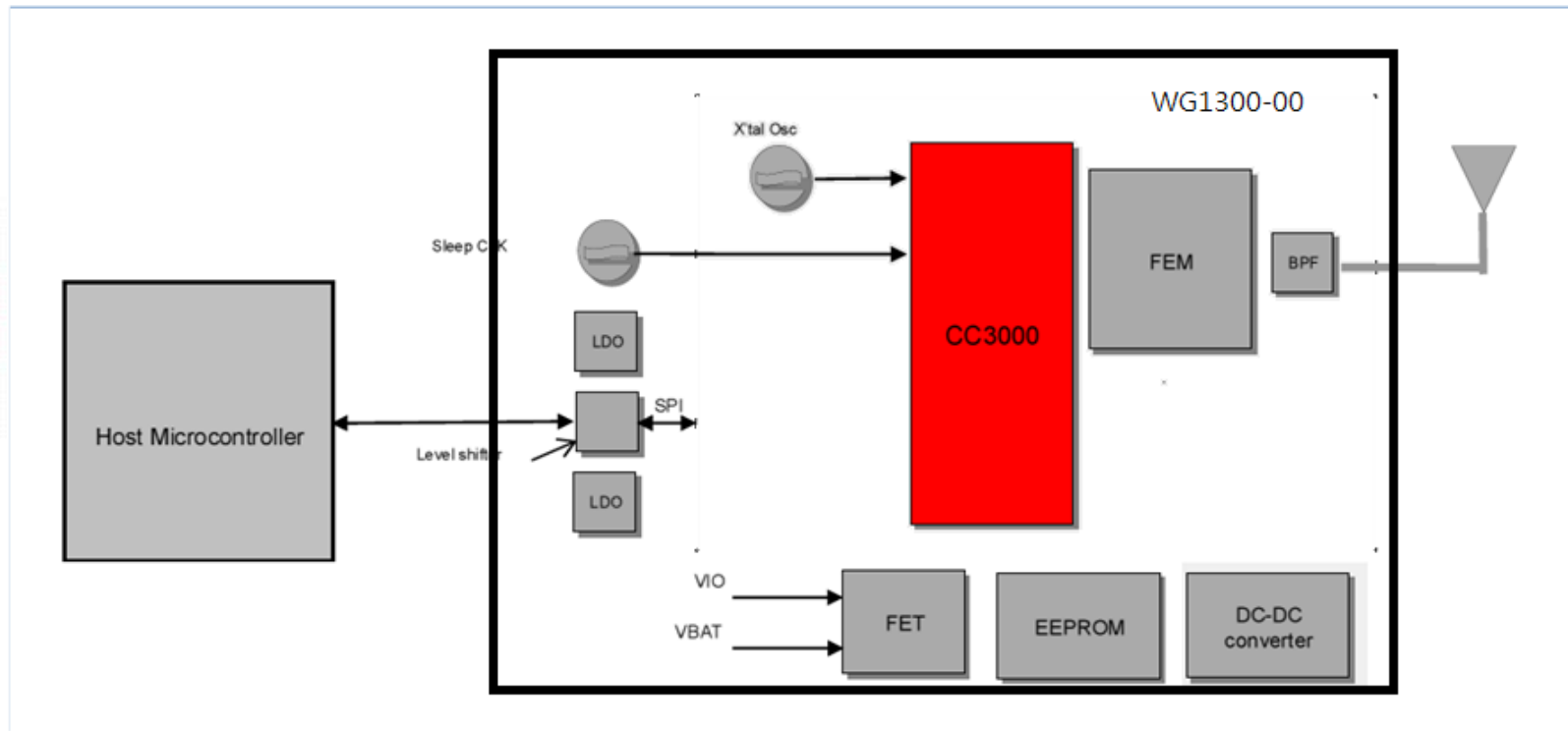
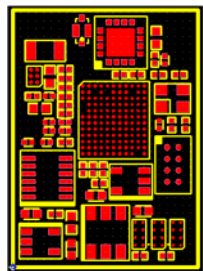
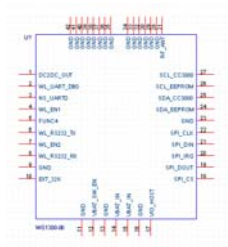
WG1300-30 LC Module



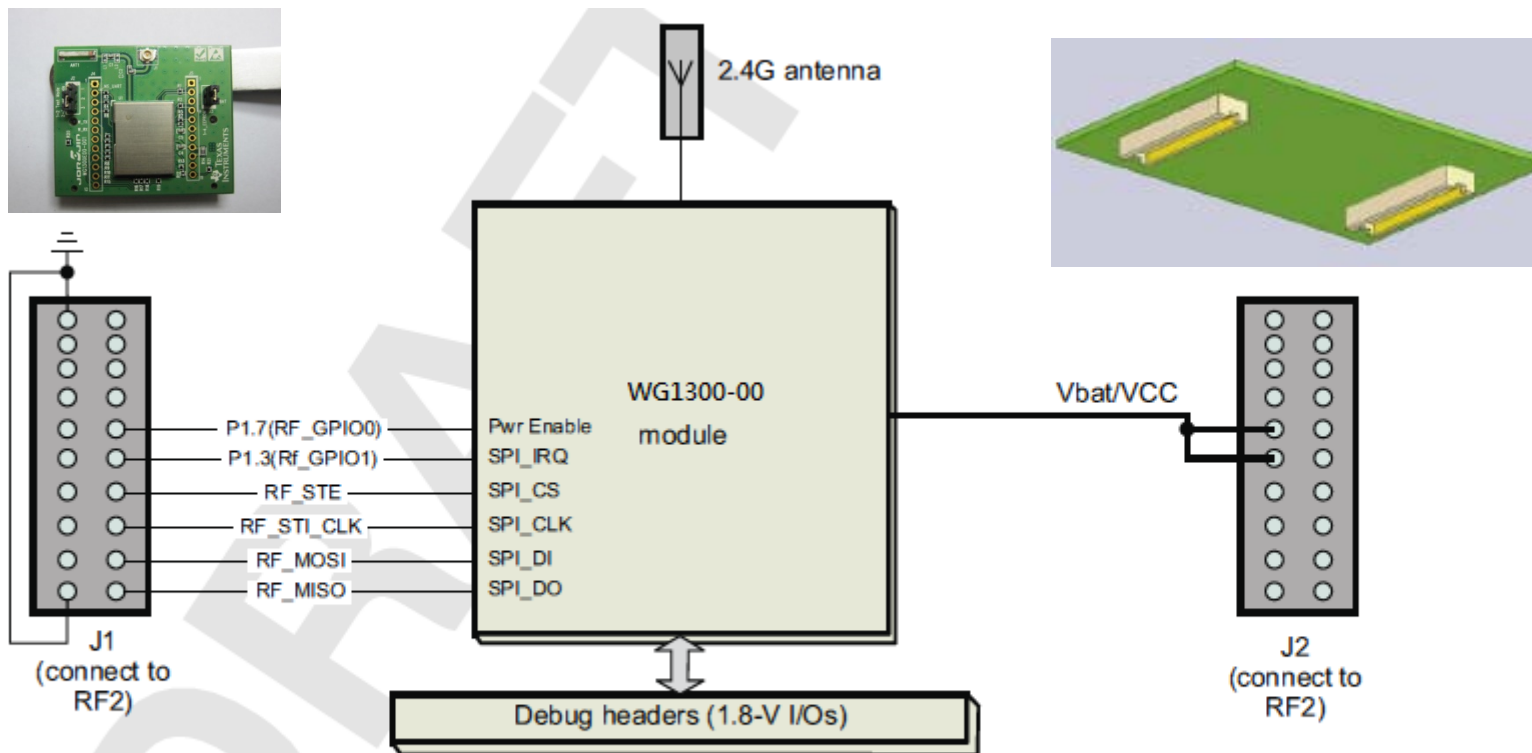
1. Module pin definition :

The logo for Jorjin Technologies features the word "JORJIN" in a bold, black, sans-serif font. A red, stylized graphic element, resembling a flame or a stylized letter 'J', is positioned between the 'O' and 'J'. Below "JORJIN", the word "TECHNOLOGIES" is written in a smaller, black, sans-serif font, all contained within a grey rectangular box.

WG1300-00 BM Module



WG1300-00 EM Board



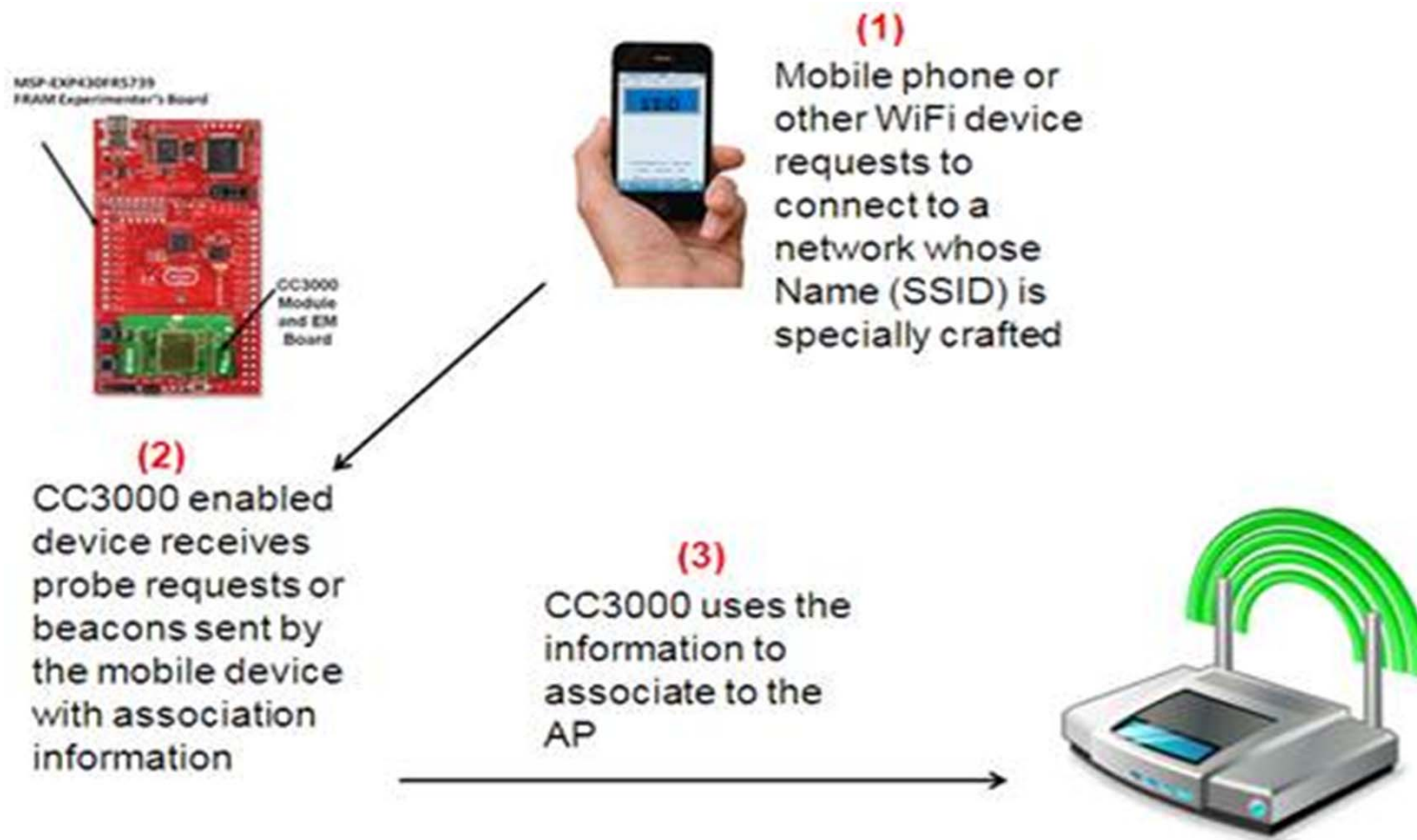
SWAA133-011

Figure 11. Typical CC3000 EM Board Block Diagram

WG1300 FEATURE

CC3000 Features	
Standards	802.11b/g
Mode	BSS STA
Wi-Fi Security modes	WEP, WPA/WPA2(AES and TKIP – Personal)
SW Upgrade	FW patches in EEPROM loaded from Host
Embedded software	TCP/IP stack, Wi-Fi driver, embedded security supplicant (WPA/WPA2-Personal), Auto transmit calibration, DHCP client, DNS
IPv4 TCP/IP Stack	ARP, DHCP Client, DNS
	4 TCP, UDP Sockets
Host Interface	SPI@15MHz
Max Throughput	Tx: 4Mbps TCP; Rx: 2.9Mbps TCP
Shutdown mode	<5uA using FET
Init time	Cold start: 700ms (from shutdown)
Power Consumption	<u>Rx</u> Rx Active (no connection) - <95mA Rx Idle Connection – 95.5mA Rx UDP max TP – 98.5mA <u>Tx</u> Continuous Tx Peak – 11g 185mA, 11b 280mA Average Tx during UDP Tx (4Mbps) 110mA
RF Performance (target)	Tx Power: +20dBm@11Mb-CCK Rx Sens: -89dBm@11Mb-CCK
Certifications	WPA Certified

WG1300 First time configuration



SW Issue & Reference

- **Software**

- **Demos and Sample Applications**

- TI provides a wide variety of demo applications using CC3000 with different microcontrollers. Also, there are sample applications to help customers start developing their own applications.

- [CC3000 Downloads Wiki](#)

- **First Time Configuration Guide**

- For more information on the “First Time Configuration” process for CC3000 based devices with no or limited IO capabilities, please visit the guide below:

- [CC3000 First Time Configuration Guide](#)

- **CC3000 Host Driver Guide**

- TI provides a software package for an external microcontroller that acts as a host processor; this package implements the CC3000 host driver and enables an interaction with the CC3000 solution. For more information on the CC3000 Host Driver and how to port it to different platforms, see the guide below:

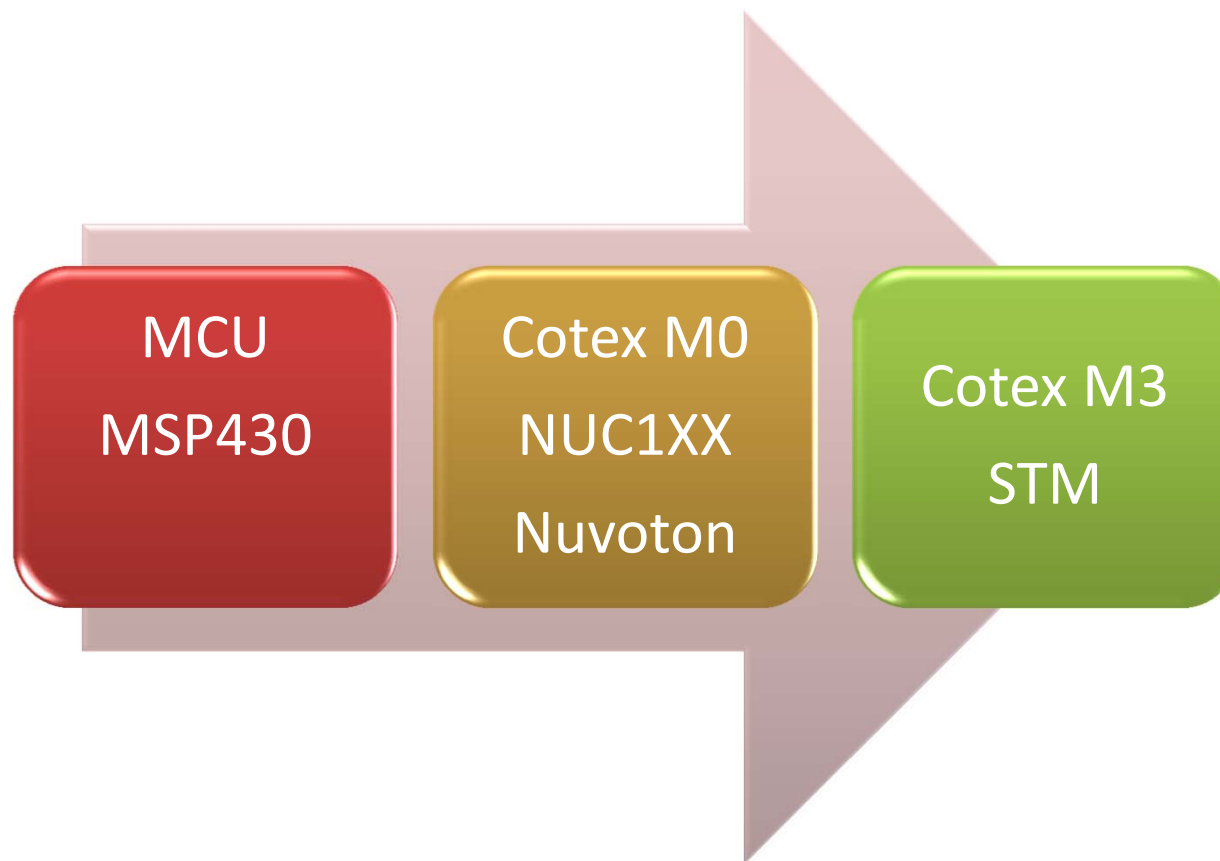
- [CC3000 Host Driver Porting Guide](#)

- **CC3000 Host Programming Guide**

- TI provides a software package for an external microcontroller that acts as a host processor. The software package implements the CC3000 host driver and a demonstration application. For more information on this software package, see the guide below:

- [CC3000 Host Programming Guide](#)

JORJIN Wireless SiP Modem & RoadMap



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课程网址: <http://www.edatop.com/peixun/antenna/133.html>



WiFi 和蓝牙天线设计培训课程



该套课程是李明洋老师应邀给惠普 (HP)公司工程师讲授的 3 天员工内训课程录像,课程内容是李明洋老师十多年工作经验积累和总结,主要讲解了 WiFi 天线设计、HFSS 天线设计软件的使用,匹配电路设计调试、矢量网络分析仪的使用操作、WiFi 射频电路和 PCB Layout 知识,以及 EMC 问题的分析解决思路等内容。对于正在从事射频设计和天线设计领域工作的您,绝对值得拥有和学习!...

课程网址: <http://www.edatop.com/peixun/antenna/134.html>

CST 学习培训课程套装

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