



CMP53x

Ultra Low Power with Superior Connectivity

Zigbee 3.0, BT5.0, Matter, Thread 1.1, NFC

Inquiry



- 2.4 GHz
- PCB-Trace or RF Pin
- Castellated Edge Connector
- +10 / +20dBm Tx Power
- NFC Type 2 Tag
- 16.7 x 23.9 mm

OVERVIEW

The CMP53x, utilizing the NXP K32W061, delivers ultra low power, and high performance for Zigbee 3.0, Thread 1.1, Matter, BT5.0, and integrated NFC Forum Type 2. The CMP53x comes equipped with an ARM Cortex M4 core, 640 kB flash, 152 kB SRAM, and 1 MB of optional additional flash. This module supports BLE v5.0 while hosting the end-user application. The CMP53x is well supported with an evaluation board that plugs into the NXP development kit. CEL supports this module with access to the SDK, software repository, and source code examples for fast development and seamless integration.

WIRELESS FEATURES

- **802.15.4**
 - ▶ Rx: -100 dBm, 2.6 mA
 - ▶ CMP530 Tx: +10 dBm, 23.5 mA
 - ▶ CMP535 Tx: +22 dBm, 135 mA
 - ▶ Zigbee 3.0 Certified Stack
 - ▶ Thread 1.1 Certified Stack
 - ▶ Matter
- **BT5.0 / BLE**
 - ▶ Rx: -100 dBm, 2.6 mA
 - ▶ CMP530 Tx: +10 dBm, 23.5 mA
 - ▶ CMP535 Tx: +22 dBm, 135 mA
 - ▶ 2Mbit / 1Mbit PHY
 - ▶ 8 simultaneous Connections
- **Low Power Deep Sleep**
 - ▶ CMP530: 13 μ A
 - ▶ CMP535-1: 48 μ A
 - ▶ CMP535-2: 0.5 μ A
- NFC Forum Type 2 Tag

APPLICATION RESOURCES

- ARM® Cortex®-M4 @ 48 MHz
- 1.64MB / 640kB Flash
 - ▶ 1.64 MB Not Available For CMP535-2
- 152kB SRAM
- 22x GPIO, 10x PWM
- 2x I2C / SPI / USART
- 8 Channel, 12-bit ADC
- RTC, I2S, and Audio CODEC

OTHER

- PCB Trace or RF Castellated
- 16.7 x 23.9 mm
- -40°C to +85°C

DEVELOPMENT TOOLS, SOFTWARE

- NXP SDK + MCUXpresso IDE
- GCC Toolchain, IAR
- CEL Plug-n-Play Module Cards
- CEL Software Repository

REFERENCE DESIGN SUPPORT

- Network Creation and Provisioning
- OTA Server and Management
- Gateway Examples
- End-Node Examples

APPLICATIONS

- Industrial, HVAC
- Building Automation
- Home IoT, Smart Energy
- Security, Sensor Networks
- Lighting Controls

Questions? Call Us
(408) 919-2500
www.cel.com

