# Welcome! Texas Instruments New Product Update

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- Phone lines are muted
- Please post questions in the chat or contact your TI sales contact or field applications engineer

## HOW THE IOT HAS EVOLVED TO MAKE WAY FOR MATTER

## **New Product Update**

William Goh – Product Systems Engineer

### Introducing the new Matter protocol



## The Foundation for Connected Things

One protocol to connect compatible devices and systems with one another. Smart home devices should be secure, reliable, and seamless to use. And with Matter, they are.

**Download Matter Specification** 





Matter is a standard application interface that allows devices from different **ecosystems** to communicate, even if they are manufactured by different brands.



1973



1997





1998

**THREAD** 2014

## **Why Matter is important**

Interoperable | Matter enabled devices works seamlessly with Apple, Amazon, Google, Samsung, major silicon vendors, and end product. No longer locked into a specific ecosystem. Matter specification developed over 3-years.

Technology | Leverages standardized internet protocol with Wi-Fi or Thread protocol. Open source code on github.

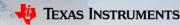
Security | Matter provides consumers with verification for the authenticity and security of Mattercertified devices.

Ease-of-use | Commissioning your Matter-certified products via smartphones using Wi-Fi or Bluetooth LE technology. Then switches to use IP based protocol like Wi-Fi or Thread.

Ultra-Low-Power | Designed to be in standby and active when needed. CSA works closely with silicon vendors to design next generation wireless MCUs with ultra-low standby current consumption.

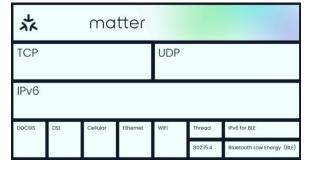
Faster time to market | Leverage open source technology. Supported by more than 500 members in the alliance. Matter-certified products are interoperable.

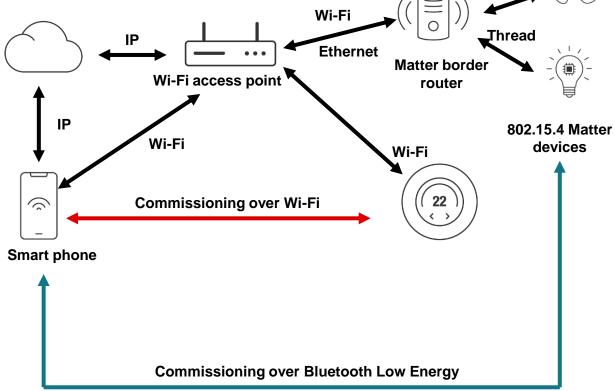




## **Matter Network Topology**

Matter is an application layer protocol that runs on the "Application" layer of Thread or Wi-Fi





### Why choose TI for the Matter protocol?

#### Industry leadership

TI has been a CSA board member for 10 years and participated in the development of Matter. We are a contributor member to the Thread Group, are a Wi-Fi Alliance member and have 20+ years of connectivity experience.

#### Industry's lowest power

Extend your battery life with our Thread and Matter devices with features including 0.85-µA standby current over temperature, best-in-class coin-cell operation at 10 dBm and more.

#### Flexible portfolio

Select from a broad portfolio of wireless radios for 2.4 GHz, Sub-1 GHz and Wi-Fi connectivity. Choose the right protocol and features to drive innovation within your connectivity solution.

Get started today with CC2652x7 and CC3235SF

#### Integrated security features

Featuring 30+ security enablers and a multilayer security approach for Wi-Fi connectivity, our SimpleLink MCUs help you protect data and combat against cyber-security attacks.

## TI Matter | Device Support

	Device	Flash SRAM	Matter device roles	Other features	Production Date
Thread	CC2651x3	352kB 32kB (+8kB no cache)	Thread RCP		In production
	CC2340R5	512kB 36kB	Thread RCP		MP Q1 2023
	CC2652x	352kB (+256kB ROM) 80kB (+8kB no cache)	<ul><li>Thread NCP (FTD or MTD)</li><li>Thread RCP</li></ul>	Concurrent BLE	In production
	CC2652x7	704kB (+256kB ROM) 144kB (+8kB no cache)	<ul> <li>SoC - Matter + Thread FTD</li> <li>SoC - Matter + Thread MTD</li> <li>Thread RCP or Thread NCP</li> </ul>	Concurrent BLE	In production
Wi-Fi	CC3230SF	256kB 1MB XIP	Wi-Fi SoC + Matter	<ul><li>2.4GHz Wi-Fi</li><li>1-Wire Coex to BLE</li></ul>	In production
	CC3235SF	256kB 1MB XIP	Wi-Fi SoC + Matter	<ul><li>2.4 &amp; 5GHz Wi-Fi</li><li>1-Wire Coex to BLE</li></ul>	In production

Go to www.ti.com/Matter to learn more

**Questions?** 



## Visit <u>www.ti.com/npu</u>

For more information on the New Product Update series, calendar and archived recordings



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