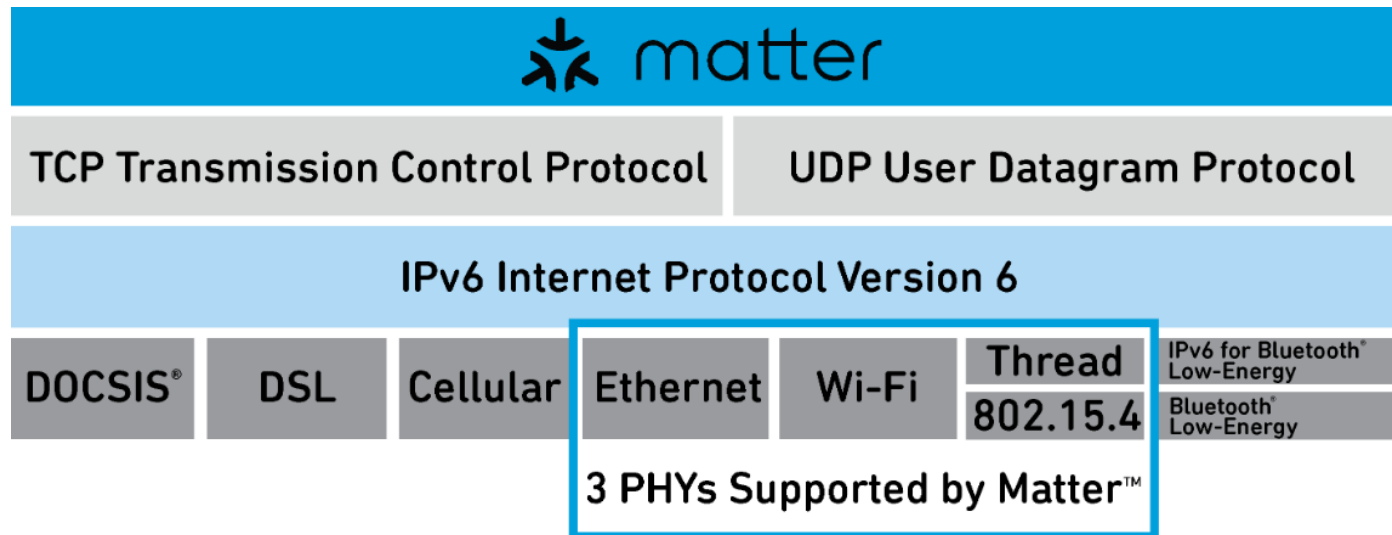


Matter

RALTRON

What is Matter?

Matter is a new smart home standard conceived by Project Connected Home Over IP (Project Chip) in 2019. It's now maintained by the Connectivity Standards Alliance (CSA), formerly known as the Zigbee Alliance. The standard is royalty-free and encourages interoperability between devices and platforms.



To facilitate communication with different types of devices and standards, Matter supports multiple physical layers. Matter works over Thread, which is a networking technology that is built on top of 802.15.4. Routing data across these different physical layers is done through a border router. **The frequency of Matter is 2.4 GHz.**

Source: <https://www.qorvo.com/innovation/matter>

What are the Benefits of Matter?

The main goal of Matter is interoperability. All Matter-compliant devices will work together no matter which brand makes them. Matter promises three big benefits for consumers: greater choice in the products and ecosystems they can use, a simplified user, and lower costs. Here are a few other ways that Matter will improve the smart home experience:

- **Local Control**

Controlling your devices will happen locally on your home network rather than over the internet. Matter devices will continue to work even if their manufacturers go out of business or suddenly decide to shut down their servers.

- **Matter Multi-Admin Control**

Matter also allows you to control devices via multiple smart home systems at the same time through its Multi-Admin feature. There isn't a hard limit to the number of different systems you can have running at the same time.

- **More Competition and More Choice for Consumers**

Despite being backed by the most powerful tech companies in the world, the Matter standard will create more competition for the big four smart home systems (Amazon, Apple, Google, and Samsung).



The Mui Board — a piece of wood that can control your smart home — doubles as a touch interface for controlling your home.

Applicable Raltron Products

Qorvo - QPG6105

32 MHz Crystal Oscillator

[RH100-32.000-6-F-2020-EXT-TR](#)

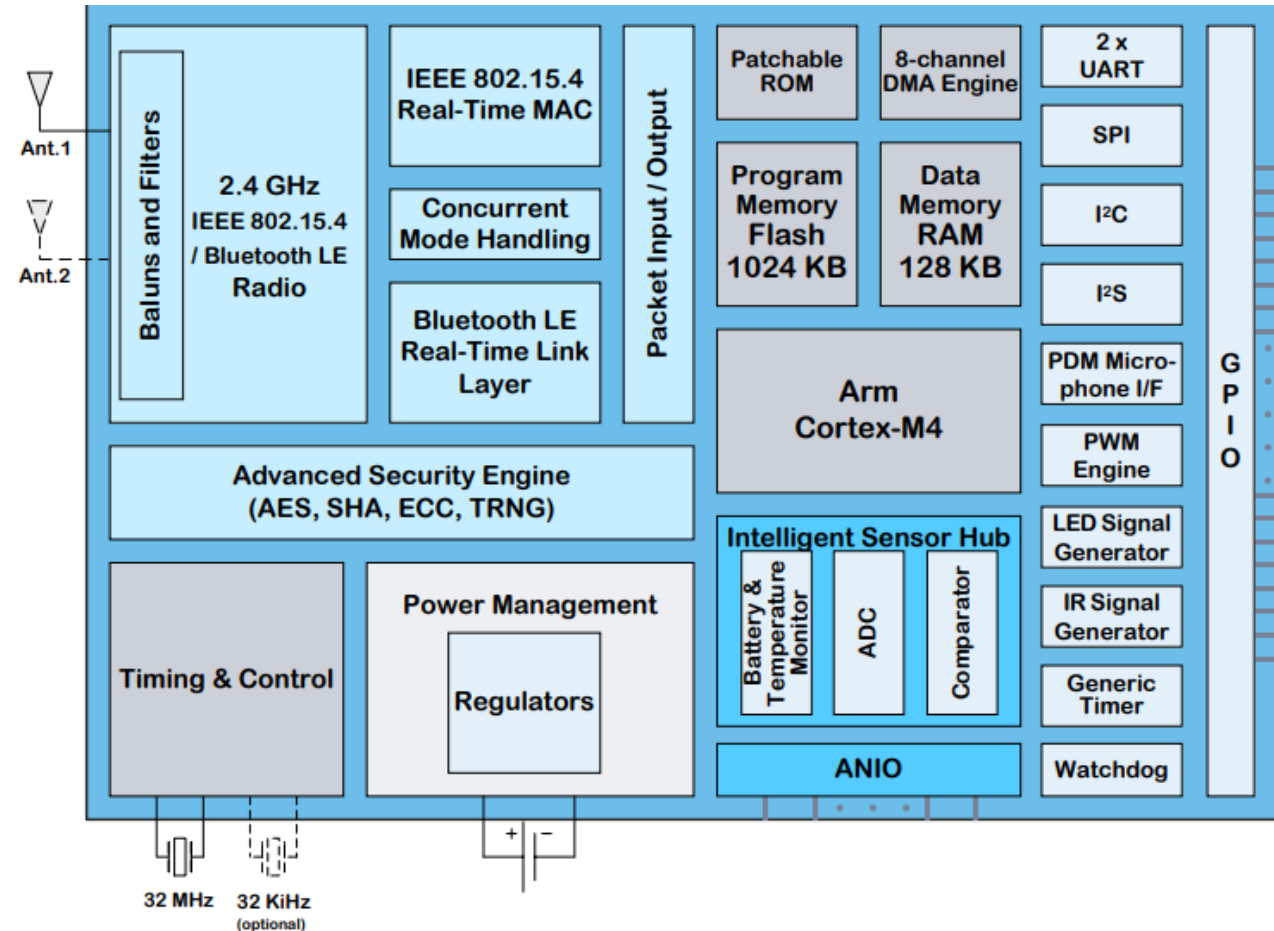
[R2520-32.000-6-F-2020-EXT-TR](#)

[R2016-32.000-6-F-2020-EXT-TR](#)

2.4 GHz Antenna

[RST-W2-P-105-RPSMA-H](#)

[RCA-5220-A0-TR](#)



Applicable Raltron Products

Silicon Labs - EFR32MG24

39 MHz Crystal

[RH100-39.000-10-F-2020-EXT-TR-NS](#)

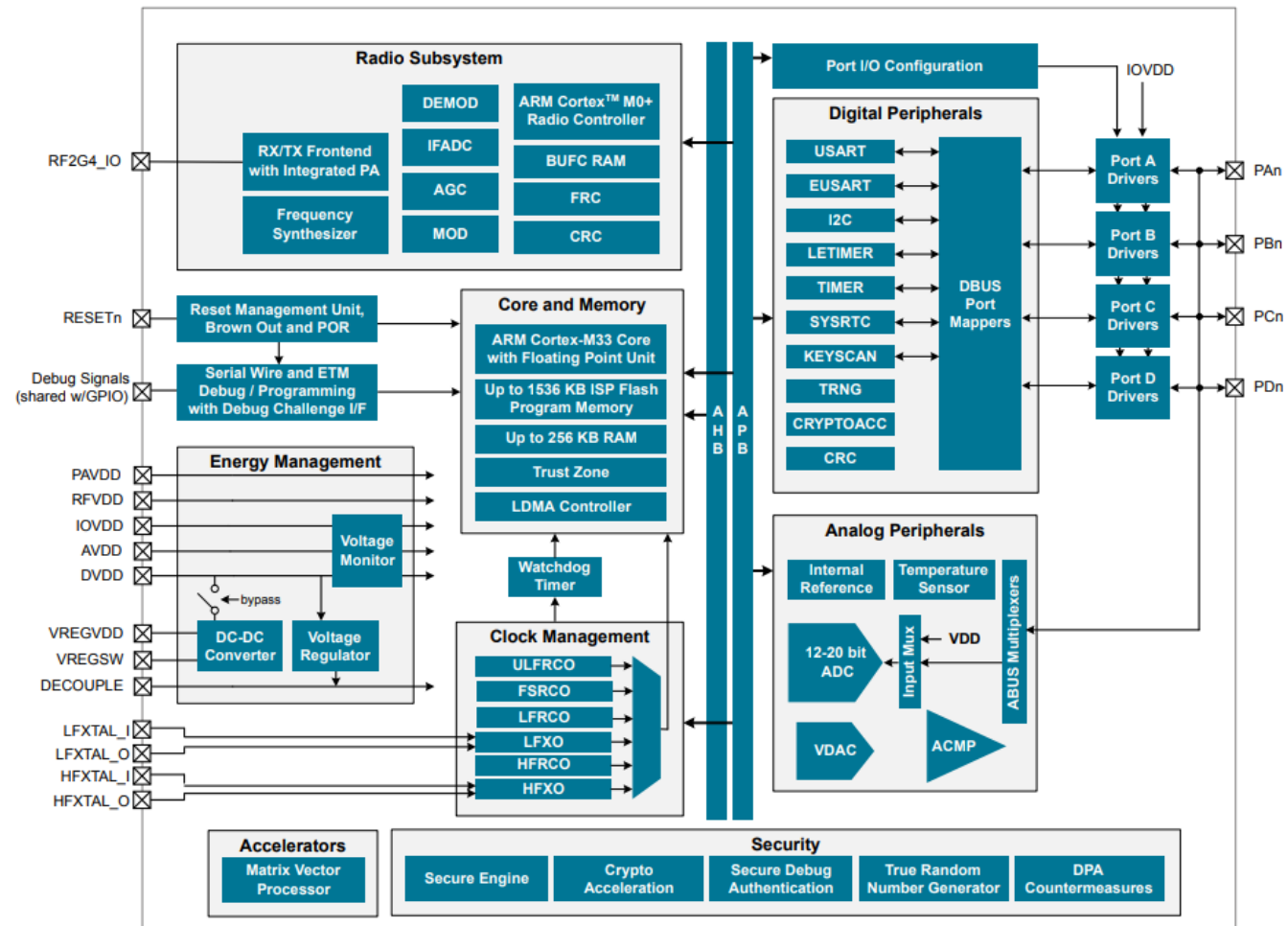
[R2520-39.000-10-F-2020-EXT-TR-NS1](#)

[R2016-39.000-10-F-2020-EXT-TR-NS1](#)

2.4 GHz Antenna

[RST-2400-P-190-IPEX-H](#)

[RST-W2-P-105-RPSMA-H](#)



Applicable Raltron Products

NXP Semiconductors - IW416

26 MHz Crystal

[R2520-26.000-6-F-1010-EXT-TR-NS1](#)

[R2016-26.000-6-F-1010-EXT-TR-NS1](#)

40 MHz Crystal

[R2520-40.000-6-F-1010-EXT-TR-NS1](#)

[R2016-40.000-6-F-1010-EXT-TR-NS1](#)

32.768 kHz Crystal

[RT3215-32.768-12.5-TR](#)

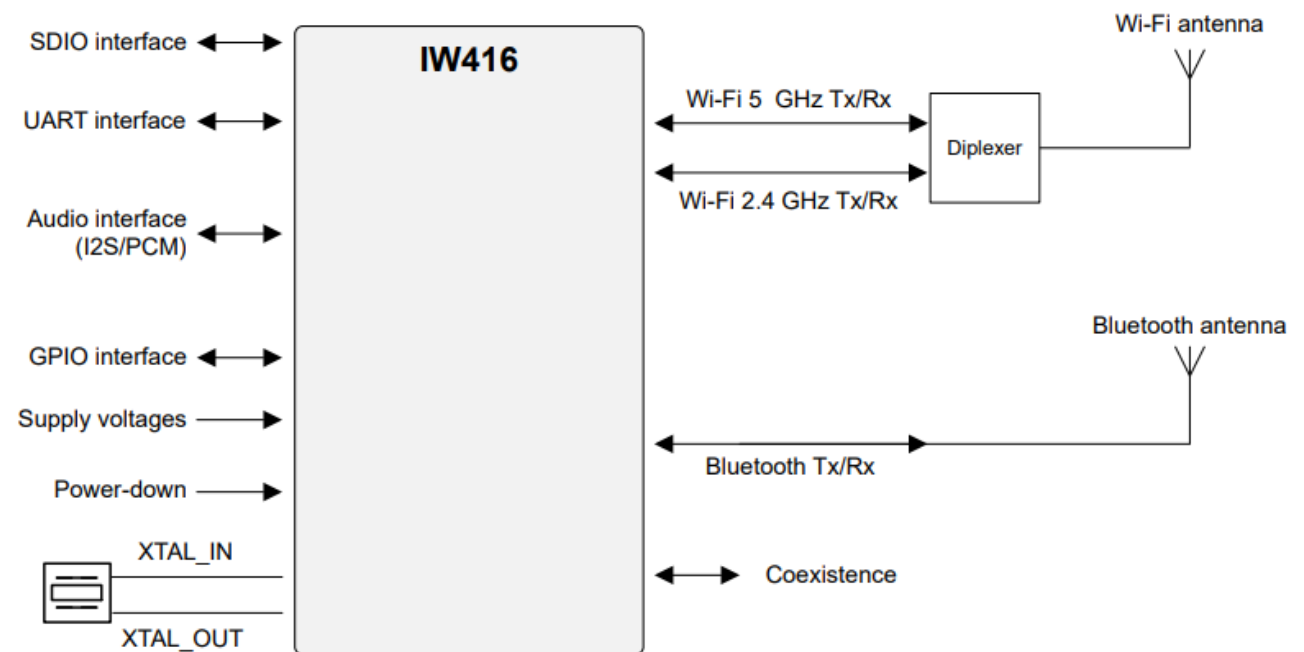
2.4 GHz Antenna

[RCA-5220-A0-TR](#)

[RST-W2A1-20022-17M-TE-001](#)

5 GHz Antenna

[RCA-6050-L1-TR](#)



Raltron Solutions - MHz Crystals









Available Crystal Packages

Part #	Size(mm)
R2016-32.000-6-F-2020-EXT-TR	2.00 x 1.60 x 0.50
R2520-32.000-6-F-2020-EXT-TR	2.50 x 2.00 x 0.65
RH100-32.000-6-F-2020-EXT-TR	3.20 x 2.50 x 0.70

Typical Frequencies:

26 MHz, 32 MHz, 39 MHz, 40 MHz

Stock at our Distributors

Product Series	Datasheet	Image	Contact Us / Buy Now
R1612 View products in stock			Buy Now
R2016 View products in stock			Buy Now
R2520 View products in stock			Buy Now
RH100 View products in stock			Buy Now

[See All Crystal Products](#)











Raltron Solutions - Oscillators

Available Oscillators Packages

Part #	Size(mm)
CO2016-32.000-3.3-50-EXT-TR	2.0 x 1.6
CO2520-48.000-3.3-50-X-T-TR	2.5 x 2.0
CO2016-0.032768-3.3-25-X-T-TR	2.0 x 1.6
CO2520-0.032768-3.3-50-X-TR	2.5 x 2.0

Stock at our Distributors

Product Series	Datasheet	Product Series	Datasheet
CO2016 View products in stock			Buy Now
CO2520 View products in stock			Buy Now
COM1 View products in stock			Buy Now
COM2 View products in stock			Buy Now

[See All Products for Oscillators](#)



Raltron Solutions - Tuning Fork 32.768 kHz

Available Tuning Fork Crystal Packages

Part #	SIZE(mm)
RT1210-32.768-9-TR	1.2 x 1.0
RT1610-32.768-12.5-TR	1.6 x 1.0
RT2012-32.768-7-20-EXT-TR	2.0 x 1.2
RT3215-32.768-7-TR	3.2 x 1.5
RSE-32.768-12.5-H14-TR	6.9 x 1.4
RSM200S-32.768-12.5-TR	8.0 x 3.8

Typical example of IC for Matter using a 32.768 kHz crystal as frequency reference:

Texas Instruments - CC2642R

Using 32.768 kHz crystal

CL: 6, 7 or 12 pF

ESR: 100 kΩ max

[See All Crystal Products](#)



Stock at our Distributors

Product Series	Datasheet	Image	Contact Us / Buy Now
RT1210 View products in stock			Buy Now
RT1610 View products in stock			Buy Now
RT2012 View products in stock			Buy Now
RT3215 View products in stock			Buy Now
RSE H14			Buy Now
RSM200S View products in stock			Buy Now










Load capacitance values: 6 pF, 7 pF, 9 pF and 12.5 pF

Frequency Tolerances: ±20 ppm and ±10 ppm



Raltron Solutions – Antennas

Raltron Antennas Solutions

Part #	Datasheet	Image	Frequency(MHz)	Contact Us / Buy Now
RST-W2-P-110-SMA-H			2400~2483	Buy Now
RPCF-MBE9-120050-O-W-001			698 ~ 960 / 1390 ~ 1435 / 1575 / 1710 ~ 2170 / 2400 ~ 2700 / 3400 ~ 3600 / 4800 ~ 6000	Contact Us
RPC-W2-P-35-70-G			2400 ~ 2500	Buy Now
RCA-5220-A0-TR			2450±50	Buy Now
RPC-W2A1-330172-O-E-001			2400 ~ 2500	Buy Now

[See All Antenna Products](#)



Raltron Products – LTCC Filters, Baluns and Diplexers

Raltron LTCC Filters, Baluns and Diplexers Solutions













Part #	Size(mm)
RCF-5500.000-700000-1005-W-001	1.00 x 0.50
RBL-2430.000-1005-EV-001	1.00 x 0.50 x 0.40
RCDI-24-49-1608-W-TR	1.60 x 0.80 x 0.60
RCDI-W2A1-W5A17-1608-W-TR	1.60 x 0.80 x 0.60

[See All LTCC Filters, Baluns and Diplexers Products](#)



Raltron Solutions - RF Connectors











Raltron **RF connectors** with low insertion loss and excellent voltage standing wave ratio support the high-level performance demanded by Matter Applications.

Product #	Datasheet	Image	Connector Family	Description
RCN-3F-3108-K-001			BNC	BNC Straight Jack PCB Receptacle
RCN-4F-28012-K-001			MCX	MCX Straight Jack PCB Receptacle
RCN-5F-33106-K-001			MMCX	MMCX Straight Jack PCB Receptacle
RCN-17M-12816-K-001			N	Type N Right Angle Plug
RCN-1M-21419-K-001			SMA	SMA Straight Plug (Quick Fit) for Semi Rigid Cable
RCN-9F-16801-K-001			TNC	TNC Straight Jack Bulkhead Crimp



Raltron Solutions - RF Cable Assemblies

Raltron cable assemblies range from simple jumpers to power and high-speed data cables.

Product #	Datasheet	Image	Cable Assemblies	Description
RCB-16-F-95-11-SD			SMA to IPEX	RP SMA Jack S/T For RF1.13 Cable
RCB-21-174-150-DO-001			MCX to MCX	MCX Plug to MCX R/A Plug For RG174 Cable
RCB-14-H-100-12-SD			MCX to SMA	SMA Jack to MCX Plug For RF1.37 Cable
RCB-15-A-100-12-SD			MMCX to SMA	SMA to MMCX For RG174 Cable
RCB-13-J-600-13-SD			TNC to SMA	TNC Jack S/T For RG316 Cable



[CABLE ASSEMBLIES SHORT FORM CATALOG](#)

CONTACT

<http://www.raltron.com>

Raltron Electronics

10400 N.W. 33rd Street

Miami, FL 33172, U.S.A.

Phone: 305 593 6033

Fax: 305 594 3973