



matter

SMART HOME SOLUTIONS

with **Panasonic**



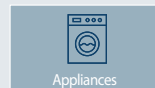
THREAD



PAN-MaX

What is Matter?

- Interoperability – One communication protocol to integrate a multi-vendor smart home.
- Standards based Connectivity: Built over well-established technologies (Wi-Fi, Bluetooth, Thread)
- Reliable: Devices work reliably in local network –with or without access to internet
- Secure: Best practices implemented in standard to guarantee data security & user privacy
- Easy: Standardized intuitive device deployment using consumer friendly technologies
- Use Cases: Many smart home user scenarios standardized; others being continuously added.



Why use Matter?

- End User Adoption: Smart Home Category to experience growth due to trustworthy purchasing and deployment
- Industry-led: Contributions by major smart home actors from device & semiconductor industry
- Natively Compatible with Smart Assistants: Out of the box operation with leading platforms



- Open source: No associated software licensing fees for the Matter stack
- Faster Market Access: Standardization facilitates new use cases, creates an open marketplace, fosters innovation
- Strong Brand Value: Only authentic product allowed to join network, this protects the brand from fake copies
- Regain the focus: With connectivity that just works, device makers can concentrate on core business

How to use Matter?

- Connectivity Standards Alliance: Become a CSA member to get access to Matter technology.
- Wireless Modules: Use multi-protocol certified radio hardware to quickly enable Matter
- Matter SDK: Use examples from semiconductor vendors who have adapted open-source Matter SDK for their devices
- Security: Usage of PKI and newest blockchain technology.
- **Matter Certification Testing:** Test your devices with a CSA authorized Test Service Provider and obtain CD
- Connect other IoT Ecosystems: Work with a "Bridge" device to bring non-native Matter devices onboard

Ready to Matter?





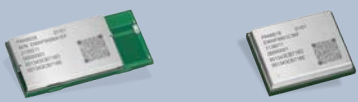
Learn More: <https://na.industrial.panasonic.com/products/wireless-connectivity>





matter

compatible hardware platforms

	THREAD				THREAD 	 WiFi	
							
	Low Power Nodes				Border Router, Controller	WiFi End Devices	
	PAN1780	PAN1770	PAN1783	PAN1783A	PAN9019A	PAN9028	PAN9019
Technology	Bluetooth 5.3 & 802.15.4		Bluetooth 5.3 & 802.15.4		WiFi 6 & BT 5.2 & 802.15.4	WiFi 5 & BT 5.2	WiFi 6 & BT 5.2
Chip	nRF52840		nRF5340		IW612	88W8987	IW611
Processor	ARM Cortex-M4F		Dual ARM Cortex-M33		hosted module	hosted module	hosted module
Secure Enclave	No		Yes		No	No	No
Flash/Ram	1MB Flash, 256 kB RAM		App: 1 MB, 512 kB Net: 256 kB, 64 kB		-	-	-
Antenna	Chip	uFL	Chip	RF Pad	RF Pad	Chip / RF Pad (switchable)	RF Pad
Size [mm]	15.6 x 8.7 x 2		15.6 x 8.7 x 2		15.3 x 12 x 2.5	24 x 12 x 2.8	15.3 x 12 x 2.5



matter

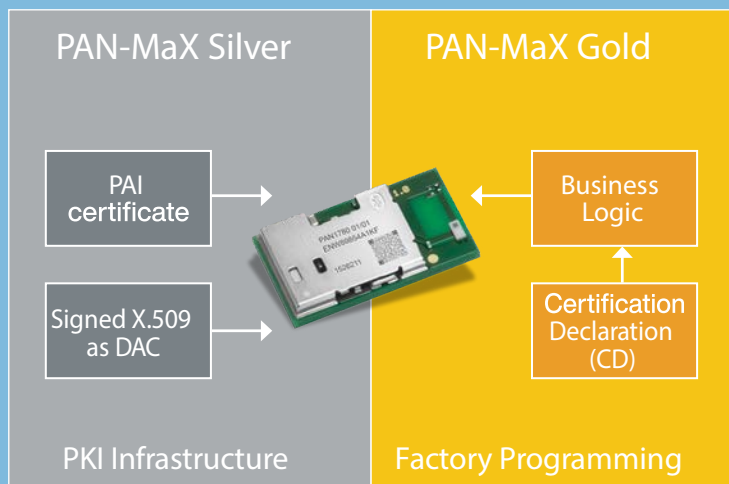
Certificate Service

PAN-MaX

- a single window multi-tier service for your Matter projects

PAN-MaX Diamond

Matter Certification Testing with partner Testing Service Provider



PAN-MaX Diamond

Gold+ Panasonic driven Easy Access at a CSA Approved - Matter Testing Provider

PAN-MaX Gold

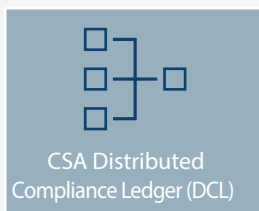
Silver + Customized Part number with Factory Software Programming Service for Business Logic (User App) and Certification Declaration

PAN-MaX Silver

Public Key Infrastructure (PKI) with Panasonic as PAI Signed X.509 Certificates for use as Matter DAC on Panasonic Modules

Panasonic Chain of Trust for your Matter project

Blockchain based source of truth about device & vendor compliance



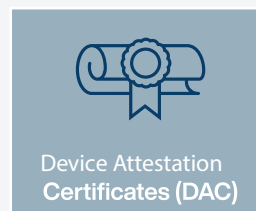
CSA approved PKI vendor providing Root of Trust for Panasonic



Panasonic PAI used to sign DAC for cryptographic verification



Digital Certificate that is written to ODM's Matter device to prove its truthworthiness.



Tests the compliance of the product with the Matter standard.



Ready to Matter?

Learn More: <https://na.industrial.panasonic.com/products/wireless-connectivity>

