

MATTER DEVELOPMENT PLATFORMS

Simplify and Accelerate Matter Designs



Matter will transform the smart home from a fragmented collection of smart devices into a unified network of smart devices to create a truly intelligent home. NXP's Matter Development Platforms include hardware and software to streamline creating Matter products.

Each of these development platforms target different Matter smart home devices and use cases, and the complete source code is easily available on the Matter GitHub. The hardware is based around existing NXP evaluation boards connected together, giving designers the flexibility to select the right combination to meet their prototype end application requirements. Leveraging NXP's broad portfolio of wireless MCUs, Wi-Fi MCUs and transceivers, crossover MCUs, MPUs and security technology, these development platforms scale to support all Matter smart home device types and application requirements.

Product Architecture	NXP Matter Development Platform	
Host-less/Standalone	Matter over Thread [®] with the K32W0x multi- protocol MCU development platform Matter over Wi-Fi [®] using the MW320 Wi-Fi MCU development platform	
MCU/RTOS Hosted	RT1060 hosted development platform with a K32W0x for Thread routing and an IW416 multi- protocol transceiver for Wi-Fi connectivity	
MPU/Linux [®] Hosted	i.MX 8M Mini hosted development platform with a K32W0x for Thread routing and a W8987 transceiver for Wi-Fi connectivity	
	i.MX 8M Mini hosted development platform with an IW612 tri-radio transceiver for Thread routing and Wi-Fi connectivity	

ALL MATTER 1.0 DEVICE TYPES





Vindow Coverings and Shades





Controllers ar Bridges

Standalone Matter Development Platforms	MCU Hosted Matter Development Platform	MPU Hosted Matter Development Platforms	
K32W0x ★ ⑦ ⑧ ℕ	Security: integrated & discrete options	i.MX 8M Mini i.MX 6ULL ☆	
MW320 * • • • • • • • • • •		i.MX 8M Mini	

NXP Technology 🔲 Secure Element can be added for turnkey Matter security, including credential provisioning

Matter Development Platform	Matter Function	Wi-Fi	Thread	EVKs
K32W0x (RTOS MCU, Thread, Bluetooth LE)	Matter Device		\checkmark	IOTZTB-DK006
88MW320 (RTOS MCU, Wi-Fi)	Matter Device	\checkmark		RDMW320-R0
i.MX RT1060 (RTOS applications processor)				MIMXRT1060-EVK
IW416 (Wi-Fi 4, Bluetooth LE)	Matter Device √	1	IW416 Partner Module	
		V	V	IOTZTB-DK006
K32W0x (RTOS MCU, Thread, Bluetooth LE)				OM-SE051ARD or OM-A5000ARD (Optional – Secure Element)
i.MX8M Mini (Linux applications processor)			√ (Border Router)	8MMINILPD4-EVKB (Kit includes W8987 module)
88W8987 (Wi-Fi 5, Bluetooth LE)	Matter Controller & Device	\checkmark		IOTZTB-DK006
K32W0x (RTOS MCU, Thread, Bluetooth LE)	a Device			OM-SE051ARD or OM-A5000ARD (Optional – Secure Element)
i.MX 8M Mini (Linux applications processor) IW612 (Wi-Fi 6, Thread, Bluetooth LE)	Matter Controller & Device	\checkmark	√ (Border Router)	Pre-production

To learn more about these development platforms, capabilities and availability, visit **www.nxp.com/matter**.

www.nxp.com

NXP, the NXP logo and NXP SECURE CONNECTIONS FOR A SMARTER WORLD are trademarks of NXP B.V. All other product or service names are the property of their respective owners. © 2022 NXP B.V.