

## NXP AUTOMOTIVE DEVELOPMENT PLATFORMS

Engineered for prototyping, evaluation, and development of Body & Chassis, Powertrain, in-vehicle Networking, Advanced Driver Assistance Systems (ADAS), Functional Safety and automotive security applications.



# Affordable deployment of safe and secure driving solutions across entire fleet of vehicles

The NXP automotive development platforms offer a rich feature set includes easy-to-use mass storage device mode flash programmer, virtual serial port, classic programming or run-control capabilities to accelerate your next breakthrough design:

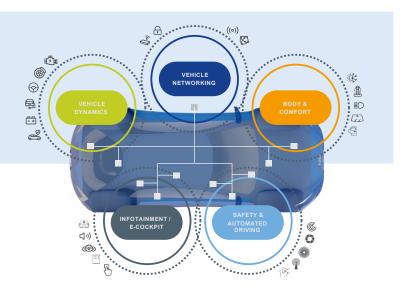
- Broad portfolio of hardware tools for prototyping, evaluation, and development.
- Diverse architectures:
  - o Arm® Cortex®- M0+/M4/M4F/M7/M33, Arm Cortex A72/A53, Arm Cortex R52
  - o Power Power Architecture® e200z7 and e200z4
  - o S12 Magniv® and S12X
- Arduino<sup>®</sup> pin-compatible and expansible hardware sockets, offering secure communication and integrated OpenSDA or OpenBDM
- Supported by extended software tools from NXP (S32
   Debugger, S32 Design Studio IDE or CodeWarror®) and global partners (Keil®, IAR Systems, SEGGER, GreenHills, P&E Engineering, Windriver, QNX and more)
- Offering dedicated online support communities for most devices and software tools, also comprehensive documentation (application notes, user and quick start guides, example codes, and more)

#### VEHICLE INFRASTRUCTURE PLATFORM

Focused on safe control and driver comfort Auto quality: Robust, safe, secure and reliable Foundational across whole range of vehicles

#### **OPTIONAL AND VEHICLE DEPENDENT**

Regularly upgraded
Optional features across a vehicle line
Fashion and time sensitive



### NXP AUTOMOTIVE DEVELOPMENT PLATFORMS BY APPLICATION

	\$32G	\$32K	S32R	S32S	\$32V	MPC57xx	S12 MagniV®
Electrification		NTBMS-FSNXP RD-K344BMU RDDRONE-BMS772		GreenBox*		EV-INVERTERHDBT EV-INVERTER RDVCU5775EVM MPC5775B- BatterySystem MPC5775B/E-EVB MPC5775BE-EVB MPC57775-DEVB MPC-LS-VNP-RDB	
Connected Vehicle	GoldBox* S32G-VNP- RDB2	S32K148EVB-KIT UCANS32K1SIC				MPC-LS-VNP-EVB MPC5748G-GW DEVKIT-MPC5748G MPC5748G-LCEVB MPC574XG-MB	
Motor Control		MCSPTE1AK344 MCSPTE1AK144 MCSXTE2BK142 MCSPTE1AK116 DEVKIT-MOTORGD KEA128BLDCRD				MCSPTR2A5775E MTRCKTSPS5744P	S12ZVML-MINIBRD S12ZVML-MINIKIT S12ZVM-EFP S12ZVM-EWP MTRCKTSBNZVM128 MTSXSR1CS12ZVM DEVKIT-S12VR64 DEVKIT-S12VRP S12ZVMAEVB S12ZVMAEVB S12ZVMEVB S12ZVMS2EVB S12ZVR32EVB S12ZVR32EVB S12ZVR64EVB3 S12ZVMC12EVBCAN S12ZVML12EVBLIN MTRCKTSBNG128
General Purpose		\$32K3X4EVB-Q172 \$32K3X4EVB-Q257 \$32K116EVB2Q048 \$32K118EVB2Q048 \$32K142EVB-Q100 \$32K144EVB-Q100 \$32K14WEVB-Q064 \$32K14WEVB-Q176 FRDM-KEAZ128Q80 FRDM-KEAZ128Q80 FRDM-KEAZ128Q64					DEVKIT-S12ZVC DEVKIT-S12ZVL DEVKIT-ZVL128 VLG-MC9S12ZVC DEVKIT-S12XE DEVKIT-S12G128
Engine Management		FRDMPKPT2000EVM		GreenBox*		MPC5777MEVB MPC5777CEVB MPC5746REVB MPC5777C-DEVB MPC5775E-EVB	
Interior Lighting		S32K-ISELED KEA128LEDLIGHTRD					S12ZVL32-LED KIT12XS6EVM
Functional Safety	GoldBox*	\$32K3X4EVB-Q172 \$32K3X4EVB-Q257		GreenBox*		DEVKIT-MPC5744P miriac™ EK-5744P MPC574xPEVB KITMPC5744DBEVM	
Drones		UCANS32K146-01 KIT-UCANS32K146 UCANS32K1SIC RDDRONE-BMS772					
High-performance Compute	BlueBox*						
Radar & Vision					SBC-S32V234 S32V234EVB S32V MIPI Cameras and De-Serializer		

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## NXP AUTOMOTIVE DEVELOPMENT PLATFORMS BY PRODUCT FAMILY

PRODUCT FAMILY	ARCHITECTURE	REFERENCE DESIGNS	BOARDS
S32G Vehicle Network Processors	64-bit quad Arm® Cortex®-A53 cores and triple Cortex-M7 lockstep cores LLCE, PFE, HSE hardware acceleration offloads general computing	GoldBox* BlueBox*	S32G-VNP-RDB2
S32K General Purpose MCUs	32-bit Arm® Cortex®-M4F and Cortex-M0+	RD-K344BMU S32K-ISELED NTBMS-FSNXP S32K148EVB-KIT RDDRONE-BMS772 UCANS32K1SIC MCSPTE1AK144 MCSPTE1AK144 MCSYTE2BK142 MCSPTE1AK116 DEVKIT-MOTORGD KEA128LEDLIGHTRD KEA128BLDCRD	\$32K148EVB-Q176 \$32K3X4EVB-Q172 \$32K3X4EVB-Q257 \$32K116EVB2Q048 \$32K118EVB2Q048 \$32K14EVB-Q100 \$32K14WEVB-Q064 \$32K14WEVB-Q064 \$32K146EVB-Q144 UCANS32K146-Q1 KIT-UCANS32K146-Q1 KIT-UCANS32K146 FRDM-KEAZ128Q8Q FRDM-KEAZ128Q8Q FRDM-KEAZ128Q8Q64
S32S Safe Vehicle Dynamics MCUs	32-bit Arm®-R52	GreenBox*	
S32V Vision Processors	64-bit Arm® Cortex-A53 APEX, ISP, GPU		SBC-S32V234 S32V234EVB S32V MIPI Cameras and De-Serializer
MPC57xx ultra-reliable MCUs	32-bit Power Architecture® MPC57xx eTPU, GTM advanced timing module	EV-INVERTERHDBT EV-INVERTER RDVCU5775EVM MPC-LS-VNP-RDB DEVKIT-MOTORGD DEVKIT-COMM	MPC5775BBatterySystem MPC5775BE-EVB MPC5775B/E-EVB MCSPTR2A5775E MPCS777C-DEVB MPC5777CEVB MPC5777CEVB MPC5746REVB DEVKIT-MPC5744P DEVKIT-MPC5748G miriac™ EK-5744P MTRCKTSPS5744P MPC574xPEVB KITMPC5744DBEVM MPC-LS-VNP-EVB MPC5748G-GW MPC5748G-LCEVB MPC574XG-MB
S12 and MagniV®mixed- signal MCUs	16-bit S12 & S12Z, high voltage analog	S12ZVML-MINIBRD S12ZVML-MINIKIT S12ZVM-EFP S12ZVM-EWP S12ZVL32-LED MTRCKTSBNZVM128 MTRCKTSPNZVM128 MTRCKTSPNZVM128 MTRCKTSBNG128 MCSXSR1CS12ZVM DEVKIT-COMM	DEVKIT-S12ZVC DEVKIT-S12ZVL DEVKIT-S12ZVL DEVKIT-S12VR64 DEVKIT-S12VRP S12ZVMC256EVB S12ZVMAEVB S12ZVMBEVB S12ZVMBEVB S12ZVMS2EVB S12ZVR32EVB S12VR64EVB3 VLG-MC9S12ZVC S12ZVMC12EVBCAN S12ZVML12EVBLIN KIT12XS6EVM DEVKIT-S12ZKE DEVKIT-S12G128

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