



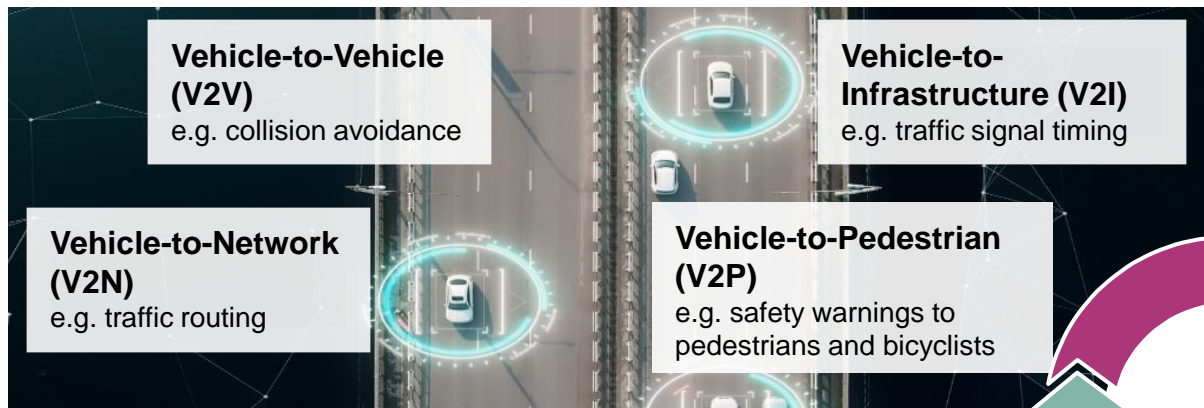
Transforming the car into a safe IoT device ...and why hardware-based security is key

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@[mobilitydays2021](#), December 13-15, 2021, Austria



Vehicle-to-Everything communication (V2X)

What is V2X?



V2X is driven by Standards

- › Mandate high security for signing and private keys
- › Security certifications provide assurance – leveraging region-specific certification schemes
- › **V2X HSM** based on a highly secured tamper resistant microcontroller to safeguard secured V2X communication

From standards to product



Why V2X?

- › Improve road safety
- › Increase efficiency
- › Support automated driving
- › Services for travelers, OEMs, mobility providers, road operators
- › Regulatory requirements

V2X has high requirements towards integrity, authenticity and privacy

- › Message authentication via digital signatures against threats such as:
 - Manipulated message (change/delete content)
 - Unauthorized sender, fake alerts
 - Privacy abuse (profiling driver data)

Security & privacy