

## **Bosch IP TechDay 2024**

ME-IC/PRM-IP | March 14th, 2024







# Bosch IP TechDay 2024 GTM IP – establishing a de-facto standard

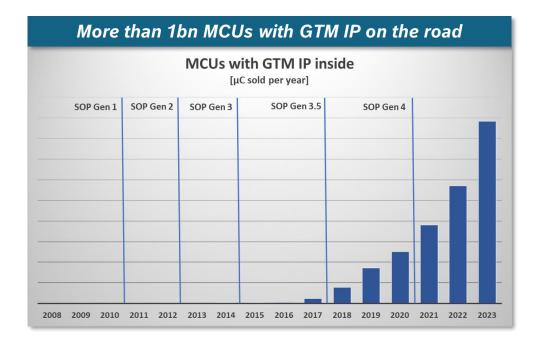




- GTM IP journey started 2008
  - driven by small group of Tier1s, focused on combustion engine
- Fast adaptation by first Body/Chassis applications
  - Non-powertrain requirements driving development of Gen 2
- Gen 3 ... based on initial feedback from market
  - Tier1s/OEMs and Tier2s collected experience
- Growing community of partners and stakeholders contributing to Gen 4
  - first feedback from electrical drive applications as well as emulation of serial interfaces (communication)

#### **Multi-Dimensional growth**

- Number of parts with GTM IP inside
- Licensees / Semiconductor Vendors
- Application Domains
- **Eco-Environment** (Tools, Simulators, Debuggers, Compilers, ...)









#### Bosch IP TechDay 2024





### **Growing # of Applications**

Display Control **Industrial Applications** 

**Emulation of Ser. Interfaces** 

Inverter DC/DC, DC/AC

**Chargers** 

BLDC, FOC, ...

**Electrical Axis** 

**Electrical Drives** 

Breaking

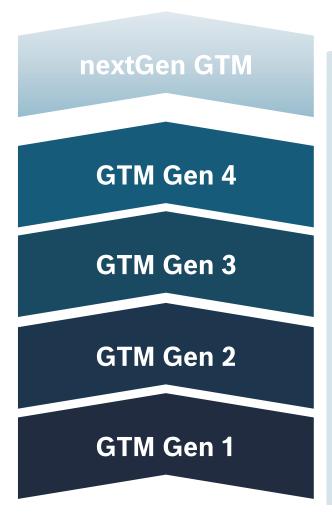
Gear Control

Steering

**Chassis Applications** 

**Body Applications** 

**Combustion Engine Control** 





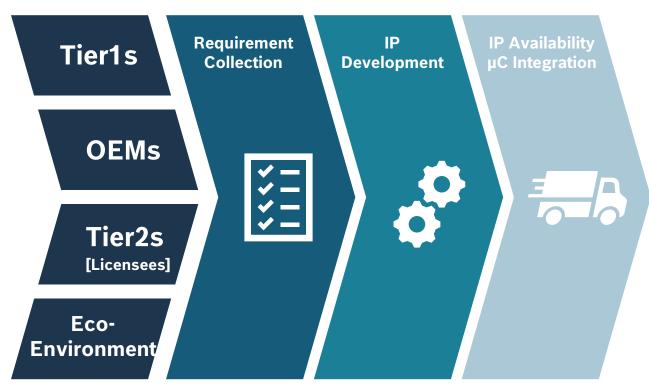




# GTM-IP – Status and Roadmap The journey continues ...







### electrification

Serial Interfaces

**Useability & Ease of Use** 

Virtualization

Core Performance

connectivity



## nextGen GTM IP





# GTM-IP – Status and Roadmap The journey continuous ...





- nextGen GTM IP ... addressing the needs of the future
  - Broad base of requirement providers ... significantly more than ever before
    - OEMs Tier1s Tier2s EcoEnvironment
  - New features expected to be mostly driven by
    - Electrification Chargers, Electrical Axis, ...
    - Connected GTM IP as flexible solution for emulation of serial protocols (e.g. zone computers)
    - Ease of use Lower the entry hurdle to develop GTM applications
    - Safety & Security compliance with latest standards
  - Challenge to find the right set of new features, serving the need of the wide market
  - Definition phase of nextGen GTM is starting now ...
    - → Availability roughly targeted for 2026/2027

#### ... stay tuned!



