

nGene 2 - Intelligent Cockpit Domain Controller

Based on the Qualcomm SA8155P, JOYNEXT provides flexible and diversified cockpits solutions for partners and customers. Our customized and high-performance intelligent cockpit solutions can help increase vehicles' overall security and lifetime, and offer full-scenario user experience of intelligent cockpit interaction







Mass-production vehicle

In-vehicle infotainment system: Dual OS system of Linux + Android

> Technical Details

- HMI design adaptive to several screen settings (up to 8 displays, including the dashboard, the HUD, the co-pilot screen, the air-conditioning screen, the rear seat screen, electronic back mirror
- Travel service: guarantee safe mobility through AR Navigation, DVR and others
- Virtual personal assistant: Hybrid Speech, Avatar animation in 2D
- o Online service: DingTalk, WeChat, Online Music, Online Radio, Karaoke and other online services
- Ecosystem: Tencent TAI 3.0
- Phone connection: CarPlay, CarLife, HiCar
- Support co-pilot screen infotainment

> Features

- Support single OS (Android) or dual OS system (Linux+Android & QNX+Android) solutions through Hypervisor, and OTA upgrade
- Enhanced data security and driving safety: information safety and functional security
- Support SOTA and FOTA
- Support DMS function
- Enhanced Intelligence for personalized services: JOYNEXT multimodal interaction



> Applications

Support all-around intelligent cockpit domain functions

The smart cockpit domain controller development is based on the dual system Hypervisor. It support the driving function of cockpit domain with several screens and multiple directions, and satisfies users' demands for security, social communication, entertainment, interaction and other scenarios

Ensure the driving safety and convenience

The cockpit domain controller can be combined with empathetic cabin platform to create intelligent virtual assistant that accompanies and proactively cares about users in all scenarios throughout the journey to satisfy personalized demands of passengers

Integrate with autonomous driving for the next generation intelligent cockpit

With the operation of different software systems and the access of external hardware components supported, multiple services can be combined and integrated by means of multimodal interactions, AR and others to provide safety monitoring and driving-parking assistance for drivers and passengers