JOYNEXT

▶ nVision 3 – 5G+V2X Vehicle-Road Collaboration Solution

JOYNEXT 5G+V2X solution integrates communication and network technologies to realize the collaboration between the 'vehicle' and all traffic participants, capable of complex environment detection, intelligent decision-making and collaborative control. JOYNEXT is the global leader in the area of 5G+V2X production, with several 5G+V2X mass production projects of international OEM under development, and the technology has been adopted to the vehicle of Hiphi brand and NIO brand

❯ Technical Details

◎ Main chip: Qualcomm SA515M
◎ Support 17 V2X Day1 scenarios
◎ Product type: traditional TBOX with external antenna
◎ Protection level IP5k2
◎ Support ETH (1000Mb), CAN, CAN FD
◎ Support customized V2X scenario

260*150*25 mm

157*157*25mm

❯ Features

◎ Support 5G communication
◎ Support C-V2X communication
◎ Support customized connectivity services: remote vehicle control, remote monitoring, emergency assistance, and roadside assistance (e-Call, b-Call)
◎ Support dual-band GNSS high-precision positioning
◎ Update: OTA
◎ V2X scenarios: forward collision warning, blind area/lane change assistance, emergency braking warning, left turn assistance, vulnerable traffic participant warning, speed guidance based on signal lights, congestion warning ahead, etc

Collaborative Lane Change

Collaborative Merging

Blind Spot Warning

Left Turn Assist

Vulnerable Road User Warning

Traffic Jam Warning

❯ Applications

◎ As one of the world's first technology enterprises to mass-produce 5G V2X products, after the Day1 scene has all landed, it has now entered a higher stage of functional research and development, and more vehicle and road scenes can be expanded through OTA

　• Day1 (17 scenarios), such as: forward collision warning, blind area/lane change assistance, emergency braking warning, left turn assistance, vulnerable traffic participant warning, speed guidance based on signal lights, congestion warning ahead, etc

　• Part of Day2 scenarios, such as: collaborative lane change, collaborative vehicle import, perception data sharing, if traffic participants pass safely, etc

◎ At present, the technology has helped the vehicle and road collaboration scenes of many models of brands such as Hiphi and NIO