



DIGITAL COCKPIT JAGUAR XJ CES 2017

TECHNICAL SPECIFICATIONS

DETAILS

ECU consolidation in the cockpit - Proven safety, security and separation of a fully-reconfigurable digital instrument cluster and infotainment system running on a single cockpit domain controller. Showcases QNX Hypervisor running two virtual machine partitions: a safety-critical guest runs QNX Platform for Instrument Clusters and a non-safety critical guest runs QNX CAR Platform for Infotainment.

QNX Platform for Instrument Clusters features the ISO 26262 certified QNX OS for Safety and patent pending safety certified QNX Graphics for Safety technology to ensure safety-critical symbols are rendered correctly to the cluster display.

QNX CAR Platform for Infotainment is the market-leading pre-integrated, automotive-hardened and field-proven solution for best-in-class Infotainment systems – from entry-level to high-end. BlackBerry QNX has established a global automotive ecosystem that is second to none.

QNX Acoustic Management Platform integrates hands-free and In-Car Communication (ICC) acoustics technologies, including new multi-zone voice enhancement with personalized soundscapes. Car occupants can now sing along with the music and have their digitally enhanced voices fill the entire car.

Digital Cockpit ECU consolidation of Infotainment and Cluster

Virtualization: QNX Hypervisor

- QNX Real-time type-1 Hypervisor on Intel Apollo Lake
- Hardware optimized SoC support including device sharing of graphics and audio
- Secure separation and isolation of two guests

Instrument Cluster: QNX Platform for Instrument Clusters

- QNX OS for Safety (ISO 26262 ASIL D)
- QNX Graphics for Safety (ISO 26262 ASIL B)
- Rightware Kanzi cluster UI

Infotainment: QNX CAR Platform for Infotainment

- QNX Neutrino RTOS
- QNX advanced HMI based on Qt 5
- QNX Blink HTML5 browser engine
- Navigation (Elektrobit)
- SmartDeviceLink (SDL)
- Voice recognition with QNX Speech Integration Framework
- Bluetooth phone connectivity with Mindtree stack and QNX Bluetooth framework

In-Car Communication (ICC) enabling clear conversations

- QNX Acoustics Management Platform featuring ICC achieves 9ms latency with < 10% CPU overhead on TI Jacinto 6
- Four zones, 4 microphones, 15 speakers
- Noise compensated audibility tracks music volume with changing noise levels