SmartCore™ Gen 3
Digital Integrated Cockpit Solution

Features:
• Integrated cockpit controller
• Scalable SoC
• Supports multiple domains including infotainment, connectivity, instrument cluster, telematics, security, RSE and camera
• Wireless CarPlay and Android Auto
• Multi-display environment
• Enables multiple OS, including Android, Linux, QNX, AutoSAR
• Vehicle network gateway
• Hypervisor

Benefits:
• Enables next-gen cockpit architecture
• Scalable across vehicle lines
• ASIL-B functionality
• Centralized security and FOTA
• Enhanced HMI and UX using multi-screen environment
• Extended lifecycle through feature adds/upgrades via app store
• Integrated DMS and informational ADAS
• Simplified packaging

https://www.visteon.com/products/domain-controller/
SmartCore™ GAC
Digital Integrated Cockpit Solution

Features:
- Integrated cockpit controller designed for the China market
- Scalable SoC
- Tencent cloud integration
- Supports multiple domains, including infotainment, connectivity, instrument cluster, HVAC and body controller
- Multi-display environment
- Enables multiple OS
- Hypervisor

Benefits:
- Rich Tencent user experience
- Next-generation cockpit architecture
- Scalable across vehicle lines
- ASIL-B functionality
- Centralized security and FOTA
- Enhanced HMI using multi-screen environment
- Extended lifecycle through feature adds/upgrades via app store
- Simplified packaging

https://www.visteon.com/products/domain-controller/
SmartCore™ Entry
Digital Integrated Cockpit Solution

Features:
• Entry integrated cockpit controller focused on value
• Single SoC
• Supports domains including infotainment, connectivity and instrument cluster
• Single display environment
• Android OS with Visteon middleware
• No hypervisor

Benefits:
• Integrated cockpit architecture for the entry market segment
• Enhanced HMI
• Extended lifecycle through feature adds/upgrades via app store
• Minimized third-party software royalties
• Simplified packaging

https://www.visteon.com/products/domain-controller/
Entry Infotainment
Cockpit Entertainment Solution

Features:

- Single ECU design
- Supports >10” remote or attached display
- Linux OS
- Wired CarPlay and Android Auto
- Allgo RACE multimedia engine
- Regional app support
- Regional navigation
- In-house embedded automatic speech recognition

Benefits:

- Platform design for low-cost engineering and fast to market
- Low-cost design with rich multimedia content
- Smartphone connectivity integration
- Scalable through a range of display suppliers and sizes
- Cloud access through smartphone or embedded Android and HTML5
- Real time, ML-based, contextual ASR
  - Allows access to vehicle functions
  - Integrated to third-party cloud-based ASR

https://www.visteon.com/products/infotainment/
Android Display Audio
Cockpit Entertainment Solution

Features:
- Single ECU design
- Supports >10” remote or attached display
- Android-based infotainment
- Wireless CarPlay and Android Auto
- Dual WiFi and BT 5.0
- Allgo RACE multimedia engine
- Regional appstore and OTA updates
- Integrated Say ’n Serve voice controls

Benefits:
- Platform design for low-cost engineering and fast to market
- Low-cost design with robust multimedia streaming
- Wired and wireless smartphone connectivity integration
- Scalable through a range of display suppliers and sizes
- Regional appstore as a low-cost alternative
- Low-cost embedded voice solution
- Hassle free switching between Android and Apple devices

https://www.visteon.com/products/infotainment/
Say ‘n Serve – Personal Assistant
Embedded Voice Recognition Solution

Features:
• Visteon AI-based speech recognition and natural language understanding engine
• On board and embedded in infotainment or SmartCore™
• Intelligent arbitration across multiple cloud-based voice assistant solutions
• Vehicle-specific noise reduction
• Supports OEM customization and branding

Benefits:
• Low-cost NLU solution compared with traditional approach
• Real-time recognition across multiple languages
• Customizable accent and wake word
• Addresses automotive use cases not addressed by cloud assistants
• Arbitration enables intelligent integration with cloud-based assistants
• Small embedded footprint allows for integration on a range of hardware platforms

https://www.visteon.com/products/infotainment/
Android Rear Seat Entertainment
Rear Seat Entertainment Solution

Features:
• Connected streaming content to two independent displays
• Android-based entertainment system
• Single MediaTek SoC design
• Integrated connectivity
• Integrated copyright and content security

Benefits:
• Low-cost embedded design
• Access content integration enabling choice of media across streaming services
• Simplified subscription management

https://www.visteon.com/products/infotainment/
DriveCore™ Compute
Automated Driving Solution

Features:
• Scalable, integrated central compute hardware platform
• Failsafe functionality ASIL-D
• Sensor agnostic supporting a range of camera, radar and lidar
• Cost-optimized solution
• Integrated AI
• DriveCore™ Runtime middleware
• Open development environment
• DriveCore™ SDK

Benefits:
• Cost optimized solution targeted at L2/L2+ automation
• Central sensor fusion
• Visteon developed environmental model
• AI algorithms for improved object detection
• AI co-processor design as alternative to pricey GPU
• Runtime and SDK enable rapid integration of software components

https://www.visteon.com/products/autonomous/
DriveCore™ Studio
Automated Driving Solution

Features:
• Comprehensive ADAS/AD development tool chain
• PC and cloud deployment
• Rapid development through an enhanced ADAS/AD continuous improvement cycle
• Single tool with fused third-party, open-source and in-house components
• Data visualization and cloud-based storage for team sharing
• Model-based code generation
• Sensor modeling
• Microsoft Azure integration for cloud storage and processing

Benefits:
• Open collaboration environment for DriveCore™ developers
• Global deployment with virtualized hardware
• Simplified algorithm development
• Embedded hardware profiling
• Algorithm comparison and KPI benchmarking
• Simulation and modeling for reduced drive cycles

https://www.visteon.com/products/autonomous/
DriveCore™ Studio Cloud
Automated Driving Solution

Features:
• End-to-end ADAS/AD continuous improvement cycle
• Intuitive web-based UI
• Cloud-based virtualized hardware
• Global test fleet integration and connectivity
• Data lake for global data sharing
• Cloud-based AI training and development
• OEM privacy, branding and billing

Benefits:
• Global, collaborative, cloud-based platform enabling rapid ADAS/AD development
• Integrated test fleet and production fleet application management
• Centralized data management
• Algorithm store
• Scalable machine learning

https://www.visteon.com/products/autonomous/
Digital Lite Reconfigurable Cluster
Driver Information Solution

Features:
• Fully digital cluster based on scalable platform architecture
• Supports up to 8” displays with two additional side pods
• Functional and decorative illumination effects
• Market-leading optical design and manufacturing

Benefits:
• Cost-effective design offering fully digital to price-sensitive segments
• Interchangeable packaging with fully digital instrument cluster enables trim level differentiation
• Flexible packaging through the use of functional and stylistic side pods
• Integrated GUI with side pods

https://www.visteon.com/products/instrument-clusters/
3D Cluster
Driver Information Solution

Features:
• Auto-stereoscopic instrument cluster graphics generate large range of perceived depth
• High-resolution 2D and 3D mode can be manually selected by driver
• Precision (X, Y, Z) integrated eye tracking utilizing Visteon DMS
• Full screen lenticular array with switchable three-zone LCD
• Automotive display with 2880 x 1080 resolution with best-in-class 3D crosstalk and perceived depth

Benefits:
• Unique, differentiated styling and graphical user interface design
• Adaptive graphical user interface leverages 3D functionality to highlight critical information
• Optimized 3D visual performance when integrated with eye tracking
• Kanzi HMI dynamically generates left/right eye views for best-in-class 3D performance

https://www.visteon.com/products/instrument-clusters/
Modular Cockpit with microZone™
Driver Information Solution

Features:
- Visteon patented microZone™ display technology
- Modified dual-cell LCD configuration
- Visteon proprietary optical stack for low power consumption
- High brightness – 850 cd/m² or as high as 1300 cd/m²
- Ultra high contrast ratio – 100,000:1
- Wide color gamut – DCI P3 color space
- Low power consumption – 9W backlight power at 850 nits
- Integrated sensor UX

Benefits:
- Revolutionary automotive display performance enables OLED-like viewing experience
- Optical quality far beyond what can be achieved by LCD, at a price far below what can be realized by OLED
- Visteon HDR ISP algorithms to optimize image quality
- High-fidelity haptic and force sensing enables rich UI
- Floating knob for contextual UI
- High contrast and brighter image enables next-gen graphics and use cases
- High operating life

https://www.visteon.com/products/instrument-clusters/
Curved Dual Display
Driver Information Solution

Features:
• Cold forming glass lens enables a range of complex multi-curvature design studio requirements
Cluster: R750 concave
Center area: R250 convex
CID: R1200 concave
• Visteon "bond then bend" structural manufacturing process
• Leverages the Visteon robotized bonding system

Benefits:
• Design differentiation enabled by multi-curvature displays behind a seamless glass lens
• Cold forming glass lens offers the lowest cost solution for curved displays
• Automotive-designed monolithic structure integrating open cell FoG LCD and carrier-integrated backlight
• Structural and styling elements in single integrated housing

https://www.visteon.com/productsDisplays/
Flexible Rotating Glass Cockpit
Driver Information Solution

Features:
• Adaptable context-based dashboard using Visteon’s patented display hinge mechanism allows 5° back and 15° forward bend
• Optical and structural bonding done by Visteon
• "Bond then bend" process
• Cold forming lens process
• Structural bonding
• Leverage POLED for display flexibility

Benefits:
• Bendable multi-display single-glass application enables cockpit flexibility and customization across car lines
• Visteon developed hinge solution enables tailored user experience in multiple driving scenarios such as race and passenger cars
• Multi-axis cold forming offers unparalleled styling and differentiation
• Slim design

https://www.visteon.com/products/displays/
Cluster Integrated DMS
Integrated Driver Monitoring System

Features:
• Cluster-integrated solution with different third-party algorithms
• Scientifically proven drowsiness assessment
• Sensors:
  - 1M reflow camera (miniaturization)
  - 2M module (small package, best value)
• DMS framework integrated into the cluster platform and Visteon’s SmartCore™ domain controller
• Most optimum camera placement avoids the need for additional HW such as peripherals and dedicated compute

Benefits:
• Scalable software stack compatible to cluster, infotainment and integrated cockpit domain
• Modular DMS system framework supports seamless switching between various third-party DMS technologies and algorithms
• Customizable system architecture to support different processors and sensor solutions
• Design advantage: Better physical and cosmetic packaging solution
• Ideal camera location: Provides highly accurate results as the camera at the cluster position has better viewing angle of the driver
• Cost effective solution: Physically and functionally integrated into the cluster

https://www.visteon.com/technology/interior-sensing/