



Vehicle Solutions



Our Services

HMI DESIGN

Instrument cluster, infotainment, and physical controls. Design and build.

VEHICLE INTEGRATION

Vehicle systems integration. Lights, TSI, ECU, BMS, motor controllers and more.

PROTOTYPE DEVELOPMENT

Bucks, mock-ups, concept vehicles, demonstration units

ENGINEERING CONSULTING

Electrical, mechanical, software, and systems engineering.

Our Products

DragonFire Domain Control Unit

KEY FEATURES

- Hypervisor-based domain controller architecture
- Up to 2 screens with custom HMI
- Flexible vehicle I/O, physical control, and connectivity options
- On-board vehicle telemetry capture and logging
- Mobile device screen mirroring

CONNECTIVITY

- 2 CAN FD Channels
- Bluetooth 5
- 802.11ac Wi-Fi
- 8x Analog Camera Interface
- Multi-channel audio

SUPPORTED UI MIDDLEWARE

- Qt for Embedded
- Crank Storyboard
- Unity

OPTIONS

- Radio Entertainment Module
- LTE Telecommunications Unit

PERFORMANCE

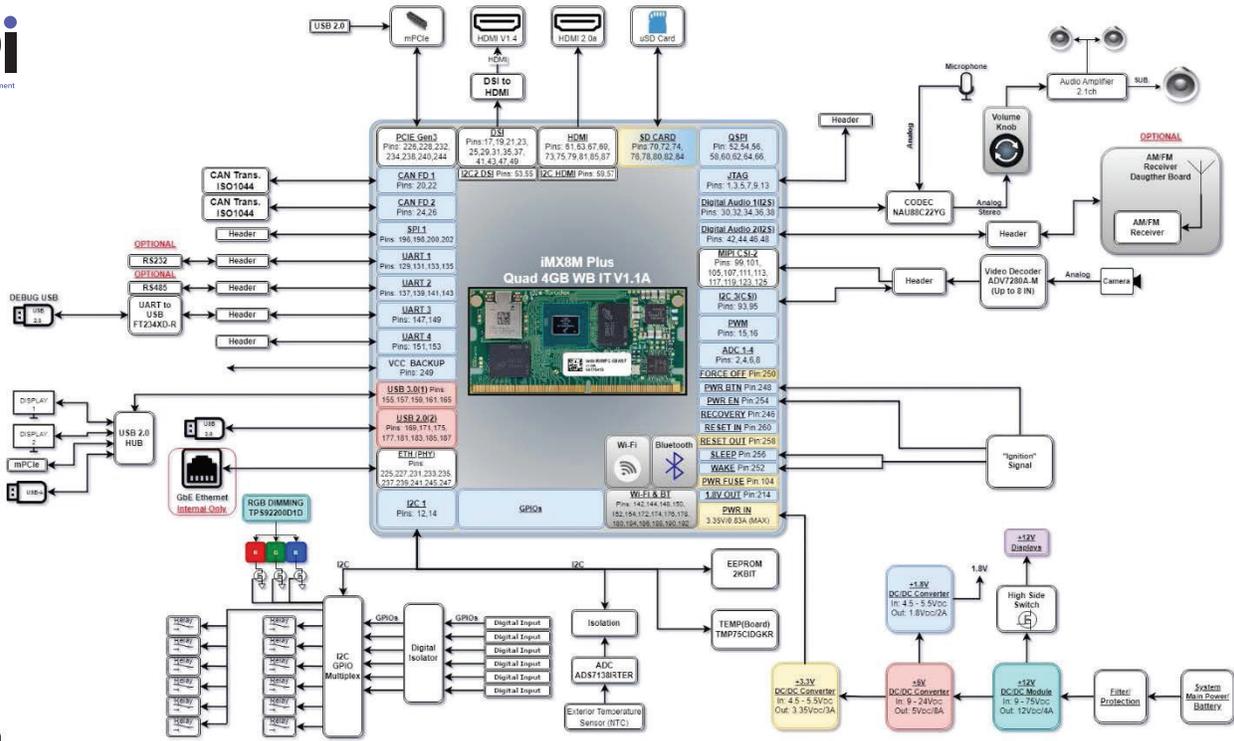
- 4x Cortex-A53 @ 1.6 GHz
- 1x Cortex-M7 @ 800 MHz
- GPU @ up to 16 GFLOPS
- NPU @ 2.3 TOPS
- VPU Enc/Dec @ 1080p60

ROADMAP

- Expanded HMI middleware
- ISO 21434 compliance
- On-board voice control
- Android Auto, Apple CarPlay capable
- Automotive Ethernet

SPECS

- 50W Power (dual screen w domain controller)
- Weight 10lbs (dual), Environmental -40 to +55/85C, IP54 rated



DragonFire DCU

CONNECTIVITY SUMMARY

CAN Bus

- 2x Flexible Data Rate CAN
- TeleCANesis middleware provides high-level protocol support (J1939, NMEA 2000, ISOBUS, etc.)

Digital I/Os

- 12x Digital Outputs (for relay control)
- 6x Digital Inputs

Network

- 1x Gigabit Ethernet
- 802.11ac WiFi Ethernet
- 1x Bluetooth 5.0 Radio
- Optional LTE/GPS Radio (via mPCIE)

Display*

- 2x Displays via HDMI
- USB touch controller input

Audio

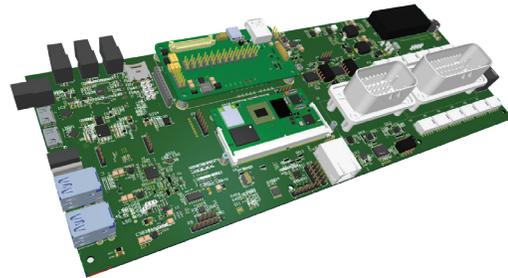
- Analog Audio Output and Mic Input
- Optional AM/FM Radio

Camera

- Up to 8 analog cameras

Storage

- 32GB Internal Flash
- Micro SD card for additional storage



*Display and touch controller re-configuration options available depending on requirements