

## Introduction

Nicknamed “Gazele Shield”, the six-channel CAN gateway ensures reliability, security, and performance of in-vehicle CAN networks. Full wire-rate and minimal-latency hardware forwarding path ensure performance of safety-critical ADAS networks are not negatively impacted. Arbitrary routing and filtering

topologies allow extension and expansion of in-vehicle networks beyond the limits imposed by a single CAN channel.

If required, user-provided binaries can be executed on a standard ARMv7-M CPU to provide proxying, frame-rewriting, and/or cryptographic security.

## Features:

- Six independent CAN 2.0B compliant interfaces.
- High speed, hardware-assisted bridging between channels at full wire-rate, up to 1Mbps per channel.
- Low-latency hardware forwarding path imposes only a 10uS delay, with zero CPU load and zero sub-bit-time jitter (with filtering and QoS enabled).
- Software forwarding path allows arbitrary, user-provided proxies, frame-rewriting, and cryptography support. User-provided software can be provided in ISO-standard C, or ARMv7-M binary form.
- Hybrid forwarding path allows modulation of hardware forwarding parameters (filters, QoS limits, etc.) without slowing hardware forwarding.

## Standard Hardware:

- Powered by standard automotive 12V DC.
- Standard CAN 2.0B electrical interfaces on all six channels.
- Customizable hardware implementation – contact us to inquire about custom application-specific functionality.