CAPTURE MODULE SERDES

technica engineering
Member of KPIT Group

4 SerDes Variants

3 Validation Workflows

1 Platform

Accelerate ADAS, autonomous driving and camera-based perception validation with a unified platform for data logging, framegrabber testing, replay and ECU injection workflows across multiple automotive SerDes ecosystems.



AVAILABLE FOR MULTIPLE SERDES ECOSYSTEMS

GMSL 2/3
Production ready

NEW
FPD-Link III/IV
TI camera ecosystems

NEW
ASA-ML
Open standard

NEW
A-PHY
MIPI emerging standard

BUILT FOR REAL-WORLD VALIDATION

Lossless Sensor Data Capture
Capture video, I2C and GPIO traffic with precise hardware timestamps, enabling high-fidelity datasets for validation, debugging and AI model development.

Accelerated Validation Workflows
Support logging, framegrabber and injection use cases with a single platform across vehicle, sensor and HIL test environments.

Replay Real-World Scenarios
Replay previously captured recordings to validate ECU behaviour, reproduce issues and reduce dependency on physical sensors.

One Platform Across SerDes Technologies
Use a common workflow, hardware platform and toolchain across GMSL2/3, FPD-Link III/IV, ASA-ML and A-PHY deployments.

Capture. **Replay.** **Inject.** **Validate.**

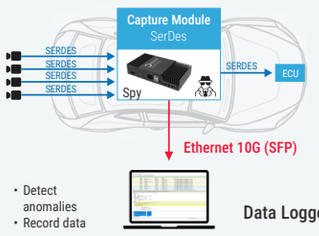
One validation platform for modern automotive camera ecosystems.

ENGINEERED FOR MODERN ADAS & SENSOR VALIDATION

DEPLOY THE CAPTURE MODULE ACROSS MULTIPLE VALIDATION WORKFLOWS:

USE CASE #1: LOGGING

Prototype Vehicle

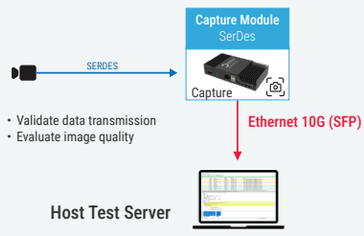


USED FOR ▶

- Vehicle integration testing
- Fleet car testing
- Data recording plan for AI training

USE CASE #2: FRAMEGRABBER

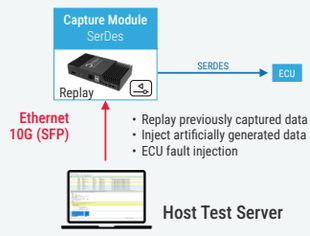
Sensor Module – Testbenches



- Sensor product validation plans
- Sensor image quality validation
- Sensor production test

USE CASE #3: INJECTION

ADAS ECU – Testbenches



- AI perception algorithms validation
- ADAS ECU product validation plans
- ADAS ECU fault injection tests
- ADAS ECU production test

CAPABILITIES ACROSS ALL VARIANTS

COMMON

CAPTURE & VALIDATION

- 4 SerDes links / 8 ports
- Logging of MIPI, I2C & GPIO
- Injection / Replay workflows
- Framegrabber operation

DATA QUALITY & SYNC

- Lossless JPEG Compression
- Hardware Timestamping
- gPTP Time Synchronisation

CONFIGURATION & INTEGRATION

- Webserver-based configuration
- Wake-up capable
- Quad mini coax connector for 4 Camera Link and 4 ECU links
- Form factor: 240 × 131 × 50 mm

AUTOMOTIVE-GRADE HARDWARE

- 12–24 V DC input
- Galvanically isolated DC/DC
- Integrated heatsink

SPECIFIC

VARIANT	CAMERA-SIDE SERIALIZER	ECU-SIDE DESERIALIZER
GMSL 2/3	MAX96793	MAX96792A
FPD-Link III/IV	DS90UB971	DS90UB9702
ASA-ML	VS775S	VS776Q
A-PHY	VA7031	VA7042



BOOK YOUR PERSONALIZED DEMO TODAY AND SEE HOW THE CAPTURE MODULE SERDES TRANSFORMS YOUR ADAS AND AD VALIDATION WORKFLOWS.

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