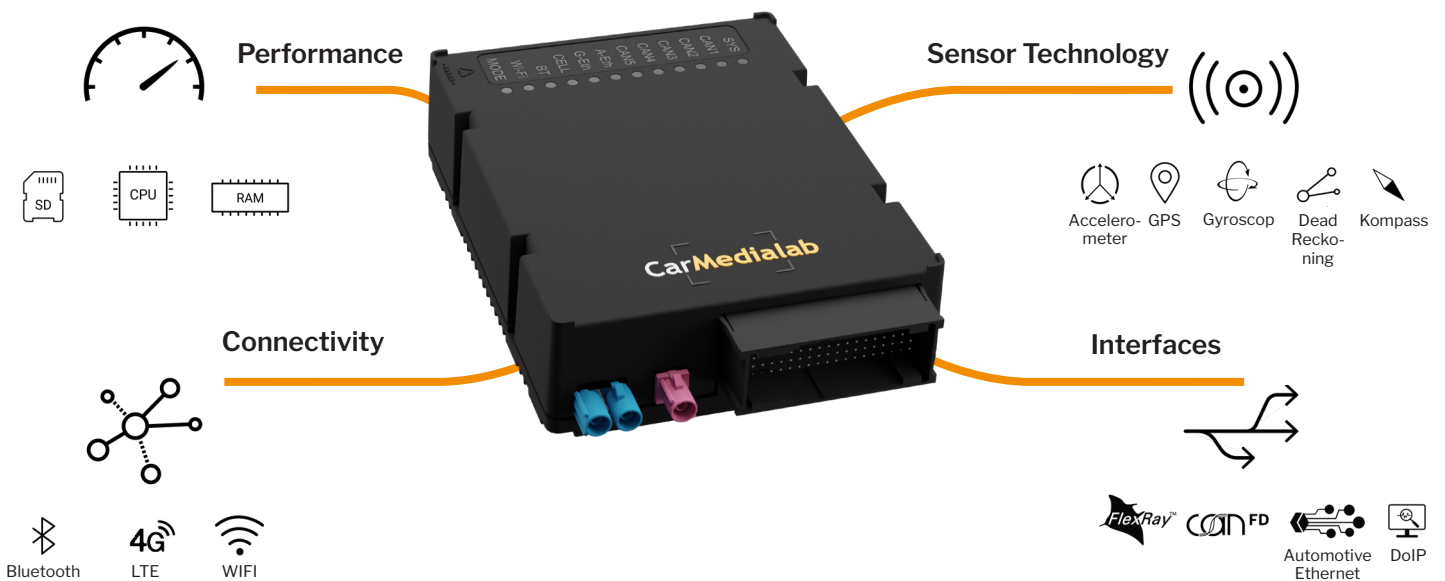


Flea 4+

Platform for Automotive Engineering

The Flea 4+ is an advanced and progressively devised telematics platform with excellent performance, designed to meet the latest increasingly demanding requirements. With its up-to-date interfaces, more efficient communication and more extensive sensor technology, the Flea 4+ offers a broad basis for new and exciting use cases.

Flea 4+ develops and expands the familiar functionality of the successful Flea 3 platform: diagnostics, measuring and statistics.



Use Cases

- 

**PREPARING NEW
TELEMATICS OPTIONS**
- 

**QUALITY
ASSURANCE**
- 

**TEST VEHICLE
PROTOCOL**
- 

**CUSTOMER BEHAVIOR
ANALYSIS**
- 

**AUTOMATED
DEVELOPMENT
DOCUMENTATION**

Data sheet

Platform for Automotive Engineering

Flea 4+

Flea 4+			
System	Processor	4 ARM Cortex-A53 mit 1.2 GHz (64 Bit) 2 ARM Cortex-R5 mit 500 MHz	
	RAM	1 GB LPDDR4 RAM	
	System Memory	4 GB eMMC	
		4 ... 32 GB, internal Micro SD (optional)	
		16 MB NOR	
	Sensors	3 D Gyroscope	
		3 D Accelerometer	
		3 D Magnetometer (Compass)	
	OS	Embedded Linux (Yocto Based)	
	Power Supply	12 / 24 V	
Operating Temperature	-40°C ... +85°C		
Dimensions	152 mm x 107 mm x 36 mm incl. Main Connector		
Wakeup Options	Ignition, CAN (Activity), RTC, Modem Ring		
Connectivity	Cellular	LTE CAT4 (150 MBit / s ↓ 50 / Mbit / s ↑) EMEA Region Bands 1, 3, 5, 7, 8, 20 HSDPA Category 24, HSUPA Category 6 MIMO 2 x 2 / RX Diversity 3G / 2G, Quadband Fallback	
		WI-FI (optional)	802.11 a / b / g / n (2.4 / 5 GHz)
		Ethernet	10 / 100 / 1000BASE-TX
		Bluetooth	BT / BLE 4.2
Interfaces	CAN	5 x CAN-FD	
	Automotive Ethernet	1 x Automotive Ethernet (100BASE-T1)	
	DoIP	1 x DoIP ISO 13400 (10 BASE-TX)	
	FlexRay (optional)	1 x FlexRay A / B Channels	
Positioning	GPS / QZSS	72-Channel with Dead Reckoning and Internal Sensors GPS, GLONASS, BeiDou, Galileo Position Accuracy 2.5 m CEP with SBAS 1.5 m CEP Frequency of Time 0.25 Hz ... 10 MHz Number of Concurrent GNSS: 3	
Connectors	ELO-54	5 x CAN-FD 1 x Automotive Ethernet (100BASE-T1) 1 x DoIP ISO 13400 (100BASE-TX) 1 x FlexRay A / B Kanäle 3 x Analog Input (0-60 V) 1 x Digital Output (Open Drain) 2 x Digital Output (High Side Switch) 1 x I2C 2 x RS232	
		USB	USB-C 2.0 (Host or Client / OTG)
		Antenna	2 x 2G / 3G / 4G Antenna Fakra 1 x GPS Antenna Fakra
Power Supply	Overvoltage Protection	36 V	
	Standby	< 0.5 mA @ 12 V	
	Hibernation (Warmstart)	< 10 mA @ 12 V	
	Working	< 500 mA @ 12 V	