VP7400
Compact, Automotive-Grade High Performance Platform for Smart Logger Applications

What is the VP7400?
VP7400 is a powerful and robust hardware platform, that is especially designed for time-synchronous recording of automotive bus messages, video streams, radar raw data and ECU-internal measurement data in vehicles. It supports exchangeable storage cartridges with up to 16 TBytes of SSD memory. With a very high logging rate of up to 1 GByte/s, it is suitable for ambitious ADAS projects. VP7400 is available in different variants suited for different tasks and use cases. It can be either delivered as a Windows PC with pre-installed Vector tools or as a dedicated logging solution with CANape log or vMeasure log.

Overview of Advantages
> Continuous logging of measurement data rates of up to 1 GByte/s
> Compact and robust design – suitable for automotive use
> Numerous interfaces for high data throughput with 2 x 10 Gbit/s Ethernet, 6 x 1 Gbit/s Ethernet and 4 x USB 3.0
> IEEE 1588 (PTP) time synchronization
> Extended temperature range from -25 °C to +70 °C

> Exchangeable storage cartridges with up to 16 TByte capacity
> VP7470: Interface expansion by two PCIe slots Gen 3.0 x8

Functions and Applications
Smart Logger with CANape log or vMeasure log
When combined with CANape log or vMeasure log, VP7400 is a high-performance stand-alone Smart Logger. To configure the hardware, a PC with CANape or vMeasure exp is required. Existing CANape projects can be downloaded to the VP7400 in a quick and easy process. During logging the configuration PC is no longer needed. For monitoring measurements, a browser-based UI for mobile devices is available. Individual measurement signals as well as status information, such as the amount of remaining storage capacity, can be displayed in this user interface, too.

Time Synchronization Options
> Time synchronization with other devices via Ethernet over IEEE 1588 (PTP) as master or slave
> UTC reference time via the installed GNSS receiver

VP7400 is a powerful and robust hardware platform, for time-synchronous recording of automotive bus messages, video streams, radar raw data and ECU-internal measurement data.
## Technical Data

<table>
<thead>
<tr>
<th>VP7400</th>
<th></th>
</tr>
</thead>
</table>
| **Processor and Main Memory** | Intel Core i7-6820EQ (4 cores operating at 2.8 GHz)  
Internal SSD with 256 GByte capacity  
32 GByte RAM |
| **Ethernet** | 2 x 10 Gbit/s Ethernet  
6 x 1 Gbit/s Ethernet (RJ45)  
5 x with hardware time stamps |
| **USB** | 4 x USB 3.0 host ports |
| **Further Interfaces** | Control signals for power management  
GPIO with 4 inputs and 4 outputs  
Built-in GNSS receiver  
WLAN option for mobile user interface  
Microphone input to record trigger comments  
Slot for CFast memory cards  
DisplayPort |
| **Time Synchronization** | IEEE 1588 (PTP), with GNSS-based UTC time |
| **Use Cases** | Smart Logger: CANape log/vMeasure log as autonomous logging solution  
Automotive PC: Windows 10 IoT 64 bit with e.g. CANape |
| **Operating Temperature Range** | VP7400 Platform: -25 °C to +70 °C  
VP7240 Storage Cartridge: 0 °C to +70 °C |
| **Power Supply** | Designed for both 12 V and 24 V electrical systems  
Resistant to voltage drops of down to 6.5 V  
Power consumption between 110 W and 200 W, depending on configuration and operating mode |
| **Housing** | Robust aluminum profile housing |
| **Dimensions (WxHxD)** | VP7440: 320 x 66 x 250 mm  
VP7470: 320 x 110 x 250 mm |
| **Certificates** | CE / RoHS / REACH |

### VP7000 Platform Portfolio

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VP7440 Processing and Logging Platform</td>
<td>VP7400 Platform with Storage Bay (H: 1.5 U)</td>
</tr>
<tr>
<td>VP7470 Processing and Logging Platform</td>
<td>VP7400 Platform with Storage Bay and PCIe Add-On (H: 2.5 U)</td>
</tr>
<tr>
<td>VP7240-4 Storage Cartridge 4 TB</td>
<td>Exchangeable SSD memory module with 4 TByte capacity</td>
</tr>
<tr>
<td>VP7240-8 Storage Cartridge 8 TB</td>
<td>Exchangeable SSD memory module with 8 TByte capacity</td>
</tr>
<tr>
<td>VP7240-16 Storage Cartridge 16 TB</td>
<td>Exchangeable SSD memory module with 16 TByte capacity</td>
</tr>
<tr>
<td>VP7110 UPS</td>
<td>Uninterruptible power supply with 160 Wh for electrical loads up to 200 W</td>
</tr>
<tr>
<td>VP7140 Docking Station for VP7240</td>
<td>Thunderbolt docking station to read out Storage Cartridges</td>
</tr>
</tbody>
</table>

Compact ADAS logging solution: Smart Logger combined with the VX1161 Multi Base Module