

VT System Overview

Module Overview and Accessories

Name	Description	Channels	Key performance characteristics
Load and Measurement Modules: VT1004A VT1004A FPGA	Measurement of ECU outputs and connection of actuators	4	<ul style="list-style-type: none"> - Differential inputs - Electronic load - Current carrying capacity up to 16 A (continuous) - Also available with user-programmable FPGA
Stimulation Module: VT2004A VT2004A FPGA	Stimulation of ECU inputs and connection of sensors	4	<ul style="list-style-type: none"> - Differential outputs - Decade resistor - Arbitrary curve generator - Also available with user-programmable FPGA
Digital Module: VT2516A VT2516A FPGA	Connection of ECU inputs and outputs that are used in digital form	16	<ul style="list-style-type: none"> - Voltage and PWM measurement - Output of digital and PWM signals - Also available with user-programmable FPGA
Serial Interface Module: VT2710	Simulation of intelligent sensors and ECUs with serial interface	10	<ul style="list-style-type: none"> - Up to 4 freely configurable PSi5 and SENT channels - 2 SPI channels with 5 chip select lines each - 2 UART / RS232 / RS422 / RS485 channels - 2 I2C channels - Additional 2 LVDS channels for active probes
Piggyboard Module: PSi5SENTpiggy	Piggyboard module for the realisation of one PSi5 or SENT channel on the Serial Interface Module VT2710	1	<ul style="list-style-type: none"> - Sensor supply with up to 25 V / 200 mA - Generation of PSi5 synchronisation pulses with freely adjustable voltage, slope und hold time - Generation of current modulated signals with free setting of low and high current levels and data rates up to 200 kBit/s - Creation of shortcuts on PSi5 or SENT channels - Simulation of various resistive or capacitive loads for the complete bus channel or single components
General-Purpose Analog I/O Modules: VT2816 VT2816 FPGA	Analog inputs and outputs with signal conditioning	16	<ul style="list-style-type: none"> - 4 analog outputs - 12 analog measuring channels up to 60 V - 8 current measurement channels up to 5 A - Also available with user-programmable FPGA
General-Purpose Relay Module: VT2820	Relays for individual wiring and use	20	<ul style="list-style-type: none"> - Current-carrying capacity up to 6 A per relay
General-Purpose Digital I/O Modules: VT2848 VT2848 FPGA	Digital inputs and outputs with signal conditioning	48	<ul style="list-style-type: none"> - Processes signals up to 60 V - Generating and measuring of PWM signals - Also available with user-programmable FPGA
Real-time Module: VT6011	PC module for executing the real-time part of CANoe with the VT System	2 PCI Express	<ul style="list-style-type: none"> - Intel® Celeron® 2.0 GHz processor - PCI Express connections for VT System network modules - Passive cooling, no fan
Real-time Module: VT6051A	High-performance PC module for executing the real-time part of CANoe with the VT System	4 PCI Express	<ul style="list-style-type: none"> - Intel® Core™ i7, 2.50 GHz processor - PCI Express connections for VT System network modules - Regulated fan, requires 2 slots - Support of Extended Realtime (ERT) from the Vector Tool Platform (VTP)
Network Module: VT6104A	Network interface for the real-time modules VT6011 and VT6051A in the VT System	4	<ul style="list-style-type: none"> - Supports CAN, LIN, J1708, CAN FD, K-Line - Switchable termination resistors - Relays for line breaks and short circuits
Network Module: VT6204	Identically to VT6104A	4	<ul style="list-style-type: none"> - Identically to VT6104A, supports additionally FlexRay
Ethernet Network Module: VT6306	Automotive Ethernet network interface for the real-time modules VT6011 and VT6051A in the VT System	6	<ul style="list-style-type: none"> - 6 Automotive Ethernet channels on specific piggy - Two 100BASE-TX/1000BASE-T channels - High precision time stamps for Ethernet frames - HW sync (1µs) with multiple bus interfaces - Media conversion between ethernet networks - Flexible hardware-based frame filter - Multiple, configurable TAP units - Configurable layer-2 switch mode

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Piggyboard Module: 100BASE-T1piggy 1101	Piggyboard module for the realization of six 100BASE-T1 channels on the Ethernet Network Module VT6306	6	<ul style="list-style-type: none"> - Electrical error injection and signal switching - Adjustable signal attenuation on 3 channels - Resistive damping values of 5 Ω ... 2.555 Ω - Transceiver NXP TJA1101 on all channels
Power Supply Module: VT7001A	Power connection to an ECU's power supply terminals (e.g. Terminal 15 and Terminal 30 of an ECU)	2	<ul style="list-style-type: none"> - Controls 2 external power supplies by RS-232 and analog voltage - Internal power supply (max. 2 A) - Current carrying capacity up to 70 A (continuous) - Current measurement (auto-ranging 100 μA ... 100 A)
Rotation Sensor Module: VT7820	Application board for the Extension Module VT7900 FPGA to simulate rotational sensors	4	<ul style="list-style-type: none"> - Simulation of wheel speed sensors (S-, I- and V-type) - Simulation of cam- and crankshaft sensors - Number of encoder wheel teeth and gaps freely configurable - Voltage or current modulated signal - Digital levels and slew rate freely adjustable
Smart Charge Communication Test Module: VT7870	Application board for the Extension Module VT7900 to test the smart charge communication of electric vehicles	1	<ul style="list-style-type: none"> - Simulation of an electric vehicle (EV) or an electric vehicle supply equipment (EVSE) - PWM and PLC communication
Extension Module: VT7900A VT7900A FPGA	Extension of VT System by easy integration of application-specific electronics	-	<ul style="list-style-type: none"> - Platform for application-specific application board - Full integration in CANoe - Also available with user-programmable FPGA
Backplane: VT8006A	Backplane for communication with the VT System modules in half-width 19" housings	6 Slots	<ul style="list-style-type: none"> - Unused slots automatically deactivated - Multiple backplanes may be cascaded
Backplane: VT8012A	Backplane for communication with the VT System modules in 19" frames/housings	12 Slots	<ul style="list-style-type: none"> - Automatic deactivation of unused slots - Multiple backplanes may be cascaded
Power Supply Module: VTC8920 (available in Europe)	12 V power supply as slide-in module for supplying the VT System	2 Connections	<ul style="list-style-type: none"> - 200 W output power
Desktop Housing 42 HP	Desktop housing in half 19" width	6 Slots	<ul style="list-style-type: none"> - For installing the VT8006A backplane - Additional space for circulation of cooling air
Desktop Housing 84 HP	Desktop housing in full 19" width	12 Slots	<ul style="list-style-type: none"> - For installing the VT8006A backplane - Additional space for circulation of cooling air
Subrack 84 HP	Subrack in full 19" width for mounting in 19" racks	12 Slots	<ul style="list-style-type: none"> - For installing the VT8012A backplane
Desktop Power Supply	12 V desktop power supply for supplying the VT System	1 Connection	<ul style="list-style-type: none"> - 150 W output power