

Pos	Item-ID	Item description	Qty
1	109301	Performance real-time target machine (P3) Complete, fully assembled, and tested Performance real-time target machine with access to I/O modules at the front side. Including 19" 4U aluminum chassis, integrated AC/DC power supply, low-noise fans, 8 GB Memory, 128 GB SSD, industrial-grade mainboard with 4-core 3.1 GHz Intel Core processor and onboard expansion slots to accommodate up to 7 I/O modules. Onboard communication: 1x Gigabit Ethernet interface for host-target communication, 1x Gigabit Ethernet interface supporting network protocols such as EtherCAT Master, UDP, TCP/IP, XCP Master, Modbus TCP and many more (the supported protocols might depend on the MATLAB release and separately purchased run-time licenses), 2x RS232 serial ports supporting baud rates up to 115.2 kbps, 4x Type-A and 1x Type-C USB ports supporting USB 3.1 Gen 2 (10 Gbps). Operating temperature range: 0 to 60 °C.	1
2	109311	Performance-P3-CPU-4.0GHz-6Core Replaces the 4-core 3.1 GHz Intel Core with a 6-core 4 GHz Intel Xeon processor, providing maximum performance and scalability to support your real-time application.	1
3	109321	Performance-P3-RAM-32GB Extends Memory to a total of 32GB	1

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4	109331	Performance-P3-SSD1TB Replaces the 128 GB SSD with a 1 TB SSD for additional data logging storage.	1
5	109341	Performance-P3-IOExpansion-4PCI Expands the Performance real-time target machine with 4 additional I/O slots to accommodate up to 11 I/O modules in the main chassis.	1
6	109351	Performance-P3-RearIO This option replaces the default enclosure with a version providing access to I/O module connectors at the rear side instead of at the front.	1
7	109352	Performance-P3-Rack This option replaces the default handles with rack-mountable brackets. Factory assembled. Delivery includes default desktop handles and bumpers for desktop use (not mounted).	1
8	202036	IO203-Performance Flexible digital I/O module with 64 TTL channels, individually programmable as inputs or outputs. Default pull on voltage is 3.3V (standard TTL), but can be set to standard 5V CMOS level via Jumper. Includes Speedgoat driver blockset for R2021b, I/O cable, and terminal board. Installed in Performance real-time target machine and fully tested. Rev.A1	1
9	2A3246	IO324-Performance Simulink-programmable FPGA I/O module with an Artix 7 FPGA featuring 200k logic cells, 32 single-ended or 16 differential 16-bit analog inputs with a total of 4 AD converters supporting simultaneous acquisition of up to 4 AD channels, 8x 16-bit analog outputs and 32x 3.3 V/5 V (selectable) digital TTL I/O lines: up to 16 of the TTL lines can be reconfigured as 8 RS422/485 interfaces. In addition, this I/O module provides 64 LVTTTL/32 LVDS 3.3 V rear I/O lines compatible with the IO3XX-2X signal conditioning rear plug-ins. Includes Speedgoat driver blockset for R2021b, I/O cable, and terminal board. Installed in Performance real-time target machine and fully tested. Rev.A0	1
10	23X226	IO3xx-22-Performance This module converts the 2.5V rear LVCMOS I/O lines of the IO3xx to 16 x RS422/RS485, 24 x 3.3V and/or 5V TTL I/O lines, and three additional (optional) I2C Master and/or Slave channel all accessible at the front of the enclosure, adds ESD and overvoltage protection, and provides 24mA current output support. Includes Speedgoat driver blockset for R2021b, I/O cable, and terminal board. Installed in Performance real-time target machine and fully tested. Rev.A1	1
11	2A6026	IO602-Performance Intelligent CAN I/O module with four independent High-Speed CAN FD interfaces. Access to all I/O is via 25-pin DSUB connector or via 4x 9-pin DSUB (male) connectors also included in the delivery, as well as CAN loopback test cables. Onboard 120-ohm CAN termination available upon request prior to order. Includes Speedgoat driver blockset for R2021b. Installed in Performance real-time target machine and fully tested.	2

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12	2X602	ARINC825 Run-Time License Run-time license allowing ARINC825-4 standard CAN bus protocol for airborne applications to run on the IO602 or IO691 I/O module. License is included in the target license file and is bound to the system. It is not interchangeable with other systems.	1
13	2B715	IO715 Four channel Gigabit Ethernet I/O module supporting EtherCAT Master (R2018a+), real-time UDP (R2018a+), PTP IEEE-1588 (R2018b+), XCP Master for bypassing (R2018a+) and TCP/IP (R2018a+). PCI Express x4 Interface. Supported operating temperature range: -40 to +85°C. Rev.A0	1
14	2A7526	IO752-Performance I/O module providing one PROFINET Device port to communicate with other nodes. Includes Speedgoat driver blockset for R2021b. Installed in Performance real-time target machine and fully tested.	1
15	301041	TSE24-01 High-precision temperature simulation unit with 24 independent resistor chain channels. Integrated into a separate 2U rack-mountable enclosure (3 variants available 12, 24 or 36 channels). Rev.A0	1
16	301022	FIU24-600 Programmable fault insertion unit (2U rack-mountable) with 24 independent channels for cell failure emulation (short-circuit, broken-wire, reverse polarity). With 600V switching relays. Rev.A0 ----- Rack -----	2
17	350101	Rack Cabinet Configuration Change of initial Rack - 1kA current sensing - Pyrofuse switching - Additional isoSPI/diff interfaces - Debug panel - isoSPI-Switches - SigCo Sub-racks - IO992 HV Terminal Boards - Additional HV cables for BCE FIU modules -> placeholder	1
18	310150	Non-Recurring Rack Engineering - Reuse of Design of Identical rack - Production, assembly and testing - Sourcing and logistics - Basic Simulink I/O test model - Delivery includes comprehensive system documentation.	1

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19	310140	Power Supplies and Signal-Conditioning - 3x LV DC power supplies: - TDK Lambda GENH 60-12.5 - 60V, 12.5A, 750W - 750W, 1/2 19", 1U - External analog control and monitor function - 24V DC power supply for rack internal PCBs - 4x isoSPI transceivers - 22x HF-suitable relays for SPI switching - Signal-conditioning PCBs and components	1