

# Price List 2024

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## QI PC Enable License

Part #	Product	Description	License price, EUR
QIR1100	<b>QI PC enable license</b> (workstation/node-fixed)	QI enable license is required for every PC/test station that runs Quick Instruments. This option is bound to a particular PC hardware and has to retire together with the PC. PC transfer options are also available on request (within 5-year period from date of purchase) in case of PC failure or premature scrapping.	<b>2450</b>
QIR1101	<b>QI PC enable license</b> (dongle-based, flexible)	QI enable license is required for every PC/test station that runs Quick Instruments. This option allows full flexibility, as it allows the same single license to be run from any arbitrary PC at a time. The license is bound to a dongle.	<b>4250</b>
QIR9100	<b>PC enable license transfer fee</b>	When QIR1100 has to be transferred from one PC to another, a one-time transfer fee has to be implemented	<b>350</b>

## QI FPGA Instruments

Prices per FPGA part name\*

Part #	Instrument Type	Description	License price, EUR
QIS1200	Frequency Counter	Universal non-invasive pulse/oscillator frequency counter on arbitrary FPGA inputs, including differential and reference clock pins (incl. those of MGT transceivers and RF ADC/DAC clocks).	<b>390</b>
QIS6100	Fast Flash IC Programmer	Fast link from JTAG to serial (SPI) Flash through the FPGA logic. The instrument receives image, programs and verifies the device. Other supported operations are read back, blank check, chip/manufacturer ID check, sector/chip erase.	<b>1590</b>
QIS1500	Digital Pattern Generator	Generates arbitrary digital pattern of a given length on FPGA's any digital output pin.	<b>990</b>
QIS3100	Ethernet Basic Tester	Tests communication over Ethernet link performing structural tests, incl. send/receive ARP/PING packets. Supports GMII/RGMII/RMII/MII interfaces and 1000/100/10Mbps link speed, external/internal loopback test, PHY-to-PHY test or PHY-to-PC test. <i>License includes up to 2 part names*</i>	<b>790</b>
QIS3108	Ethernet Stress Tester	Evaluates link quality by measuring Frame Error Rate (FER) during functional test. Supports external/internal loopback and PHY-to-PHY tests, SGMII/GMII/RGMII/MII interfaces and 1000/100/10Mbps link speed. <i>License includes up to 2 part names*</i>	<b>990</b>
QIS2300	UART Tester	Sends and/or receives data over UART links, intended to test UART/RS232/RS485/RS422/etc interfaces. <i>License includes up to 2 part names*</i>	<b>390</b>
QIS2101	High-Speed I2C / SMBus Tester	High-performance instrument for sending/receiving data over I2C and SMBus interfaces. Allows rapid configuration and programming of popular on-board peripheral devices (clock signal generators, EEPROMs, power controllers, temperature/voltage sensors). <i>Instrument includes QIS2100 license.</i>	<b>690</b>
QIS5100	Memory Interconnect Tester	At-speed test solution for interconnection lines between the host FPGA and a DDR memory device. All DDR types are supported DDR4/DDR3/DDR2.	<b>890</b>
QIS5102	DDR Margining Tester (Xilinx 7 Series)	An additive option, which evaluates data signals quality by building BER diagrams. Tests for delays and other timing related faults. Screens out marginal defects, e.g. minor delays, crosstalk, missing ground, etc. <i>NB! Requires QIS5100 Memory Interconnect Tester</i>	<b>2490</b>
QIS7100	RF Channel Tester	Test solution for RF links attached to integrated data converters (high-speed ADC/DACs). Sends a continuous software-defined signal and/or converts acquired signal into a set of sampling points. Various test setups are supported (external loopback, test with external equipment like spectrum analyzer and/or signal generator).	<b>8990</b>
QIS8100	BER Tester (BERT)	Bit-Error Rate Test/Measurement (BERT) instrument generates/receives PRPG sequences on arbitrary high-speed serial links (FPGA gigabit transceiver). Both loopback and FPGA-to-FPGA configurations supported. Combination of families/vendors is supported. Suitable for testing SMA, SFP/QSFP, Ethernet 10G/40G links and others. Some buses may require dedicated protocols. <i>License includes up to 2 part names*</i>	<b>2190</b>
QIS8108	Eye BERT with Mask	An additive graphical option for series/mass production test enabling quick and fully automated quality check based on Statistical Eye Diagrams. Helps to reveal hidden/marginal defects and other assembly quality issues. <i>NB! Requires QIS8100 BER Tester</i> <i>License includes up to 2 part names*</i>	<b>1490</b>

QIS8201	PCI Express BERT	An additive option for BERT - adds PCI Express bus protocol handling for establishing communication and loopback options. Requires at-least the basic BERT. <i>NB! Requires QIS8100 BER Tester</i> <i>Lead time: project-dependent</i>	<b>14990</b>
QIS8203	SDI BERT	Adds SDI protocol handling for establishing communication and loopback options. <i>NB! Requires QIS8100 BER Tester</i> <i>Lead time: project-dependent</i>	<b>ASK</b>
QIS8204	JESD204 BERT	Adds JESD204 protocol handling for establishing communication and loopback options. <i>NB! Requires QIS8100 BER Tester</i> <i>Lead time: 6 weeks</i>	<b>14990</b>
QIS1400	IEEE 1149.8.1 and IEEE 1149.6 instruction support IP	SELECTIVE_TOGGLE, EXTEST_TRAIN and EXTEST_PULSE emulation on an arbitrary FPGA I/O pin. <i>Lead time: 3 weeks</i>	<b>990</b>

\* License for some instruments includes up to 2 part names

## QI Software Instruments

Prices per IC part name\*

Part #	Instrument Type	Description	License price, EUR
QIS1100	PinTouch	A versatile tool to test on-board LEDs, switches, push buttons, jumpers, simple devices and pin-to-pin connections to/from FPGA. Drive, sense, toggle arbitrary pins on FPGA in a static manner. <i>License includes up to 2 part names*</i>	1590
QIS1300	ADC Measurement (Xilinx)	Instrument fetches measurements from FPGA's built-in analog-to-digital converters allowing to measure supply voltages and values on external analog pins as well as FPGA core's temperature.	490
QIS2100	I2C Tester	I2C / IIC bus integrity test and communication solution. Instrument automatically scans I2C bus, enumerates all connected slave devices, sends and receives data (single/multiple bytes) to/from I2C / IIC devices (e.g. on-board sensors, power manager devices, etc).	390
QIS2200	SPI Tester	Easy-to-use configurable instrument for SPI bus integrity test and communication. Writes and reads bytes via SPI protocol in different communication modes (CPOL / CPHA).	390
QIS5101	DDR4 Connectivity Tester	Test and diagnostics solution for the electrical continuity of pin interconnections between DDR4 memory and the host device (memory controller) on FPGA. Test covers data/address busses as well as memory control signals and follows the JEDEC standard for DDR4 memories (Connectivity Test Mode).	490
QIS6200	SVF Player	A solution to program CPLDs via SVF files, control Boundary Scan devices and perform other arbitrary user-defined actions on JTAG bus.	290

\* License for some instruments includes up to 2 part names  
IC support checking on request

## FPGA IPs & Stand-Alone Instruments

Prices per FPGA part name

Part #	Instrument Type	Description	License price, EUR
QIP6100	Short configurable BS register	Short reconfigurable Boundary Scan register for speeding-up BS shift operations for different purposes, like e.g. flash programming. Compatibility with EXTEST and other BScan commands as well as with third-party JTAG software tools is ensured via BSDL file modification (included). <i>Lead time: 2 days</i>	1590
QIP1900	IO conditioning IP	Setting electrical parameters (terminations, I/O standard, etc) on arbitrary pins for correct signal conditioning, e.g. for IEEE 1149.6 support. <i>Lead time: 2 days</i>	490
QIP9100	JTAG to system bus bridge IP	Bridge IP to access embedded system bus of FPGA (AXI/Avalon/PLB) from JTAG port. Provides interoperability between FPGA's functional firmware and external JTAG test controller. Capable to execute read/write cycles on system bus, i.e. to communicate with FPGA's peripheral cores. Requires intergation into 3rd-party functional / mission-mode firmware. <i>Lead time: 2 weeks</i>	3290

## Customization and deployment service

Part #	Service	Price, EUR/h
QID9900	Custom embedded FPGA/SW instrument development	129
QID9901	Embedded SW deployment service. Integration into customer's test runtime (LabVIEW, TestStand, etc.)	129
QID9909	Customization for engineering changes	129

### Standard Conditions

Delivery term: EXW Tallinn, ESTONIA. Prices without VAT.

Standard lead time is 1 day. It is effective for supported FPGA devices in the instrument library.

Warranty: 1 year bug fixes in runtime and instruments

Updates: instruments and runtime can be updated within 1 year from the date of delivery