

ScanExpress Programmer™

Universal In-System Programming Tool



Revolutionize the way you think about test

Features

- High-performance In-System Programming of Flash memories, serial EEPROMs, CPLDs, FPGAs, and other in-system-programmable devices
- Supports I²C, SPI, and JTAG interfaces
- In-system programming of Flash memory devices at native CPU speeds with Target Assisted Flash Programmer
- Configurable voltage from 1.25V to 3.3V with Corelis JTAG controllers
- User programmable JTAG TCK speeds up to 100 MHz, SPI SCK speeds up to 50 MHz, and I²C or SMBus SCL speeds up to 5 MHz
- Supports Standard, Fast, and High-speed mode I²C bus data rates up to 5 Mbits/sec
- Programs up to four target devices in parallel with the JTAG module—programming and verifying data in real time
- Memory contents can be dumped to a file to save vital information or to be used to program parts on additional targets
- Interfaces with LabVIEW, LabWindows/CVI, Keysight VEE, Visual Basic, and other third party test executives
- Supports Corelis high-performance JTAG controllers
- Compatible with the Corelis ScanExpress family of products
- Works with Windows Vista, Windows 7, Windows 8/8.1, and Windows 10

Benefits

- Save time and effort by performing common programming functions while the target device is installed in-circuit.
- Decrease complexity by using a single universal instrument for multiple ISP operations.

ScanExpress Programmer™ is a universal in-system programming (ISP) solution designed for convenience and versatility—a modular, multi-functional, and high-performance tool to program, read, and verify Flash memories, serial EEPROMs, CPLDs, FPGAs and more.

Like all Corelis ScanExpress family products, ScanExpress Programmer is a tool for all phases of the product life cycle—whether programming early code during product development, programming production code during manufacturing, or reprogramming units out in the field, ScanExpress Programmer is designed to fit all in-system programming needs.

Applications

Development

Engineers and developers can quickly erase, program, verify, and read code stored in memory devices during the development process.

Production

ISP allows memory devices to remain on the shelf in a blank state until ready-to-ship, easing inventory management.

Service & Repair

Reprogram Flash and troubleshoot firmware problems in the field or on the repair bench using ISP.



ScanExpress Programmer features support for the most popular in-system programming interfaces and components. Utilizing a high-performance Corelis JTAG controller along with user-friendly and intuitive Windows-based software, ScanExpress Programmer offers fast and convenient erase, program, verify, and read capabilities for all supported programming modules.

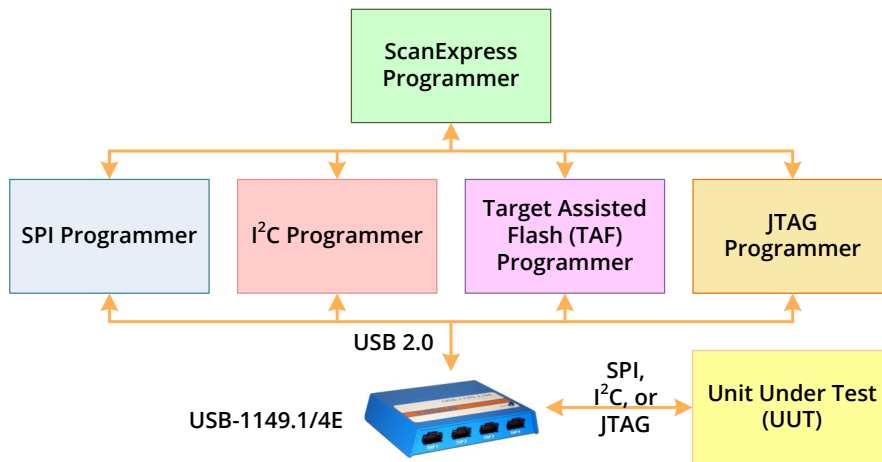
ScanExpress Programmer Modules

ScanExpress Programmer features four unique programming modules: JTAG Programmer, SPI Programmer, I²C Programmer, and Target Assisted Flash (TAF) Programmer. See *Ordering Information* for module licensing options.

The **JTAG Programmer** module is a flexible JTAG/boundary-scan programmer capable of programming Flash memory and serial EEPROM devices connected to boundary-scan components. Boundary-scan Flash programming files are generated by the ScanExpress Flash Generator™ software (sold separately).

The JTAG programmer can also program CPLDs, FPGAs, and other JTAG in-system programmable devices. Concurrent programming for up to four boards on supported Corelis JTAG controllers is included for increased throughput.

The **Serial Peripheral Interface (SPI) and Inter-Integrated Circuit (I²C) Programmer** modules offer fast programming of SPI devices and convenient programming of I²C memory devices by controlling the serial bus signals directly through dedicated SPI and I²C interface available on supported Corelis boundary-scan controllers.



ScanExpress Programmer modules interface with the UUT using a JTAG controller.

The **Target Assisted Flash (TAF) Programmer** module utilizes Corelis' JTAG Embedded Test (JET) technology to take control of the system CPU for the fastest possible ISP performance with Flash memory devices.

Ordering Information

Part Number—20600 ScanExpress Programmer Professional
Includes SPI, I²C, and JTAG modules.

Part Number—20601 ScanExpress Programmer - Direct SPI and I²C
SPI & I²C serial bus programming.

Part Number—20603 ScanExpress Programmer - JTAG
JTAG Flash and CPLD programming.

Part Number—206XX ScanExpress Programmer - TAF
Target Assisted Flash programming. Includes one CPU support package. For a complete list of supported processors and part numbers, please contact the Corelis sales department:

Email: sales@corelis.com

For more information, please visit our website at <http://www.corelis.com/>



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ScanExpress Programmer Performance

Programming Scenario	JTAG	I ² C	SPI	TAF
Flash memory connected to a TAF supported CPU	Average	-	-	Very Fast
Flash memory connected to any JTAG device(s)	Average	-	-	-
SPI serial EEPROM with direct SPI access	Slow	-	Fast	-
I ² C serial EEPROM with direct I ² C access	Average	Fast	-	-
CPLD programming	Fast	-	-	-