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System Requirements & Platform Availability by Product for R2019a

View general *system requirements*.

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
5G Toolbox	- Requires MATLAB - Requires Communications Toolbox - Requires DSP System Toolbox - Requires Signal Processing Toolbox	✓	✓	✓
Aerospace Blockset	- Requires MATLAB - Requires Simulink - Requires Aerospace Toolbox - Control System Toolbox recommended - Simulink Control Design recommended	✓	✓	✓
Aerospace Toolbox	- Requires MATLAB	✓	✓	✓
Antenna Toolbox	- Requires MATLAB - RF Toolbox recommended - Phased Array System Toolbox recommended	✓	✓	✓
Audio Toolbox	- Requires MATLAB - Requires DSP System Toolbox - Requires Signal Processing Toolbox - Simulink recommended - Simulink Coder recommended - MATLAB Coder recommended - Simulink Real-Time recommended - Simulink required to use block library - VST plugin generation only supported on Windows and Mac - VST plugin hosting only supported on Windows and Mac - AU plugin hosting only supported on Mac - JUCE plugin project generation requires MATLAB Coder - JUCE plugin project generation only supported on Windows and Mac	✓	✓	✓
Automated Driving Toolbox	- Requires MATLAB - Requires Computer Vision Toolbox - Requires Image Processing Toolbox - Statistics and Machine Learning Toolbox recommended - Simulink recommended - Deep Learning Toolbox recommended - Parallel Computing Toolbox recommended - Sensor Fusion and Tracking Toolbox recommended - The `vehicleDetectorFasterRCNN` function requires Deep Learning Toolbox. - Parallel Computing Toolbox is required for functions that support GPU computing: `vehicleDetectorFasterRCNN`, `fastRCNNObjectDetectorMonoCamera`, and `fasterRCNNObjectDetectorMonoCamera`.	✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
AUTOSAR Blockset	- Requires MATLAB - Requires Simulink - Requires Embedded Coder (to generate AUTOSAR code and export ARXML files)	✓	✓	✓
Bioinformatics Toolbox	- Requires MATLAB - Requires Statistics and Machine Learning Toolbox - On Red Hat Enterprise Linux 6.x and SUSE Linux Enterprise Desktop 11.x, use LIBZ version 1.2.3.3 or higher	✓	✓	✓
Communications Toolbox	- Requires MATLAB - Requires Signal Processing Toolbox - Requires DSP System Toolbox - Fixed-Point Designer recommended - Simulink Coder recommended - Simulink recommended - RF Toolbox recommended - RF Blockset recommended - Parallel Computing Toolbox recommended - MATLAB Coder recommended	✓	✓	✓
Computer Vision Toolbox	- Requires MATLAB - Requires Image Processing Toolbox - Simulink recommended - Image Acquisition Toolbox recommended - MATLAB Coder recommended - Simulink required to use block library - Statistics and Machine Learning Toolbox recommended - Parallel Computing Toolbox recommended - Deep Learning Toolbox recommended - Deep learning functionality requires Deep Learning Toolbox. Parallel Computing Toolbox is required for GPU support. These capabilities include training frameworks and layers for *object detection* and *semantic segmentation*. - The `trainRCNNObjectDetector` function and `rcnnObjectDetector` class requires Deep Learning Toolbox and Statistics and Machine Learning Toolbox. Parallel Computing Toolbox is required for GPU support. - The `trainImageCategoryClassifier` function and `imageCategoryClassifier` class require Statistics and Machine Learning Toolbox.	✓	✓	✓
Control System Toolbox	- Requires MATLAB	✓	✓	✓
Curve Fitting Toolbox	- Requires MATLAB - Statistics and Machine Learning Toolbox recommended	✓	✓	✓

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Data Acquisition Toolbox	- Requires MATLAB - Requires a supported data acquisition hardware device and its associated driver software - Signal Processing Toolbox recommended	✓		

Database Toolbox	- Requires MATLAB
	- Your system must have access to an installed database.
	  - Cassandra
	  - MongoDB
	  - Neo4j
	- Database Toolbox supports exchanging data from the following NoSQL databases:
	- Database Toolbox supports importing and exporting data from any ODBC- and JDBC-compliant database management system, including:
	  - SQLite
	  - IBM DB2
	  - IBM Informix
	  - Ingres
	  - Microsoft Access
	  - Microsoft Excel
	  - Microsoft SQL Server
	  - MySQL
	  - Oracle
	  - PostgreSQL
	  - Sybase SQL Server
	  - Sybase SQL Anywhere
	- Database Toolbox requires a database driver. You typically install a driver when you install a database. For instructions about how to install a database driver, consult your database administrator.
	- On Windows platforms, Database Toolbox supports Open Database Connectivity (ODBC) drivers and Java Database Connectivity (JDBC) drivers. On UNIX platforms, Database Toolbox supports JDBC drivers.
	See product documentation for more details.
	- Database Toolbox supports American National Standards Institute (ANSI) standard SQL commands.
		✓	✓	✓

Datafeed Toolbox	- Requires MATLAB
	Datafeeds available only on Windows from:
	  - Bloomberg
	  - Haver Analytics
	  - IQFeed
		✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Deep Learning Toolbox	- Requires MATLAB - Parallel Computing Toolbox recommended and is required for GPU support - Image Processing Toolbox recommended - Computer Vision Toolbox recommended - GPU Coder recommended - MATLAB Coder recommended - Simulink recommended - Reinforcement Learning Toolbox recommended	✓	✓	✓
DO Qualification Kit	- Requires MATLAB - Requires Simulink Report Generator (to execute tests for Simulink Check tool qualification)	✓	✓	✓
DSP System Toolbox	- Requires MATLAB - Requires Signal Processing Toolbox - Simulink recommended - Fixed-Point Designer recommended - Communications Toolbox recommended - Simulink Coder recommended - MATLAB Coder recommended - Simulink required to use block library	✓	✓	✓
Econometrics Toolbox	- Requires MATLAB - Requires Statistics and Machine Learning Toolbox - Requires Optimization Toolbox	✓	✓	✓
Embedded Coder	- Requires MATLAB - Requires MATLAB Coder - Requires Simulink for generating code from Simulink - Requires Simulink Coder for generating code from Simulink - Requires Fixed-Point Designer for generating fixed-point code - Requires host platform C compiler. - Requires cross-compiler for the target processor if the code will execute on a platform different from the host. - Simulink Coder recommended	✓	✓	✓
Filter Design HDL Coder	- Requires MATLAB - Requires Signal Processing Toolbox - Requires Fixed-Point Designer - Requires DSP System Toolbox - HDL Coder recommended - HDL Verifier recommended	✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Financial Instruments Toolbox	- Requires MATLAB - Requires Financial Toolbox - Requires Statistics and Machine Learning Toolbox - Requires Optimization Toolbox - The fitSmoothingSpline function requires Curve Fitting Toolbox - Econometrics Toolbox recommended - Datafeed Toolbox recommended - Curve Fitting Toolbox recommended - Global Optimization Toolbox recommended - Database Toolbox recommended	✓	✓	✓
Financial Toolbox	- Requires MATLAB - Requires Statistics and Machine Learning Toolbox - Requires Optimization Toolbox	✓	✓	✓
Fixed-Point Designer	- Requires MATLAB - Requires Simulink for fixed-point design in Simulink - Parallel Computing Toolbox recommended	✓	✓	✓
Fuzzy Logic Toolbox	- Requires MATLAB - Requires Simulink for using toolbox blocks	✓	✓	✓
Global Optimization Toolbox	- Requires MATLAB - Requires Optimization Toolbox - Parallel Computing Toolbox recommended	✓	✓	✓
GPU Coder	- Requires MATLAB - Requires MATLAB Coder - Requires Parallel Computing Toolbox - Embedded Coder recommended - Requires Deep Learning Toolbox to generate code from deep learning networks - Requires host platform C compiler. *See list of supported host compilers.* - For GPU computing, *see additional system requirements* - For executing deep learning examples, *see additional system requirements*	✓		✓
HDL Coder	- Requires MATLAB - Requires Fixed-Point Designer - Requires MATLAB Coder - Simulink recommended - Signal Processing Toolbox recommended - DSP System Toolbox recommended - HDL Verifier recommended	✓	✓	✓
HDL Verifier	- Requires MATLAB - Simulink recommended - MATLAB Coder required for DPI component generation - Simulink Coder required for DPI component and TLM generation from Simulink - Fixed-Point Designer required for cosimulation and FPGA-in-the-loop	✓		✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
IEC Certification Kit	- Requires MATLAB - Requires Simulink Report Generator (to execute tests for tool qualifications except Embedded Coder and Polyspace products)	✓	✓	✓
Image Acquisition Toolbox	- Requires MATLAB - Requires Image Processing Toolbox - Computer Vision Toolbox recommended	✓	✓	✓
Image Processing Toolbox	- Requires MATLAB - Signal Processing Toolbox recommended - Statistics and Machine Learning Toolbox recommended - Computer Vision Toolbox recommended - Wavelet Toolbox recommended - Image Acquisition Toolbox recommended - Mapping Toolbox recommended - Image processing on GPU requires Parallel Computing Toolbox. A list of support functions is available *on this page.* - Deep learning functionality requires Deep Learning Toolbox. Parallel Computing Toolbox is required for GPU support. Deep learning capabilities for image processing are described *on this page.*	✓	✓	✓
Instrument Control Toolbox	- Requires MATLAB - For VISA and GPIB support, availability and installation of third-party platform-specific GPIB and VISA libraries are required	✓	✓	✓
LTE HDL Toolbox	- Requires MATLAB - Requires Simulink - Requires Communications Toolbox - Requires Signal Processing Toolbox - Requires DSP System Toolbox - Requires Fixed-Point Designer - LTE Toolbox recommended - HDL Coder recommended - HDL Verifier recommended	✓	✓	✓
LTE Toolbox	- Requires MATLAB - Requires Signal Processing Toolbox - Requires DSP System Toolbox - Requires Communications Toolbox - Instrument Control Toolbox recommended - Parallel Computing Toolbox recommended - HDL Coder recommended - RF Blockset recommended	✓	✓	✓
Mapping Toolbox	- Requires MATLAB - Statistics and Machine Learning Toolbox recommended - Image Processing Toolbox recommended	✓	✓	✓
MATLAB	- **Prerequisite for all other products**	✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
MATLAB Coder	- Requires MATLAB - Simulink Coder recommended - Embedded Coder recommended - Requires Fixed-Point Designer for generating fixed-point code - Requires host platform C compiler. See list of supported host compilers. - Requires cross compiler for the target processor if the code will execute on a platform different from the host - For executing deep learning networks, *see additional system requirements*	✓	✓	✓
MATLAB Compiler	- Requires MATLAB	✓	✓	✓
MATLAB Compiler SDK	- Requires MATLAB - Requires MATLAB Compiler - Creating libraries and components that will be integrated with other programming languages requires a compiler for those languages.	✓	✓	✓
MATLAB Parallel Server	- Requires access to a client session of MATLAB and Parallel Computing Toolbox ; MATLAB Parallel Server is installed on cluster computers. - See *additional system requirements.*	✓	✓	✓
MATLAB Production Server	- Does not require MATLAB or Simulink - See additional system requirements.	✓	✓	✓
MATLAB Report Generator	- Requires MATLAB	✓	✓	✓
Mixed-Signal Blockset	- Requires MATLAB - Requires Simulink - Requires DSP System Toolbox - Requires Signal Processing Toolbox	✓	✓	✓
Model Predictive Control Toolbox	- Requires MATLAB - Requires Control System Toolbox - Requires Simulink for using toolbox blocks - Simulink Control Design recommended - Optimization Toolbox recommended for nonlinear MPC	✓	✓	✓
Model-Based Calibration Toolbox	- Requires MATLAB - Requires Simulink - Requires Optimization Toolbox - Requires Statistics and Machine Learning Toolbox - Requires Symbolic Math Toolbox - Deep Learning Toolbox recommended - Parallel Computing Toolbox recommended - Global Optimization Toolbox recommended	✓		

OPC Toolbox	- Requires MATLAB	✓		
Optimization Toolbox	- Requires MATLAB - Parallel Computing Toolbox recommended	✓	✓	✓

Parallel Computing Toolbox	- Requires MATLAB
	- General resource requirements for parallel computing:
	  - Maximum of 1 MATLAB worker per physical CPU core is recommended.
	  - Minimum of 2GB RAM per MATLAB worker is recommended. If you are using Simulink, 4GB RAM per worker is recommended.
	- Requirements for supporting the local scheduler:
	  - Minimum of 5 GB of disk space is recommended to accommodate temporary data directories.
	- Requirements for GPU Computing:
	  - CUDA-enabled NVIDIA GPUs with compute capability 3.0 or higher. For releases 17b and earlier, compute capability 2.0 is sufficient for all features except for use of deep learning. (*GPU Support by Release Is my GPU supported?*)
	  - Latest graphics driver (*Get the latest driver.*)
	- Requirements for scaling across multiple computers in a cluster or cloud:
	  - MATLAB Parallel Server extends the constructs of parallel computing to clusters and clouds
		✓	✓	✓

Partial Differential Equation Toolbox	- Requires MATLAB	✓	✓	✓
Phased Array System Toolbox	- Requires MATLAB - Requires DSP System Toolbox - Requires Signal Processing Toolbox - Simulink recommended - MATLAB Coder recommended - Simulink Coder recommended	✓	✓	✓
Polyspace Bug Finder	- Polyspace Code Prover recommended - Does not require MATLAB or Simulink	✓	✓	✓
Polyspace Client for Ada	- Polyspace Server for Ada required - Does not require MATLAB or Simulink	✓		✓
Polyspace Code Prover	- Requires Polyspace Bug Finder - Does not require MATLAB or Simulink	✓	✓	✓
Polyspace Server for Ada	- Polyspace Client for Ada recommended - Does not require MATLAB or Simulink	✓		✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Powertrain Blockset	- Requires MATLAB - Requires Simulink - Stateflow recommended - Simscape recommended - Model-Based Calibration Toolbox recommended	✓	✓	✓
Predictive Maintenance Toolbox	- Requires MATLAB - Requires Signal Processing Toolbox - Requires Statistics and Machine Learning Toolbox - Requires System Identification Toolbox - Text Analytics Toolbox recommended - Simulink recommended - Deep Learning Toolbox recommended	✓	✓	✓
Reinforcement Learning Toolbox	- Requires MATLAB - Requires Deep Learning Toolbox - Requires Simulink for using toolbox blocks - Parallel Computing Toolbox recommended and is required for GPU support and parallelizing simulations - Control System Toolbox recommended	✓	✓	✓
RF Blockset	- Requires MATLAB - Requires Simulink - Requires RF Toolbox - Communications Toolbox recommended - DSP System Toolbox recommended - Signal Processing Toolbox recommended	✓	✓	✓
RF Toolbox	- Requires MATLAB - Communications Toolbox recommended	✓	✓	✓
Risk Management Toolbox	- Requires MATLAB - Requires Financial Toolbox - Requires Statistics and Machine Learning Toolbox - Requires Optimization Toolbox - Financial Instruments Toolbox recommended - Econometrics Toolbox recommended - Datafeed Toolbox recommended - Global Optimization Toolbox recommended - Database Toolbox recommended	✓	✓	✓
Robotics System Toolbox	- Requires MATLAB - Simulink recommended - MATLAB Coder recommended - Simulink Coder recommended - Image Processing Toolbox recommended - Computer Vision Toolbox recommended - Simscape Multibody recommended - Stateflow recommended	✓	✓	✓
Robust Control Toolbox	- Requires MATLAB - Requires Control System Toolbox - Requires Simulink for using toolbox blocks - Simulink Control Design recommended	✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Sensor Fusion and Tracking Toolbox	- Requires MATLAB - MATLAB Coder recommended - Phased Array System Toolbox recommended - DSP System Toolbox recommended - Computer Vision Toolbox recommended	✓	✓	✓
SerDes Toolbox	- Requires MATLAB - Requires DSP System Toolbox - Requires Signal Processing Toolbox	✓	✓	✓
Signal Processing Toolbox	- Requires MATLAB - DSP System Toolbox recommended	✓	✓	✓
SimBiology	- Requires MATLAB - Global Optimization Toolbox recommended - Optimization Toolbox recommended - Parallel Computing Toolbox recommended - Statistics and Machine Learning Toolbox recommended	✓	✓	✓
SimEvents	- Requires MATLAB - Requires Simulink - Stateflow recommended - Statistics and Machine Learning Toolbox recommended	✓	✓	✓
Simscape	- Requires MATLAB - Requires Simulink	✓	✓	✓
Simscape Driveline	- Requires MATLAB - Requires Simulink - Requires Simscape	✓	✓	✓
Simscape Electrical	- Requires MATLAB - Requires Simulink - Requires Simscape - Simscape Multibody recommended	✓	✓	✓
Simscape Fluids	- Requires MATLAB - Requires Simulink - Requires Simscape	✓	✓	✓
Simscape Multibody	- Requires MATLAB - Requires Simulink - Requires Simscape	✓	✓	✓
Simulink	- Requires MATLAB - Requires Fixed-Point Designer for simulating fixed-point data types - Some features require the use of a C Compiler.	✓	✓	✓
Simulink 3D Animation	- Requires MATLAB - Simulink recommended - Simulink is required if using the blockset portion of the product	✓	✓	✓
Simulink Check	- Requires MATLAB - Requires Simulink	✓	✓	✓

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Simulink Code Inspector	- Requires MATLAB - Requires Simulink - Requires host platform C compiler supported by MATLAB (for `loadlibrary` usage). See list of supported host compilers.	✓		✓
Simulink Coder	- Requires MATLAB - Requires Simulink - Requires MATLAB Coder - Embedded Coder recommended - Simulink Real-Time recommended - Requires Fixed-Point Designer for generating fixed-point code - Requires host platform C compiler. See list of *supported host compilers.* - Requires cross-compiler for the target processor if the code will execute on a platform different from the host.	✓	✓	✓
Simulink Control Design	- Requires MATLAB - Requires Simulink - Requires Control System Toolbox - Simulink Design Optimization recommended	✓	✓	✓
Simulink Coverage	- Requires MATLAB - Requires Simulink - Simulink Test recommended - Simulink Design Verifier recommended - Embedded Coder recommended	✓	✓	✓
Simulink Design Optimization	- Requires MATLAB - Requires Simulink - Requires Optimization Toolbox - Global Optimization Toolbox recommended - Parallel Computing Toolbox recommended - Simulink Control Design recommended - Control System Toolbox recommended - Statistics and Machine Learning Toolbox recommended	✓	✓	✓
Simulink Design Verifier	- Requires MATLAB - Requires Simulink - Requires Simulink Check - Requires Simulink Coverage	✓	✓	✓
Simulink Desktop Real-Time	- Requires MATLAB - Requires Simulink - Simulink Coder recommended - MATLAB Coder recommended	✓	✓	
Simulink PLC Coder	- Requires MATLAB - Requires Simulink	✓		
Simulink Real-Time	- Requires MATLAB - Requires Simulink - Requires Simulink Coder - Requires MATLAB Coder - Stateflow recommended - Requires a compiler (See supported compiler versions.)	✓		

Product	System Requirements	Windows (64 bit)	Mac (64 bit)	Linux (64 bit)
Simulink Report Generator	- Requires MATLAB - Requires Simulink - Requires MATLAB Report Generator	✓	✓	✓
Simulink Requirements	- Requires MATLAB - Requires Simulink - Simulink Test recommended	✓	✓	✓
Simulink Test	- Requires MATLAB - Requires Simulink - Simulink Coverage required for measuring model or code coverage - Simulink Design Verifier required for adding missing coverage	✓	✓	✓
SoC Blockset	- Requires MATLAB - Requires Simulink - Requires Simulink Coder and Embedded Coder for generating embedded C code - Requires HDL Coder for generating HDL code	✓	✓	✓
Spreadsheet Link	- Requires MATLAB - Available on 32 bit Windows and 64 bit Windows only - Requires one of the following versions of Excel: Excel 2007 | Excel 2010 | Excel 2013 or later	✓		
Stateflow	- Requires MATLAB - Requires Simulink - Requires C compiler when used in non-Windows or 64 bit environments. See the list of supported compilers.	✓	✓	✓
Statistics and Machine Learning Toolbox	- Requires MATLAB	✓	✓	✓
Symbolic Math Toolbox	- Requires MATLAB	✓	✓	✓
System Composer	- Requires MATLAB - Requires Simulink	✓	✓	✓
System Identification Toolbox	- Requires MATLAB - Requires Simulink for using toolbox blocks - Signal Processing Toolbox recommended - Control System Toolbox recommended	✓	✓	✓
Text Analytics Toolbox	- Requires MATLAB - Requires Statistics and Machine Learning Toolbox - Parallel Computing Toolbox recommended - Deep Learning Toolbox recommended	✓	✓	✓

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Trading Toolbox	- Requires MATLAB
	- Financial Toolbox recommended
	- Financial Instruments Toolbox recommended
	- Econometrics Toolbox recommended
	- Datafeed Toolbox recommended
	- Optimization Toolbox recommended
	- Windows only support:
	  - X_TRADER®
	  - CQG®
	  - Bloomberg EMSX
	  - Interactive Brokers®
	  - Wind Data Feed Services
		✔	✔	✔

Vehicle Dynamics Blockset	- Requires MATLAB - Requires Simulink - Model-Based Calibration Toolbox recommended - Powertrain Blockset recommended - Stateflow recommended	✔	✔	✔
Vehicle Network Toolbox	- Requires MATLAB - Simulink recommended - On Linux® platform, support is limited to encoding and decoding CAN and CAN FD messages using MathWorks virtual channels. Hardware support on Linux is only available for PEAK-System CAN interface hardware.	✔		✔
Vision HDL Toolbox	- Requires MATLAB - HDL Coder recommended - Image Processing Toolbox recommended - Fixed-Point Designer recommended - Computer Vision Toolbox recommended - HDL Verifier recommended - Simulink recommended	✔		✔
Wavelet Toolbox	- Requires MATLAB - Signal Processing Toolbox recommended - Image Processing Toolbox recommended - Statistics and Machine Learning Toolbox recommended	✔	✔	✔
WLAN Toolbox	- Requires MATLAB - Requires Signal Processing Toolbox - Requires DSP System Toolbox - Requires Communications Toolbox - Instrument Control Toolbox recommended - Parallel Computing Toolbox recommended - LTE Toolbox recommended - HDL Coder recommended - RF Blockset recommended - MATLAB Coder recommended	✔	✔	✔