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System Requirements & Platform Availability by Product for R2020a

View general *system requirements*.

Product	System Requirements	Platform Notes
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 - Simulink recommended - Sensor Fusion and Tracking Toolbox recommended - The `vehicleDetectorFasterRCNN` class requires Deep Learning Toolbox. - Parallel Computing Toolbox is required for functions that support GPU computing: `vehicleDetectorFasterRCNN`, `fastRCNNObjectDetectorMonoCamera`, and `fasterRCNNObjectDetectorMonoCamera`.	Unreal Engine-based simulation and visualization only runs in Windows.

Product	System Requirements	Platform Notes
AUTOSAR Blockset	- Requires MATLAB - Requires Simulink - Requires Embedded Coder to generate AUTOSAR code and export ARXML files - Requires System Composer to create AUTOSAR Architecture models	
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 and required to use block library - Image Acquisition Toolbox recommended - MATLAB Coder recommended - 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	

Product	System Requirements	Platform Notes
Data Acquisition Toolbox	- Requires MATLAB - Requires a supported data acquisition hardware device and its associated driver software - Signal Processing Toolbox recommended	Windows only

Database Toolbox	- Requires MATLAB
	- Your system must have access to an installed database.
	- Database Toolbox supports exchanging data from the following NoSQL databases:
	  - Cassandra
	  - MongoDB
	  - Neo4j
	
	- 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	Platform Notes
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 all tool qualifications, except Polyspace products) - Polyspace kit support is not available on Mac.	
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	Platform Notes
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 - Requires Embedded Coder for bidirectional traceability and SIL/PIL - 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*	Windows and Linux only
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 generating SystemVerilog DPI components - Simulink Coder required for generating SystemVerilog DPI or UVM components and transaction-level models (TLMs) from Simulink - Fixed-Point Designer required for cosimulation and FPGA-in-the-loop	Windows and Linux only

Product	System Requirements	Platform Notes
IEC Certification Kit	- Requires MATLAB - Requires Simulink Report Generator (to execute tests for tool qualifications except Embedded Coder and Polyspace products) - Polyspace kit support is not available on Mac.	
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 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**	
MATLAB Coder	- Requires MATLAB - Requires Embedded Coder for processor-specific optimizations, bidirectional traceability, SIL/PIL, and advanced customizations - Requires Fixed-Point Designer for generating fixed-point code - Simulink Coder recommended - 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*	

Product	System Requirements	Platform Notes
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 Online Server	- Usage of MATLAB Online checks out a MATLAB license. - See *additional system requirements*	Linux Only
MATLAB Parallel Server		
MATLAB Production Server	- Does not require MATLAB or Simulink	
MATLAB Report Generator	- Requires MATLAB	
MATLAB Web App Server	- Does not require MATLAB or Simulink	
Mixed-Signal Blockset	- Requires MATLAB - Requires Simulink - Requires DSP System Toolbox - Requires Signal Processing Toolbox - Control System Toolbox recommended	
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	Windows only
Motor Control Blockset	- Requires MATLAB - Requires Simulink - Requires Simulink Control Design for Field Oriented Control Autotuner block - Embedded Coder Recommended - Fixed-Point Designer Recommended - Simscape Electrical Recommended	Code generation for the examples that rely on Embedded Coder Support Package for Texas Instruments C2000 Processors is available for Windows only.

Product	System Requirements	Platform Notes
Navigation Toolbox	- Requires MATLAB - Requires ROS Toolbox for SLAM Map Builder App - Robotics System Toolbox recommended - MATLAB Coder recommended - Simulink recommended - Computer Vision Toolbox recommended - Sensor Fusion and Tracking Toolbox recommended	
OPC Toolbox	- Requires MATLAB	Windows only
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	- Does not require MATLAB or Simulink - Polyspace Code Prover recommended	
Polyspace Bug Finder Access	- Does not require MATLAB or Simulink - *See additional system requirements*	Windows and Linux only

Product	System Requirements	Platform Notes
Polyspace Bug Finder Server	- Does not require MATLAB or Simulink	
Polyspace Client for Ada	- Polyspace Server for Ada required - Does not require MATLAB or Simulink	Windows and Linux only
Polyspace Code Prover	- Does not require MATLAB or Simulink - Requires Polyspace Bug Finder - A minimum of 4 physical cores with 4 GB per core is recommended	
Polyspace Code Prover Access	- Does not require MATLAB or Simulink - Requires Polyspace Bug Finder Access - *See additional system requirements*	Windows and Linux only
Polyspace Code Prover Server	- Does not require MATLAB or Simulink - Requires Polyspace Bug Finder Server - A minimum of 4 physical cores with 4 GB per core is recommended	
Polyspace Server for Ada	- Polyspace Client for Ada recommended - Does not require MATLAB or Simulink	Windows and Linux only
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 - Antenna Toolbox recommended - Communications Toolbox recommended - DSP System Toolbox recommended	
RF Toolbox	- Requires MATLAB - Communications Toolbox recommended - RF Blockset recommended	

Product	System Requirements	Platform Notes
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 - Navigation Toolbox recommended - ROS Toolbox recommended - MATLAB Coder recommended - Simulink Coder 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	
ROS Toolbox	- Requires MATLAB - Simulink recommended - Robotics System Toolbox recommended - Navigation Toolbox recommended - Simulink Coder recommended - Stateflow recommended	
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 - Simulink required for IBIS-AMI model generation - RF Toolbox recommended	
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 - sbionca requires Statistics and Machine Learning Toolbox	

Product	System Requirements	Platform Notes
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	
Simulink Code Inspector	- Requires MATLAB - Requires Simulink - Requires host platform C compiler supported by MATLAB (for `loadlibrary` usage).	Windows and Linux only
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. - Requires cross-compiler for the target processor if the code will execute on a platform different from the host.	
Simulink Compiler	- Requires MATLAB - Requires Simulink - Requires MATLAB Compiler	

Product	System Requirements	Platform Notes
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 Test recommended	
Simulink Desktop Real-Time	- Requires MATLAB - Requires Simulink - Simulink Coder recommended - MATLAB Coder recommended	Windows and Mac only
Simulink PLC Coder	- Requires MATLAB - Requires Simulink	Windows only
Simulink Real-Time	- Requires MATLAB - Requires Simulink - Requires Simulink Coder - Requires MATLAB Coder - Stateflow recommended - Requires a compiler (See supported compiler versions.)	Windows only
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	

Product	System Requirements	Platform Notes
SoC Blockset	- Requires MATLAB - Requires Simulink - Requires Simulink Coder and Embedded Coder for generating embedded C code - Requires HDL Coder for generating HDL code	Windows and Linux only
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	Windows only
Stateflow	- Requires MATLAB - Simulink recommended - 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	

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	Unreal Engine visualization only runs in Windows.

Product	System Requirements	Platform Notes
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.	Windows and Linux only
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	Windows and Linux only
Wavelet Toolbox	- Requires MATLAB - Signal Processing Toolbox recommended - Image Processing Toolbox recommended - Statistics and Machine Learning Toolbox recommended	
Wireless HDL Toolbox	- Requires MATLAB - Requires Simulink - Requires Communications Toolbox - Requires Signal Processing Toolbox - Requires DSP System Toolbox - Requires Fixed-Point Designer - 5G Toolbox recommended - LTE Toolbox recommended - HDL Coder recommended - HDL Verifier 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	