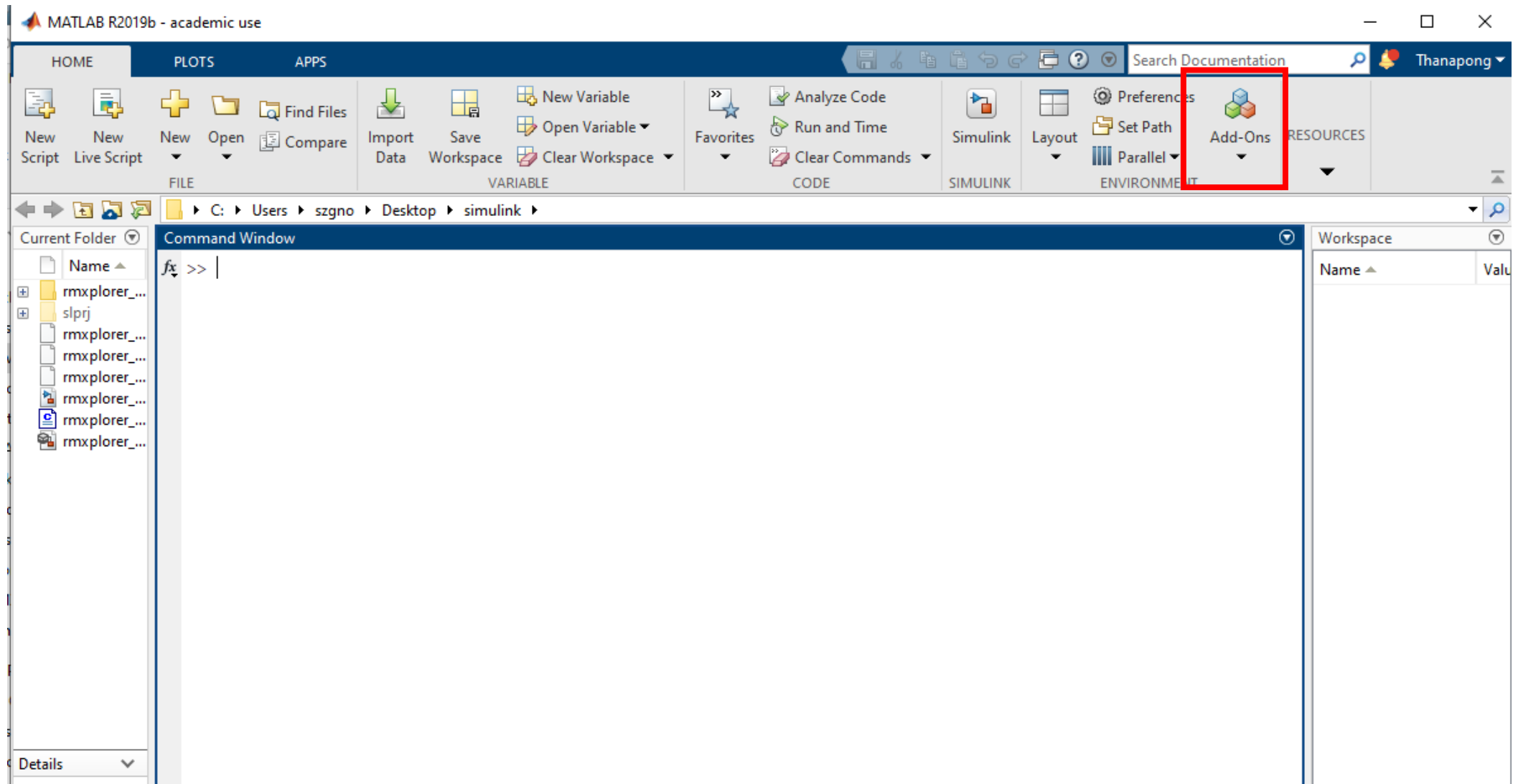


# Download Nucleo Support Package



# Download Nucleo Support Package

Add-On Explorer

Contribute | Manage Add-Ons

R2020a now available

nucleo

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- Electrical Systems
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- Signal Management
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- Sensor Decoders

**Motor Control Blockset**

**Control System Toolbox**

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Did you mean: **nuclei** (95 results)

1 RESULT

Installed




**Simulink Coder Support Package for STMicroelectronics Nucleo Boards** by MathWorks

Embedded Coder Team **STAFF**

Generate and deploy code for STMicroelectronics Nucleo boards

Simulink® Coder™ Support Package for STMicroelectronics® Nucleo Boards enables you to create Simulink® models and automatically generate and deploy code on supported Nucleo boards. The support

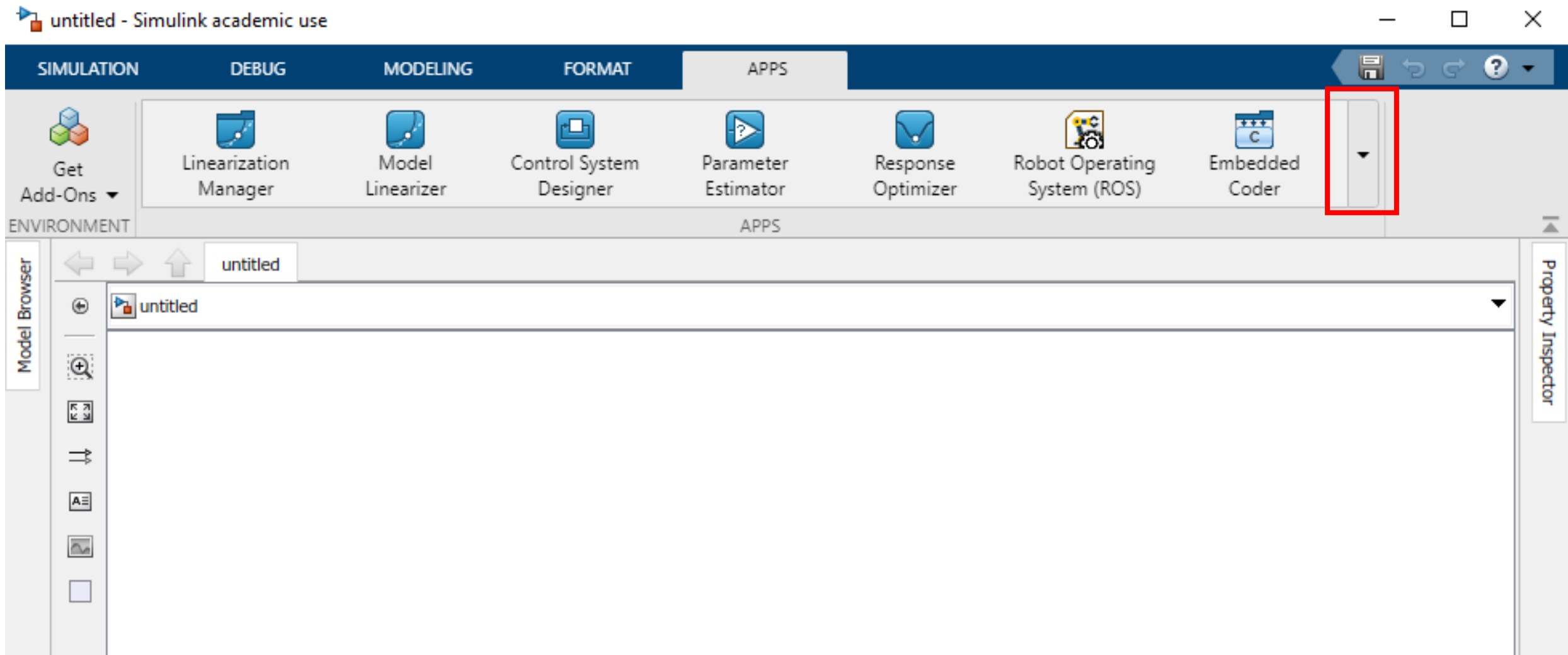
Hardware Support



52 Downloads ⓘ

Updated 18 Mar 2020

# Selecting the correct hardware



Get Add-Ons ▾

ENVIRONMENT

Model Browser

← →

+

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→

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Embedded Coder

Simulink Coder

AUTOSAR Component ...

HDL Coder

PLC Coder

Fixed-Point Tool

Single Precision Converter

Lookup Table Optimizer

REAL-TIME SIMULATION AND TESTING

Simulink Real-Time

Desktop Real-Time

MODEL VERIFICATION, VALIDATION, AND TEST

Requirements Viewer

Requirements Manager

Model Advisor

Clone Detector

Model Transformer

Metrics Dashboard

Model Slicer

Coverage Analyzer

Design Verifier

Simulink Test

CODE VERIFICATION, VALIDATION, AND TEST

SIL/PIL Manager

Code Inspector

FIL Wizard

HDL Cosimulator

SETUP TO RUN ON HARDWARE

Run on Custom Hardware

System on Chip (SoC)

Run on Hardware Board

Get Hardware Support Packages

SIMULATION GRAPHICS AND REPORTING

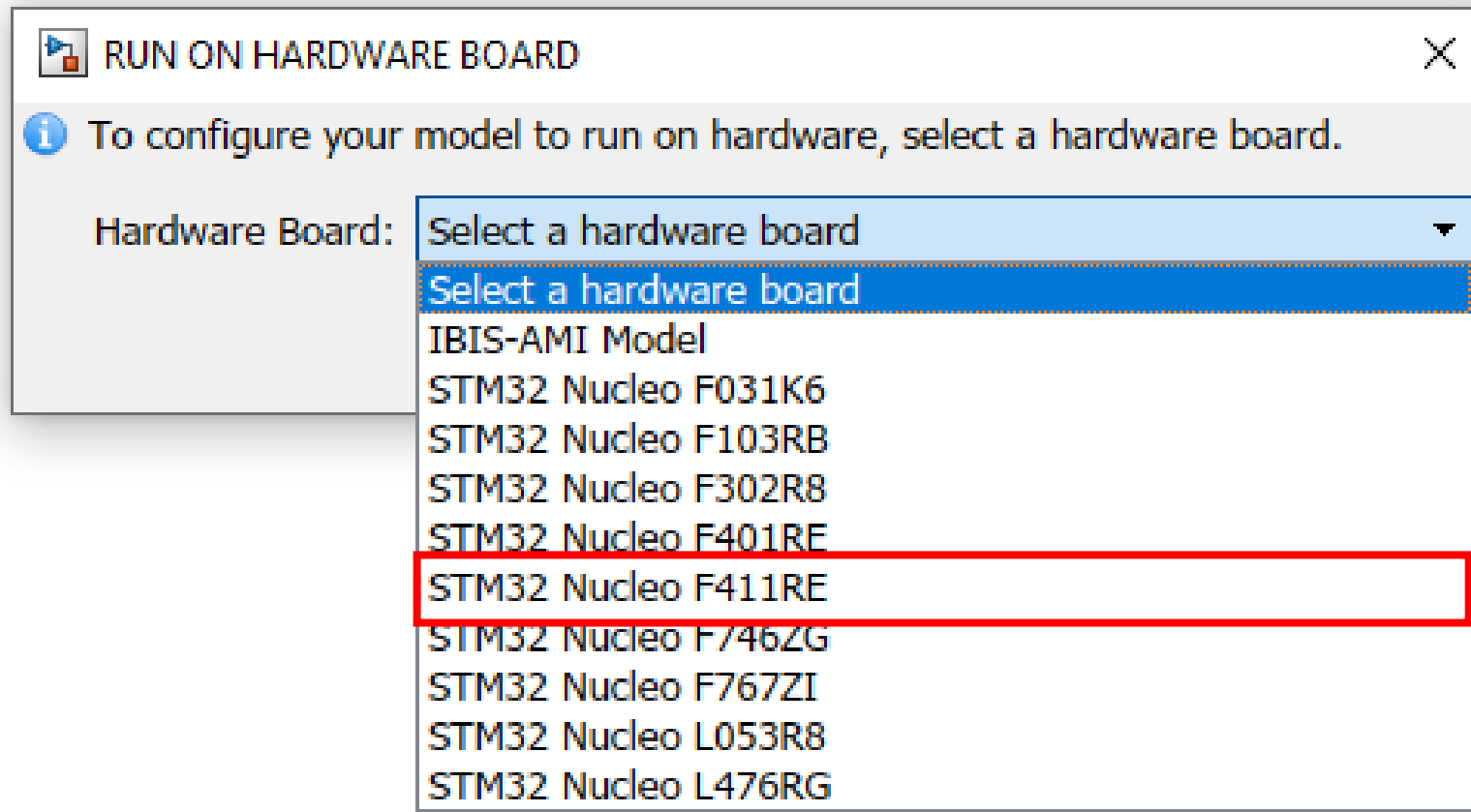
3D Animation

3D Model














Report

Property Inspector

# Selecting the correct hardware

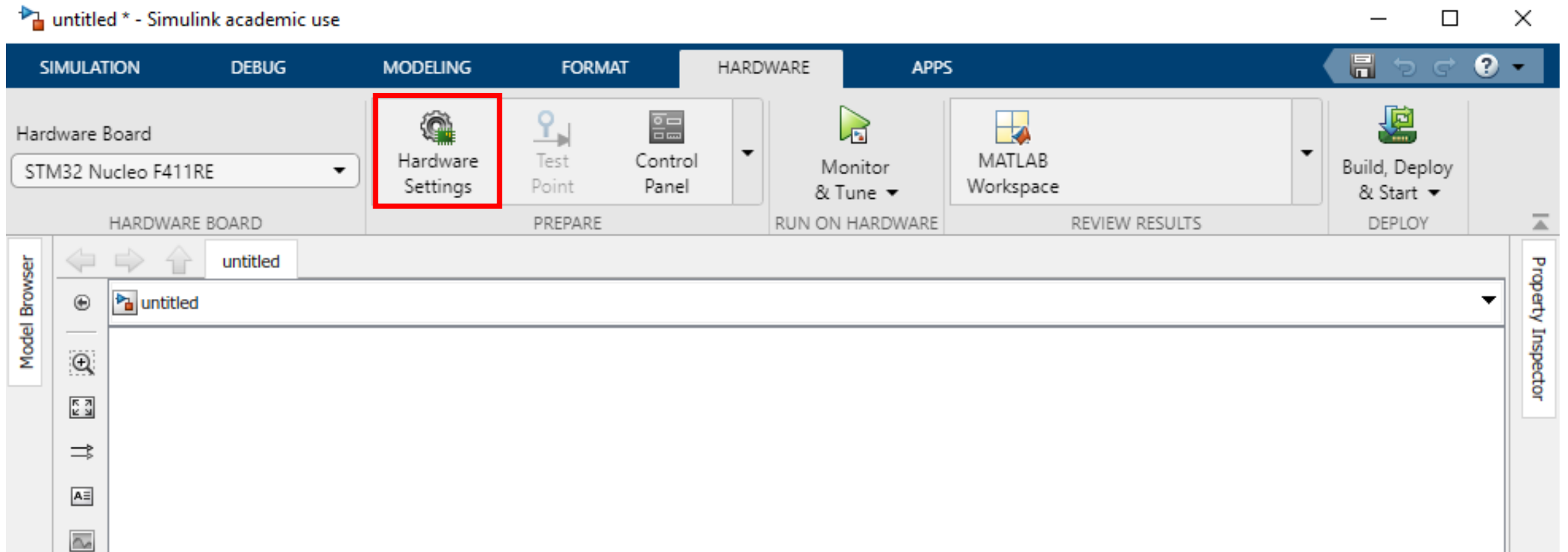


# Selecting the correct hardware

- >  Keyboards
- >  Mice and other pointing devices
- >  Monitors
- >  Network adapters
- >  Portable Devices
- ▼  Ports (COM & LPT)
  -  STMicroelectronics STLink Virtual COM Port (COM3)
- >  Print queues
- >  Processors
- >  Security devices
- >  Sensors
- >  Software components
- >  Software devices

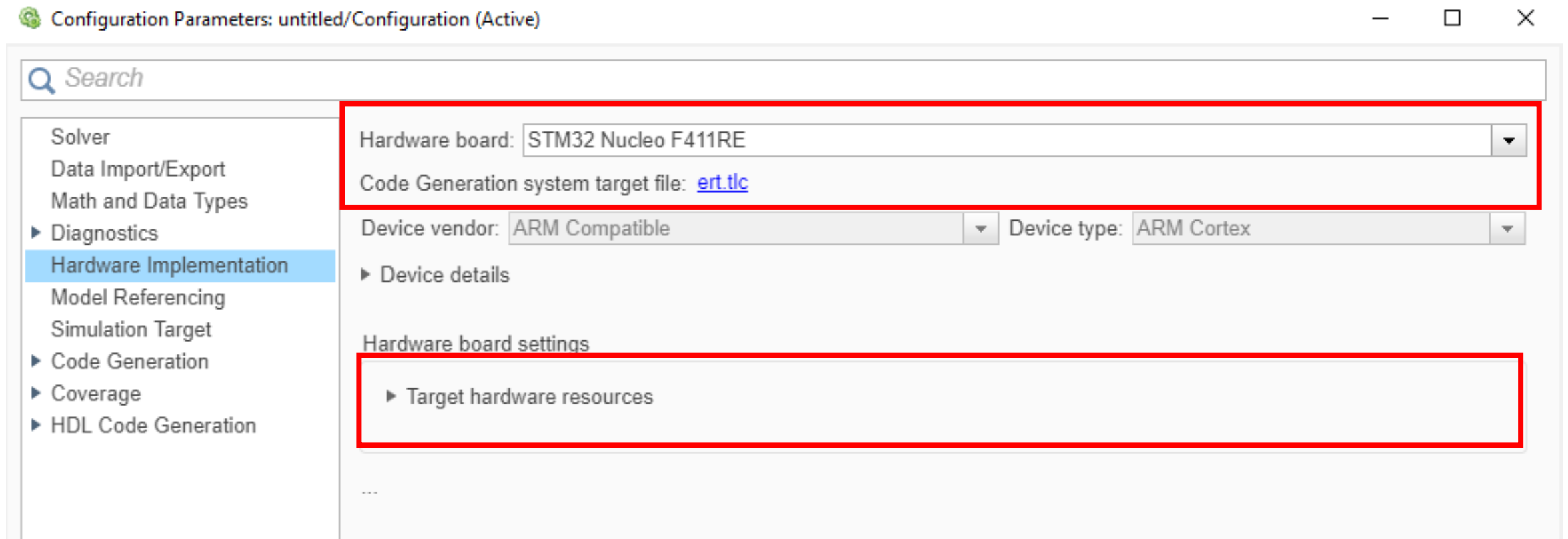
In Device Manager

# Selecting the correct hardware





# Selecting the correct hardware



# Selecting the correct hardware

Hardware board settings

▼ Target hardware resources

Groups

Build options ☒ Enable Simulink IO

Simulink IO Serial port:

Clocking

I2C0(default)

I2C2

I2C3

SPI0(default)

SPI2

SPI3

SPI5

SCI1

SCI0(default)

SCI6

PIL

External mode

# Selecting the correct hardware

Hardware board settings

▼ Target hardware resources

Groups

- Build options
- Simulink IO
- Clocking
- I2C0(default)
- I2C2
- I2C3
- SPI0(default)
- SPI2
- SPI3
- SPI5
- SCI1
- SCI0(default)
- SCI6
- PIL
- External mode

Communication interface: serial

Serial port: COM3

Logging buffer size (in bytes): 2000

☒ Verbose

# Selecting the correct hardware

Configuration Parameters: rmxplorer\_example1/Configuration (Active)

Search

- Solver
- Data Import/Export
- Math and Data Types
- Diagnostics
- Hardware Implementation
- Model Referencing
- Simulation Target
- ▼ Code Generation
  - Optimization
  - Report
  - Comments
  - Identifiers
  - Custom Code
  - Interface**
  - Code Style
  - Verification
  - Templates
  - Code Placement
  - Data Type Replacement
- Coverage
- Simscape
- Simscape Multibody 1G
- Simscape Multibody

### Software environment

Code replacement library: None

Shared code placement: Auto

Support: ☒ floating-point numbers ☒ non-finite numbers ☒ complex numbers  
☒ absolute time ☒ continuous time ☐ variable-size signals

### Code interface

Code interface packaging: Nonreusable function

☐ Remove error status field in real-time model data structure

### Data exchange interface

Array layout: Column-major

External functions compatibility for row-major code generation: error

Generate C API for:

☐ signals ☐ parameters ☐ states ☐ root-level I/O

☐ ASAP2 interface

# Running Code (External Mode)

