

# Library for Cadence AWR Design Environment™ (Microwave Office™ )

User Manual



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# 1. About this manual

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- This manual is intended for users of the design kit (the “library”) that provides Murata Manufacturing Co., Ltd.’s (Murata) MLCC and RF-inductors’ electrical models, specifically for use with Cadence's AWR Design Environment Microwave Office (MWO). This manual explains how to install the library and how to use it in the Schematic window of MWO.
  - The procedures in this manual allow you to perform the necessary operations, however, please be aware that some contents may make differences depending on your environment.

## 2. Operation environment

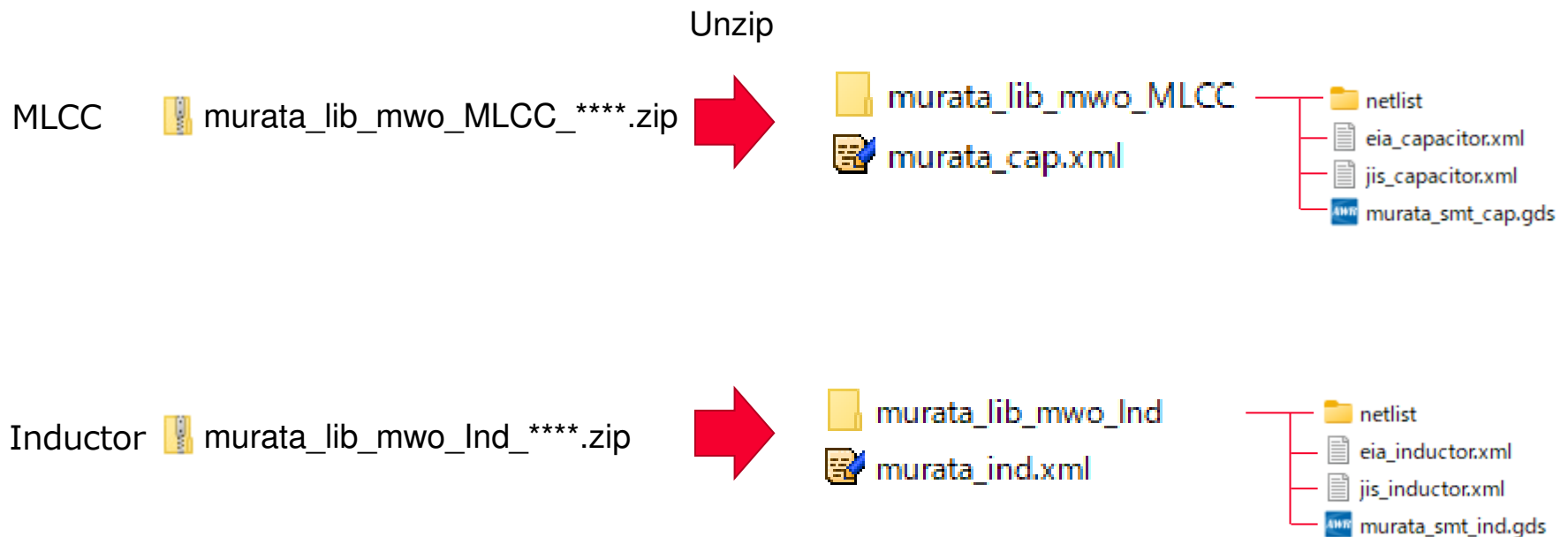
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- This manual is based on the following environment. Please also refer to the manuals for the relevant equipment and the software according to your environment.
  - OS: Windows 11/10
    - Administrator privileges are required to install the library.
  - MWO version 12.0 or later (only for 64 bit version)

### 3. How to install (1)

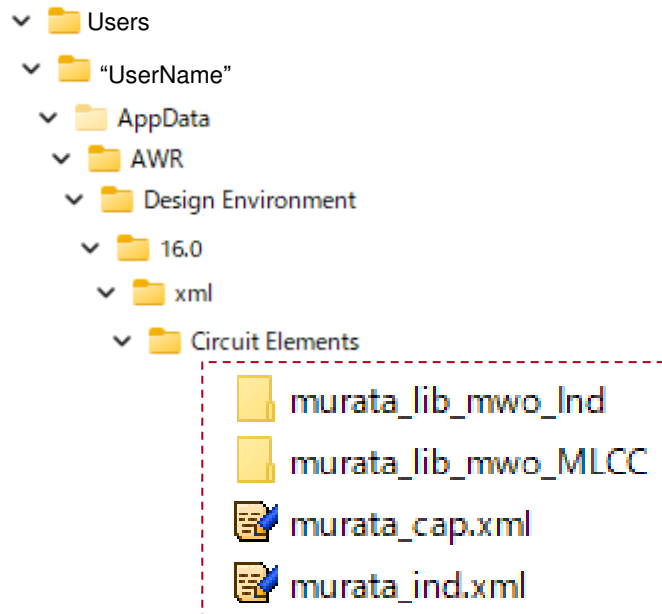
Unzip the downloaded file (murata\_lib\_mwo\_MLCC\_\*\*\*\*.zip、murata\_lib\_mwo\_Ind\_\*\*\*\*.zip) .  
And check the contents.



### 3. How to install (2)

Move the unzipped folders and files(.xml) into the following directory.

C:\Users\"UserName"\AppData\Local\AWR\Design Environment\16.0\xml\Circuit Elements\



- If there are folders and files of the previous version, delete them before moving the new ones.
- **AppData is a hidden folder.**  
Please check the "Show hidden items" option in the Windows Explorer's settings.

## 4. How to use

- Open the murata\_cap or murata\_ind category in the Elements browser.
- There are two types of part number: EIA and JIS, and you can use either one.
- You can place the elements on the Schematic by dragging and dropping.

**murata\_MLCC**

**murata\_Ind (RF-inductor)**

**Drag & Drop**

The screenshot displays the Murata EDA software interface. On the left, the 'Elements' browser shows a tree structure with categories like 'AWR web site', 'CMC Models', and 'EIA'. Under 'EIA', there are sub-categories such as '200V\_and\_over', 'Acoustic\_noise\_reduction', 'Audio\_signal\_low\_distortion', 'General\_Purpose', 'High-Q', 'Size(400M(01005))', 'Size(600M(0201))', 'Size(1005M(0402))', 'High\_Frequency', 'Implantable\_medical\_device', 'Infotainment\_for\_Automotive\_JAEC-Q100', 'Low\_ESL', 'Low\_ESR\_for\_Powertrain', 'Metal\_Terminal\_General', 'Metal\_Terminal', 'Powertrain', 'Resin\_external\_electrode', 'Resin\_external\_electrode\_for\_Powertrain', 'Safety\_Standard\_Certified', 'Ultra-small', 'Water\_repellent', and 'Water\_repellent(ISO)'. The 'murata\_cap' category is highlighted in red. Below the 'Elements' browser, a table lists models and their descriptions. The 'GJM0225C1C100GB01' model is highlighted in red. On the right, the 'Schematic 1' window shows a circuit diagram with two ports (PORT P=1 and PORT P=2) and a component labeled 'SUBCKT (D=5)'. A red arrow points from the 'murata\_cap' category in the Elements browser to the component in the Schematic 1 window. Below the Schematic 1 window, the 'Graph 1' window shows a plot of impedance (Z) versus frequency (MHz). The plot shows a resonance curve with a minimum impedance at approximately 100 MHz. The 'Status Window' at the bottom right shows simulation details, including the model 'LIN-GJM0225C1C100GB01.SFDGC' and simulation parameters like '6:30:22 PM Begin Simulate' and '6:30:22 PM Freq - 136 points'.

Model	Description
GJM0225C1C100GB01	10pF Temp:CoG(-50to125deg), 16V, 100MHz-50G

## 5. Contact

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- For inquiries concerning this library, please go to the following inquiry form on our website.
  - <https://WWW.murata.com/ja-jp/contactform>

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