

Search a component in the Altium CERN libraries

Case N° 1: We know the name of the library in which the component should be.

Method 1 : Simple search with Part Number

Example: Looking for a 100nF SMD capacitor.

The screenshot shows the 'Libraries' dialog box in Altium Designer. The 'Search' tab is active. The 'Libraries' list shows 'Capacitors.Dblib - Capacitors SMD' selected. The 'Search' field contains '100nf'. The 'Results' table lists the following components:

Part Number	Library Ref
CC0201_100NF_6.3V_10%_X5R	Capacitor - non polarized
CC0402_100NF_16V_10%_X7R	Capacitor - non polarized
CC0603_100NF_50V_10%_X7R	Capacitor - non polarized
CC0805_100NF_50V_10%_X7R	Capacitor - non polarized
CC1206_100NF_50V_10%_X7R	Capacitor - non polarized

Below the table, the text '322 components' is displayed. The 'Model Name' field shows 'CAPC0603X33N'. The 'Model Type' is 'Footprint'. The 'Source' is 'Capacitors SMD.PcbLib'. The 'SCH Library' is also shown.

Callout 1: Select the table « Capacitor SMD » of the « Capacitor.Dblib » library and enter the text: 100nF .

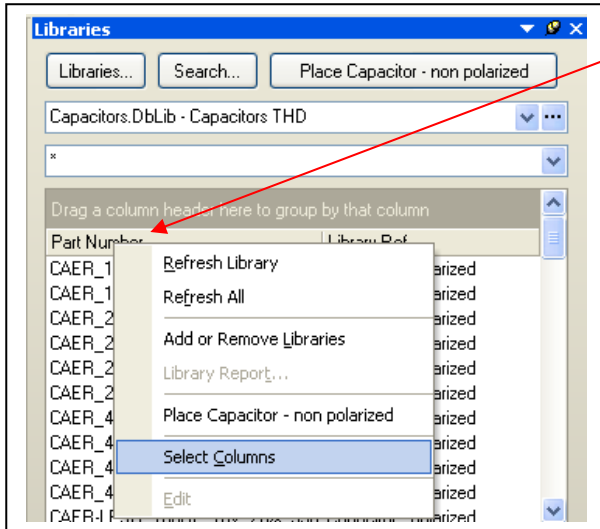
Callout 2: Altium automatically filter all 100nF capacitors contained in the library.

Instead of « 100nF », Value, we could enter another keyword such as type of case (0805), voltage, dielectric (X7R) or all characteristics. The order and syntax should be the same than the part number.

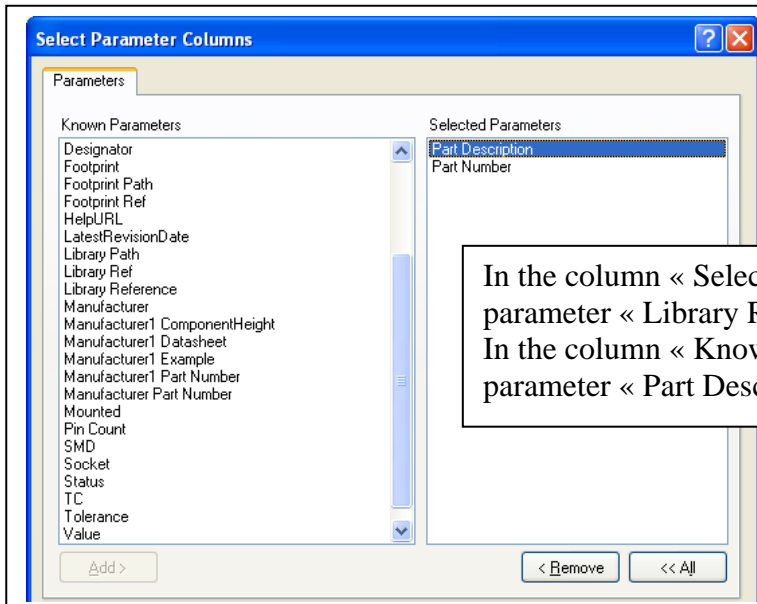
To understand the naming of components in Altium libraries at CERN, see the file "Library PartNumber - Denomination"

Method 2 : Search criteria that is not contained in the le part Number

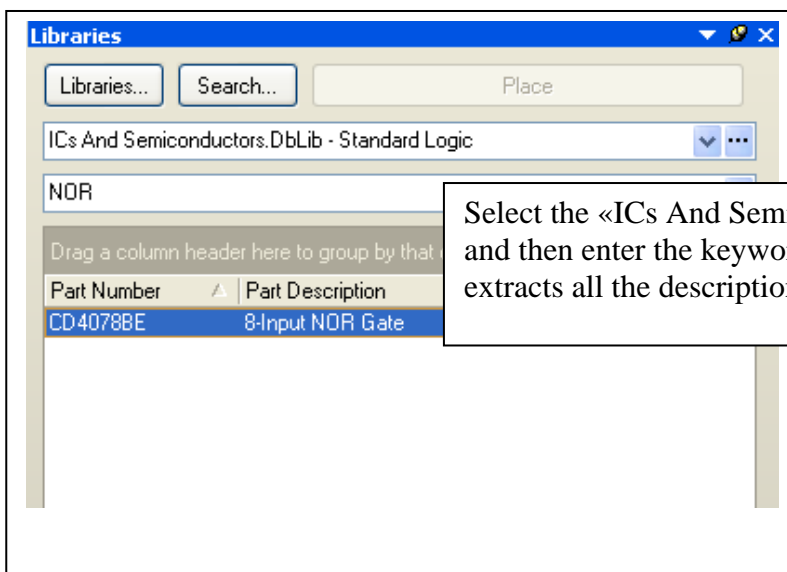
Exemple : Looking for a NOR gate



In the Librairies panel, right click on the text « Part Number » of the column «Part Number» and select « Select Columns » in the popup menu.



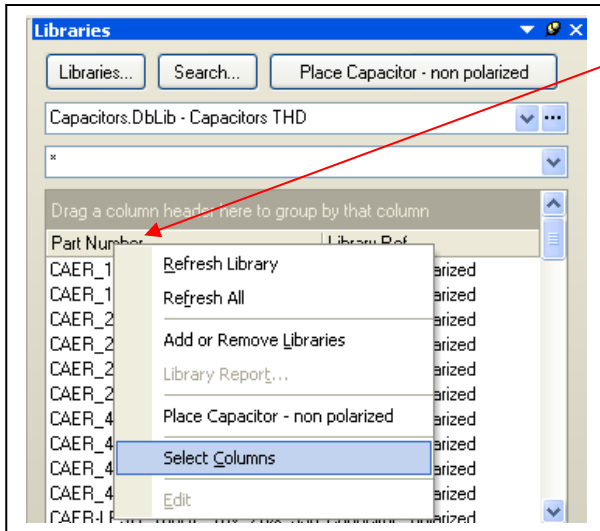
In the column « Selected Parameters » select the parameter « Library Ref » and click « <Remove ». In the column « Known Parameters » select parameter « Part Description » and click « Add>».



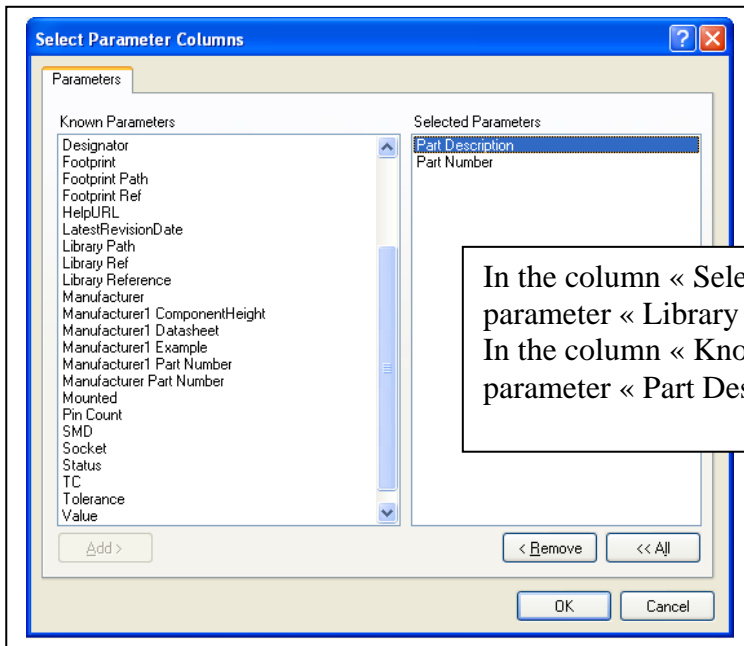
Select the «ICs And Semiconductors.DbLib – Standard Logic» library and then enter the keyword « NOR or AND or BUFFER, etc.». Altium extracts all the descriptions which contain this word.

Case N° 2: We don't know in which library, the component should be .

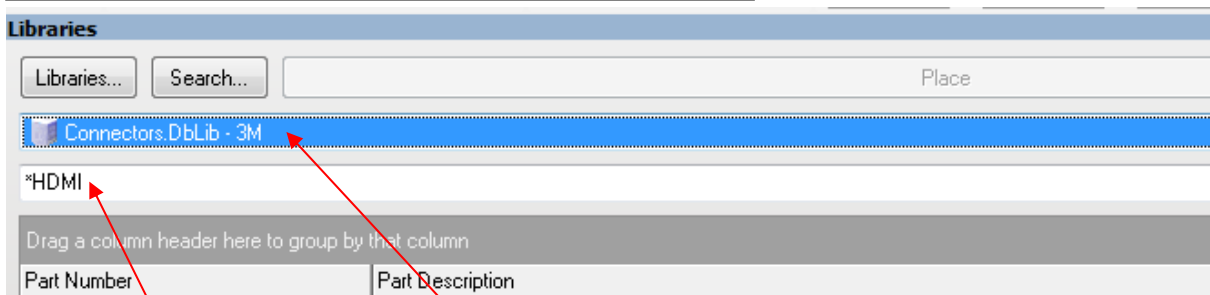
Example: Looking for HDMI connector.



In the Libraries panel, right click on the text « Part Number » of the column «Part Number» and select « Select Columns » in the popup menu.



In the column « Selected Parameters » select the parameter « Library Ref » and click « <Remove ». In the column « Known Parameters » select parameter « Part Description » and click « Add>».



Enter the keyword « HDMI »

Select the first table of the Connectors Library and with the down key, scan all the tables until Altium detects the keyword in one of them.

Libraries

Libraries... Search... Place Connector HDMI 19 Male + 1 Shield


Connectors.DbLib - MOLEX

*HDMI

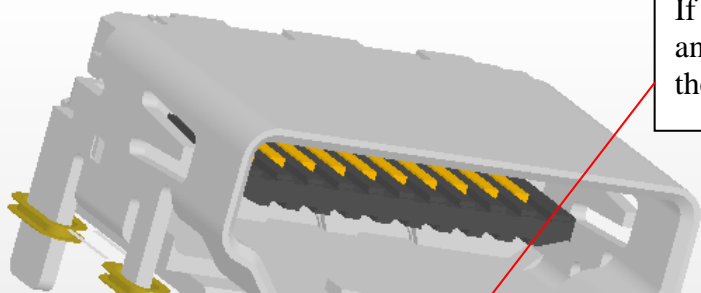
Drag a column header here to group by that column

Part Number	Part Description	Manufacturer
MOLEX_46765-1001	0.4mm Pitch, Surface Mount Right Angle 19 Contacts Micro HDMI Type-D Receptacle With Kaptr MOLEX	MOLEX
MOLEX_500254-1927	0.5mm Pitch, Surface Mount Right Angle 19 Contacts HDMI Receptacle With Thru Hole Mounting MOLEX	MOLEX

2 components



Model Name: MOLEX_500254-1927 Model Type: Footprint



Altium finds two HDMI connectors in the MOLEX table. You can then select one or continue to review other tables.

If we continue, you will find another HDMI connector in the SAMTEC table.

Libraries

Libraries... Search... Place Connector HDMI 19 Male + 1 Shield

Connectors.DbLib - SAMTEC

*HDMI

Drag a column header here to group by that column

Part Number	Part Description	Manufacturer
SAMTEC_MHDMR-19-02-H-TH-L-TR	19 Contacts, Pitch 0.4mm, Right Angle, Mini HDMI High Speed I/O Receptacle	SAMTEC

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