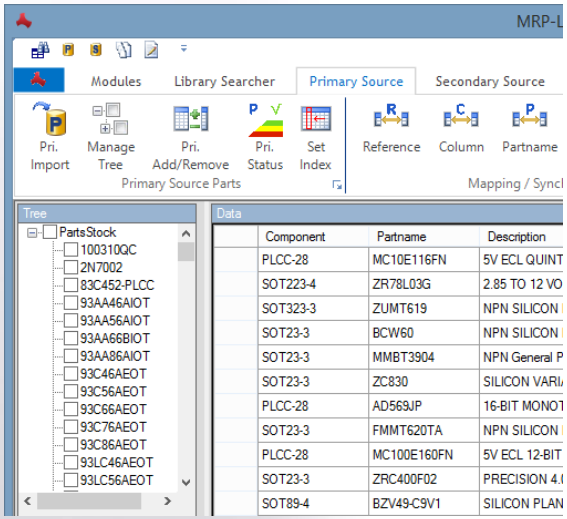
CSK - CAD Systeme Kluwetasch

MRP-Link Design flow

Parts Stock



BOM Management

CADSTAR

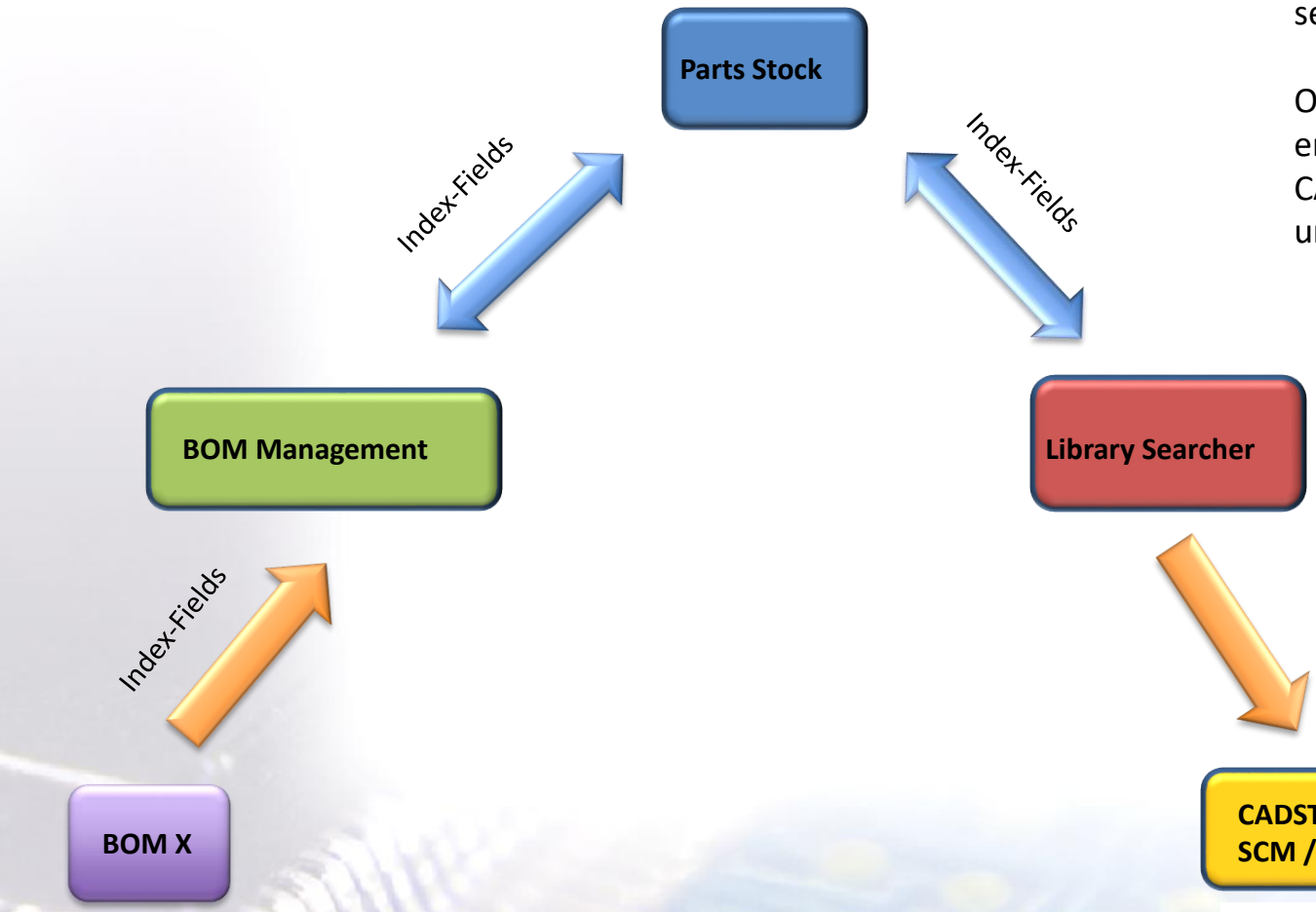
BOM A

BOM B

BOM C

Or other
CSV Files

MRP-Link Index References

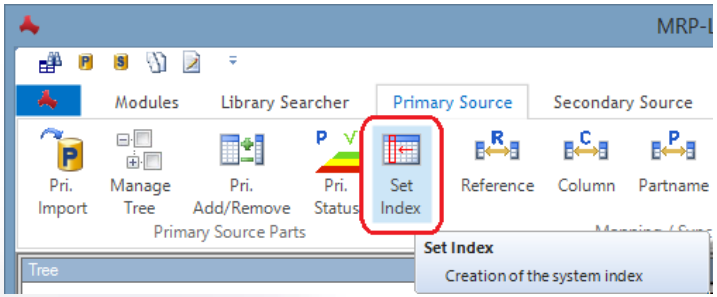


CSV BOM Files

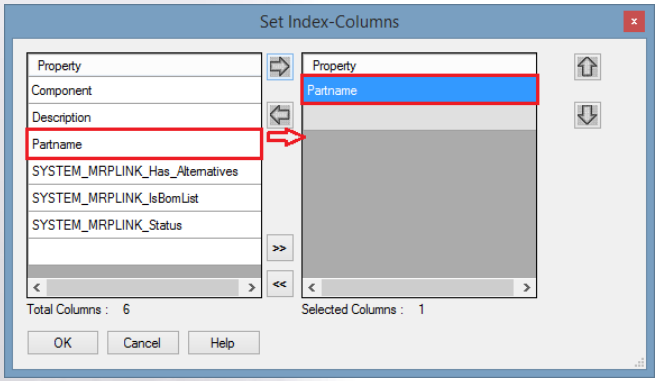
The Index-Fields are individual selectable.

Optional in a single CADSTAR environment is always the CADSTAR Part Name the unique Identifier.

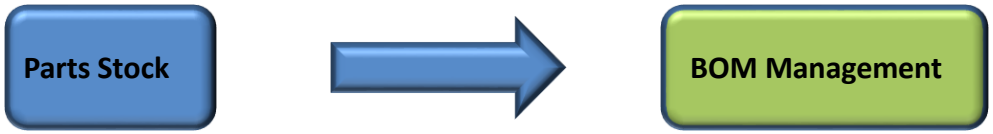
Index Mapping from Parts Stock to BOM



Required Reference **Index** Mapping from Parts Stock to BOM Management



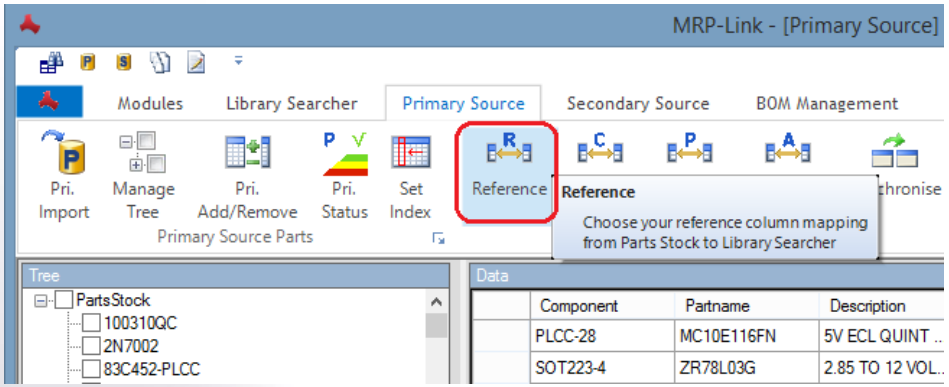
Select the unique reference for the whole system

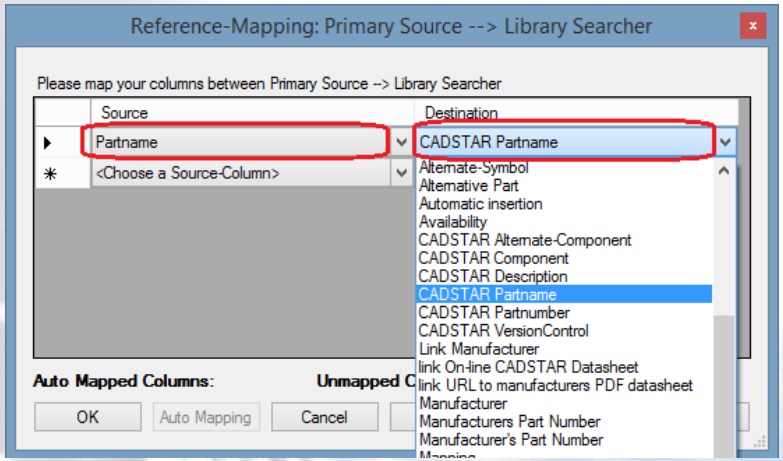


Attention: If there is a Cluster Index, select the most important index column as first item!!!

Index Mapping - Parts Stock to Library Searcher

Required Reference **Index** Mapping from Parts Stock to CADSTAR Library Searcher

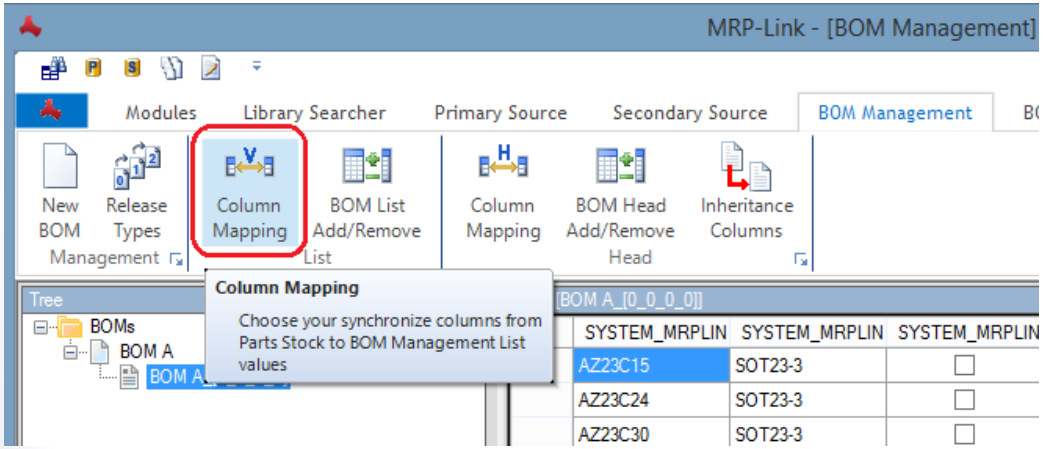




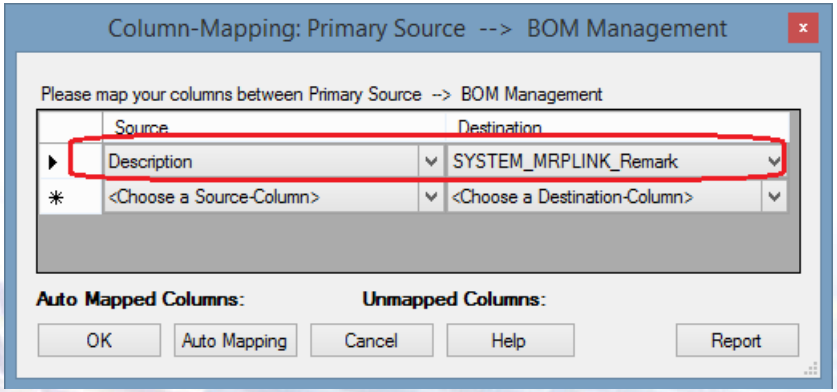
CADSTAR

Column Mapping - Parts Stock to BOM Management

Required **Column** Mapping from Parts Stock to BOM Management

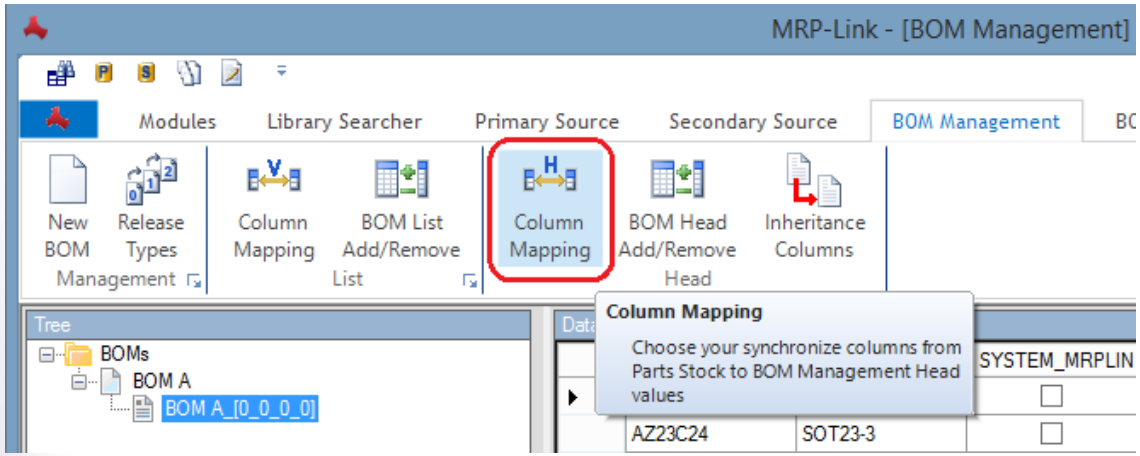


Required Colum Management

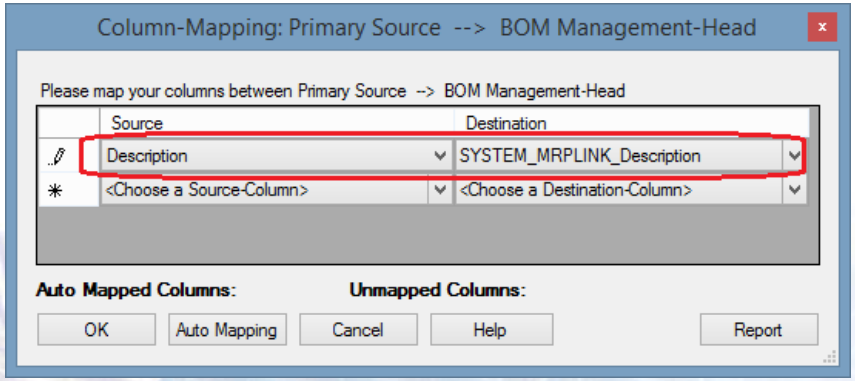


Column Mapping - Parts Stock to BOM Management

Required **Column** Mapping from Parts Stock to BOM Management

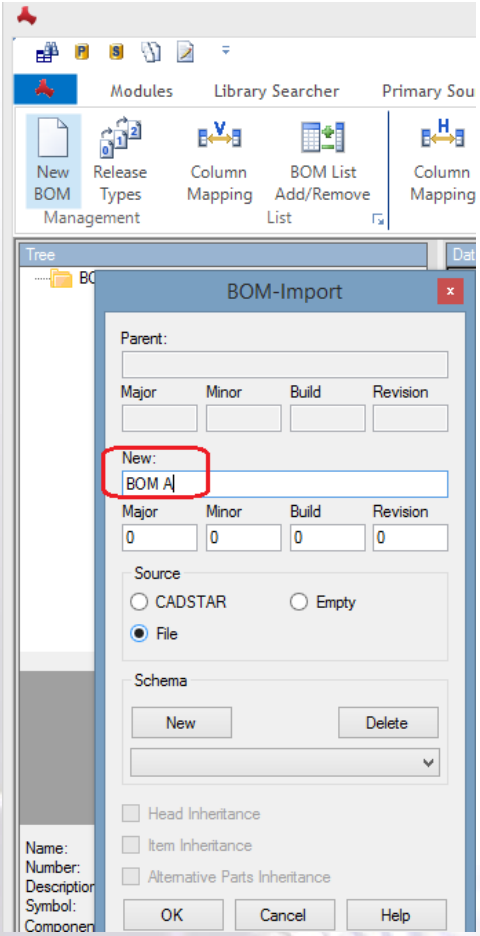


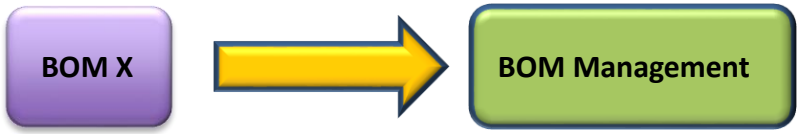
Required Colum Management



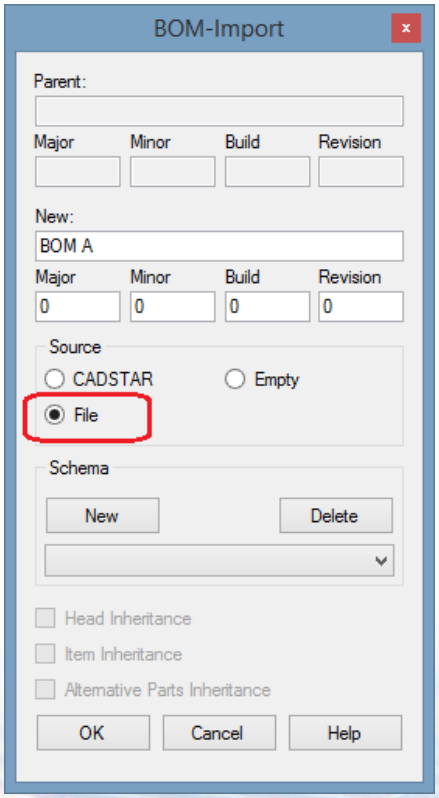
Create BOM from File

Select BOM, press right hand bottom, select NEW BOM and type BOM Name

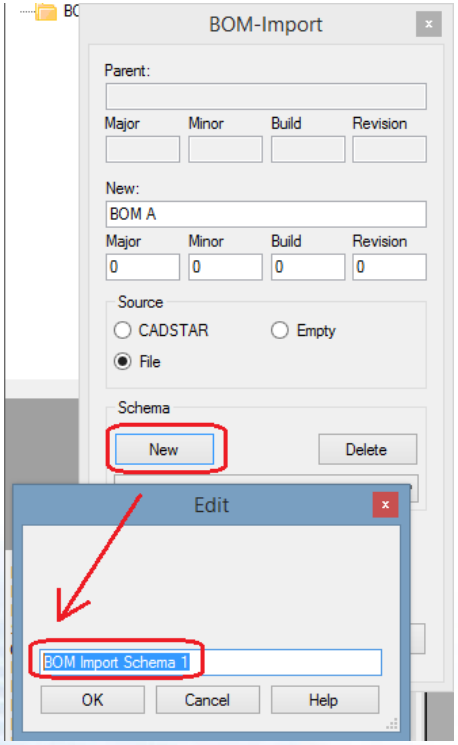




Select File for CSV Import



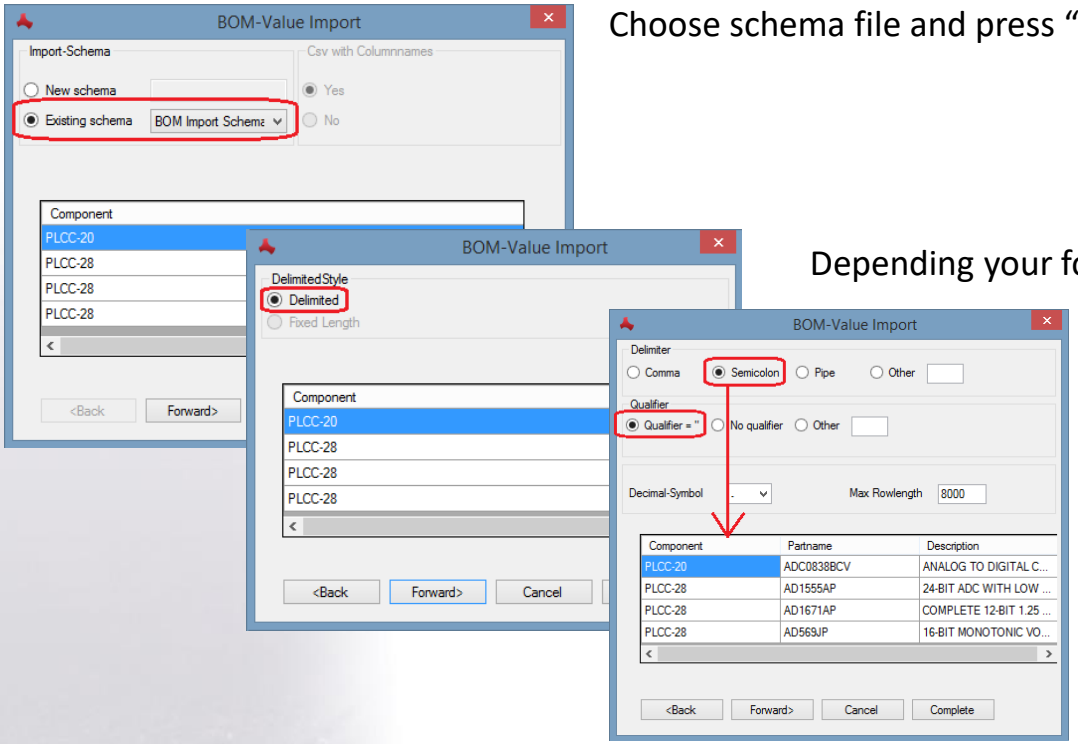
If not available
create a new Import Schema for further reuse



CSV Import Setting

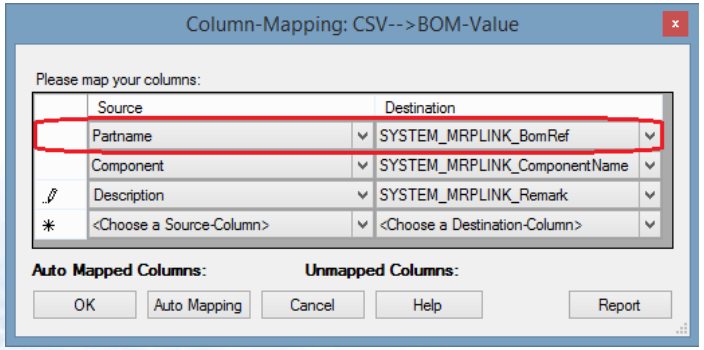
Select csv file from Open File Dialog and press “ok”

Choose schema file and press “forward”



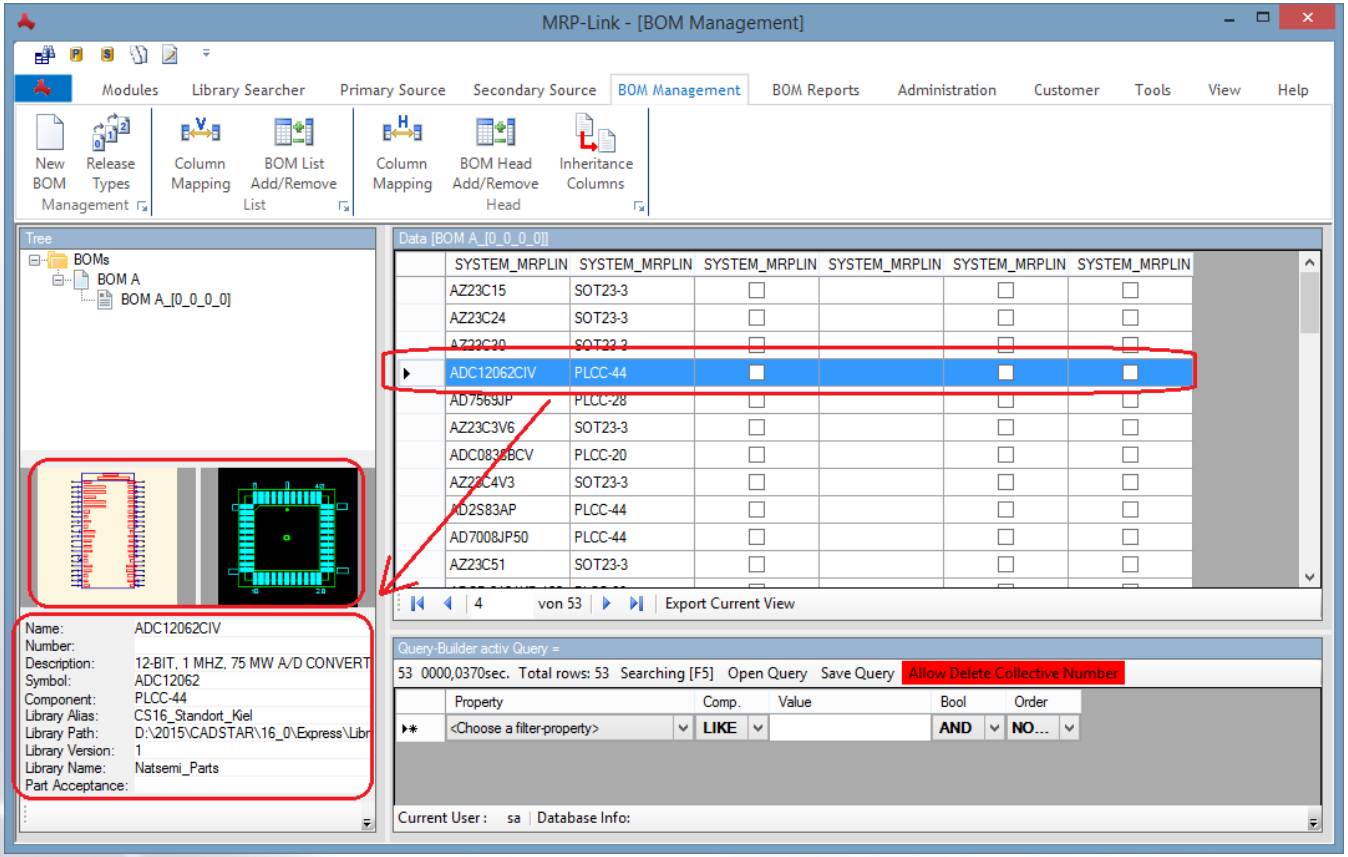
Depending your format select ‘,’ or ‘;’

Select you field Mapping’



MRP-Link BOM Import

BOM A is now imported

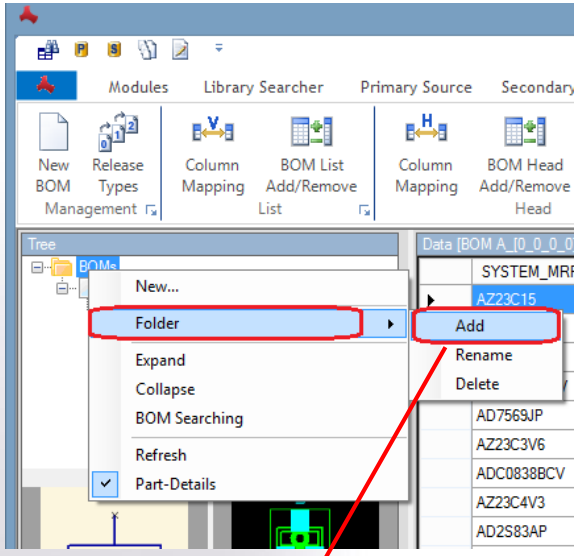


With a right index reference we will see inside the BOM Detailed View the SCM Symbol, the PCB Component and Part Details like (Part Name, Symbol Name, Library Alias, Library Path, Part Acceptance).

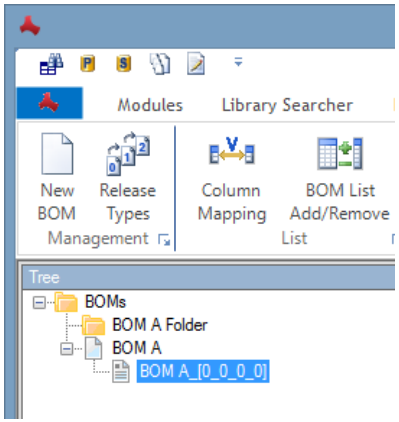
BOM Management → **Parts Stock** → **CADSTAR**

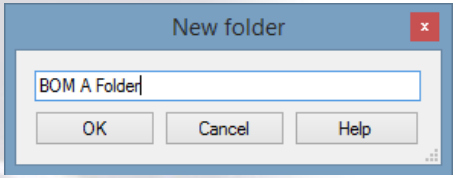
Organize BOM's in Folder

It is possible to create Folders to organize BOM's in an hierarchical structure.

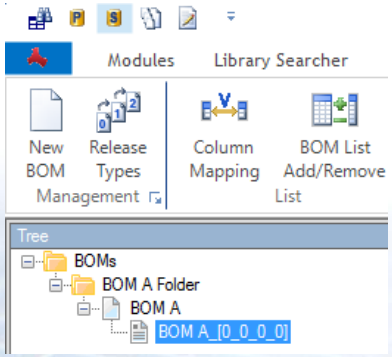


Create a New Folder





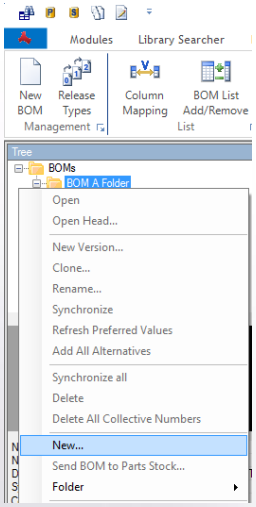
Move the BOM A with drag & drop into the folder



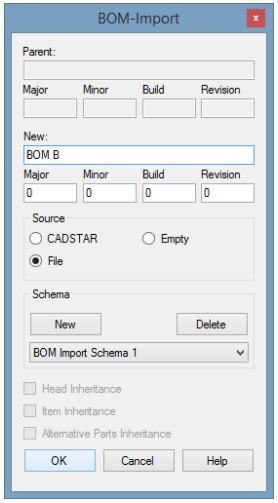
Semi Autoimport next BOM B

(with Schema & Complete function)

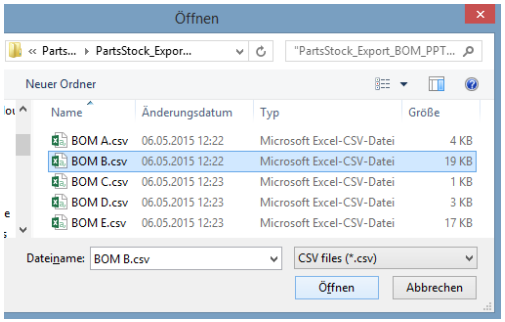
Step 1



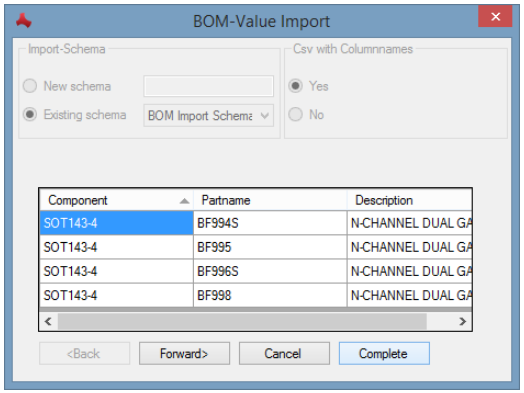
Step 2



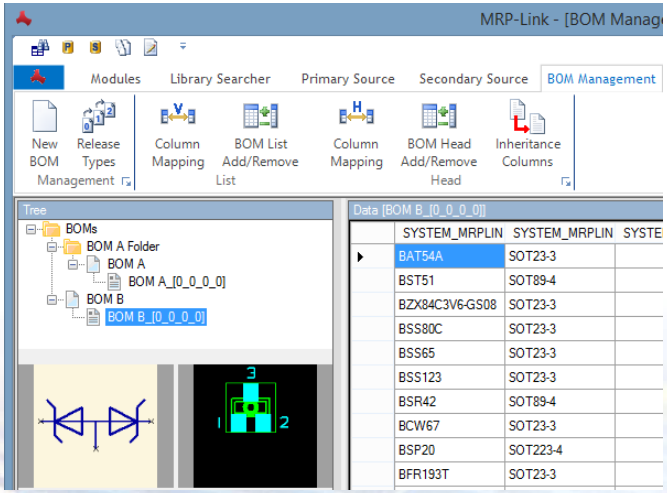
Step 3



Step 4



Finish



Only few steps necessary to import a new BOM.

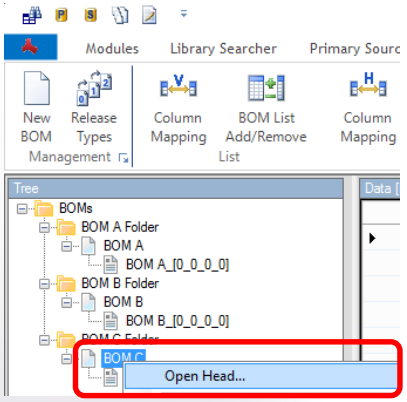
With an existing Import Schema for a specified CSV File and execute complete function you will reduce the necessary work.

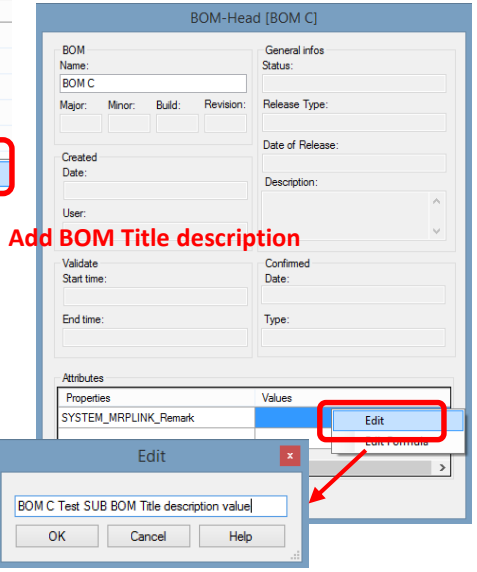
Add to BOM a Title and description

Each BOM has one title.

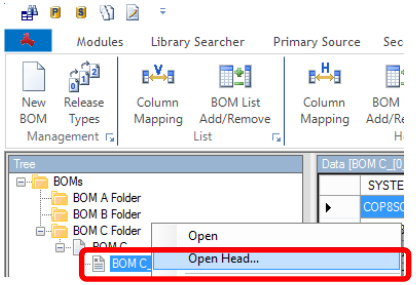
Each BOM version has his own description.

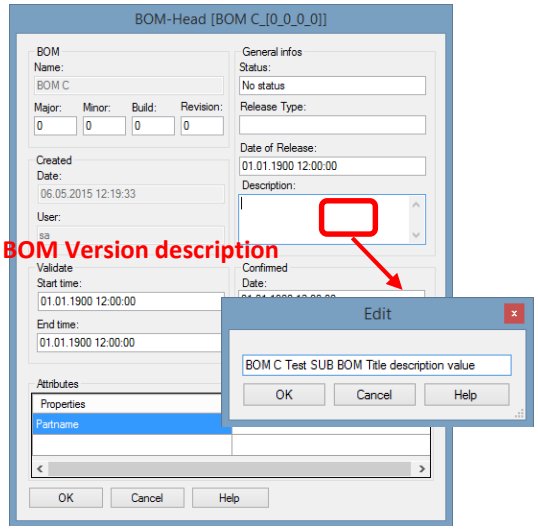
Which is the Part description, when a BOM becomes a Part.



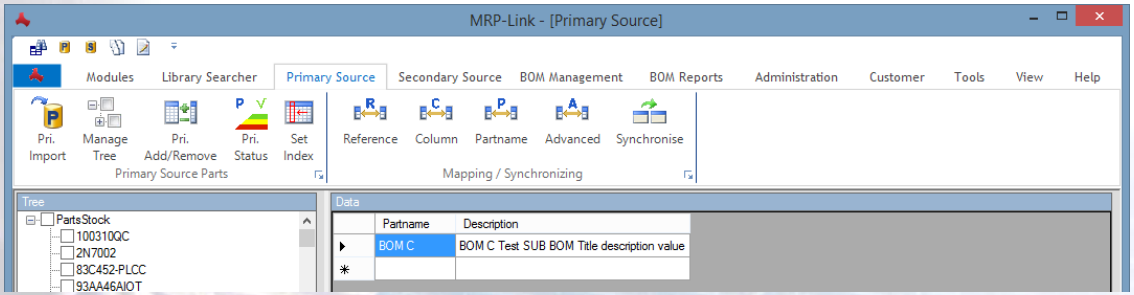


Add BOM Title description

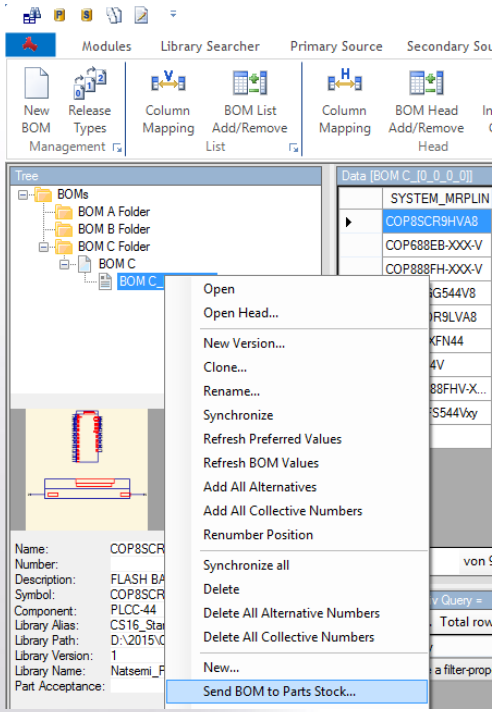




Add BOM Version description



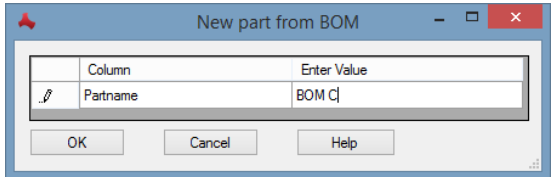
How to create from BOM a Part

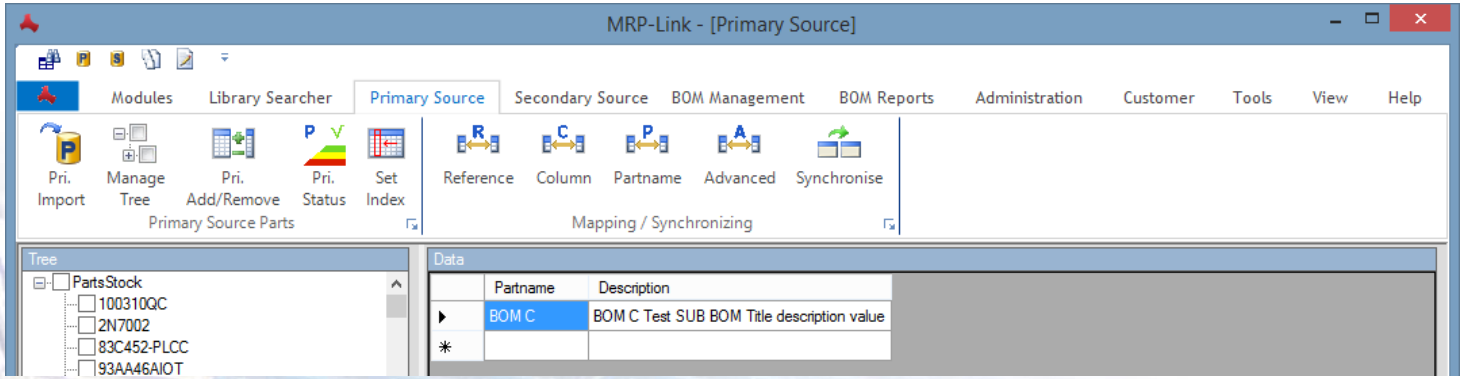


Each BOM can become a Part with only one mouse click.

When a BOM is a Part, it represent the whole BOM as a single Part.

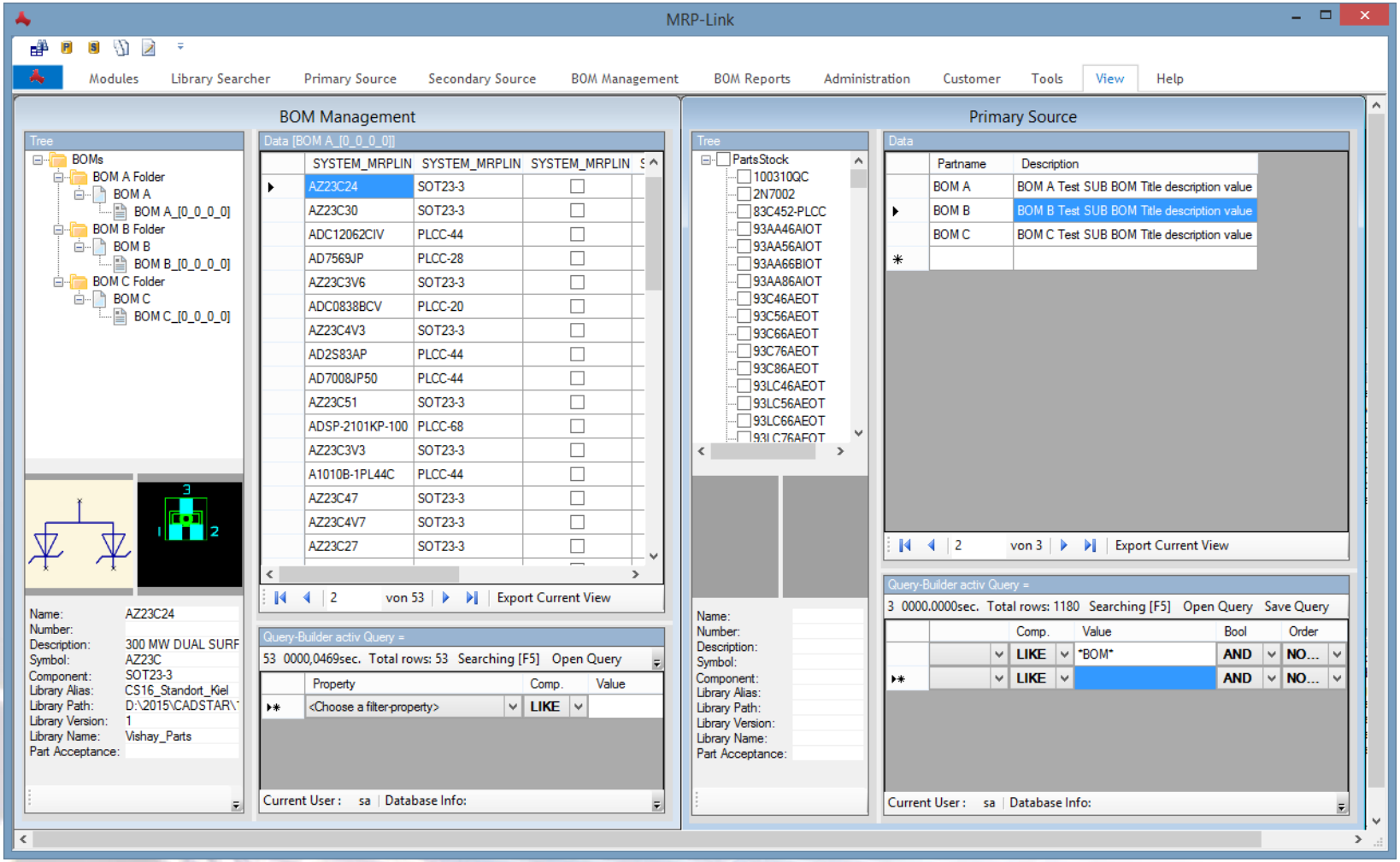
In the usages is no difference for to a single Part.





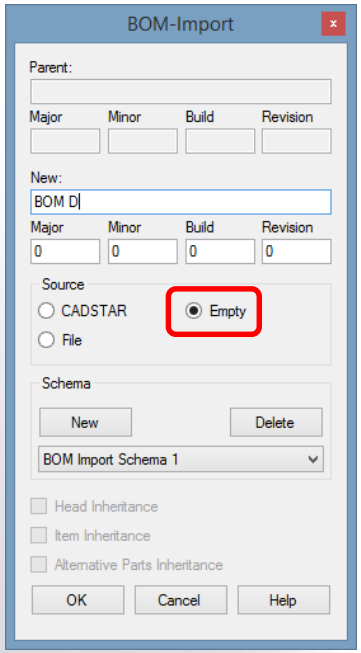
Compare BOM View and Part View

In the Part Stock we find the BOM Name with a description for this BOM as single Part.



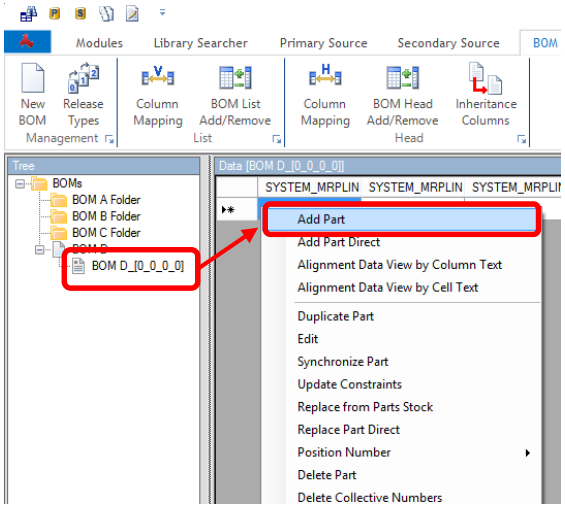
Create Master BOM & Add Part as BOM

Step 1

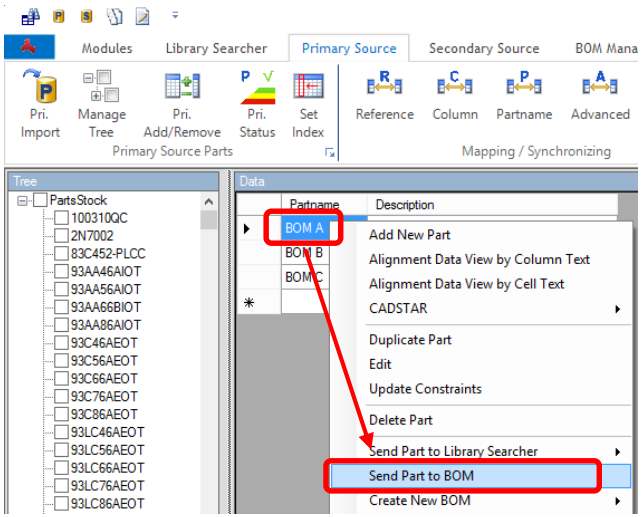


Now an empty BOM is to be created.
As first Part the Part “BOM A” is added to this BOM. There is no difference to add a Part or a Part which is a BOM.

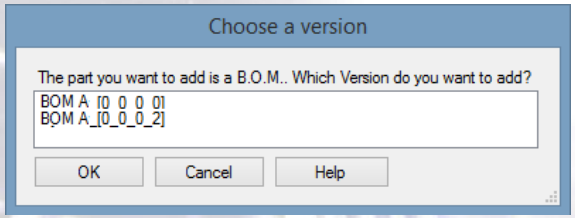
Step 2



Step 3

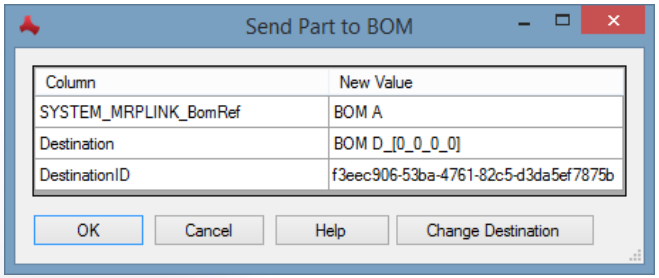


Step 4

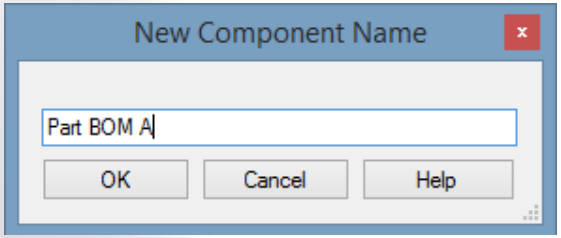


This Part is an BOM with an index of [0,0,0,0].
Deepening how may Index Values this BOM have you can select that one of the versions.

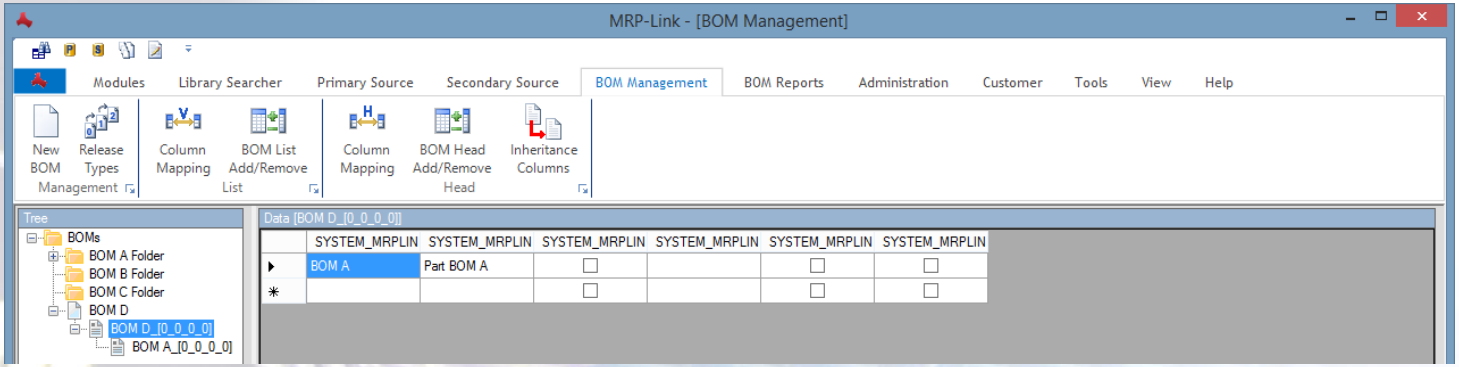
Create Master BOM & Add Part as BOM 2



Since the target BOM can have multiple indexes, all these index values are displayed.



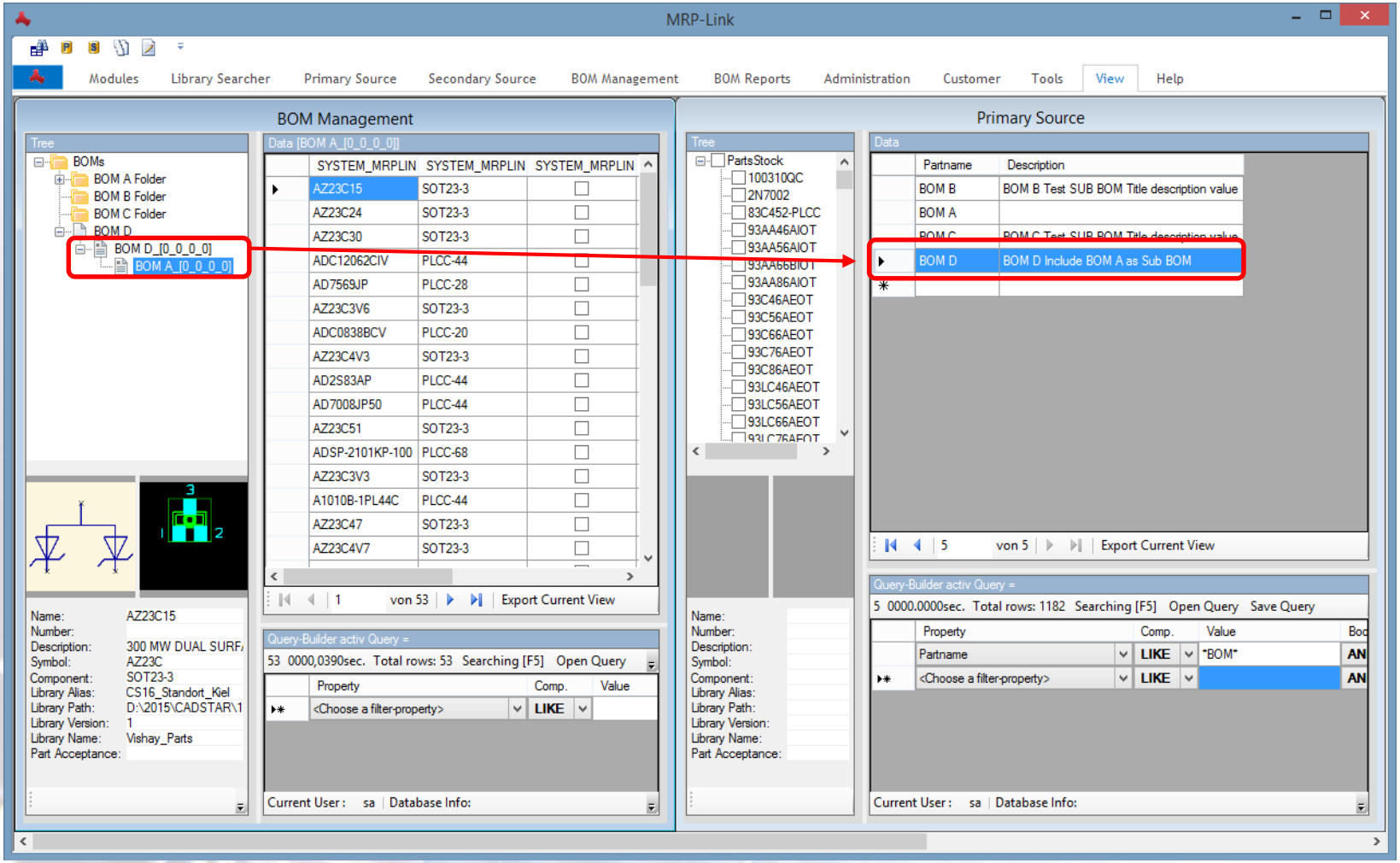
Each new added Part becomes in this field now a reference name.



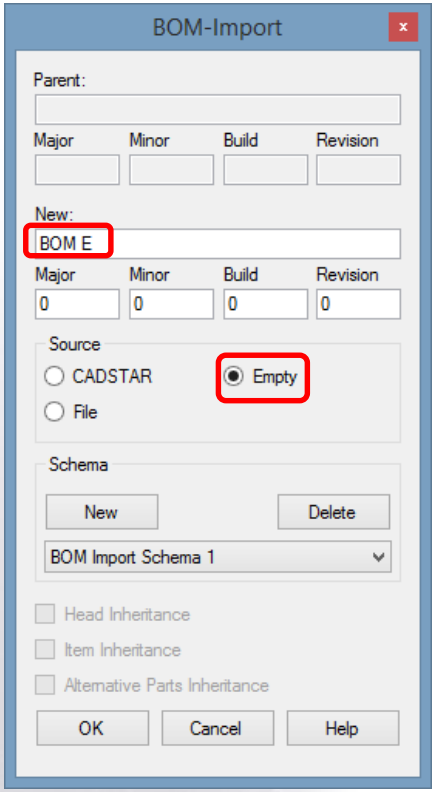
The BOM a is now a simple Part in this BOM.

View after add a Part as BOM

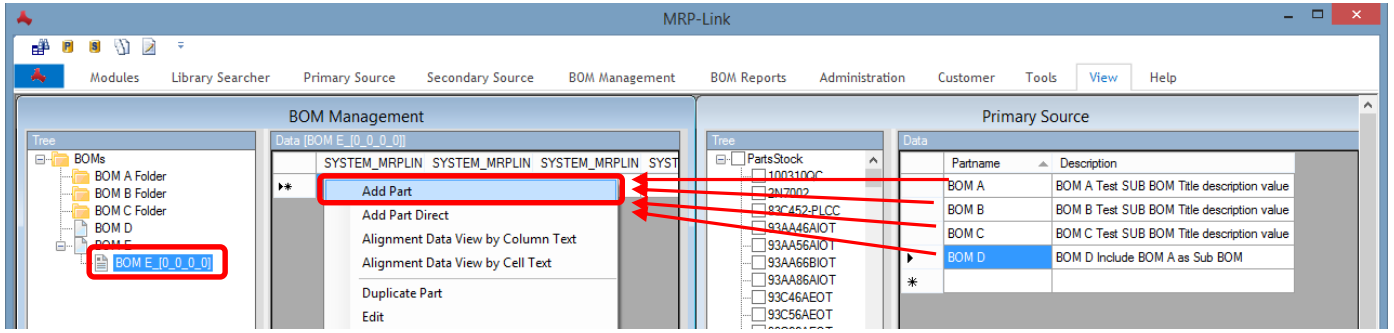
The view from a Part which is a BOM in the BOM
This identifiable in the Tree View.



Create the finale BOM



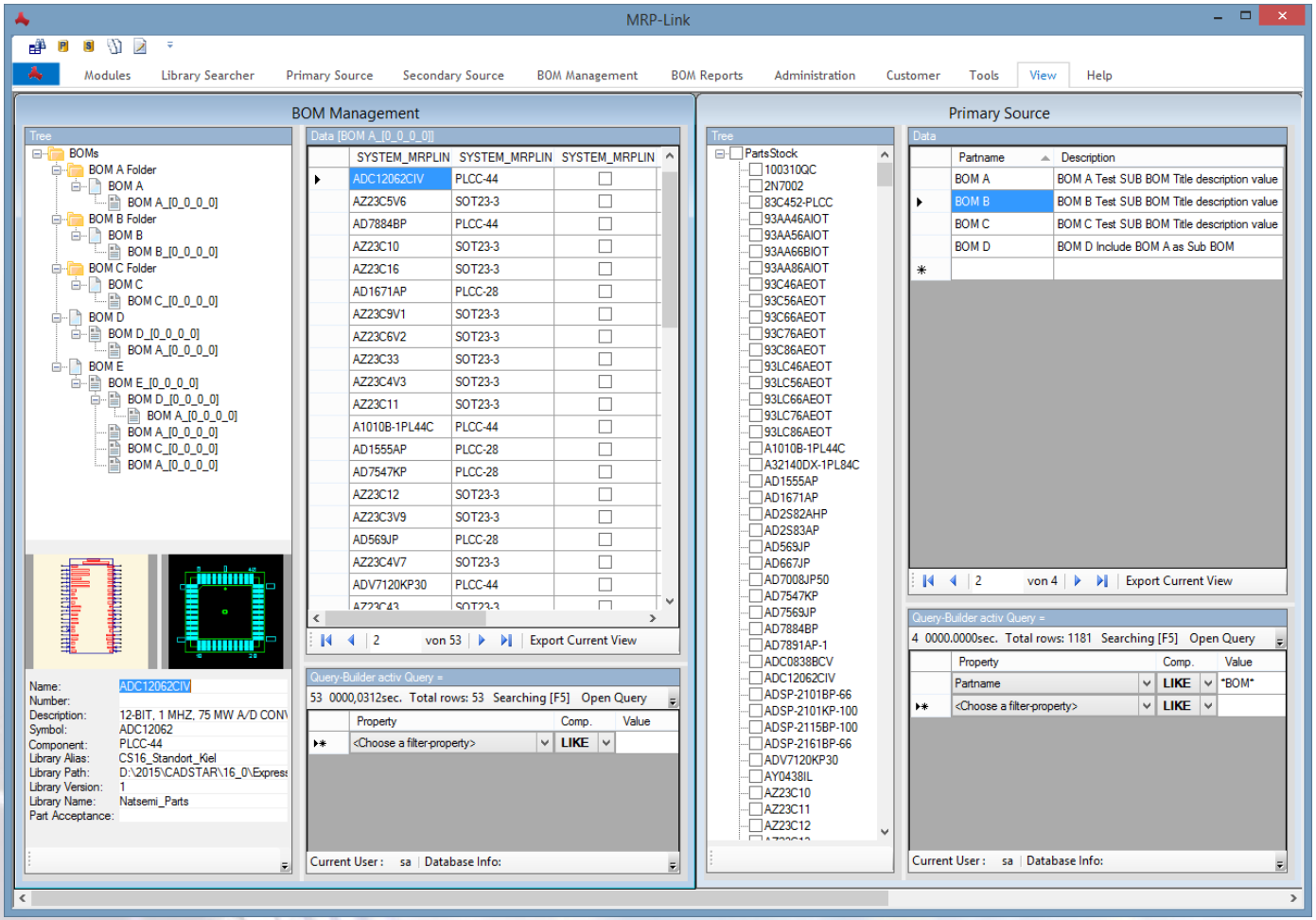
The final BOM E should include all other BOM's we have create before.



With the normal Add Part function all this parts will be added to the final BOM.

Of course it is also possible to add in the same way a simple Part.

All Part Added in the final BOM



Here we can see, the view after adding all parts into the BOM.

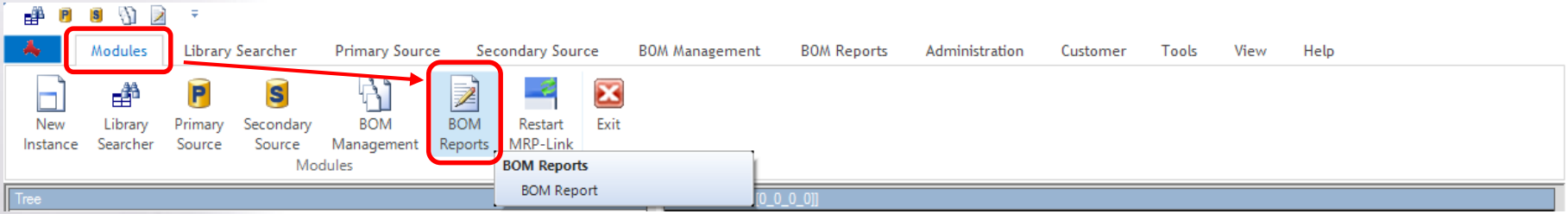
Open B.O.M. Reports

The BOM Management is the area where we manage the BOM's.

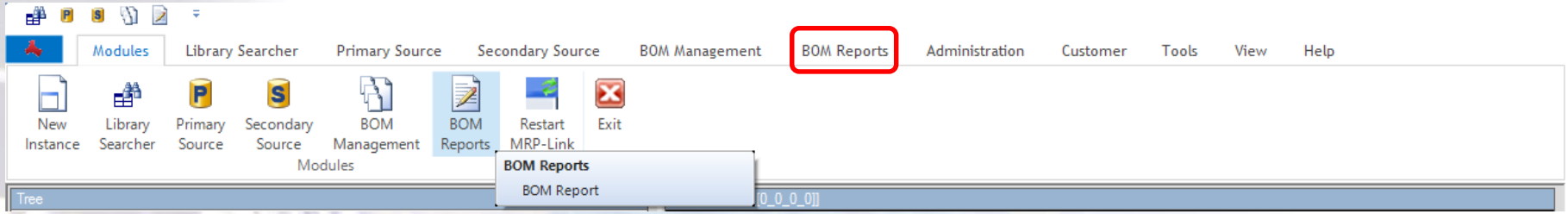
In this view is only a flat view without any hierarchy possible.

The BOM Reports show a view over all hierarchy BOMS's.

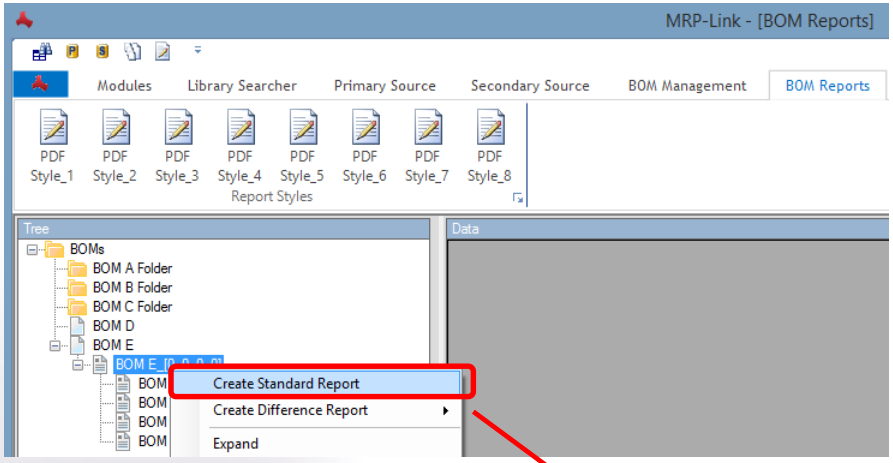
You can start the BOM Reports on Modules Tab



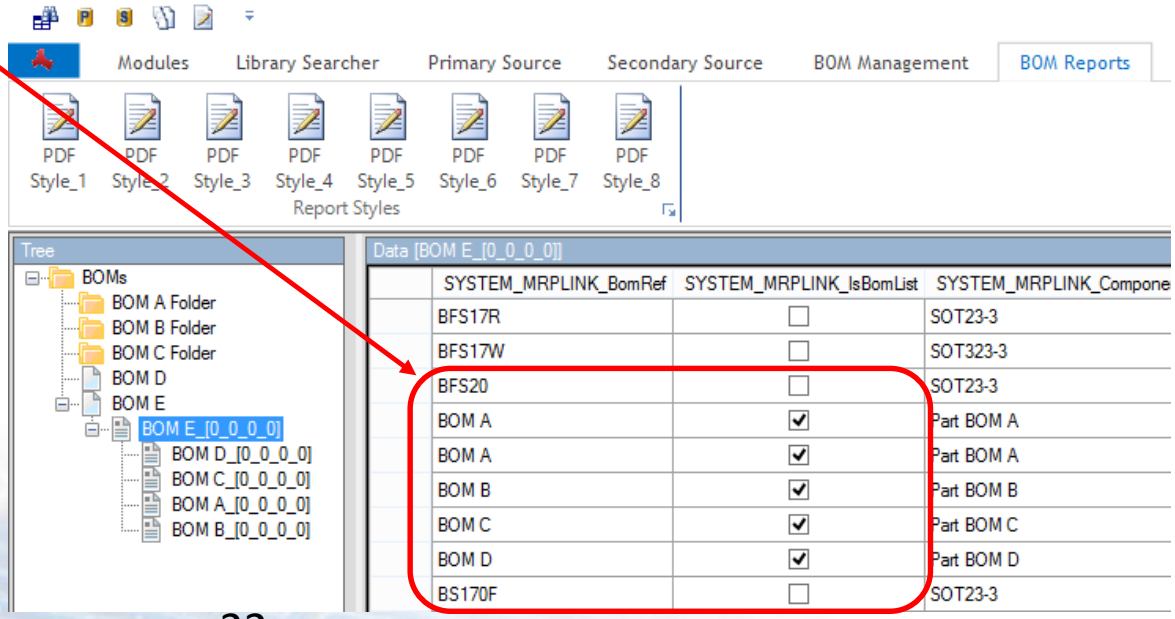
Or you click directly to BOM Reports Tab



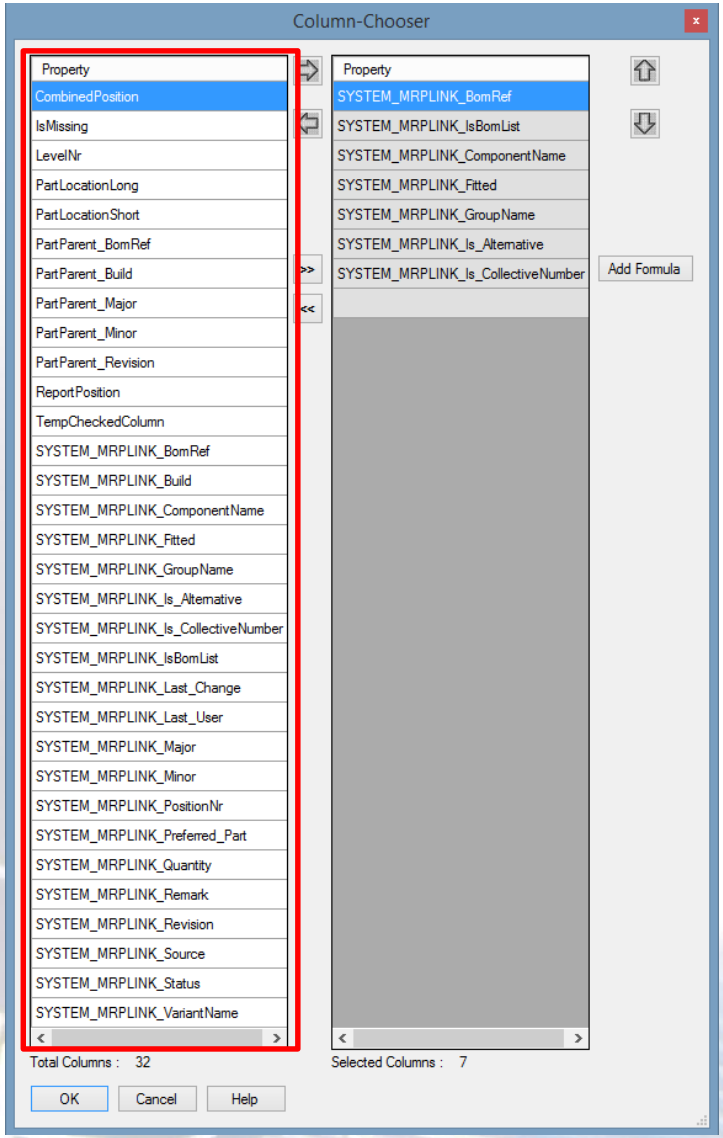
B.O.M. Reports Select Standard Report



With a simple RMB-click we decide
to create a Standard hierarchical Expanded View.



Hierarchical Report Colums



Here we have a series of new columns where we can select to display as usual view.

Most of this new columns are reference to the structure of the BOM's.

Depend of the selection of columns you can create a very wide range of reports.

Example view as Excel output

	A	B	C	D	E	F	G
1	LevelNr	Par tLocation Long	PartParent_BomRef	ReportPosition	SYSTEM_MRPLINK_IsBom	SYSTEM_MRPLINK_BomRef	SYSTEM_MRPLINK_Remark
2	0			1	True	BOM A	BOM A Test SUB BOM
3	1	BOM A_[0_0_0_0]	BOM A	2	False	10uF-10V-EC	10uF 10V Electrolytic Capacitor
4	1	BOM A_[0_0_0_0]	BOM A	3	False	10uF-10V-EC	10uF 10V Electrolytic Capacitor
5	1	BOM A_[0_0_0_0]	BOM A	4	False	1N914	High-speed diode
6	1	BOM A_[0_0_0_0]	BOM A	5	False	1N914	High-speed diode
7	1	BOM A_[0_0_0_0]	BOM A	6	False	HLMP-1585	LED GREEN 3MM HLMP-1585
8	1	BOM A_[0_0_0_0]	BOM A	7	False	HLMP-1585	LED GREEN 3MM HLMP-1585
9	1	BOM A_[0_0_0_0]	BOM A	8	False	470E-MRS25-1%	Metal film resistor MRS25 470E 1%
10	1	BOM A_[0_0_0_0]	BOM A	9	False	470E-MRS25-1%	Metal film resistor MRS25 470E 1%
11	1	BOM A_[0_0_0_0]	BOM A	10	False	39K-MRS25-1%	Metal film resistor MRS25 39K 1%
12	1	BOM A_[0_0_0_0]	BOM A	11	False	39K-MRS25-1%	Metal film resistor MRS25 39K 1%
13	1	BOM A_[0_0_0_0]	BOM A	12	False	2N3904	SABER TRANSISTOR
14	1	BOM A_[0_0_0_0]	BOM A	13	False	2N3904	SABER TRANSISTOR
15	0			14	True	BOM B	BOM B Test SUB BOM
16	1	BOM B_[0_0_0_0]	BOM B	15	False	47uF-10V-EC	47uF 10V Electrolytic Capacitor
17	1	BOM B_[0_0_0_0]	BOM B	16	False	1000uF-50V-EC	1000uF 50V Electrolytic Capacitor
18	1	BOM B_[0_0_0_0]	BOM B	17	False	1N4148	High-speed diode
19	1	BOM B_[0_0_0_0]	BOM B	18	False	1N4148	High-speed diode
20	1	BOM B_[0_0_0_0]	BOM B	19	False	1K5-MRS25-1%	Metal film resistor MRS25 1K5 1%
21	1	BOM B_[0_0_0_0]	BOM B	20	False	5K6-MRS25-1%	Metal film resistor MRS25 5K6 1%
22	1	BOM B_[0_0_0_0]	BOM B	21	False	22E-MRS25-1%	Metal film resistor MRS25 22E 1%
23	1	BOM B_[0_0_0_0]	BOM B	22	False	470E-MRS25-1%	Metal film resistor MRS25 470E 1%
24	1	BOM B_[0_0_0_0]	BOM B	23	False	3E3-MRS25-1%	Metal film resistor MRS25 3E3 1%
25	1	BOM B_[0_0_0_0]	BOM B	24	False	3E3-MRS25-1%	Metal film resistor MRS25 3E3 1%
26	1	BOM B_[0_0_0_0]	BOM B	25	False	2N3053	MED.POWER SIL.NPN PLAN.TRANSISTOR
27	1	BOM B_[0_0_0_0]	BOM B	26	False	2N3053	MED.POWER SIL.NPN PLAN.TRANSISTOR
28	1	BOM B_[0_0_0_0]	BOM B	27	False	2N2905A	SIL. PLAN. EPI. TRANSISTOR
29	0			28	True	BOM C	BOM C Test SUB BOM Version
30	1	BOM C_[0_0_0_0]	BOM C	29	False	1UF-C0805-20/100%	Chip capacitor
31	1	BOM C_[0_0_0_0]	BOM C	30	False	1UF-C0805-20/100%	Chip capacitor
32	1	BOM C_[0_0_0_0]	BOM C	31	False	1UF-C0805-20/100%	Chip capacitor
33	1	BOM C_[0_0_0_0]	BOM C	32	False	10E-R0805-2%	Chip resistor 0805 10E 2%
34	1	BOM C_[0_0_0_0]	BOM C	33	False	10E-R0805-2%	Chip resistor 0805 10E 2%
35	1	BOM C_[0_0_0_0]	BOM C	34	False	10E-R0805-2%	Chip resistor 0805 10E 2%
36	1	BOM C_[0_0_0_0]	BOM C	35	False	PCF80C552-4WP	8 bit microcontroller -40..85 deg.C.
37	1	BOM C_[0_0_0_0]	BOM C	36	False	PCF80C552-4WP	8 bit microcontroller -40..85 deg.C.
38	1	BOM C_[0_0_0_0]	BOM C	37	False	74HC573MD	Octal D-type Latch Tri-State
39	1	BOM C_[0_0_0_0]	BOM C	38	False	74HC573MD	Octal D-type Latch Tri-State
40	1	BOM C_[0_0_0_0]	BOM C	39	False	74HC573MD	Octal D-type Latch Tri-State
41	1	BOM C_[0_0_0_0]	BOM C	40	False	74HC573MD	Octal D-type Latch Tri-State
42	1	BOM C_[0_0_0_0]	BOM C	41	False	CON-EURO96-MA	Euro Connector 96 Pins Male Angled
43	1	BOM C_[0_0_0_0]	BOM C	42	False	CON-EURO96-MA	Euro Connector 96 Pins Male Angled
44	1	BOM C_[0_0_0_0]	BOM C	43	False	CON-EURO96-MA	Euro Connector 96 Pins Male Angled
45	0			44	True	BOM D	BOM D Include BOM A as Sub
46	1	BOM D_[0_0_0_0]	BOM D	45	True	BOM A	BOM A Test SUB BOM
47	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	46	False	10uF-10V-EC	10uF 10V Electrolytic Capacitor
48	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	47	False	10uF-10V-EC	10uF 10V Electrolytic Capacitor
49	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	48	False	1N914	High-speed diode
50	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	49	False	1N914	High-speed diode
51	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	50	False	HLMP-1585	LED GREEN 3MM HLMP-1585
52	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	51	False	HLMP-1585	LED GREEN 3MM HLMP-1585
53	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	52	False	470E-MRS25-1%	Metal film resistor MRS25 470E 1%
54	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	53	False	470E-MRS25-1%	Metal film resistor MRS25 470E 1%
55	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	54	False	39K-MRS25-1%	Metal film resistor MRS25 39K 1%
56	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	55	False	39K-MRS25-1%	Metal film resistor MRS25 39K 1%
57	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	56	False	2N3904	SABER TRANSISTOR
58	2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	57	False	2N3904	SABER TRANSISTOR

MRP-Link Report as PDF Output

CSK - CAD Systeme Kluwetasch

CSK-Report

BOM:	BOM E	Mayor:	0	Export Time	29.11.2009 20:28:37
Validate_Start:	1900-01-01T12:00:00+01:00	Minor:	0	Report Maker	sa
Validate_End:	1900-01-01T12:00:00+01:00	Build:	0		
Status:	No status	Revision:	0		
Parts:	57				
Price:	0.00				

Cad Systeme Kluwetasch
Struckbrook 49
D-24161 Altenholz
Telefon +49 431-32917-0
Telefax +49 431-32917-26

Pos	Part	Cnt	Components	Description	Price	Sum
1	10uF-10V-EC	4	, C2 , C1 , C2 , C1	10uF 10V Electrolytic Capacitor		NaN
2	1N914	4	, D2 , D2 , D1 , D1	High-speed diode		NaN
3	PCF80C552-4WP	2	, U1 , U1	8 bit microcontroller -40..85 deg.C.		NaN
4	1000uF-50V-EC	1	, C2	1000uF 50V Electrolytic Capacitor		NaN
5	2N3053	2	, TR2 , TR1	MED.POWER SIL.NPN PLAN.TRANSISTOR		NaN
6	1K5-MRS25-1%	1	, R1	Metal film resistor MRS25 1K5 1%		NaN
7	39K-MRS25-1%	4	, R3 , R4 , R4 , R3	Metal film resistor MRS25 39K 1%		NaN
8	1N4148	2	, D1 , D2	High-speed diode		NaN
9	BOM D	1	, Part D	BOM D Include BOM A as Sub		NaN
10	BOM B	1	, Part B	BOM B Test SUB BOM		NaN
11	74HC573MD	4	, U3 , U2 , U3 , U2	Octal D-type Latch Tri-State		NaN
12	HLMP-1585	4	, LED1 , LED2 , LED1 , LED2	LED GREEN 3MM HLMP-1585		NaN
14	2N2905A	1	, TR3	SIL. PLAN. EPI. TRANSISTOR		NaN
15	470E-MRS25-1%	5	, R2 , R4 , R2 , R1 , R1	Metal film resistor MRS25 470E 1%		NaN
16	2N3904	4	, TR2 , TR1 , TR1 , TR2	SABER TRANSISTOR		NaN
21	5K6-MRS25-1%	1	, R2	Metal film resistor MRS25 5K6 1%		NaN
22	10E-R0805-2%	3	, R3 , R1 , R2	Chip resistor 0805 10E 2%		NaN
23	CON-EURO96-MA	3	, X1 , X1 , X1	Euro Connector 96 Pins Male Angled		NaN
25	1UF-C0805-20/100%	3	, C3 , C2 , C1	Chip capacitor		NaN
26	BOM A	2	, Part BOM A , Part A	BOM A Test SUB BOM		NaN
27	22E-MRS25-1%	1	, R3	Metal film resistor MRS25 22E 1%		NaN
32	47uF-10V-EC	1	, C1	47uF 10V Electrolytic Capacitor		NaN
48	3E3-MRS25-1%	2	, R5 , R6	Metal film resistor MRS25 3E3 1%		NaN
52	BOM C	1	, Part C	BOM C Test SUB BOM Version		NaN

Here we see a PDF View which is defined inside MRP-Link.

This view is self adjustable by the user with XHTML as template.

MRP-Link Report

Partnumber:	BOM E	Mayor:	0	Export Time:	06.05.2015 18:18:08
Validate_Start:	1900-01-01T12:00:00+01:00	Minor:	0	Created by:	sa
Validate_End:	1900-01-01T12:00:00+01:00	Build:	0		
Status:	No status	Revision:	0		
Parts:	57				

LevelNr	PartLocationLong	PartParent_BomRef	ReportPosition	IsBomList	BomRef	ComponentName	Remark
1	BOM A_[0_0_0_0]	BOM A	3	false	10uF-10V-EC	C2	10uF 10V Electrolytic Capacitor
2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	49	false	1N914	D2	High-speed diode
1	BOM C_[0_0_0_0]	BOM C	36	false	PCF80C552-4WP	U1	8 bit microcontroller -40..85 deg.C.
1	BOM B_[0_0_0_0]	BOM B	16	false	1000uF-50V-EC	C2	1000uF 50V Electrolytic Capacitor
1	BOM B_[0_0_0_0]	BOM B	26	false	2N3053	TR2	MED.POWER SIL.NPN PLAN.TRANSISTOR
1	BOM B_[0_0_0_0]	BOM B	19	false	1K5-MRS25-1%	R1	Metal film resistor MRS25 1K5 1%
1	BOM A_[0_0_0_0]	BOM A	10	false	39K-MRS25-1%	R3	Metal film resistor MRS25 39K 1%
1	BOM B_[0_0_0_0]	BOM B	17	false	1N4148	D1	High-speed diode
0			44	true	BOM D	Part D	BOM D Include BOM A as Sub
0			14	true	BOM B	Part B	BOM B Test SUB BOM
1	BOM C_[0_0_0_0]	BOM C	39	false	74HC573MD	U3	Octal D-type Latch Tri-State
1	BOM A_[0_0_0_0]	BOM A	6	false	HLMP-1585	LED1	LED GREEN 3MM HLMP-1585
1	BOM B_[0_0_0_0]	BOM B	18	false	1N4148	D2	High-speed diode
1	BOM B_[0_0_0_0]	BOM B	27	false	2N2905A	TR3	SIL. PLAN. EPI. TRANSISTOR
2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	53	false	470E-MRS25-1%	R2	Metal film resistor MRS25 470E 1%
2	BOM D_[0_0_0_0].BOM A_[0_0_0_0]	BOM A	57	false	2N3904	TR2	SABER TRANSISTOR
1	BOM C_[0_0_0_0]	BOM C	37	false	74HC573MD	U2	Octal D-type Latch Tri-State
1	BOM B_[0_0_0_0]	BOM B	25	false	2N3053	TR1	MED.POWER

CSK MRP-Link

Official German Distributor

Für Rückfragen und weitere Informationen steht Ihnen das CSK Team gerne zur Verfügung.

CSK - CAD Systeme Kluwetasch e.K.
Struckbrook 49
D – 24161 Altenholz

Tel.: +49 431 32917-0
Fax.: +49 431 32917-26
E-Mail-Adresse: Kluwetasch@cskl.de

Internet: https://www.cskl.de

MRP-Link

CSK - CAD Systeme Kluwetasch
www.cskl.de