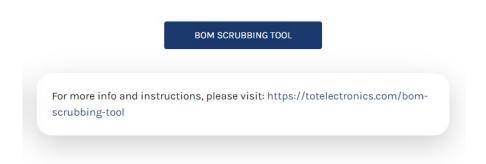


BOM Scrubbing Tool Instruction Guide

1. START BY SELECTING THE BOM SCRUBBING TOOL BUTTON



2. ENTER RELEVANT INFORMATION FOR YOUR PROJECT

START NEW SCRUB

Let's start with the basic details

First Name*		
Last Name*		
Email*		
Phone		
Company		
Assembly Name		
Assembly Number*		
Rev		



a. Select 'Choose File' to upload BOM to be scrubbed.

To the right is an example of what the page should look like after a **BOM (.xlsx file)** is uploaded.

• Select BOM as the file type.

	Or CHOOSE FILE		
	(Please only import 1 BOM)		
Uploaded files		Files type	

- o Select the MAP BOM button to continue.
- (Please note that our servers are secure and ITAR Compliant. If you require an NDA to share files, please email <u>orders@ThermOmegaTech.com</u> or call to discuss.)

3. MAP BOM

- a. "Header Row in excel" and "Last Row in excel" will auto-populate but can be changed if required.
- b. Assign the correct data type for each column.
- c. Names with an asterisk (*) are required for every BOM. (Quantity Per and MPN are required columns).
- d. Select Next to continue.

4. SCRUB BOM

- a. You can make modifications to your BOM here if needed.
- b. You can also search for parts with the Search box in the top right corner.
- c. Missing information and errors like blank lines are highlighted in pink.

Line Item Description Quantity Per* Ref. Designator Lead Quantity Mfgr MPN* Rev

d. Ensure which line item is the PCB if it is present in the BOM. Click the PCB box to the right.



- e. Install and Purchase are automatically selected. If the part is a "do not install", uncheck the Install box. If the part does not need to be acquired or is something that would be consigned, uncheck the Purchase box.
- f. Highlight and Right-click to delete or add rows and type or "copy and paste" information.
- g. Hit "Validate and Import" on the bottom right to continue and wait for lead times to compile.
- 5. BOM HEALTH

		2	 HOH MD LOW UNC 			HICH MID LOW URIX	α	NEW ACTIVE NRIND EOL UT8 OIS5 UNIK				NONE TER 1 TER 2 TER 3 TER 4 TER 5 TER 6-	×	 NO UNKNOWN YES 		19		 0-14 15-60 61-90 90+
Line Risi	k			MPN	Risk	u	le Cycle Status	s	ock Levels			NONR			Lead	I time		
ines			Internal Part Number		Customer Part Number 11 9.	Description 14	China Merry 14	Original MPN		Qty 18		Mar 14 /	MPN II 9	Line Dirk Conte		BOM Line Risk 14 9.	L DOPOR	
0	0	Cathad	The second second	12	Contract of the contract of the	CAP, LOUF CER, XSR, Q.,		GRM155R61A105KE01D		- aly 14		Murata	GRM155R61A105KEDID	une sole score op	-76		100	
	0	Cather				Diode, Shottky, 1.5A, 3.	Nexperia USA Inc.	PMBG3015EH,115			1	Nexperia USA Inc.	PMEG301SEH,115		-71	HIGH		
5	0	Cathel				IC, uController, MZ206.	Microchip Technology	PIC32MZ2064D48169-(HF		1	Microchip Technology	PIC32MZ2064D48169-I/HF		-74	HIGH		
3	0					LED, Red/Blue, Light Pl.	Bivar Inc.	LPV2-0750D-RB			t.	Bivar Inc.	LPV2-0750D-R8		-110	HIGH		
5						LCD, Graphic Display, 4	TE Connectivity AMP Connectors	5-1634592-0			1				-51	HIGH		
2						IC,Boost Converter,MA.	. Maxim integrated	MAX1769EUE+			1				-51	HIGH		
4	0	Cached				CAP, 3.3uF CBR, X75, 0.	TDK Corporation	C16088751A335K080AC			1	TDK Corporation	C1608X751A335K080AC		-47	MD		
5	0	Called				Cep, Ceramic, 15pF, 50.	. TDK Corporation	C1005C0G1H150J0508A			2	TDK Corporation	C1005C0G1H150J050BA		-37	MD		
8	Ø	Called				IC OPAMP GP 3KHZ RR.	. Analog Devices Inc.	LT6003HS5#TRMIP8F			1	Analog Devices Inc.	LT6003HS5#TRMP8F		-42	MD	\$	
	0	Cathel				IC,Flash Memory,W25	GigaDevice	GD25Q32CTIGR			1	GigeDevice Semiconductor (HK) U	GD25Q32CTIGR		-49	MD	*•	

a. Below is the dashboard signifying the status of every component in your BOM.

- 6. RESULT OF BOM SCRUB
 - a. To export your dashboard, click the EXPORT REPORT button on the top right



b. This will covert this dashboard into an Excel file that reports on all metrics listed in their respective columns



NOTE: Please see the below appendix for BOM health definitions

Appendix A

Below are definitions for the primary terms used in both the summarized data and the master list by ThermOmegaTech when understanding the BOM Health data.

Summarized Data

- **BOM Lines:** This is the approved manufacturer list (AML) where the end customer has approved one or more manufacturer part numbers (MPN) with the same form/fit/function.
- **MPNs:** This is the sum total of distinct MPNs on the BOM
- **MPNs with no results:** After querying the 30+ suppliers whom are integrated within the ThermOmegaTech ecosystem, this is the sum total of distinct MPNs with no responses from any supplier.
- Unique Manufacturers (MFGRs): the sum total of distinct MFGRs on the BOM
- Earliest Delivery Date: Based on lead times provided by the 30+ suppliers within the ThermOmegaTech ecosystem, this is the earliest date when all MPNs can be received. Note: BOM Health is excluding current stock levels from the suppliers because of the volatility of component availability.
- Line Risk: the count of BOM Lines within a high/mid/low-risk score based on lifecycle, component availability, lead time, number of supplier sources, and reported component on order status. BOM Health will use the best MPN risk score to report on the line.
 - High: less than -50
 - Mid: between -26 and -50
 - Low: greater than -25
- **MPN Risk:** the count of MPNs within a high/mid/low-risk score based on lifecycle, component availability, lead time, number of supplier sources, and reported component on order status.
 - High: less than -50
 - Mid: between -26 and -50
 - Low: greater than -25
- Lifecycle Status: pulled from 30+ suppliers within the ThermOmegaTech ecosystem, BOM health uses the furthest response within the MPN life cycle. For example, if 10 suppliers report the MPN as active and 1 report the MPN as not recommended for new design (NRND), BOM health will report NRND.
- **Stock Levels:** After summing the in-stock quantity from the 30+ suppliers within the ThermOmegaTech ecosystem, BOM Health will respond with a tier rank. Please reference the example below:
 - Tier 1: 1-9 pcs in stock
 - Tier 2: 10-99 pcs in stock
 - Tier 3: 100-999 pcs in stock
 - Tier 4: 1000-9999 pcs in stock

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- NCNR: Similar to lifecycle, BOM health reports the worst possible response from the 30+ suppliers within the ThermOmegaTech ecosystem. If one or more suppliers report the MPN as NCNR as yes, BOM Health will show a "yes"
- Lead Time: Lead time is pulled from the 30+ suppliers within the ThermOmegaTech ecosystem and is reported in calendar days within BOM Health. The value shown in BOM Health is the minimum lead time from the suppliers.

Master List Data

- Line Risk Score: after scoring all the MPNs on the BOM line, the line risk is the best MPN risk score based on lifecycle, component availability, lead time, number of supplier sources, and reported component on order status.
 - High: less than -50
 - \circ Mid: between -26 and -50
 - Low: greater than -25
- **MPN Cross Score:** based on the original MPN, this is the highest scored MPN from 30+ suppliers within the ThermOmegaTech ecosystem using a string algorithm known as the <u>Jaro-Winkler algorithm</u>
- Lifecycle Status: pulled from 30+ suppliers within the ThermOmegaTech ecosystem, BOM health uses the furthest response within the MPN life cycle. As an example, if 10 suppliers report the MPN as active and 1 report the MPN as not recommended for new design (NRND), BOM health will report NRND.
- **Suppliers with Stock:** Of the 30+ suppliers within the ThermOmegaTech ecosystem, the count of distinct suppliers with stock available.
- **Projected Stock:** the sum of the stock reported to be available from 30+ suppliers within the ThermOmegaTech ecosystem.
- **Stock Levels:** After summing the in-stock from the 30+ suppliers within the ThermOmegaTech ecosystem, BOM Health will respond with a tier rank. Please reference the example below:
 - Tier 1: 1-9 pcs in stock
 - Tier 2: 10-99 pcs in stock
 - Tier 3: 100-999 pcs in stock
 - Tier 4: 1000-9999 pcs in stock
- **Possible Crosses:** the count of possible crosses provided by the 30+ suppliers within the ThermOmegaTech ecosystem.
- **Min Lead Time:** Lead time is pulled from the 30+ suppliers within the ThermOmegaTech ecosystem and is reported in calendar days within BOM Health. The value shown in BOM Health is the minimum lead time from the suppliers.
- **Max Lead Time:** Lead time is pulled from the 30+ suppliers within the ThermOmegaTech ecosystem and is reported in calendar days within BOM Health. The value shown in BOM Health is the maximum lead time from the suppliers.
- **On-Order QTY:** Of the 30+ suppliers within the ThermOmegaTech ecosystem, this is the summed-on-order QTY from the suppliers.
- **On Order ETA:** Of the 30+ suppliers within the ThermOmegaTech ecosystem, this is the minimum date (or earliest delivery) reported by the suppliers.



- **Country of Origin:** First country of origin response from the 30+ suppliers within the ThermOmegaTech ecosystem.
- **Region:** First region response from the 30+ suppliers within the ThermOmegaTech ecosystem.
- **RoHS**: Similar to lifecycle, BOM health reports the worst possible response from the 30+ suppliers within the ThermOmegaTech ecosystem. If one or more suppliers report the MPN as RoHS is no, BOM Health will show a "no."
- NCNR: Similar to lifecycle, BOM health reports the worst possible response from the 30+ suppliers within the ThermOmegaTech ecosystem. If one or more suppliers report the MPN as NCNR is yes, BOM Health will show a "yes."
- **Packaging:** First packaging response from the 30+ suppliers within the ThermOmegaTech ecosystem.
- **MPN Risk Score:** the MPN risk score based on lifecycle, component availability, lead time, number of supplier sources, and reported component on order status.
 - High: less than -50
 - Mid: between -26 and -50
 - Low: greater than -25
- **Updated on:** This is the last time new data was requested for the MPN from the 30+ suppliers within the ThermOmegaTech ecosystem.