

## *SOFTWARE DESCRIPTION*

This custom software solution to automate the standardization of BOM formats for GPC Electronics.

### *Description*

This software is designed to automate the process of converting various formats of BOMs received by GPC electronics into GPC's standard format (Quotewin single/multi-level BOM format & SAP upload format). In addition, user can identify missing fields from input files and web scrape corresponding information.

### *Benefits and Value*

The objective of this software is to streamline one of GPC Electronics' business processes through automation to maximize efficiency – BOMs received from GPC Electronics' customers are to be converted into a standard format Excel spreadsheet which can be fed into GPC Electronics' MRP system, SAP. This allows for less administration overhead for the business. However, the solution's output format will be limited to the current standard GPC format and any future changes desired mean that the system will have to be modified. Due to the wide array of formats in which BOMs are received, it may also be impossible to create a solution which can deal with every scenario, and thus a human aspect is still required to error check the system.

This new software solution will have a learning curve for users as they take time to become familiar with the system. The software solution will also need to be tested to ensure that it integrates seamlessly into GPC Electronics' current IT infrastructure. Over the long-term, the solution should provide GPC Electronics with enhanced efficiency as the manual time required to convert BOMs into their standard format is reduced.

### *Platform Requirements*

Microsoft Windows 7, 8, 8.1, 10

Microsoft Windows Server 2008, 2012, 2016

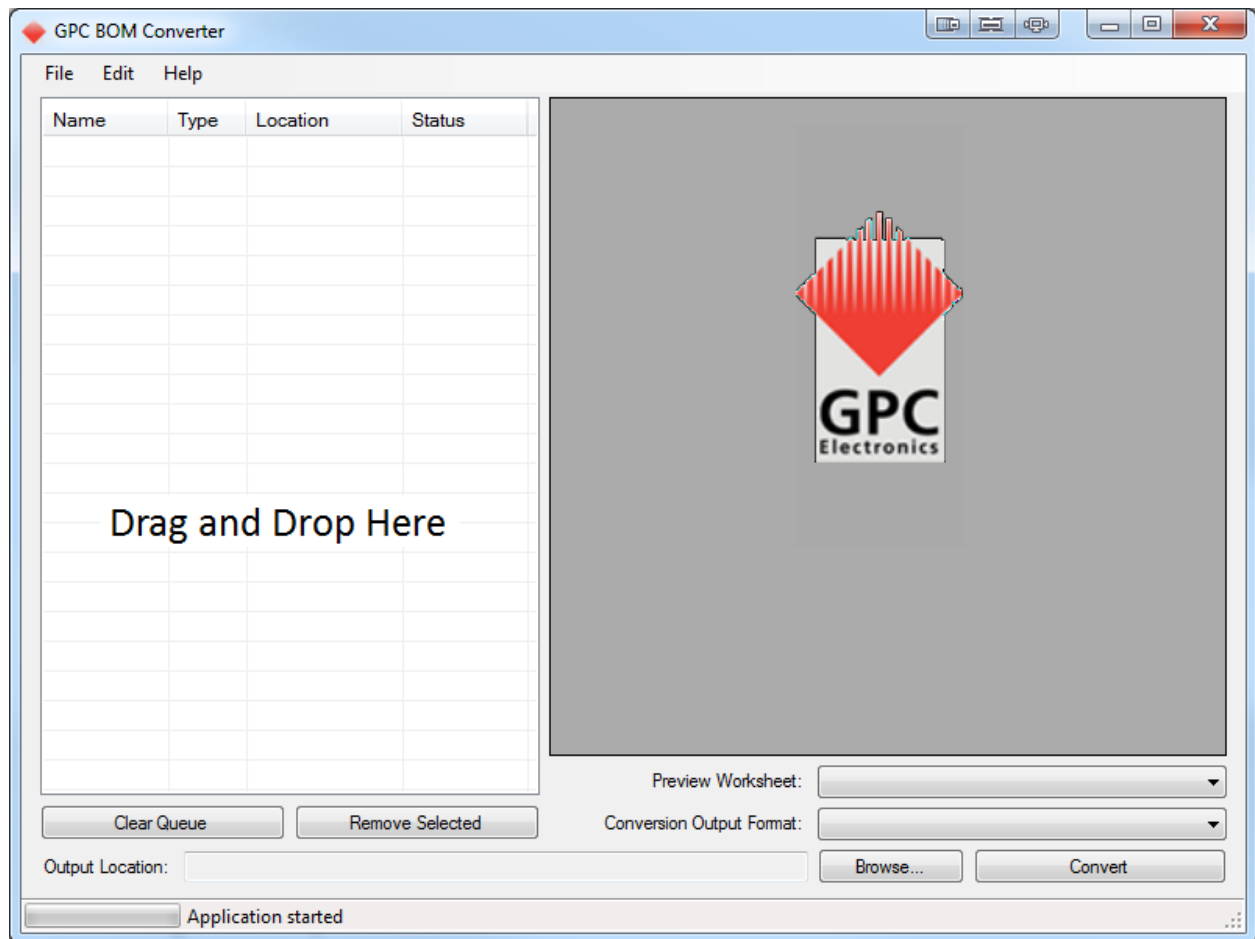
### *Supportive Software Requirements*

Microsoft .NET Framework 4.5 or above

Microsoft Office 2010 (Word and Excel conversion available)

Microsoft Office 2013 or newer (Word, PDF and Excel conversion available)

## Interface guide:



### Menu Bar

File: Able to open file selected from folders and alternative exit function of this software

Edit: Able to set settings, a function which will be explained in an individual section

Help: Able to browse instruction and software description

### Buttons and Boxes

Clear Queue: Clear all selected files

Remove selected: Remove selected file from the queue

Conversion Output format: Select the output format of the file, currently there are 3 versions. Quotewin single/multi-level and SAP format

Browse: Select desired output location of the output file

Convert: Command to initiate the conversion process

**Settings**

Column Identifiers (Basic)

Level: level;lvl;lv;lv::

CPN: cpn;::::

Description: description;item description;material description;general desc

Quantity: quantity;qty;qty/assy;qty per assy;e-bom quantity;:

Designator: designator;designation;ref des;reference des;reference positi

Manufacturer: manufacturer;mfr.name;20-primary manuf;maker;vendor;mfr |

MPN: part number;mfr.nbr;manufacturer part #;manufacturer p/n;ma

Process: process;:

Notes: notes;bom notes;:

Cool tip: All column identifiers are case insensitive when compared.  
Heuristic analysis will also override these decisions with what it thinks is best.

Web Scraping Preference

DigiKey: 1 Mouser: 2

Element14: 3 RS Components: 4

Restore Defaults Save

### Explanation

This is the setting page that is used to modify some configurable parameters. It may be useful when there are new column headers which are not recognised by the program.

For example: Level is the name of this mandatory field in a standard BOM, and the editable field allows you to add similar names of this column type separated by a semicolon “;” e.g. level;lv;lvl

The order in which the web scrapers are used can also be set here. If the program encounters missing descriptions when converting a file, it will check each of the sources listed until it finds something to insert. This is only possible if an MPN value is present for that item.

### Buttons

**Restore Defaults:** Use this if you wish to restore all of the values back to their original setting as at design time. You will be prompted with a confirmation message.

**Save:** This saves all of the above settings into the program’s long-term configuration file.