StdBx PartsDB

Just like the same mechanical package can be used for many different ICs, so too can the same Eagle library component be used for many different vendor parts. For example, the same library component can represent a red LED or a green one. What's important to the library component is that the LEDs share the same mechanical shape, pad layout and panel cutouts or engravings. Similarly the same library component for a push button can represent a momentary contact button or a push-on/push-off button. The mapping from library component to vendor parts can be one to many.

The reverse is also true. The same vendor part for an LED can be used for the library component with panel cutouts to make it show through clear or with another library component that just an engraved spot to have it diffused. Another example would be two different library components that represent the same switch, one with a round cap, the other with a rectangular cap. So the mapping from vendor part to library components can also be one to many.

To facilitate this many-to-many mapping StdBx uses a parts database rather than just the Eagle component library. Each library component carries the definition of the front panel layers as well as the normal schematic and board layout representations. Also, it is a goal that the StdBx library components be readily available. Therefore there may be multiple vendors and/or multiple manufacturers for each component. Since both retailers and manufacturers add and drop components all the time, the information needs to be maintained dynamically but it would cause unnecessary churn to the Eagle library to have to update it every time a new vendor is found or a manufacturer introduces a new color.

The database need not be complex or require special tools. The master information will be maintained as a Microsoft Excel (.xlsx) file, but the data will also be saved as CSV text so that it can be imported into any spreadsheet or database, or just read as text.

Therefore: Each component in the StdBxLibrary.lbr will be assigned a part number. The format for the number is "SBxxxx" where xxxx is a four digit number.   So that we can also track enclosure variants or other StdBx parts, these too will receive a part number. A master list of StdBx part numbers will be maintained. Each entry will record the part number, name, revision, definition file type, description, and status. A second list will be maintained that contains a list of vendor parts that can be used with each StdBx library component. Each entry will record the vendor, vendor part number, StdBx part number, manufacturer, manufacturer part number, name and notes. No component shall be added to the library unless the part for that component is readily available.

The purpose of the master list of StdBx part numbers is to facilitate allocation of new part numbers and manage development and status of all StdBx components.

To find a part for your project determine the kind of part you need and choose that component from the component library. Note the StdBx part number. Then look up that StdBx part number in the vendor

part number list. You may find multiple vendors or vendor part numbers that match. You should always find at least one.

If you should ever want to submit a new library component for inclusion in StdBx, please also submit one or preferably multiple vendors' part numbers that fit the component.