PT. PCI Elektronik Internasional as contractor serve for Original Equipment Manufacturer (OEM). In manufacturing Process of customer product, PCI get used to receive Bill of Material (BOM) that included in Engineering Change Order (ECO) from customer as one of the most important document related to the product. Product Engineer (PE) of PCI is responsible to upload the BOM into PCI SAP System and ensure there is no error during BOM creation. The checking process of the BOM is still done manually so that take more times and has chance to cause error. In other hand the BOM received form customer has different format to BOM of PCI then need to be converted. In order to solve these problems VBA application of BOM Buy Off and BOM Converter need to be designed. Application of BOM Converter is used to convert the format of customer BOM to be matched with the format of PCI BOM. Whereas application of BOM Buy Off is used to compare the PCI BOM and customer BOM. Output of BOM Buy Off is discrepancy found between the two BOMs and recommend to revise the PCI BOM so that match with customer BOM. By using this application of BOM Buy Off, the checking process is about 15 minutes while when it was done manually is about 45 minutes. Application of BOM Buy Off also simplify the checking work flow then the target to finish the BOM Buy Off can be expedited from 2 days become 1 day after the BOM uploaded by the PE. Whereas by using the application of BOM Converter, the converting process become faster which is from 1 hour to be 5 minutes.

Key Words : BOM, BOM Buy Off, BOM Converter, Engineering Change Order