

## PoE PD Modules – Load Input Filter Design II

### A. Scope

This document can be applied on Befact PoE / PoE+ PD modules. Current models of Befact PoE/PoE+ PD modules are TPD modules (TPD-12, TPD-50, TPD-33), SPD modules (SPD-12, SPD-50), THPD modules (THPD-12, THPD-50, THPD-33), AHPD Module (AHPD-12).

### B. Case Study – PI ( $\pi$ ) Filter

A proper input filter can do noise reduction, impedance tuning, EMI reduction and enhancing stability of circuitry for a load, target system. One of the popular filters, PI (  $\pi$  ) filter, is another simple one can be applied on target system. Normally, the ferrite bead is the recommended one for the “L” part. And the “C” part can be one of all kinds of capacitor, for example, electrolytic capacitor (EC), Multi-Layer Ceramic Capacitor (MLCC), solid capacitor, ...etc.

