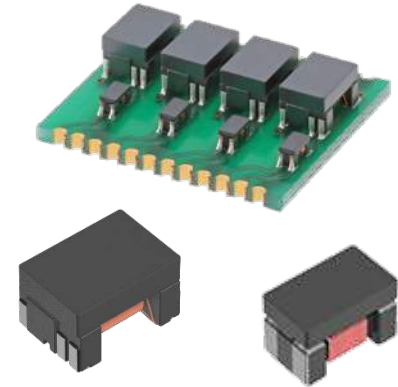


# ALT-ACM-KIT

## LAN Magnetics Solution for 1000BASE-T Sample Kit

TDK's ALT-ACM-KIT contains components + an eval board to simplify evaluation of the discrete LAN magnetics solution based on the ALT4532 series transformer and the ACM2012 series common-mode filter combination. The included ALT4532-EVA-01A evaluation board configuration supports the 1000BASE-T Ethernet standard.

TDK has developed the ALT4532M series pulse transformers in an SMD package using an automated winding process that provides excellent frequency performance and manufacturing consistency due to the fully automated winding and assembly process.



When used in conjunction with the appropriate common-mode filter (ACM2012 in this case), it provides the complete solution for LAN magnetics comparable or better than traditional LAN magnetics modules and typically in a smaller overall footprint. The proposed ALT + ACM solution can reduce overall placement area significantly (~40%) depending on the configuration versus a traditional LAN module. The ALT4532M-EVA-01A evaluation board allows for quick performance evaluation, signal integrity, and EMC testing of the solution. The solution is compatible with other Ethernet standards (10BASE-T, 100BASE-TX, and 1000BASE-T) by means of interchanging different common-mode filters.

### PRODUCT HIGHLIGHTS

- Kit contains the following components for quick evaluation:
  - ALT432-EVA-01A evaluation board
  - ALT4532M-201-T001 pulse transformer
  - ACM2012-900-2P-T002 common mode choke
- Allows SI/EMC test for TDK's ALT4532 on the same land pattern as the module
- Operating temperature range of -40°C to +85°C

### APPLICATION EXAMPLES

- LAN interfaces of various devices including:
  - Telecom switches, routers
  - Computing equipment LAN ports
  - Industrial network interface equipment (including Modbus and other)

### DESIGN RESOURCES

- [ALT4532-EVA-01A Datasheet](#)
- [ALT4532M-201-T001 Datasheet](#)
- [ACM2012-900-2P-T002 Datasheet](#)
- [Application Note - Recommended combinations of products in the ALT series and common mode filters/chokes](#)
- [Application Note - Server Power Supply Circuit Products and Data Line Products](#)

#### ALT-ACM-KIT Contents

TDK Part Number	Description	Quantity
ALT4532-EVA-01A	LAN Magnetics Eval Board for 1000BASE-T (includes 4 ALT pulse transformers + 4 ACM common mode filters mounted to PCB)	1 pcs
ALT4532M-201-T001	Pulse Transformer for LAN	4 pcs
ACM2012-900-2P-T002	Common Mode Choke for Differential Signal Line	4 pcs