

TLVR Choke Series by LinkCom: Innovative Voltage-Reduction Inductors for AI Server Core Circuit

LinkCom proudly announces the TLVR Choke LVR1005 series, an innovative inductor designed for AI server core power supplies. The TLVR Choke aims to address the voltage drop issues caused by CPU process scaling and brings new breakthroughs to the AI industry. The LVR1005 series utilizes a novel power reduction topology proposed by Google in 2019, enabling faster transient responses. During rapid changes in CPU load, it provides relatively stable voltage while reducing the need for capacitors, thus improving overall cost-effectiveness.



LinkCom, having mastered critical technology by the end of 2023, overcame Japanese patent restrictions and obtained patents. In early 2024, customer interest led to testing arrangements. Compared to competitor products, the LVR1005 series offers the following advantages:

1. Better PCB flatness control to prevent soldering failures.
2. Easy inspection and debugging after assembly.
3. Higher primary and secondary winding insulation (100 VDC to 200 VDC).
4. Common circuit design (Co-Lay) compatibility.

The TLVR Choke LVR1005 series maximizes magnetic circuit efficiency, with precision requirements exceeding typical magnetic components. Due to its high customization ratio, it is not suitable for traditional track-based automated production equipment.

LinkCom's fully automated assembly equipment, combining visual judgment and robotic arms, enhances assembly precision through edge detection technology. Collaboration with upstream partners optimizes production, contributing to Taiwan's Industry 4.0 transformation and increased market competitiveness. Beyond TLVR inductors, this design is also applicable to high-precision assembly of flat transformers and other magnetic components.