



**Connecting the Information
Age.....**

10GBase-T XMJax Magnetic Connectors

Universal Integrated



10GB XMJax Magnetic Connectors



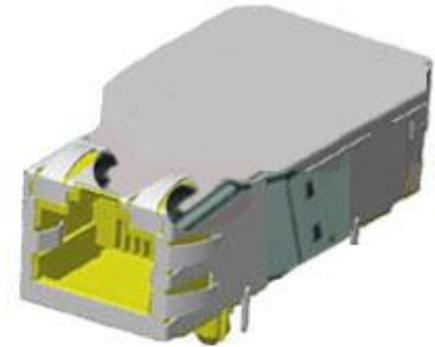
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10GBase-T Magnetic Connector Background

10GBASE-T, or **IEEE 802.3an-2006**, is a standard released in 2006 to provide 10 Gbit/s connections over unshielded or shielded twisted pair cables, over distances up to 100 meters (330 ft). 10GBASE-T cable infrastructure can also be used for 1000BASE-T allowing a gradual upgrade from 1000BASE-T using auto negotiation to select which speed to use. 10GBASE-T has higher latency (1 microsecond) and consumes more power than other 10 gigabit Ethernet physical layers. Xmultiple uses 10GBASE-T silicon with power dissipation of 3-4 W at structure widths of 40 nm. and with 28 nm in development.

10GB XMJax Magnetic Connectors

The 10GB Universal XMJax connector is an RJ connector which has the capability to have different 10GB transformer components integrated. The transformer components are easily inserted and removed with our patent pending design.



10GB XMJax Magnetic Connectors

The wide area on the back of the Universal is designed with enough room to house any 10GB transformer in the marketplace. Also integrated inside the Universal XMJax is a printed circuit board with a locking mechanism so the transformer can be inserted and then locked in place on the PCB. We have multiple 10GB semiconductor companies who are providing their transformers for integrating their transformer into an RJ45 connector housing.



10GB XMJax Magnetic Connectors

Our XMJax 10GB transformer, integrates into the universal connector as well. The advantage of our Universal 10GB solution is the integration the transformer and connector results in a higher level of EMI protection. The shield surrounds the 10GB component and the RJ45 connector providing this protection.



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The major benefit is that the component and RJ45 contacts mate inside the RJ45 connector thereby reducing EMI compared to solutions where the component and connector are separated and connected by traces on the printed circuit board. The longer distance to make this connection between the component and connector is much more critical in higher speed 10GB transmission. The Universal XMJax is the best way for the component and connector to perform for 10GB



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The major benefit of our design of the Universal 10GB RJ45 connector is it permits users to insert and remove components. A user of our Universal 10GB RJ45 connector has the capability to purchase 10GB transformers from multiple sources. Second sourcing reduces lead-times. There is also the advantage of removing failed components without expensive repairs. When you add up all the advantages you can see that our universal solution will be embraced by many users.



The XMJax 10GBase-T Connectors

- **Noise Issues Solved by XMJax**
- **Universal Approach which uses passive components provided by major semiconductor manufacturers**
- **XMJax uses the standard RJ45 connector used for networking connectivity**
- **Optionally, the XMJax provides UltraJax double contact pin count RJ45 connectors**

Contact XMultiple

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