

# Decoupling Multiple Power Planes

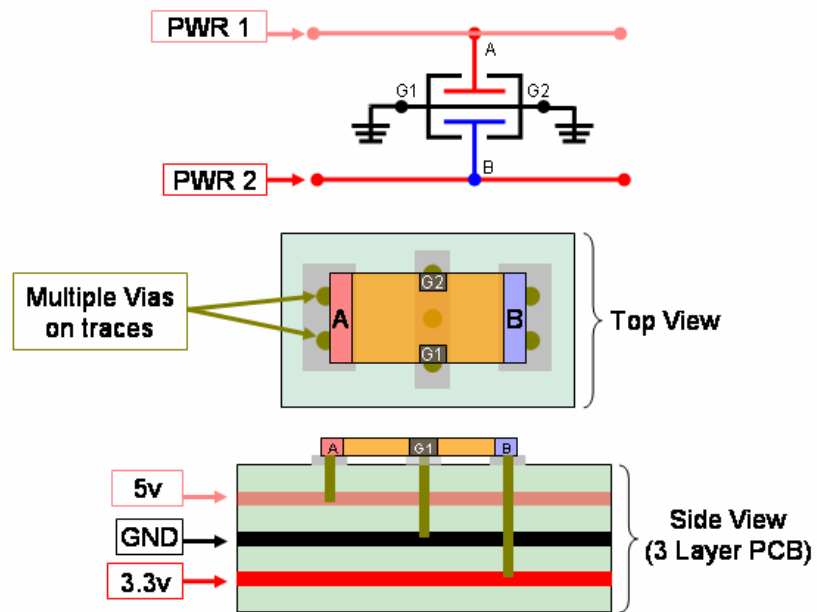
## Summary

The purpose of this application note is to specifically address the question of how to apply the X2Y® Technology when decoupling a printed circuit board (PCB) with multiple power planes. This application note should be considered an extension of:

- [Application Note #3001 X2Y® Solution for Decoupling Printed Circuit Boards](#)
- [Application Note #3002 IC Decoupling and EMI Suppression using X2Y® Technology](#)

The X2Y® Technology offers low inductance, passive cancellation of noise, and uniform capacitive values from side-to-side with crosstalk isolation. **Error! Reference source not found.** depicts a schematic and layout of an X2Y® component in a Circuit 1 configuration attached across multiple power planes. Note that PWR 1 and PWR 2 can be the same or different voltage potentials. (For example, PWR 1 = 5v and PWR 2 = 3.3v or PWR 1 = PWR 2 = 5v.)

## Circuit 1 - Multiple Power Plane Attachment



**Figure 1.** Schematic and layout of X2Y® Technology in a Circuit 1 configuration attached across multiple power planes. For more information on the Circuit 1 configuration see [Application Note #1002 X2Y® Circuit 1 & Circuit 2 Configurations](#).

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## Conclusion

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For more information on the X2Y<sup>®</sup> Technology used in decoupling applications, circuit configurations, and benefits go to [www.x2y.com](http://www.x2y.com) or use the contact information at the end of this application note to get answers to questions unique to your application.

**Note:** Performance results reported in this and other application notes can only be achieved with patented X2Y<sup>®</sup> components sourced from X2Y<sup>®</sup> licensed manufacturers or their authorized distribution channels.

## Contact Information

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Direct inquiries and questions about this application note or X2Y<sup>®</sup> products to [x2y@x2y.com](mailto:x2y@x2y.com) or telephone:



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