

# $C_{FLY}$ Cross-Connected (CCC) DC-DC Converter

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# Outline

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- Motivation.
- $C_{FLY}$  Cross-Connected (CCC) boost converter.
- CCC buck converter with inserted  $D > 0.5$  control achieving fast transient response.
- Gate drive techniques for CCC converter.
- Conclusion.

# Conclusion

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- CCC has almost the same power density and efficiency as DSD.
- CCC has smaller input (or output) current ripple.
- CCC has more control sequences: faster transient response:  $> \times 2$   
 $I_{L,SR}$  of DSD.
- The more control sequences may facilitate more functions.

# Reference

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