<b>ON Semiconductor</b> ®	ON Selection. Se Power Solutions fro	ervice. Support. om ON Semiconductor	ontact Us   Company   jn Part #/Keyword	Investors   Careers   jan Cross - Referen	???? ???   ???? ?????????    Noce » Advanced
HOME PRO	DUCTS DESIGN SUPPORT	APPLICATIONS	QUALITY	MyON: Sign	In or Register
Design Support	Home > Support > Design Sup	port > Design Resource	es > Evaluation Board	s Previ Prod	iously Viewed ucts
Technical Documentation	NCP5422EVB:NCP5422 Buck Controller Evaluat	Dual Out - of tion Board with C	- Phase Synchron urrent Limit	<b>OUS</b> Selec	ct Product 🖵 Go Clear List
Design Resources	<b>Evaluation Board Descrip</b> The NCP5422		Ma 12V ATN	Des	ign Support
Design & Development Tools	evaluation board is a 4.0 in by 2.2 in two - layer printed circuit board. This			T T T T T T T S	Technical Documentation Design Resources Technical Support Sales Support
Evaluation Boards	demonstration circuit can be used	04143	5100 <b>: 10</b> :	9414J	
Conversion Services	to evaluate the performance and functionality of	ON Semiconductor	Demons CS5422 D Duck Rep. 12V to 1.	stration Circuit: ual Output Actor SV/18A and 1.5V/18A	
Evaluation Board Documents	NCP5422, Dual Out - of - Phase Synchronous E	Buck Controller. Wi	th onw 12 V input.	9900 per	

Custom Foundry Services

Sample Kits

Simulation Models

Product Recommendation Tools

Software

Video

Technical Support

two independent synchronous Buck switching regulators provide 1.8 V/10 A and 1.5 V/10 A outputs. The NCP5422 controller contains all the circuitry required for teo independent Buck regulators and uses the V2<sup>™</sup> control scheme to achieve the fastest possible transient response and best overall regulation, while using the least number of external components. Another feature of the NCP5422 is out of -phase synchronizarion between the channels, which rduces the input filter requirement. The NCP5422 also provides under -vo;tage lockout, soft start, built -in adaptive FET non overlap, and hiccup -node overcurrent protection.

## Features and Applications

**Features** 

- ? Dual Synchronous Buck Topology
- ? V2<sup>™</sup> Control Method
- ? 150 ns Transient Response
- ? 0 or 100% Duty Cycle During Load Transient
- ? Programmable Soft Start
- ? Out of Phase Synchronization Between the Channels
- ? Hiccup Mode Overcurrent Protection
- ? Undervoltage Lockout
- ? Excellent Line and Load Regulation
- ? Low Output Voltage Ripple

## **Evaluation Board Information**

Evaluation Board	Status	Pb- free	Short Description	Parts Used	Action
NCP5422EVB	Active		NCP5422 Dual Out -of - Phase Synchronous Buck Controller Evaluation Board with Current Limit	NCP5422ADR2 , NCP5422ADR2G	Contact Local Sales Office

Technical Documents								
Туре	<b>Document Title</b>	Document ID/Size						
Eval Board: BOM	NCP5422EVB Bill of Materials	NCP5422EVB_BOM.PDF - 54.0 KB	0					
Eval Board: Gerber	NCP5422EVB Gerber Layout Files (Zip Format)	NCP5422EVB_GERBER.ZIP - 47.0 KB	0					
Eval Board: Schematic	NCP5422 Schematic	NCP5422EVB_SCHEMATIC.PDF - 39.0 KB	0					
Eval Board: Test Procedure	NCP5422EVB Test Procedure	NCP5422EVB_TEST_PROCEDURE.PDF - 15.0 KB	0					

