



Data-Driven Insights, Better Outcomes

# Hedging Strategies: Zero-Cost Put Spread Collars

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August 12th, 2024

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## Company Background

Volworks® is a wealthtech and advisory research/consulting firm specializing in helping investors and advisors make better data-driven decisions for their equity and ETF investments. The Volworks platform was initially developed to help Volworks Founder manage equity portfolios for a family office client. While the initial focus was on using options strategies to improve outcomes, the platform has evolved into a leading equity analytics platform in addition to its powerful options capabilities, used daily by the Volworks team.

Our team has extensive experience in options trading, asset management, and software development. Volworks Founder Victor Viner previously led two SEC Registered Investment Advisory firms as CEO & CIO, including Volaris, a multibillion-dollar options-based firm with proprietary technology later acquired by Credit Suisse.

## NVDA Zero-Cost Put Spread Collars Overview

The NVDA zero-cost put spread collars in this document were generated from the Volworks analytics and option strategies platform. The pricing of the trades uses indicative pricing from the time each trade was analyzed. We structured a traditional zero-cost put spread collar and a booster (1x2 call spread) put spread collar for the examples here. The difference in the strategies is that the booster collar outperforms the put spread collar, and a long stock position, to a predetermined cap. The booster cap is lower than the traditional put spread collar, which is the tradeoff for the outperformance. The payoff graphs show how each strategy compares to the other. These trades are for illustrative purposes not meant to be an offer to buy or sell securities or recommendations any investor.



# Zero-Cost Put Spread Collars: Short Call & Booster Collars

## Description

The zero-cost put spread and booster collars are strategies designed to provide various ranges of downside protection for long equity and/or ETF positions. They are typically structured as zero-cost (or a small credit) by selling an out-of-the-money call to finance the downside protection.

The put spread collar is one of the most common hedging strategies used by investors and advisors. The booster collar, which Volworks recommends for sophisticated investors, is structured to outperform the stock (with or without a put spread collar) as it appreciates. The tradeoff is that the booster collar has a lower cap (max return) than put spread collars for the same level of protection.

## Use Cases

1. The investor wants to protect gains and is willing to sell some or all the position in a stock or ETF at a predetermined higher price. This is the most common use case.
2. The booster collar is used for investors who want downside protection AND want to outperform the stock as it appreciates for a predetermined range. This strategy is great for investors or advisors who are not overly bullish for the next 3-6 months.
3. The investor or their advisor is concerned that the overall market for the next 3-6 months has a significant sell-off risk. This type of hedge is considered a macro hedge as it's not structured for a single symbol.

## Structures

- Volworks recommends collar trades that are typically 120-200 days, with 180 days as the sweet spot for most stocks or ETFs.
- Zero-cost put spread collars are structured with a long put spread combined with a short call. It's imperative that all the options are for the same expiration. Put spreads are viewed as percent of the stock price. The most common ones used are 95-80%, 95-85%, and 90-80%. The calls sold to finance the put spreads are selected to cover the cost of the put spread.
- Zero-cost booster collars are structured with a long-put spread and a booster 1x2 call spread. The difference here is that the booster 1x2 is structured for a credit that funds the put spread.

## Highlights & Key Takeaways

- Zero-cost put spread collars can be used on stocks or ETFs in any portfolio. Many investors use them, and stagger expirations across their holdings.
- Zero-cost booster collars are great strategies for higher-vol stocks. In our experience, once investors understand the strategy, they like to implement it in a portion of their positions.

## Reasons for Using the Strategy

- Can be implemented on any stock or ETF that has listed options.
- Typically structured for zero-cost or credit. There is no margin or cash required to implement the strategy.
- Investors and their advisors can determine the level of protection they are comfortable with and whether giving up the upside above the cap fits their outlook and situation.
- The trades can be managed to adjust to changing market conditions, if desired by the investor.
- Trades can be executed in most brokerage margin accounts and or retirement accounts for additional tax benefits.
- Investor retains the dividend during the trade.

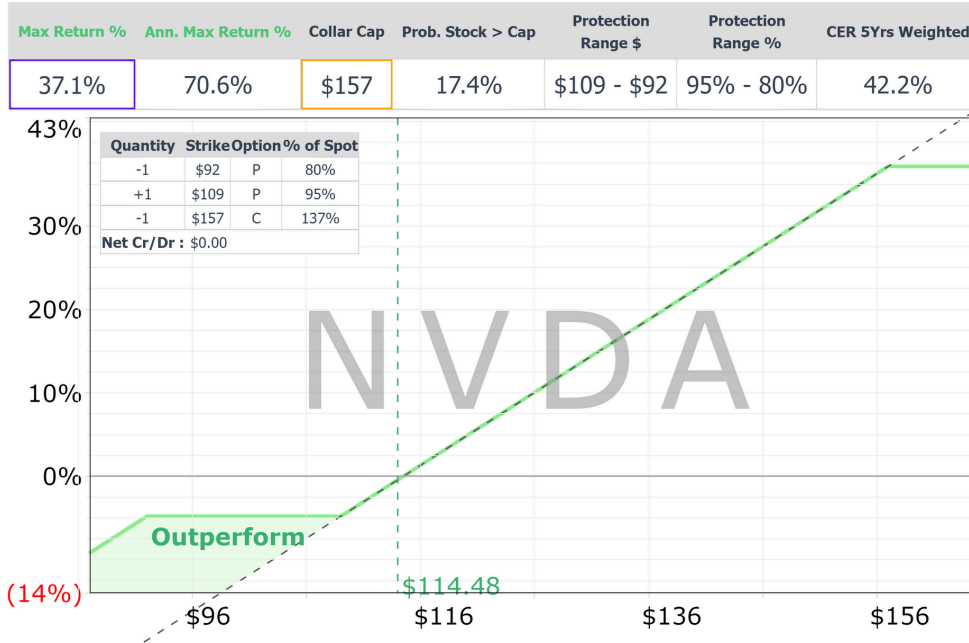
## Reasons for Not Using the Strategy

- Investors believe there is a high likelihood that the stock will appreciate above the cap.
- Can realize a taxable gain at expiration if the stock closes above the cap.



# NVDA Zero-Cost Put Spread Collar Strategy

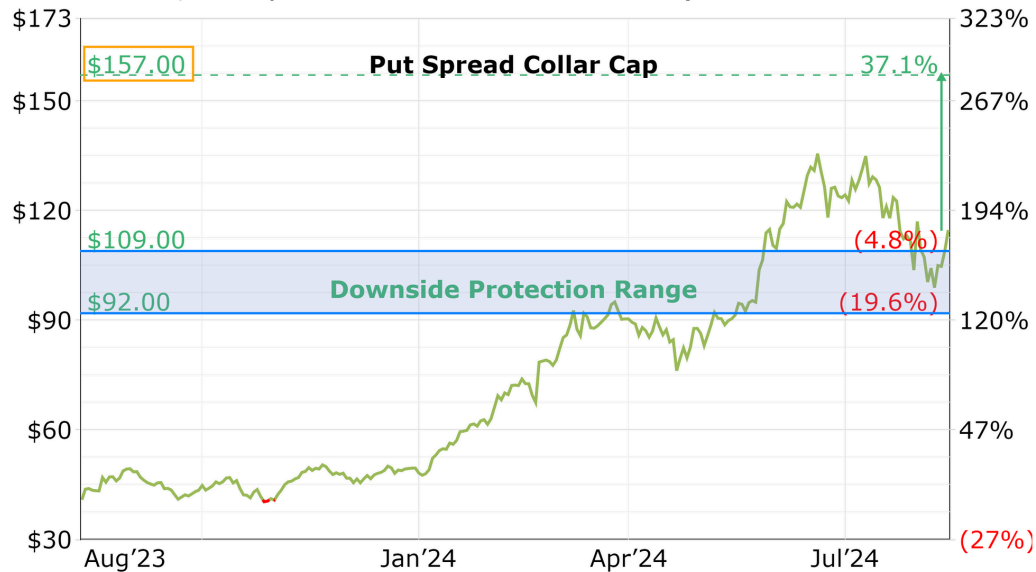
NVDA \$114.48 | Put Spread Collar | 192 Days to 02/21/25 Exp  
Trade date 08/12/24



Payoff: Strategy vs Stock

Stock Price	Return		\$ PnL	
	Put Spread Collar	Stock	Put Spread Collar	Stock
\$85	(10.9%)	(25.8%)	(\$12.48)	(\$29.48)
\$90	(6.5%)	(21.4%)	(\$7.48)	(\$24.48)
\$110	(3.9%)	(3.9%)	(\$4.48)	(\$4.48)
\$114.48	0%	0%	\$0.00	\$0.00
\$130	13.6%	13.6%	\$15.52	\$15.52
\$145	26.7%	26.7%	\$30.52	\$30.52
\$157	37.1%	37.1%	\$42.52	\$42.52
\$165	37.1%	44.1%	\$42.52	\$50.52
\$175	37.1%	52.9%	\$42.52	\$60.52

NVDA \$114.48 | 1 Year Price & Performance with Put Spread Collar Trade



## VOLWORKS INSIGHTS

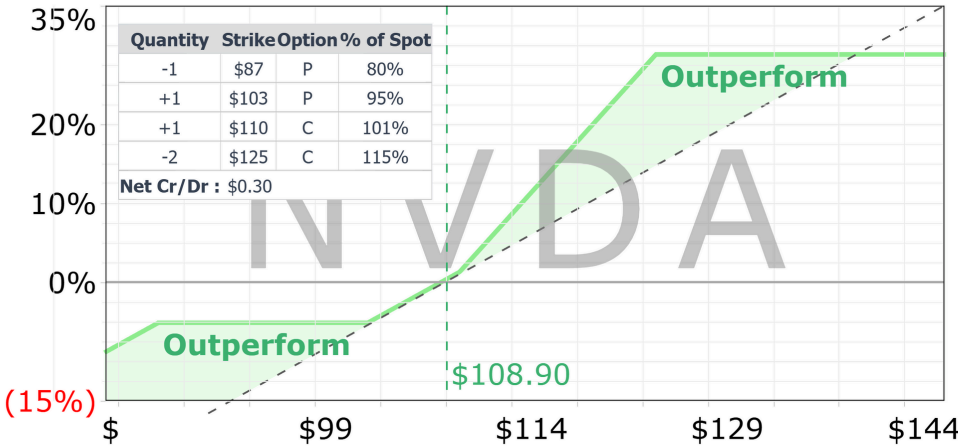
- Protection from **(5%)** to **(20%)**
- Outperforms the stock up to the cap of **\$150** for a **37.7%** max return
- NVDA has an implied probability of **17%** of finishing above the **\$150** cap



# NVDA Zero-Cost Booster Put Spread Collar Strategy

NVDA \$108.90 | Booster Collar | 192 Days to 02/21/25 Exp  
Trade date 08/12/24

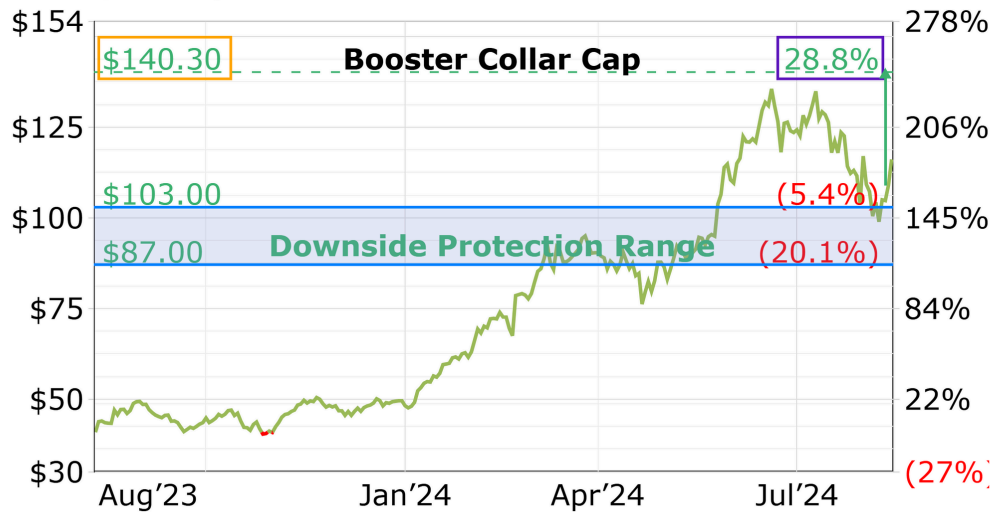
Max Return %	Ann. Max Return %	Price to Boost (\$)	Collar Cap	Prob. Stock > Cap	Protection Range \$	Protection Range %	Booster Impact Metric	CER 5Yrs Weighted
28.8%	54.8%	\$110	\$140.3	21.8%	\$103-\$87	95% - 80%	-	42.2%



Payoff: Strategy vs Stock

Stock Price	Return		\$ PnL	
	Booster Collar	Stock	Booster Collar	Stock
\$80	(11.6%)	(26.5%)	(\$12.60)	(\$28.90)
\$85	(7.0%)	(21.9%)	(\$7.60)	(\$23.90)
\$105	(3.3%)	(3.6%)	(\$3.60)	(\$3.90)
\$108.9	0.3%	0%	\$0.30	\$0.00
\$110	1.3%	1.0%	\$1.40	\$1.10
\$115	10.5%	5.6%	\$11.40	\$6.10
\$120	19.7%	10.2%	\$21.40	\$11.10
\$125	28.8%	14.8%	\$31.40	\$16.10
\$140.3	28.8%	28.8%	\$31.40	\$31.40
\$145	28.8%	33.1%	\$31.40	\$36.10
\$155	28.8%	42.3%	\$31.40	\$46.10

NVDA \$108.90 | 1 Year Price & Performance with Booster Collar Trade



## VOLWORKS INSIGHTS

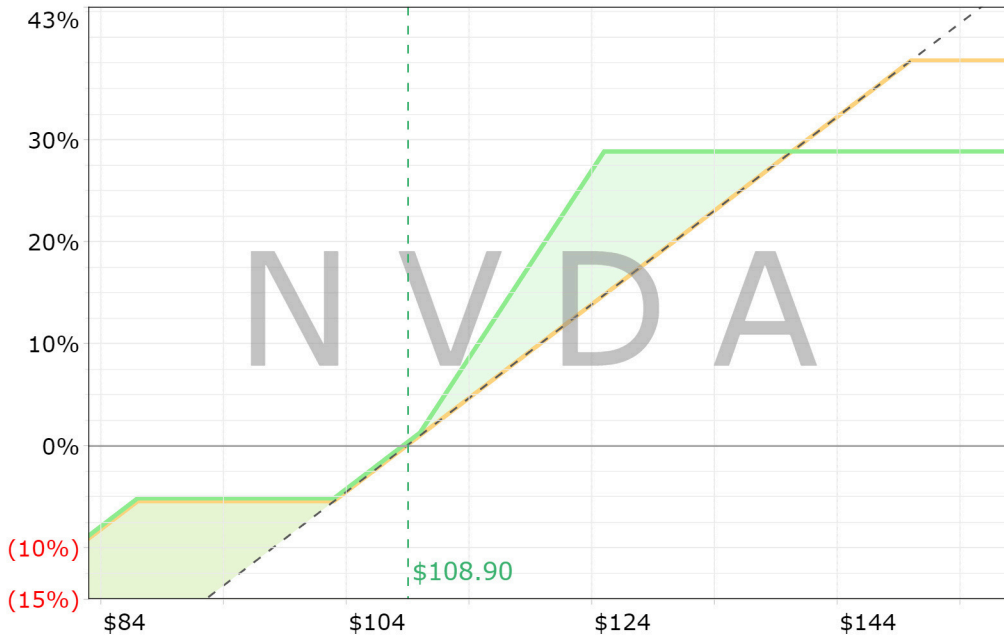
- Protection from (5%) to (20%)
- Outperforms the stock up to the cap of \$140.30 for a 28.8% max return
- Only **Mag 7** stock positive in 9 of the past 10 years for the same time period
- Only down period was in **2019**. NVDA was down **38.8%**



# NVDA Zero-Cost 95%-80% Collars: Comparing Put Spread vs Booster

NVDA Payoff | NVDA: \$108.90 | Trade date 08/12/24

#	Symbol	Max Return %	Ann. Max Return %	Collar Cap	Prob. Stock > Cap	Protection Range \$	Protection Range %	CER 5Yrs Weighted		
1	NVDA	37.7%	71.7%	\$150	17%	\$103 - \$87	95% - 80%	42.2%		
#	Symbol	Max Return %	Ann. Max Return %	Price to Boost (\$)	Collar Cap	Prob. Stock > Cap	Protection Range \$	Protection Range %	Booster Impact Metric	CER 5Yrs Weighted
2	NVDA	28.8%	54.8%	\$110	\$140.3	21.8%	\$103-\$87	95% - 80%	-	42.2%



Trade 1 Outperforms Trade 2 at **\$140.30**

NVDA \$108.90 | 1 Year Price & Performance with Trade



## VOLWORKS INSIGHTS

- Traditional put spread collar has a max return of **37.7%** compared to the booster max return of **28.8%**
- The booster collar is attractive for investors who are not overly bullish for the next **6** months
- The booster collar outperforms the put spread collar (and stock only) from **\$110** to **\$140.30**

Symbol	Reference Price	DTE	CER Wtd 5yrs	Down Beta	Actual Percent of Spot	\$ Strike	Cost as % of Notional	Call Strike for Zero Cost	Call Strike % Out of Money	Prob of Stock > Zero Cost Strike	Call Strike % of Spot - CER Weighted
Average			7.3%	1.17			2.4%		17.9%	20.9%	10.6%
AAPL	\$221.27	156	4.9%	1.21	95-86	\$ 210-190	2.0%	\$250	13.0%	20.8%	8.1%
AMZN	\$170.23	156	(5.5%)	1.10	94-85	\$ 160-145	2.3%	\$205	20.4%	16.3%	25.9%
COST	\$864.82	156	8.0%	0.65	95-85	\$ 820-735	2.2%	\$985	13.9%	20.7%	5.9%
GOOGL	\$164.16	156	2.8%	1.45	94-85	\$ 155-140	2.1%	\$190	15.7%	19.7%	13.0%
GS	\$491.94	156	9.2%	1.34	95-85	\$ 465-420	2.2%	\$555	12.8%	23.2%	3.7%
JPM	\$207.94	156	12.6%	1.29	96-84	\$ 200-175	2.6%	\$225	8.2%	30.8%	(4.4%)
LLY	\$908.05	156	10.7%	0.19	95-85	\$ 860-770	2.9%	\$1,100	21.1%	18.3%	10.4%
META	\$528.54	156	2.9%	1.04	95-85	\$ 500-450	2.9%	\$645	22.0%	17.7%	19.2%
MSFT	\$414.01	156	5.7%	0.94	95-85	\$ 395-350	2.3%	\$465	12.3%	22.7%	6.6%
NVDA	\$116.14	156	22.2%	1.93	95-85	\$ 110-99	3.8%	\$166	42.9%	12.8%	20.8%
QQQ	\$462.58	156	4.5%	1.05	95-85	\$ 439-394	1.8%	\$510	10.3%	22.9%	5.7%
TSLA	\$207.83	156	21.4%	2.68	94-84	\$ 195-175	3.6%	\$295	41.9%	12.7%	20.6%
XLV	\$151.22	156	3.0%	0.26	96-86	\$ 145-130	1.3%	\$160	5.8%	30.0%	2.8%
XLY	\$178.00	156	0%	1.24	95-85	\$ 169-151	1.8%	\$195	9.6%	24.8%	9.5%

\*This is an actual report generated on 08/14/2024 from the Volworks Platform. All the analytics and reports from our platform can be exported to preformatted PDFs and/or Excel.

# Glossary of Terms

**% of Spot:** The percent the strike is of the spot price; e.g. 108% means the strike is 8% above the spot price.

**Ann. Max Return %:** The Booster Max Return, annualized.

**Booster Cap:** Above this price at expiration, owning the stock outperforms the Booster trade.

**Booster Impact Metric:** Proprietary metric which measures the amount the Max Return exceeds the sum of % to Boost Return and the CER™ for the given DTE. It measures the benefit of a Booster Trade compared to the stocks CER.

**Call Strike for Zero Cost:** The strike price of the call option with the same duration to finance a zero-cost hedge. The price of this call option equals the cost of the hedge.

**Call Strike % out of Money:** The percent the call strike is above the Symbol Price.

**Contextual Expiration Returns™ (CER):** The Contextual Expiration Return™ (CER) shows the median, mean, and weighted recency-adjusted average returns of the past 5 and/or 10 years for a given number of days to the listed option's expiration dates (DTE). For example, from (6/6/24), there are 106 days until the September monthly expiration (9/20/24). Our platform calculates the returns starting from the date that is 106 days prior to each of the September Monthly expirations for the past 10 years. Then, we calculate the mean, median, recency-adjusted (weighted) average return, standard deviation, and other statistics for our reports.

**Cost as % of Notional:** The cost of the strategy, expressed as a % of Symbol price.

**Days To Expiration:** Calendar days remaining until expiration for the analyzed trade. Weekly expirations are denoted by (w).

**Downside Beta (5Yr):** Beta calculated on the months where SPY had negative returns over the past 5 years.

**Expiration Date:** Date of the option expiration.

**Max Return %:** The maximum % return of the strategy.

**Price:** Price of the Symbol when the report was generated.

**Price To Boost:** The price above which at expiration the trade boosts the strategy return. This is at the long call strike.



# Glossary of Terms

**Prob. Stock > Cap:** The implied probability from the options market that the Symbol Price will be higher than the strategy cap at expiration.

**Prob. of Stock > Zero Cost Strike:** The implied probability from the options market that the Symbol Price will be higher than the Zero Cost Call Strike at expiration.

**Protection Range \$:** The price range at expiration where stock ownership is protected by owning a put spread.

**Protection Range %:** The Protection Range at expiration, shown as a percentage of spot price.

**Strategy Debit or Credit:** The amount we receive (Credit) or pay out (Debit) to put on the trade.

**Strike:** Strike price of the option(s) in the trade.

**Symbol:** The stock or ETF being analyzed in the report.