As of Date: 9/30/2024



#### alpha architect

## ALPHA ARCHITECT 1-3 Month Box ETF (Cboe: BOXX)

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#### 1-3 Month Box ETF Seeks to Be a Tax-Efficient Cash Management Tool



#### **Tax Efficiency**

The strategy seeks to be more tax-efficient than Treasury Bills.



#### **Treasury Bill Risk**

The strategy seeks to have a similar risk profile as 1-3 month Treasury Bills.



#### **Treasury Bill Returns**

The strategy seeks to earn returns similar to, or better than, 1-3 month Treasury Bills.

## Box Spread Background

### Box Spreads: FAQ

- Are box spreads a new market phenomenon?
  - No. As early as November 1985, Billingsley and Chance published "Options Market Efficiency and the Box Spread Strategy" in <u>Financial Review.</u>
- Who participates in the box spread market?
  - Multiple market participants: Options market makers, proprietary trading desks, and hedge funds make up a large portion of the market.
- Why does the box spread market exist?
  - Box spreads have historically allowed institutions an efficient alternative market to borrow and/or lend.
- What about "early" exercise risk associated with box spreads?
  - 1-3 Mo. Box ETF only trades and holds "European" style options which are only exercisable at expiration, thus, eliminating early exercise risk.



### Box Spreads are Backed by the Options Clearing Corporation (OCC)

	Rating	Outlook
US Sovereign Debt*	AA+	Stable
Options Clearing Corporation**	AA	Stable

OCC is a Systematically Important Financial Market Utility (SIFMU) with a similar credit rating as US Government Debt Obligations



These are OCC ratings and not the credit rating for the 1-3 Mo. Box ETF \*"As rated by S&P Global Ratings as of 01/20/2023: https://www.spglobal.com/ratings/en/research/articles/230120-bulletin-credit-faq-u-s-sovereign-debt-hits-the-ceiling-again-12617455 \*\* As rated by S&P Global Ratings as of 2/15/2024: Confirmed via OCC investor relations. SIFMU source: https://www.theocc.com/getmedia/872857a7-b46a-4eeb-b0fc-408d6646f993/OCC-ToolKit-Primer-SIFMU-072222.pdf

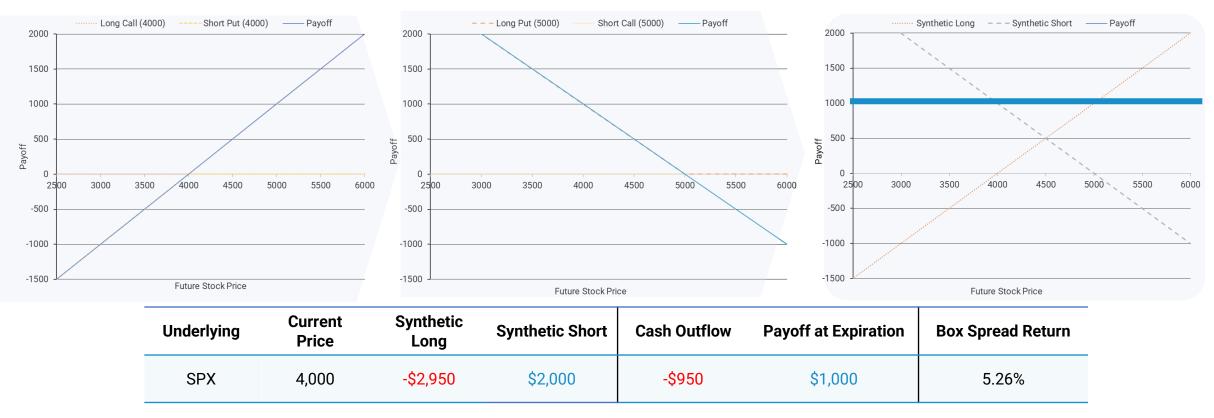
# Box Spread Explanation

#### Box Spread Construction and Hypothetical Payoff Profile

Synthetic Long (Long Call, Short Put @ \$4,000) +

Synthetic Short (Short Call, Long Put @ \$5,000)

Box Spread (Pays \$1,000 regardless of price)



The examples presented above are for illustrative purposes only and not the return of any actual investment. A box spread can be broken into two components: 1) a synthetic long position in the stock, and 2) a synthetic short position in the stock. The combination of the synthetic long and the synthetic short position eliminates market risk for the composite position and isolate a payoff equal to the spread in the strike price between the synthetic long and the synthetic short position. The difference between the known payoff and the price paid for the box spread, approximates the return the investor would get by buying the box spread. Definitions for Long Call, Short Call, Long Put and Short Put are on page 10.

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## 1-3 Mo. Box ETF Expense Ratio and Standardized Performance (as of 9/30/2024)

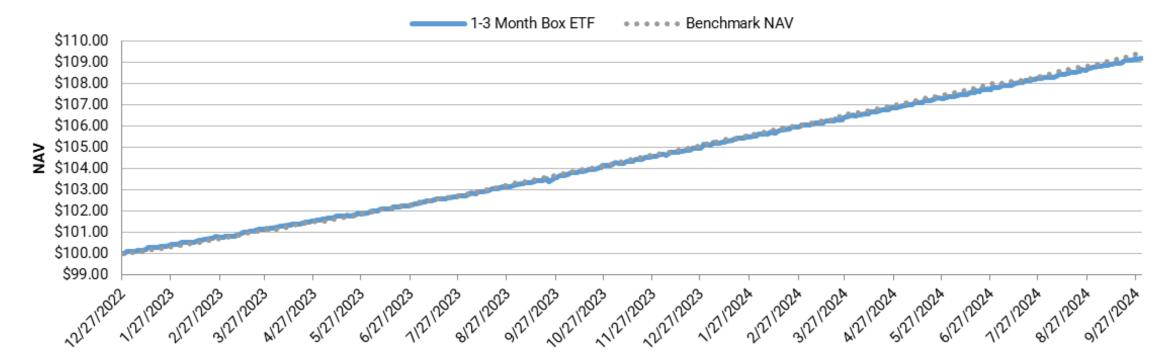
ETF Name	ETF Ticker	Gross Expense Ratio	Net Expense Ratio	ETF Inception Date	Return Type	3 Month	1 Year	3 Year	5 year	Since Inception
1-3 Month Box ETF	BOXX 0.39%	0.20%	0.19%	12/28/2022	NAV	1.31%	5.40%			5.14%
		0.19%	12/20/2022	MKT	1.30%	5.35%			5.14%	

Returns are average annualized total returns, except those for periods of less than one year, which are cumulative. The performance data quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than the performance quoted. For performance data current to the most recent month end, please call 215.882.9983 or visit <u>www.alphaarchitect.com/funds</u>. Market price is the price at which shares in the ETF can be bought or sold on the exchanges during trading hours, while the net asset value (NAV) represents the value of each share's portion of the fund's underlying assets and cash at the end of the trading day. The net expense ratio is applicable to investors. The Adviser has contractually agreed to waive receipt of its management fees and/or assume expenses of the Fund (excluding payments under the Fund's Rule 12b-1 distribution and service plan (if any), acquired fund fees and expenses, brokerage expenses, taxes (including tax-related services), interest (including borrowing costs), litigation expense (including class action-related services) and other non-routine or extraordinary expenses) do not exceed 0.1949% of the Fund's average daily net assets. This agreement will remain in place until November 21, 2023 and may not be terminated prior to its one year term.



### 1-3 Mo. Box ETF NAV Performance Since Inception (as of 9/30/2024)

**Cumulative NAV Performance Chart** 



Source: Factset. The NAV performance data quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than the performance quoted. For performance data current to the most recent month end, please call 215.882.9983 or visit <u>www.alphaarchitect.com/funds</u>. Market price is the price at which shares in the ETF can be bought or sold on the exchanges during trading hours, while the net asset value (NAV) represents the value of each share's portion of the fund's underlying assets and cash at the end of the trading day. The net expense ratio is applicable to investors. Benchmark NAV, is the Solactive 1-3 month US T-Bill Index.





## CONTACT US TO LEARN MORE

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Investors should consider the investment objectives, risks, charges and expenses carefully before investing. For a prospectus or summary prospectus with this and other information about the Fund, please call (888) 123-4589 or visit etfsite.alphaarchitect.com/documents. Read the prospectus or summary prospectus carefully before investing.

Risks:

Investing involves risk, including the possible loss of principal. Shares of any ETF are bought and sold at market price (not NAV) and may trade at a discount or premium to NAV. Shares are not individually redeemable from the Fund and may only be acquired or redeemed from the fund in creation units.

There is no assurance that the Fund will achieve its investment objective. An investor may lose money by investing in the Fund. An investment in the Fund is not a bank deposit and is not insured or guaranteed by the FDIC or any government agency.

Selling or Writing Options Risk. Writing option contracts can result in losses that exceed the seller's initial investment and may lead to additional turnover and higher tax liability. The risk involved in writing a call option is that there could be an increase in the market value of the underlying or reference asset.

Buying or Purchasing Options Risk. If a call or put option is not sold when it has remaining value and if the market price of the underlying asset, in the case of a call option, remains less than or equal to the exercise price, or, in the case of a put option, remains equal to or greater than the exercise price, the buyer will lose its entire investment in the call or put option.

Box Spread Risk. A Box Spread is a synthetic bond created by combining different options trades that have offsetting spreads(e.g., purchases and sales on the same underlying instrument, such as an index or an ETF, but with different strike prices). If one or more of these individual option positions are modified or closed separately prior to the option contract's expiration, then the Box Spread may no longer effectively eliminate risk tied to the underlying asset's price movement.

FLEX Options Risk. FLEX Options are exchange-traded options contracts with uniquely customizable terms like exercise price, style, and expiration date. Due to their customization and potentially unique terms, FLEX Options may be less liquid than other securities, such as standard exchange listed options.

Counterparty Risk. Counterparty risk is the risk that a counterparty to a financial instrument held by the Fund or by a special purpose or structured vehicle invested in by the Fund may become insolvent or otherwise fail to perform its obligations, and the Fund may obtain no or limited recovery of its investment, and any recovery may be significantly delayed.

The Fund is distributed by Quasar Distributors, LLC. The Fund's investment advisor is Empowered Funds, LLC which is doing business as EA Advisers.

#### Definitions:

Long call: In return for paying a premium, the buyer of a call gets the right (not the obligation) to buy the underlying instrument at the strike price at any time until the expiration date. Short call: In return for receiving the premium, the seller of a call assumes the obligation of delivering the underlying instrument at the strike price at any time until the expiration date. Long put: In return for paying a premium, the buyer of a put gets the right (not the obligation) to sell the underlying instrument at the strike price at any time until the expiration date. Short put: In return for receiving the premium, the seller of a put assumes the obligation of buying the underlying instrument at the strike price at any time until the expiration date.

