Canada’s First Global Semiconductor

Semiconductors are one of the single most important components in the development of emerging technology. They are also the core components of microprocessor chips as well as transistors, which in turn are the key technologies associated with anything that’s computerized or uses radio waves.

Horizons Global Semiconductor Index ETF (the “ETF” or “CHPS”) seek to replicate, to the extent possible and net of expenses, the performance of an index that is designed to provide exposure to the performance of global, publicly listed companies engaged in the production and development of semiconductors and semiconductor equipment. Currently, CHPS seeks to replicate the performance of the Solactive Capped Global Semiconductor Index (the “Index”), net of expenses. CHPS seeks to hedge the U.S. dollar value of its portfolio to the Canadian dollar at all times.
Semiconductors: The Core of Leading Technologies
According to Fortune Business Insights, the global semiconductor market is projected to grow from USD $452.25 billion in 2021 to USD$803.15 billion in 2028 at a CAGR of 8.6%.

Driving this growth is an acceleration of the usage of key electronics and technology of which processors are the key component.

Key Areas of Growth

**Internet of Things:** Wi-Fi-enabled devices with extensive processing power are needed to make household products “smart”. This includes an expansion of key consumer goods such as smart household appliances (i.e.: fridges, stoves) and consumer electronic devices such as flat-screen televisions and smart-hub devices (Google Home, Alexa, smart thermostats, etc.)

**Artificial Intelligence:** Graphics processing units (GPUs) are necessary for the development of artificial intelligence and the algorithms they need to create for use in machine learning. As A.I. usage expands, GPUs are the central piece of hardware technology being used to help with their expansion. A GPU is also a central component for any device that utilizes any sort of A.I. framework such as creating user experiences – Smart TV and Automobiles are two large users of this technology.

**Automobiles and Autonomous Vehicles:** One of the largest growth areas for use of GPUs are vehicles. Automotive electronics, which may include everything from displays to in-car systems, are projected to account for an estimated 45% of a car’s manufacturing cost by 2030, according to Deloitte (April 2019) The cost of the semiconductor-based components used in those electronics is estimated to jump to $600 by 2030 from $475 in 2020.

**Cryptocurrencies:** Due to the algorithmic nature of cryptocurrency mining and usage, ASIC processors and GPUs are the key technology component (i.e.: the shovel) in mining and using cryptocurrencies.

**Gaming:** GPUs are the key component for any type of video gaming system. You simply cannot use any gaming console or PC cloud gaming portal without an integrated GPU. For example, both the PlayStation 5 and the Xbox Series X consoles use a customized version of the AMD Zen 2 processor.

The Solactive Capped Global Semiconductor Index
The Solactive Capped Global Semiconductor Index is the Underlying Index of CHPS. The Index is a capped market capitalization index designed to provide exposure to the performance of global, publicly listed equity securities of companies that are involved in the development or production of semiconductors and semiconductor equipment. Publicly listed equity securities, excluding A-Shares securities listed on the Shenzhen or Shanghai Connect exchanges, of companies that meet inclusion requirements, such as having a minimum market capitalization of US$1 billion, that derive a substantial amount of revenue from the production or development of semi-conductors or semi-conductor equipment, and which meet certain other requirements, will be eligible for inclusion.
The Index will continue to hold publicly listed securities in developed and emerging markets that have previously qualified for inclusion, as long as the securities meet the ongoing minimum index inclusion criteria, including a minimum market capitalization of US$ 800,000,000.

The Index will hold the 50 largest globally listed issuers (excluding any aforementioned Chinese-listed A-shares issuers) as determined using a capped market capitalization methodology. The Index includes an index weighting cap so that no constituent Issuer can exceed 10% of the index portfolio at the time of rebalance. The Index is rebalanced quarterly. At each rebalance, all index Constituent Issuers with an index weight below that 10% cap will be weighted in correspondence to their relative market capitalization.

Key Features

1) **Canada’s First Semiconductor ETF**: Direct exposure to the key global hardware sector – semiconductors. Essential for almost all leading technology development.

2) **Global Exposure**: Provides global exposure to the world’s leaders, including the large Asian foundry manufacturers. The Canadian equity market has little to no exposure to this industry.

3) **Capped index Exposure**: Capped index exposure provides broad diversification to the sector.

4) **Made for Canadians**: Ideal exposure for Canadian investors that get currency-hedged exposure and potential additional tax consequences of holding U.S. listed ETFs in the sector.

To learn more, please visit [www.HorizonsETFs.com/ETF/CHPS](http://www.HorizonsETFs.com/ETF/CHPS)