



TRADECOPE

LOWER THE LATENCY OF YOUR TRADING SYSTEM

Deployment of Netcope's FPGA Platform Created **a New Revenue Stream for Trading Firm**

A small proprietary trading firm deploys Tradecope to an Emerging Market Exchange and pioneers the use of the FPGA acceleration to increase the profitability of their trading strategy

Who doesn't get ahead gets left behind. Even if your trading strategy generates profit, it is always good practice to think ahead and work on improvements. Especially when you know that you are not the biggest fish in the pond.

And when your current technology of choice is a software-based trading

platform, then it is clear where the biggest bottleneck for speed is. Even if you already have your own co-located server, low-latency NIC, kernel bypass, and heavily optimized software stack as a base of your trades, you may get left behind. The next step in the evolution of your infrastructure is hardware acceleration. And here comes FPGA to save the day.

Enriching the Trading Tech Stack with FPGA

How do I start working with this technology? Do I develop my own platform? How many FPGA developers will I need? When will we become production-ready? How much will it cost me?

If I have no FPGA experience or in-house expertise, should I maybe consider a 3rd-party solution? Will it meet my criteria? Do they support markets where I want to trade? Is it compatible with what we already have? What is the time to market? How much will it cost me?

We have seen cases where our clients realized that they could achieve equal trading results with Tradecope as with their own internal FPGA team. Equal results with one crucial difference; the time to market was in months instead of years, and the overall investment was about 30% of their internal development team cost.

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Deployment of Tradecope

Our client decided to deploy FPGA technology despite having no experience with it. They just knew that it would give them an edge. And when they found out about Tradecope, they were excited to see that they do not need to learn much about FPGA. Indeed, Tradecope is an easy-to-use solution that allows everyone to benefit from pure hardware trade processing without the need to be an FPGA expert.

Even though the solution seemed great on paper, the client needed more information on the feasibility of Tradecope before making the final call. Since the decision logic can be written in C++ and compiled via Xilinx Vivado, the engineering team was able to test the speed of algorithms in a software simulator, while exploring how the Tradecope API can be integrated with

their existing system. Only then was the client able to make an educated decision whether Tradecope is worth the effort.

In the meantime, the Netcope Technologies development team worked on the support for the new exchange. We generated a new feed handler based on the market data protocol description and a new execution engine for sending orders to this market.

The client still needed a specific set of custom features so that their strategy could work properly. No problem. This is our added value. We work with each client to meet their needs and deliver a solution that works perfectly for them.

The next step of the deployment process is to test everything on the real hardware in »

the exchange's co-location and fine-tune everything. First, back-testing of the strategy logic with historical market data. Then, connecting to the test environment to send

test orders. After that, connecting to a production environment and sending a limited number of orders. Finally, a full production deployment.

How long? How much?

Since each customer and project is unique, do not hesitate to speak with us and share your plans - especially if you want to avoid the unnecessary headache of developing your own FPGA platform - and we will figure out together what it takes to get this job done for you.

When it comes to the financial aspect of the project, our approach is: *"If you do not make money, we do not make money."*

And what our customer says today?

"Thanks to our cooperation with Netcope, our latency is reduced to nanoseconds from microseconds, enabling us to enter into a new playfield in the stock markets and create a new revenue stream for our trading firm. We appreciate their professional behavior, level of engagement, and problem solving skills during the whole process. We look forward to strengthening our relationship with Netcope and working on new projects in the near future." Co-founder, Proprietary trader



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successfully deployed
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Summary

- Deployment and use of Tradecope do not require FPGA expertise. The decision logic and monitoring application can be written in C/C++ by your software developer.
- Tradecope achieves the lowest latency possible because the whole trading pipeline from incoming market data packet to outbound order message is implemented in a high-performance FPGA card.
- Tradecope enabled the firm to start making profits in a different field that they couldn't enter before due to the latency barrier.
- Precise packet timestamps are supported, and the framework provides detailed latency statistics without any additional hardware.

For more information do not hesitate to [contact us](#).