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[Istiophorus platypterus](#), one of the world's fastest fish ^[6]

asmFish,

a [port](#) of Stockfish in [x86-64 assembly](#) by [Mohammed Li](#), optional using [AVX2](#) and [BMI2](#) instructions, assembled with [FASM](#) to run under [Windows](#) or [UNIX/Linux](#), first released in June 2016. The fun project is about to demonstrate how an experienced assembly programmer can optimize a program compared with [GCC](#) ^[1]. A few structural optimizations were also applied, such as elimination of [piece lists](#) as already tried in Stockfish ^[2]. Critical functions in asmFish do not conform to the x86-64 [ABI](#) concerning register usage and [calling convention](#) ^[3]. Some less time critical code was ported using GCC generated assembly output, such as [Ronald de Man's](#) probing code for [Syzygy Bases](#). asmFish further supports [large pages](#), and its [parallel search](#) is [numa](#) aware ^[4] ^[5].

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2015

- [\[for fun\] rewrite of stockfish into asm and question on source](#) by [Mohammed Li](#), [FishCooking](#), January 09, 2015
- [Re: \[for fun\] rewrite of stockfish into asm and question on source](#) by [Mohammed Li](#), [FishCooking](#), April 18, 2016

2016

- [new humanistic compile of SF is 108KB](#) by [Mohammed Li](#), [FishCooking](#), May 28, 2016
- [Re: Speedup and simplicity idea](#) by [Mohammed Li](#), [FishCooking](#), June 28, 2016
- [ASM Fish for Linux and Windows](#) by [Norbert Raimund Leisner](#), [CCC](#), July 26, 2016
- [asmFish 44 cores](#) by A. Turkoglu, [FishCooking](#), August 28, 2016
- [Scaling of Asmfish with large thread count](#) by [Dann Corbit](#), [CCC](#), October 07, 2016 » [Parallel Search](#)
- [New asmFish released](#) by [Stefan Pohl](#), [CCC](#), November 04, 2016

2017 ...

- [Reaching Lyudmil Antonov](#) by Art Ford, [CCC](#), January 23, 2017
- [asmfish macOS 11082017](#) by [Michael B](#), [CCC](#), November 08, 2017
- [asmFish update - all flavors of OS](#) by [Michael B](#), [CCC](#), January 20, 2018
- [Re: asmFish update - all flavors of OS](#) by T. Poppins, [CCC](#), January 23, 2018
- [New asmfish](#) by [Günther Simon](#), [CCC](#), February 12, 2018

External Links

Chess Engine

- [GitHub - tthsqe12/asm: stockfish chess engine in x86-64](#) (deleted)
- [GitHub - lantonov/asmFish: The latest version of asmFish by Mohammed Li \(04.11.2016\)](#) hosted by [Lyudmil Antonov](#)

Misc

- [Yes - We Have Heaven](#), [Long Distance Runaround](#), [The Fish \(Schindleria Praematurus\)](#), Album [Fragile](#) (1971), [YouTube](#) Video

References

1. [^ Re: \[for fun\] rewrite of stockfish into asm and question on source](#) by [Mohammed Li](#), [FishCooking](#), April 18, 2016
2. [^ removal of piece lists](#) by [Mohammed Li](#), [FishCooking](#), November 11, 2014
3. [^ Agner Fog's manuals](#)
4. [^ asm/readme.txt at master · tthsqe12/asm · GitHub](#)
5. [^ lets get the ball moving down the field on numa awareness](#) by [Mohammed Li](#), [FishCooking](#), August 30, 2016
6. [^ Istiophorus platypterus](#), [Image](#) by [Citron](#), March 2010, [CC BY-SA 3.0](#), [Wikimedia Commons](#), [Sailfish from Wikipedia](#), [Indo-Pacific sailfish from Wikipedia](#)

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