

# Guix RISC-V Bootstrap

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<sup>1</sup><https://elenq.tech>

# RISC-V

Most ISAs  
are proprietary  
license fees

RISC-V  
is open  
and modular

microcontrollers  
computers  
huge servers

# Linux & RISC-V

## getting there

# Bootstrapping



Can we make sure our  
Free software comes  
from the sources?

**NO**

No, the compilers  
(person or program)  
might be evil

# Making yogurt<sup>2</sup>

# Trusting Trust<sup>3</sup>

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<sup>2</sup><https://archive.fosdem.org/2020/schedule/event/gnumes/>

<sup>3</sup><https://dl.acm.org/doi/pdf/10.1145/358198.358210>

Bootstrapping  
prevents this

# A new commencement<sup>4</sup>

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<sup>4</sup>(gnu packages commencement)

# Ports!

# Ports!

## Stage0-POSIX



# Ports!

Stage0-POSIX

GNU Mes

# Ports!

Stage0-POSIX

GNU Mes

TinyCC

# Backports!

# Backports!

## GCC 4.6.4

# Backports!

## GCC 4.6.4

## TinyCC-Boot

# Changes!

# Changes!

Musl instead of  
GCC 2.95 & Glibc

See #71921



# People

# People stikonas

People  
stikonas  
janneke

People  
stikonas  
janneke  
efraim

# Money

NLNet-NGI<sup>5</sup>

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<sup>5</sup><https://nlnet.nl/>

# Leadership

# Writing<sup>6</sup>

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<sup>6</sup> My blog

<sup>7</sup> FOSDEM 2023

<sup>8</sup> FOSDEM 2024 (in person!)

# Writing<sup>6</sup>

## Introductory talk<sup>7</sup>

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# Writing<sup>6</sup>

## Introductory talk<sup>7</sup>

## Advanced talk<sup>8</sup>

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# Thanks

**Thanks**  
help

**Thanks**  
help  
money

**Thanks**  
help  
money  
support

**Thanks**  
help  
money  
support  
attention