| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------|-----------|-------------|---------|-----------------|------------------|
| start:09:00 | end:09:10 | Len: 0:10:0 | id: 147 | | set page 1 of 30 |

Welcome

Welcome

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 1 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------|-----------------------|-------------|---------|------------------------|------------------|
| start:09:10 | ^{end:} 09:30 | Len: 0:20:0 | id: 147 | | set page 2 of 30 |

FOSSi Foundation Update

FOSSi Foundation Update

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 2 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------|------------------------------|-------------|---------|------------------------|------------------|
| start:09:30 | ^{end:} 10:00 | Len: 0:30:0 | id: 148 | | set page 3 of 30 |

Diagrams and system visualisation in chip design

Aliaksei Chapyzhenka

Diagrams and system visualisation in chip design

Aliaksei Chapyzhenka

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 3 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|-----------------|------------------|
| start: 10:00 | end: 10:30 | Len: 0:30:0 | id: 148 | | set page 4 of 30 |

Netlistsvg: How to Draw a Better Schematic than Graphviz

Neil Turley

Netlistsvg: How to Draw a Better Schematic than Graphviz

Neil Turley

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 4 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|------------------------|------------------|
| start: 10:50 | end: 11:10 | Len: 0:20:0 | id: 148 | | set page 5 of 30 |

Lessons learned customising the Rocket RISC-V core

Julius Baxter

Lessons learned customising the Rocket RISC-V core

Julius Baxter

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 5 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|------------------------|------------------|
| start: 11:10 | end: 11:40 | Len: 0:30:0 | id: 148 | | set page 6 of 30 |

Higher-Order Hardware Design with Chisel 3

Jack Koenig

Higher-Order Hardware Design with Chisel 3

Jack Koenig

Veyepar: TalkSigns.rfxml

set page 6 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|------------------|
| start: 11:40 | ^{end:} 12:10 | Len: 0:30:0 | id: 148 | | set page 7 of 30 |

The fusion of high-level synthesis with event-oriented hardware description (myhdl)

Christopher Felton

The fusion of high-level synthesis with event-oriented hardware description (my

Christopher Felton

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 7 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|------------------------|------------------|
| start: 13:30 | end: 13:50 | Len: 0:20:0 | id: 148 | | set page 8 of 30 |

JuxtaPiton: The First Open-Source, Heterogeneous-ISA Processor

Katie Lim

JuxtaPiton: The First Open-Source, Heterogeneous-ISA Processor

Katie Lim

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 8 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|------------------|
| start: 13:50 | ^{end:} 14:10 | Len: 0:20:0 | id: 148 | | set page 9 of 30 |

OpenPiton+Ariane: Making Ariane Multicore with OpenPiton's P-Mesh

Jonathan Balkind

OpenPiton+Ariane: Making Ariane Multicore with OpenPiton's P-Mesh

Jonathan Balkind

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 9 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|------------------------|-------------------|
| start: 14:10 | end: 14:30 | Len: 0:20:0 | id: 148 | | set page 10 of 30 |

Lessons Learned from Open-Sourcing NVDLA

Joshua Wise

Lessons Learned from Open-Sourcing NVDLA

Joshua Wise

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 10 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 14:30 | ^{end:} 14:50 | Len: 0:20:0 | id: 148 | | set page 11 of 30 |

DVKit: An Integrated Development Environment for Design and Verification Engineers

Matthew Ballance

DVKit: An Integrated Development Environment for Design and Verification En

Matthew Ballance

Veyepar: TalkSigns.rfxml

set page 11 of 30

Latch-Up 2019

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 15:30 | ^{end:} 16:00 | Len: 0:30:0 | id: 148 | | set page 12 of 30 |

Live Graph infrastructure for Synthesis and Simulation

Jose Renau

Live Graph infrastructure for Synthesis and Simulation

Jose Renau

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 12 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 16:00 | ^{end:} 16:30 | Len: 0:30:0 | id: 148 | | set page 13 of 30 |

The Berkeley-Out-of-Order-Machine: An Open Source Synthesizable High-Performance RISC-V Processor

Jerry Zhao, Abe Gonzalez, Ben Korpan

The Berkeley-Out-of-Order-Machine: An Open Source Synthesizable High-Per

Jerry Zhao, Abe Gonzalez, Ben Korpan

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 13 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|------------------------|-------------------|
| start: 16:30 | end: 17:00 | Len: 0:30:0 | id: 148 | | set page 14 of 30 |

FireSim: Open-Source Easy-to-use FPGA-Accelerated Cycle-Exact Hardware Simulation in the Cloud

David Biancolin, Alon Amid

FireSim: Open-Source Easy-to-use FPGA-Accelerated Cycle-Exact Hardware

David Biancolin, Alon Amid

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 14 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 17:30 | ^{end:} 18:00 | Len: 0:30:0 | id: 148 | | set page 15 of 30 |

How I started learning FPGA: My journey writing a GameBoy in Verilog

Wenting Zhang

How I started learning FPGA: My journey writing a GameBoy in Verilog

Wenting Zhang

Veyepar: TalkSigns.rfxml

set page 15 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 18:00 | ^{end:} 18:30 | Len: 0:30:0 | id: 148 | | set page 16 of 30 |

Emulation of vintage integrated circuits through die analysis and reverse-EDA

Cole Johnson

Emulation of vintage integrated circuits through die analysis and reverse-EDA

Cole Johnson

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 16 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 04 Sat |
|---------------------|-------------------|-------------|---------|-----------------|-------------------|
| start: 18:20 | end: 18:50 | Len: 0:30:0 | id: 148 | | set page 17 of 30 |

Mingle, drinks

Mingle, drinks

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 17 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------|-------------------|-------------|---------|------------------------|-------------------|
| start:09:30 | end: 10:00 | Len: 0:30:0 | id: 148 | | set page 18 of 30 |

BaseJump STL: a Standard Template Library for Hardware Design

Daniel Petrisko

BaseJump STL: a Standard Template Library for Hardware Design

Daniel Petrisko

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 18 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 10:00 | ^{end:} 10:30 | Len: 0:30:0 | id: 148 | | set page 19 of 30 |

OSVVM, VHDL's #1 FPGA Verification Library

Jim Lewis

OSVVM, VHDL's #1 FPGA Verification Library

Jim Lewis

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 19 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 10:30 | ^{end:} 11:00 | Len: 0:30:0 | id: 148 | | set page 20 of 30 |

Verifying Open-Source Silicon with SystemVerilog: Getting in on the Ground Floor

Matthew Ballance

Verifying Open-Source Silicon with SystemVerilog: Getting in on the Ground Fl

Matthew Ballance

Veyepar: TalkSigns.rfxml

set page 20 of 30

Latch-Up 2019

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|-------------------|-------------|---------|------------------------|-------------------|
| start: 11:20 | end: 11:40 | Len: 0:20:0 | id: 148 | | set page 21 of 30 |

RISC-V in Debian

Vagrant Cascadian

RISC-V in Debian Vagrant Cascadian

Veyepar: TalkSigns.rfxml

set page 21 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|-------------------|-------------|---------|------------------------|-------------------|
| start: 11:40 | end: 12:10 | Len: 0:30:0 | id: 148 | | set page 22 of 30 |

Lightning Talks

Lightning Talks

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 22 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|-------------------|---------------|----------|------------------------|-------------------|
| start: 11:49 | end: 12:01 | Len: 00:12:00 | id: 148. | | set page 23 of 30 |

Hermes-Lite: Amateur Radio SDR

Steve Haynal

Hermes-Lite: Amateur Radio SDR

Steve Haynal

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 23 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|-----------------------|---------------|---------|------------------------|-------------------|
| start: 12:01 | ^{end:} 12:29 | Len: 00:28:00 | id: 148 | | set page 24 of 30 |

Tim has too many projects - LatchUp Edition

Tim 'mithro' Ansell

Tim has too many projects - LatchUp Edition

Tim 'mithro' Ansell

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 24 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|-------------------|-------------|----------|------------------------|-------------------|
| start: 13:20 | end: 13:50 | Len: 0:30:0 | id: 148. | | set page 25 of 30 |

FuseSoC - Cores have never been so much fun

Olof Kindgren

FuseSoC - Cores have never been so much fun

Olof Kindgren

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 25 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|----------|------------------------|-------------------|
| start: 13:50 | ^{end:} 14:20 | Len: 0:30:0 | id: 148. | | set page 26 of 30 |

DUH: document and tools for HW design reuse

Aliaksei Chapyzhenka

DUH: document and tools for HW design reuse

Aliaksei Chapyzhenka

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 26 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|----------|------------------------|-------------------|
| start: 14:20 | ^{end:} 14:50 | Len: 0:30:0 | id: 148) | | set page 27 of 30 |

Nyuzi: An Open Source GPGPU Processor

Jeff Bush

Nyuzi: An Open Source GPGPU Processor

Jeff Bush

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 27 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 15:10 | ^{end:} 15:40 | Len: 0:30:0 | id: 148 | | set page 28 of 30 |

OpenRAM: An Open Source Memory Compiler

Matthew Guthaus

OpenRAM: An Open Source Memory Compiler

Matthew Guthaus

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 28 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|----------|-----------------|-------------------|
| start: 15:40 | ^{end:} 16:10 | Len: 0:30:0 | id: 148. | | set page 29 of 30 |

SYZYGY: An Open Standard For Semiconductor Evaluation

Tom McLeod

SYZYGY: An Open Standard For Semiconductor Evaluation

Tom McLeod

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 29 of 30

| Latch-Up 2019 | | | | Revolution Hall | May 05 Sun |
|---------------------|------------------------------|-------------|---------|------------------------|-------------------|
| start: 16:00 | ^{end:} 16:20 | Len: 0:20:0 | id: 148 | | set page 30 of 30 |

Open-Source FPGA tools, how and why?

Piotr Esden-Tempski

Open-Source FPGA tools, how and why?

Piotr Esden-Tempski

Veyepar: TalkSigns.rfxml

Latch-Up 2019

set page 30 of 30