X-HEEP: an open-source eXtendible Heterogeneous Energy-Efficient RISC-V Platform for Embedded-class systems

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**X-HEEP: open-source**

**RISC-V**

**uC for EVERYONE**

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**CONFIGURABLE**

**OPENHW**

**RELIABLE ON SUCCESSFUL IPs**

**OPENHW**

**AMOUNT OF MEMORY**

**FUSESOC**

**BUS ARCHITECTURE**

**INCLUDE PERIPHERALS**

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**EXTENDABLE**

**EASY PLUG&PLAY YOUR ACCELERATOR**

**SUPPORT MULTIPLE TARGES**

ASIC, FPGA

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**SUPPORT FOR**

**MULTIPLE COMPILERS**

GCC

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**COMPLETE FW STACK**

**FUSESOC**

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**EASY TO USE**

**STUDENTS, EDUCATION, IP DEVELOPERS**

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**1st TSMC65nm LP IMPLEMENTATION**

cve2 CPU, 256kB SRAM, 10 power domains eXtended with CGRA and IMC blocks

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**TSMC65 LP LVT**

**SPEED: 32kHz - 250MHz**

**POWER @1.2V,100MHz (mW)**

**AREA (kGE)**

- CPU - cv32e2/libex
- 256KB SRAM
- DEBUG
- BUS
- PERIPHERALS

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1,250

31

2.99

2.58

0.75