

HENSOLDT Cyber MiG-V 1.0

MADE IN GERMANY RISC-V

The HENSOLDT Cyber MiG-V 1.0 is a general purpose, logic-encrypted processor, Made in Germany, targeting high-security applications. Logic encryption hinders the insertion of hardware Trojans, giving HENSOLDT Cyber the full control of the design and production chain. The CPU is based on a RISC-V core and can be used together with the formally verified seL4[®] microkernel (hosted in the chip's internal ROM) to create ultra-secure solutions.

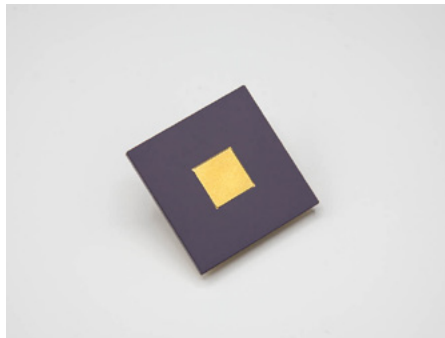
Features and Benefits

- 64-Bit RISC-V core
- Hardened against corruption during production
- Compatible with TRENOS and Genode
- Formally verified seL4 kernel in ROM

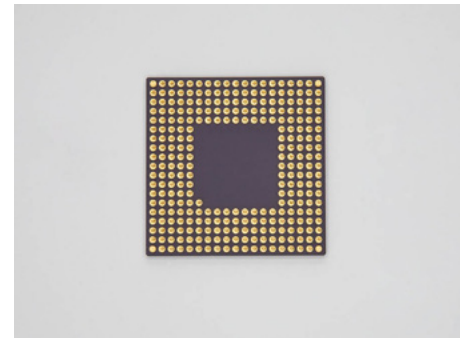
| System Specs | | Processor Core Specs | |
|------------------------------|-------------------------|----------------------|---|
| ETH MAC | 2x 10/100 Mbps with MII | RV64 | IMAC |
| TRNG | x1 | Privilege modes | M,S,U |
| Timers | x3 | MMU | Sv39 |
| SPI | x3 | CPU Clock | 240MHz |
| QSPI | x1 | SRAM | 1MB |
| | | ROM | <ul style="list-style-type: none"> • Bootloader + seL4 • Flash |
| GPIO | x5 | TLB | <ul style="list-style-type: none"> • 16 entries, associative • PLRU replacement mechanism |
| Industrial temperature range | -40°C to +85°C | Instruction Cache | <ul style="list-style-type: none"> • 16kB • 4-ways set-associative write-back • VIPT |
| | | Data Cache | <ul style="list-style-type: none"> • 32kB • 8-ways set-associative write-back • VIPT |
| | | SDRAM Bus Width | <ul style="list-style-type: none"> • 32 Bit |



MiG-V 1.0 Evaluation board



MiG-V 1.0 Packaging



MiG-V 1.0 PGA

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