BayTrail Hypervisor

Bareflank based bare metal UEFI hypervisor on Intel BayTrail

Description:

The demo is presenting one of the features that bare metal hypervisor gives. It is run in **edk2 UEFI** implementation on MinnowBoard Turbot platform. Hypervisor was written with **Bareflank** - an open source hypervisor SDK. Depending on the implementation, it can provide an interface for underlying software to control hypervisor's operation or be completely transparent. This kind of hypervisors use **Intel's VMX** (Virtual Machine eXtensions).

Output is mirrored to the UART before Bareflank is started. In this demo hypervisor hijacks writes to UART and ignores or modifies them. As a result, all output from UEFI is **normal** on the attached monitor, but **modified** in the minicom after hypervisor starts.

In this case hypervisor is started manually to show the difference between working on real hardware and inside a virtualized environment, but nothing stops us from starting the hypervisor earlier as a part of the boot process.

Elements:

- MinnowBoard Turbot Quad
- monitor with video output (platform)
- laptop with serial output (Hypervisor)