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## SYStem.Up or SYStem.Attach to debug boot process?

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Modern Arm/Cortex based target platforms use a multicore architecture, security modules, power-management, an elaborated reset circuitry and many other fancy features which have a direct impact on debugging the boot process for a rich OS such as Linux / QBX / VxWorks or hypervisor Xen / L4Re / QNX / COQOS.

TRACE32 is configurable to the maximum. Thus, it allows its customers to create start-up scripts for any debug scenario during the boot process. An important decision that the tester has to make is at which time to establish debug communication to the platform under debug:

- When the boot process has already started (**SYStem.Mode Attach**).
- Or directly after the platform reset (**SYStem.Mode Up**)

Thereby it is key to make sure that the debugger communicates while booting only with platform resources that are already powered and clocked, otherwise the debug logic might fall into an unrecoverable error state.

**Minimum software:** Latest Release DVD is recommended. Newer versions can be provided by the Lauterbach support, if required.

**Supported core architectures:** Cortex-A, Cortex-R, Cortex-X, Neoverse, SecurCore, Custom Armv8/Armv9

For more details refer to the presentation [attach\\_or\\_up.pdf](#)