



ALACRON RUN-TIME OPERATING ENVIRONMENT

Host Operating System Support

Supported host operating systems include: Windows NT/2K/XP, Solaris, and Linux for both run-time and code development.

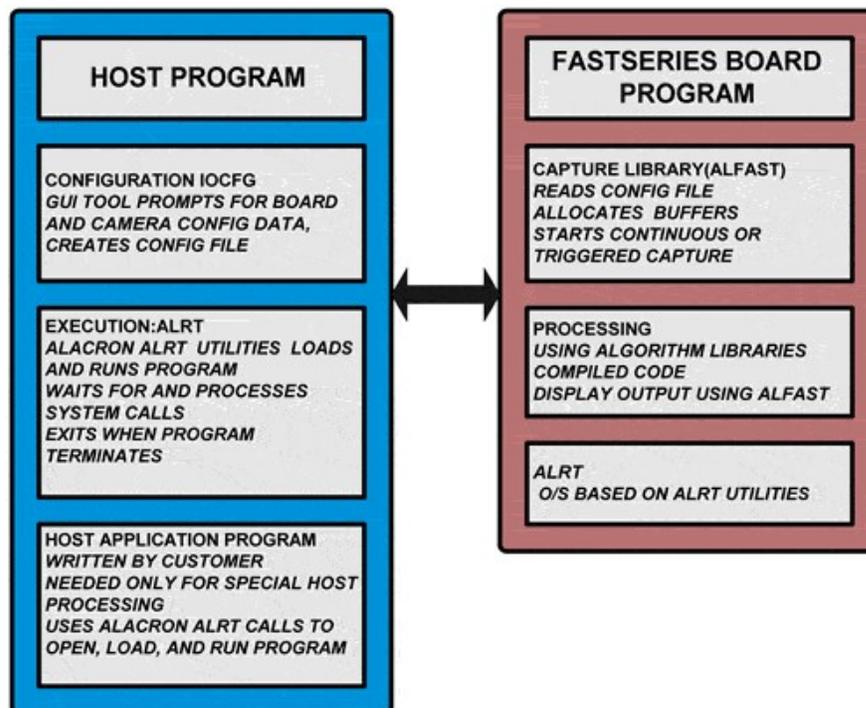
Alacron Runtime (ALRT) Operating Environment

The Alacron Runtime (ALRT) operating environment provides flexibility in the selection of program architecture while it ensures ease of application development, allowing a developer to take full advantage of Alacron's high-performance FastSeries hardware, including the boards in the FastVision family.

ALRT consists of several components installed by the ALRT installation program.

- Host runtime software or board runtime software
- Device driver (ALFAST)
- Set of utilities

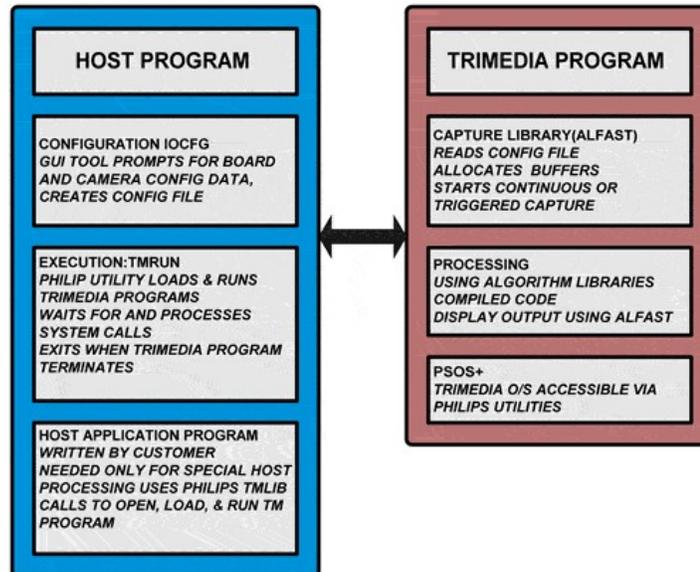
The Alacron Runtime (ALRT) operating environment provides flexibility in the selection of program architecture while it ensures ease of application development, allowing a developer to take full advantage of Alacron's high-performance FastSeries hardware. The diagram below outlines the flow of information and system calls provided by the ALRT environment for the entire Alacron FastSeries Board families.





ALACRON RUN-TIME SOFTWARE (ALRT)

The ALRT environment can be replaced by the Nexperia (Trimedia) SDK environment for Alacron FastSeries Nexperia (Trimedia) based boards. The result is outlined below.



This environment allows the user to use pSOS+ multitasking environment for execution instead of the single tasking ALRT environment.

Program Modes

As a developer using a FastSeries board, you have two processor types at your disposal.

- The host processor
- The FastSeries Board processor(s)

Application decision logic may reside on the host or on the FastSeries Board. The ALRT operating environment allows the application developer to allocate functionality, as desired, to each processor.

Attached Processor Mode (Slave Mode)

In the attached processor mode, The FastSeries Board operates as a traditional slave-mode attached processor board. One need only write a single C program, which resides on the host and uses the resources of the host operating system.

Decision logic remains on the host. The host computer controls the FastSeries Board through a slave-mode driver interface library. The driver controls all functions of the FastSeries Board and loads programs.

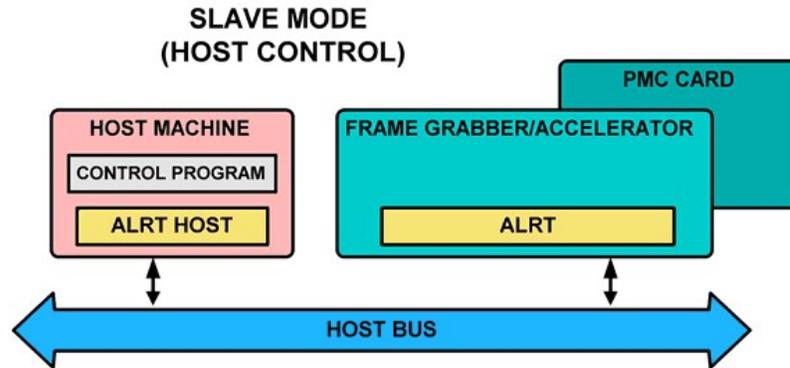
The driver handles transfer of data between the FastSeries Board and the host. The driver manages memory, and services interrupts, call functions, and programs.

Additionally, for the FastSeries Board, ALRT provides a light-weight thread execution model.





ALACRON RUN-TIME SOFTWARE (ALRT)



Stand-Alone Mode

In the stand-alone mode, ALRT operates as a host program that loads the FastSeries Board processor(s) kernel and application programs onto the Board. ALRT then becomes the communication pipeline between the FastVision and the host computer during program execution.

