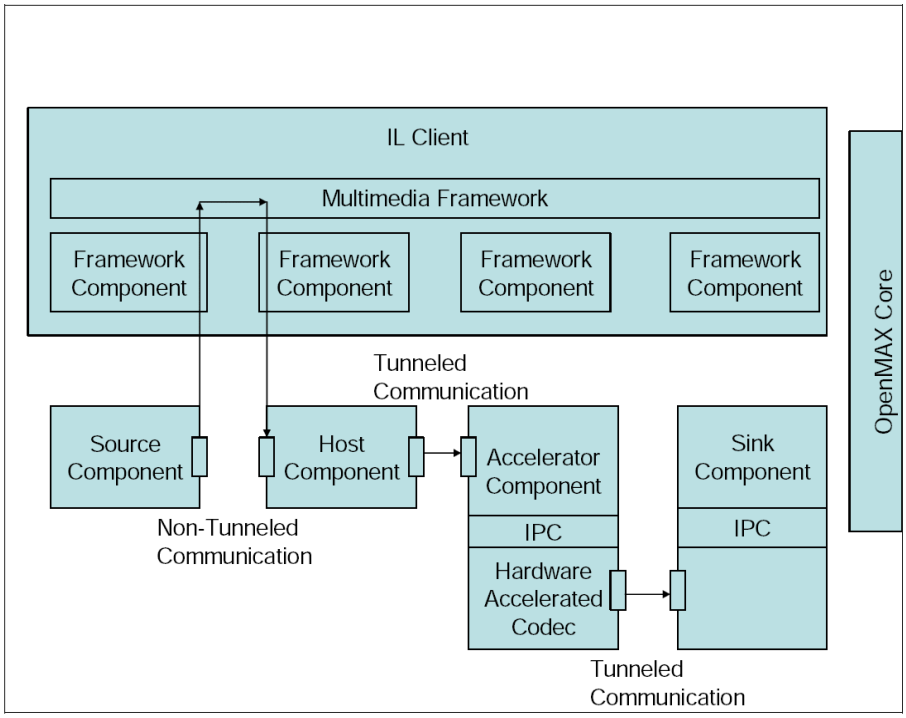

Figure 4 - OpenMax Communication

Application Non-Resident Code Size

Due to the large number of standards, encoding formats, processing variants, etc, the non-resident multimedia code size is quite large (millions of lines of code). This is only the code running on the accelerators, and does not include the code on the general purpose processors. Of course, depending on the operating mode, only a small subset of this code will be configured and running at a particular point in time.

Client/Server Communication Pattern

In simple configurations as illustrated in Figure 1, the communication follows a client/server pattern. However, as we will see shortly, this is not typically the case.

In the simple case, communication may be considered coarse grained, in that a large chunk of data is passed to the accelerator (for example, a video frame), and the DSP runs for a relatively long period of time to compute the results. Again, this coarse grained behavior is not always the case, as is described below.

Coarse Grain Data Rates and Latencies

For the coarse grained scenario, data rates and latencies are relatively conservative. Order of magnitude data sizes are 1K bytes, and rates under 100 Hz.