The operating system installed in both environments is GNU/Linux - Ubuntu with kernel 3.16.0-38 in the PC, and Debian with kernel 3.4.106 in the MPSoC. The file system ext4 was used to access all storage devices. Table 1 details the main characteristics of both environments.

Table 1: Configuration of the experimental environments

	PC	MPSoC
Processor	Intel Core-I7	ARM Cortex A7
Processor model	4790	AllWinnerTech SoC A20
Technique of Manufacture (nm)	22	40
Clock frequency	3.6 GHz	960 MHz
Cores/Processor (#)	4 (with Hyper-Threading)	2
L1 cache/Core (KB)	64 x 2	64
L2 cache/Core (KB)	256 x 4	1024
Cache L3 shared (MB)	8	=
Memory (GB)	16 (DDR3)	2 (low-power DDR3)