Figure 1: EA-MPU on pulpino

EA-MPU is placed between ram_mux and data_ram, as shown in Figure1. The EA-MPU table is implemented as an external RAM. The tuple (isntr_addr, data_addr) saved in this ram and can be updated when loading new secure task. The aim of using external RAM is to speed up the process of querying. The content in external RAM is a copy of Data RAM. The FSM of EA-MPU and EA-MPU Table is shown in Figure 2.
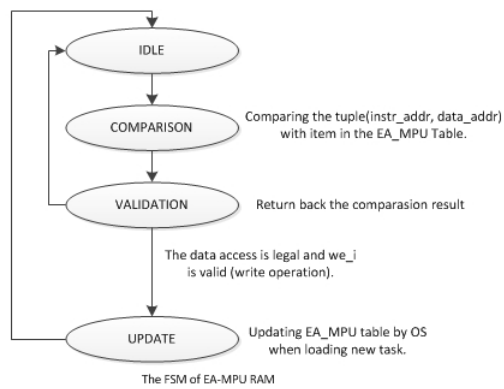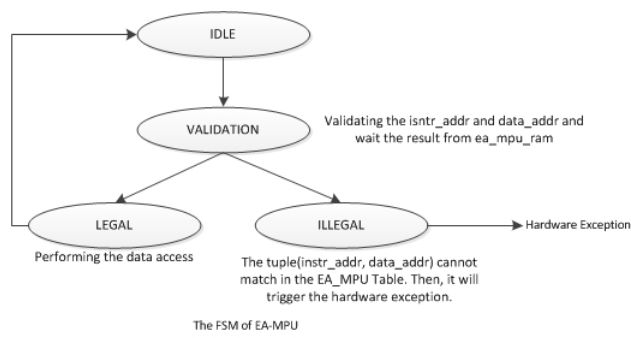
The FSM of EA-MPU

The FSM of EA-MPU RAM

Figure 2: The FSM of EA-MPU and its Table