



Figure 41: Resolved IRK index structure at RAM

At the end of the operation, AAR will generate the **END** event.

Triggering the **STOP** task will stop AAR. If AAR is stopped before the operation has completed, the **END**, **RESOLVED**, and **NOTRESOLVED** events are not generated. However, if **STOP** is triggered close to the end of the operation the events can be generated.

8.3.3 EasyDMA

This peripheral implements EasyDMA with scatter-gather functionality for reading from memory without CPU involvement.

The scatter-gather functionality allows EasyDMA to collect data from multiple memory regions, instead of one contiguous block. The memory regions are described by a job list, called input job list. The job list consists of one or more job entries that consist of a 32-bit address field, 8-bit attribute field, and 24-bit length field. A job list ends with a zero filled job entry.

The input job list must have separate entries for the following entries:

1. The three first bytes of the resolvable private address (the 24-bit hash)
2. The three following bytes of the resolvable private address (the 24-bit prand)
3. The IRKs

The attribute field of each of these entries identify the input job and must be set according to the following table.

Attribute	Value
Hash	11
Prand	12
Irk	13

Table 36: Attribute field for input job list

If the **IN.PTR** register or the entries in the input job list are not pointing to memory connected to the DMA bus, an EasyDMA transfer may result in a HardFault or memory corruption. See **Memory** on page 13 for more information about the different memory regions and DMA connectivity.

The EasyDMA will have finished accessing the RAM when the **END**, **RESOLVED**, or **NOTRESOLVED** events are generated.

For instances supporting DMA error detection, the **ERRORSTATUS** register will report if a bus error has occurred during DMA access. To see if DMA error detection is supported, see the the instance's configuration in **Instantiation** on page 216.