



Figure 40: Address resolution with packet device address preloaded into multiple RAM locations, and three IRK keys

AAR will go through the list of available IRKs in the job list, and for each IRK try to resolve the address according to the Resolvable Private Address Resolution Procedure described in the *Bluetooth Specification*². The time it takes to resolve an address may vary depending on where in the list the resolvable address is located. The resolution time will also be affected by RAM accesses performed by other peripherals and the CPU. See the Electrical specifications for more information about resolution time.

Note: Maximum number of IRKs supported in a job list is 4096.

AAR only compares the received address to those programmed in the module without checking the address type.

AAR will stop when it has managed to resolve the maximum number allowed, specified in the **MAXRESOLVED** register. Each time AAR resolves an IRK, the index of the corresponding IRK is written to memory through the output job list in **OUT.PTR**. For each IRK found, **OUT.AMOUNT** is updated accordingly.

The output job list must define a memory region large enough to hold list of resolved IRK indices. This is calculated from the **MAXRESOLVED** register, where each IRK index occupies two bytes in memory. In the example below, the **n** indicates the number of bytes (size) in the resolved IRK index array. The value of **n** must be exactly 2 times the value of **MAXRESOLVED**.

² *Bluetooth Specification Version 4.0 [Vol 3]* chapter 10.8.2.3.