- KEY.VALUE[2] = `0x39F574D8`
- KEY.VALUE[3] = `0x4C683841`

The IN.PTR points to a job that contains the following 16-byte input data array:

```
        {0x02, 0x13, 0x24, 0x35, 0x46, 0x57, 0x68, 0x79, 0xAC, 0xBD, 0xCE, 0xDF, 0xE0,
0xF1, 0x02, 0x13}
```

Once the encryption is complete, the output buffer referenced by the output job will be filled with the following 16-byte array:

```
        {0x99, 0xAD, 0x1B, 0x52, 0x26, 0xA3, 0x7E, 0x3E, 0x05, 0x8E, 0x3B, 0x8E, 0x27,
0xC2, 0xC6, 0x66}
```

Note: The KEY byte order is reversed compared to the NRF52 and NRF53 series devices.

8.6.1 Shared resources

The ECB shares the same AES module as the AAR and CCM peripherals. The ECB will always have lowest priority. If there is a sharing conflict during encryption, the ECB operation will be aborted and an ERROR event will be generated.

8.6.2 EasyDMA

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

The scatter-gather functionality allows EasyDMA to collect data from multiple memory regions, instead of one contigous block. The memory regions are described by a 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 attribute field must be set to `11`.

If INPTR or OUTPTR pointers or the entries in the job lists 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 or ERROR 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.

Example

The figure below shows an example of a job list with three job entries. Each of the entries point to a memory address, and the length field describes how many bytes of data is stored at that address. There are three blocks of memory in use

- FIRSTDATA, an array of length 3
- SECONDDATA, an array of length 2
- THIRDDATA, an array of length 11

NORDIC
SEMICONDUCTOR